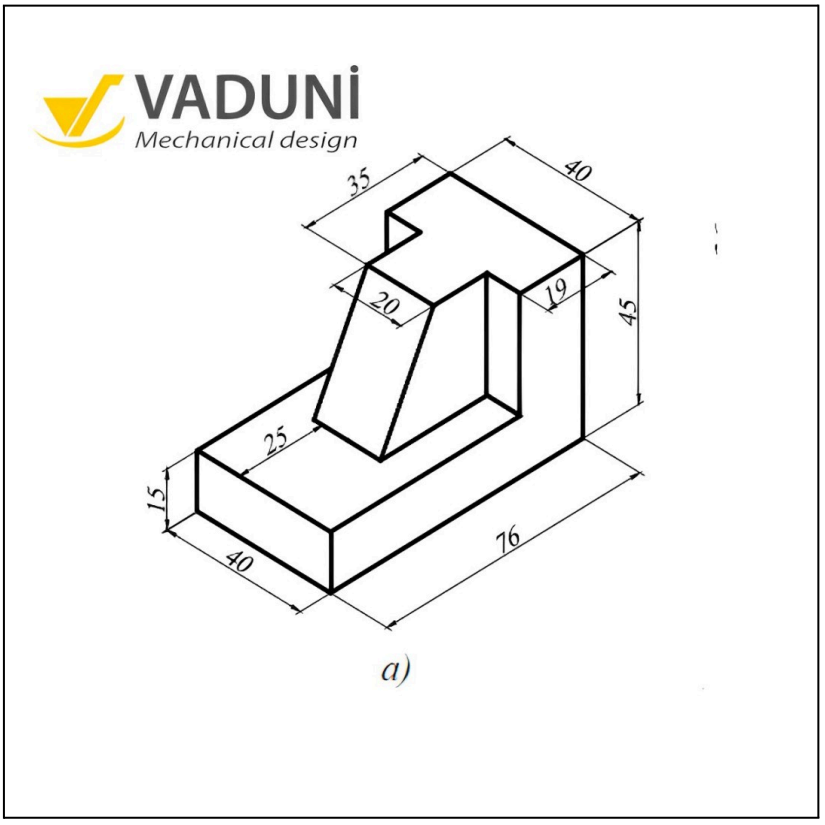
TỔNG HỢP CÁC BÀI TẬP AUTOCAD 3D

Bài tập 1



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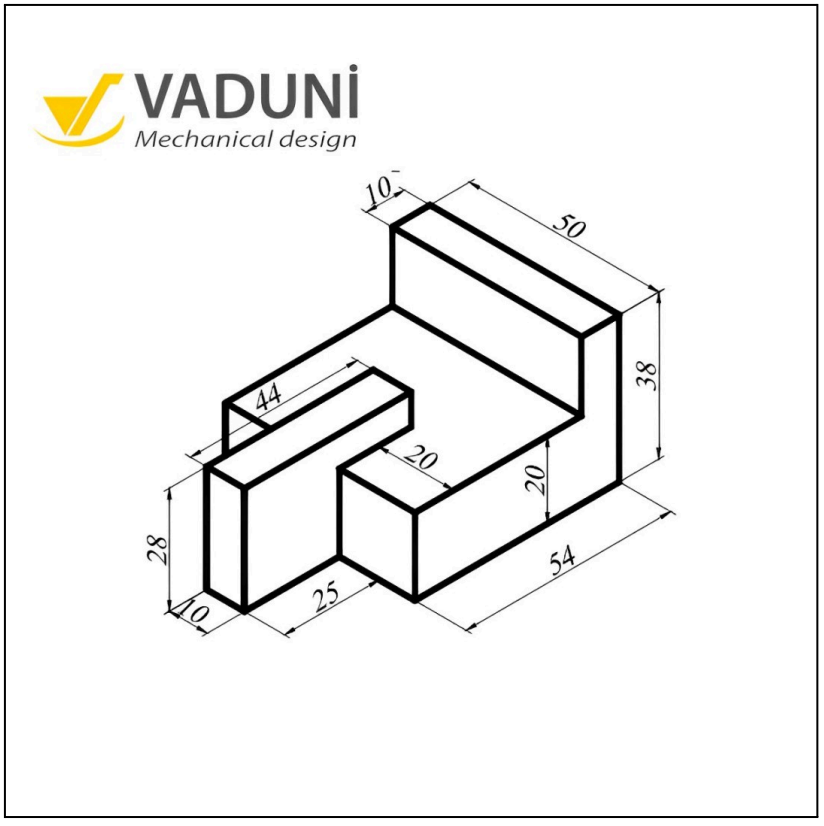

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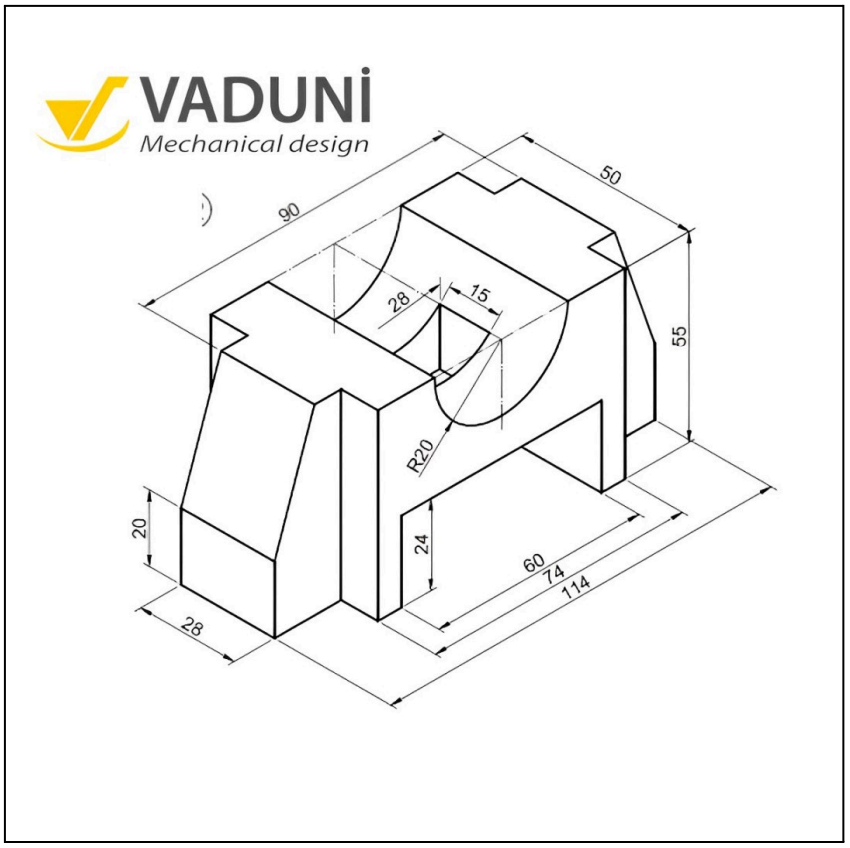

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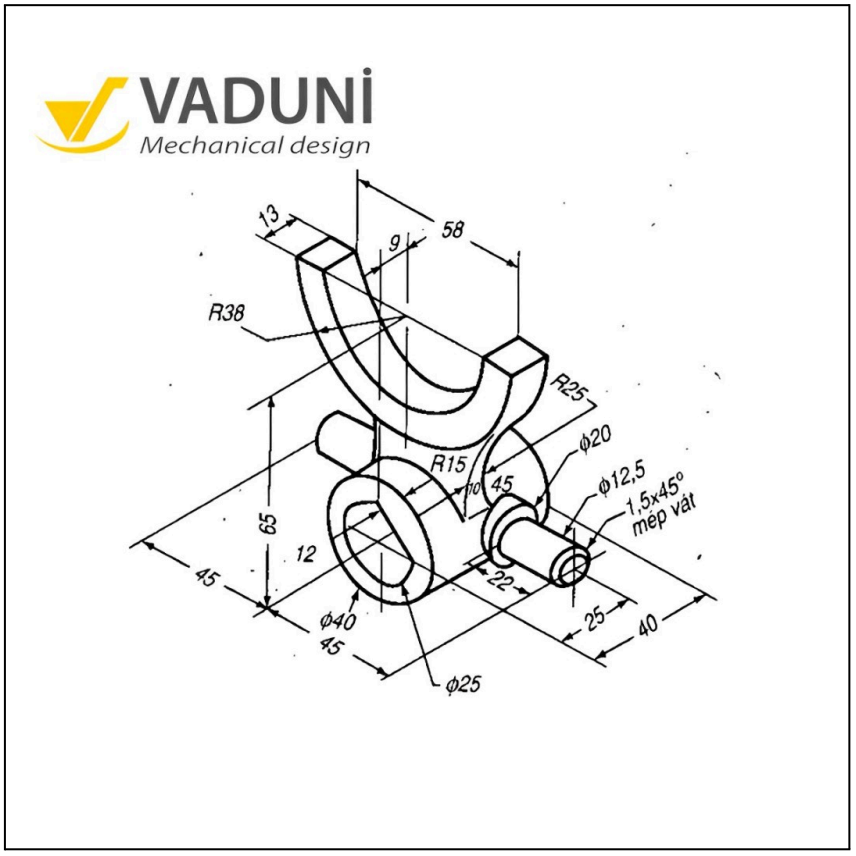

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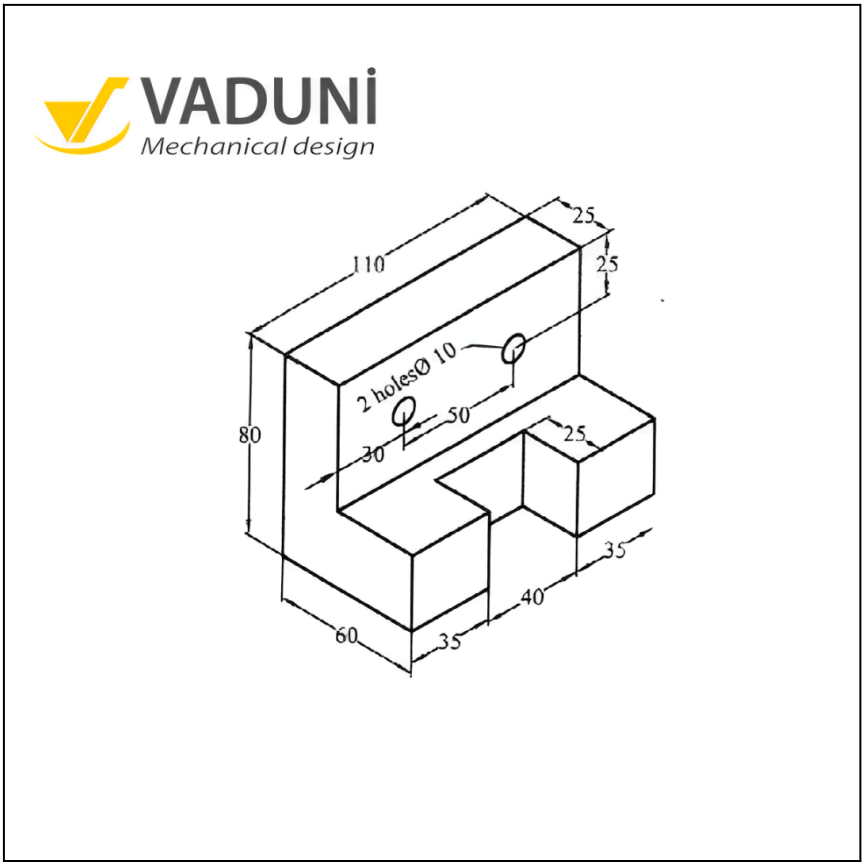

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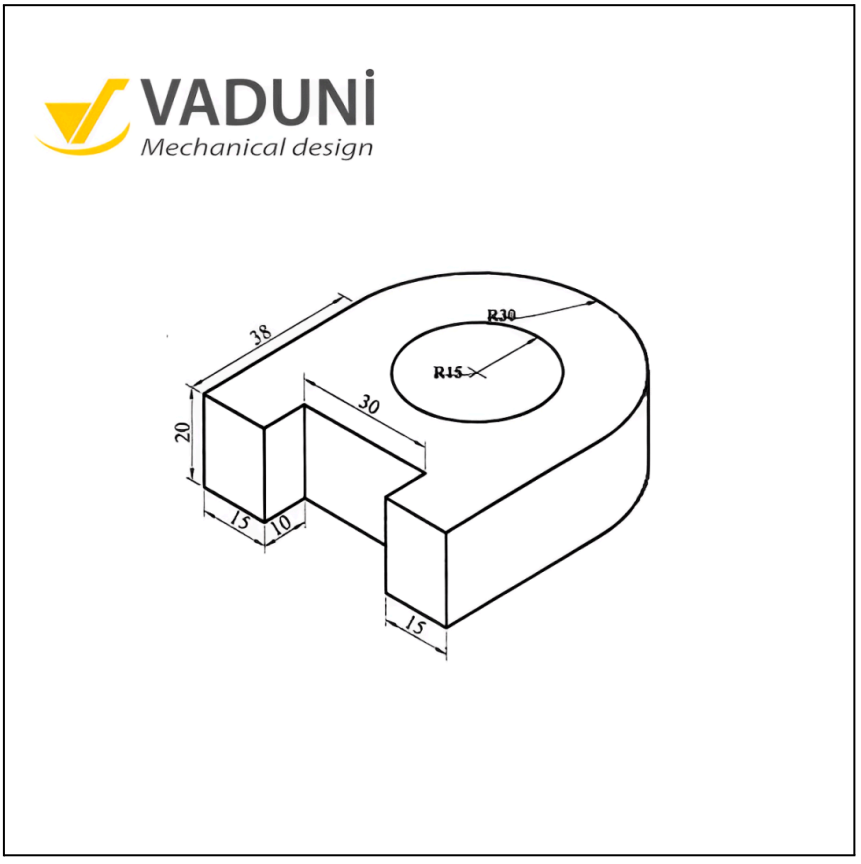

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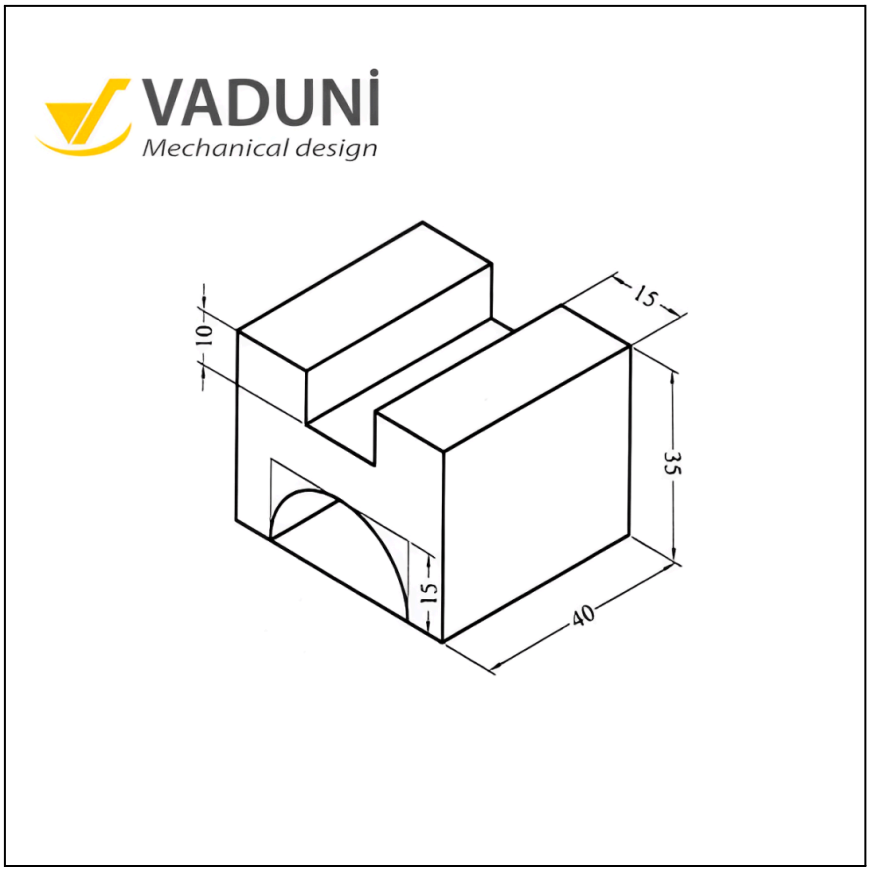

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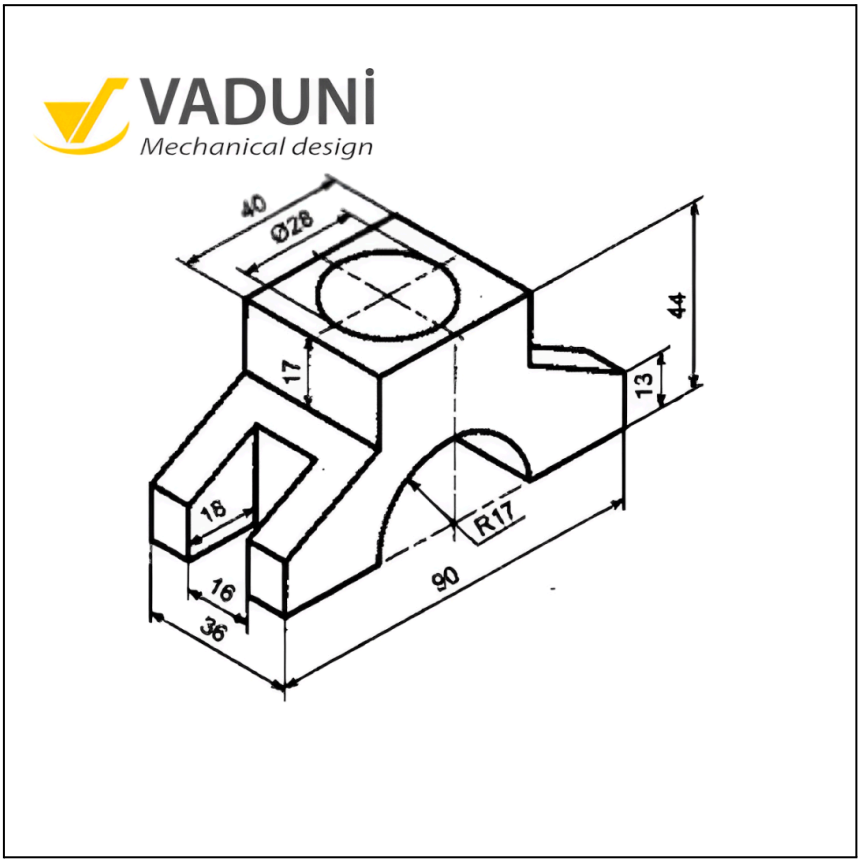

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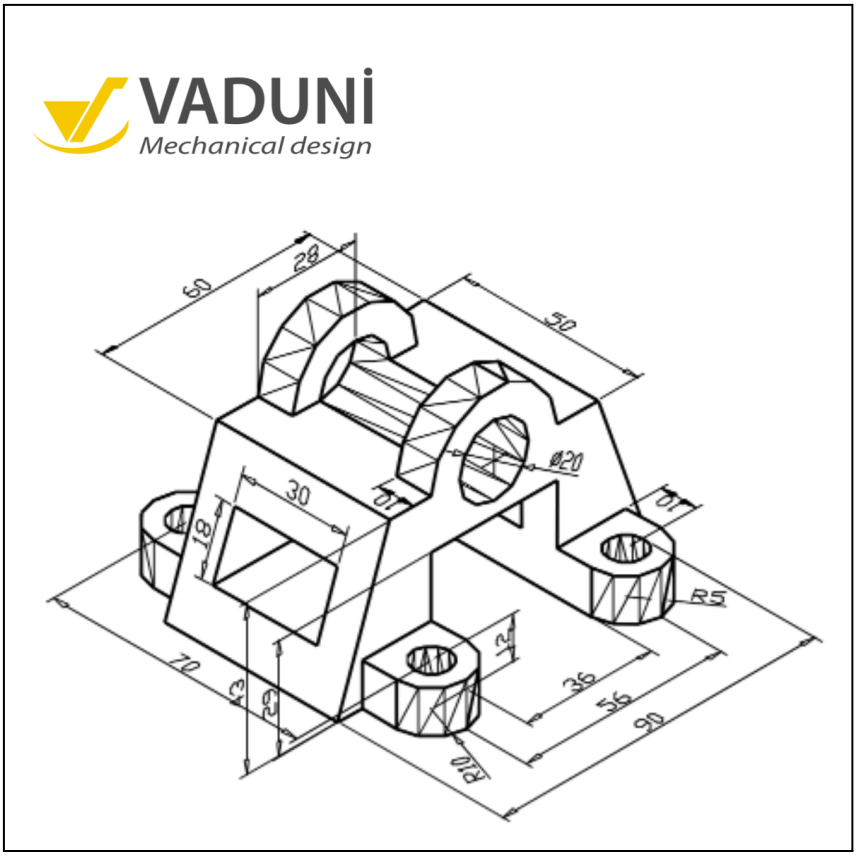

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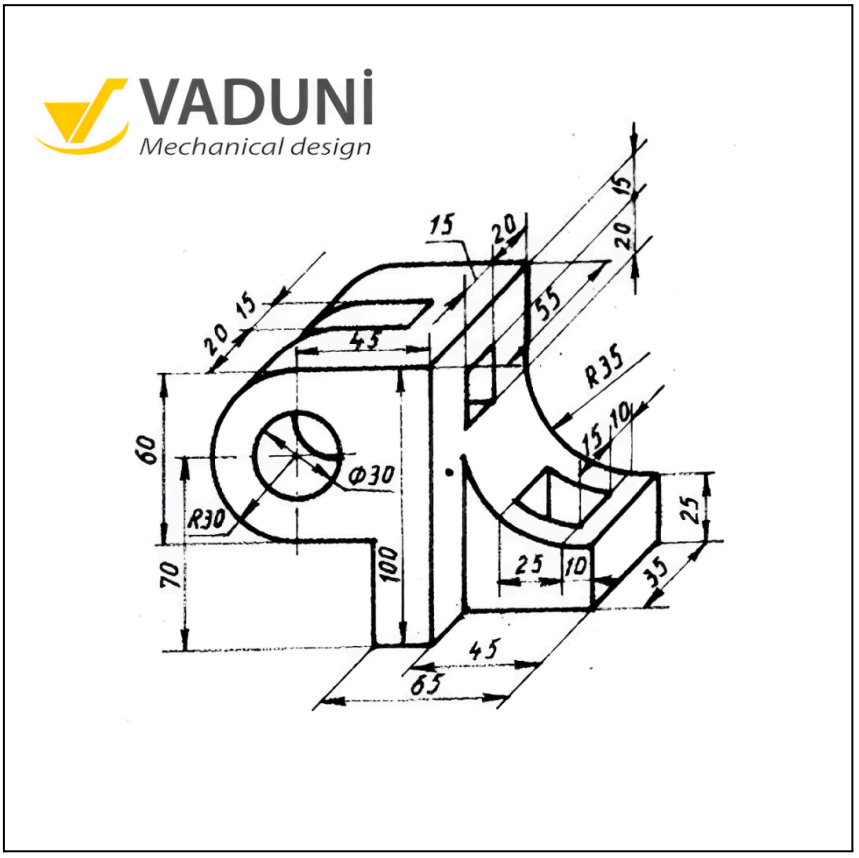

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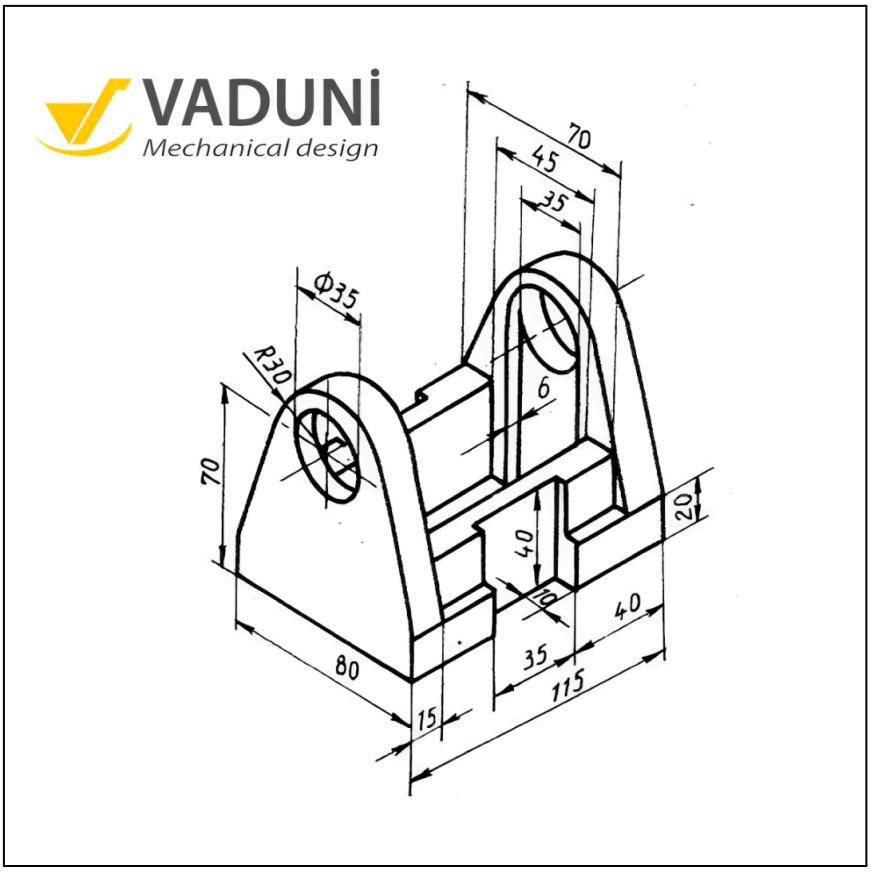

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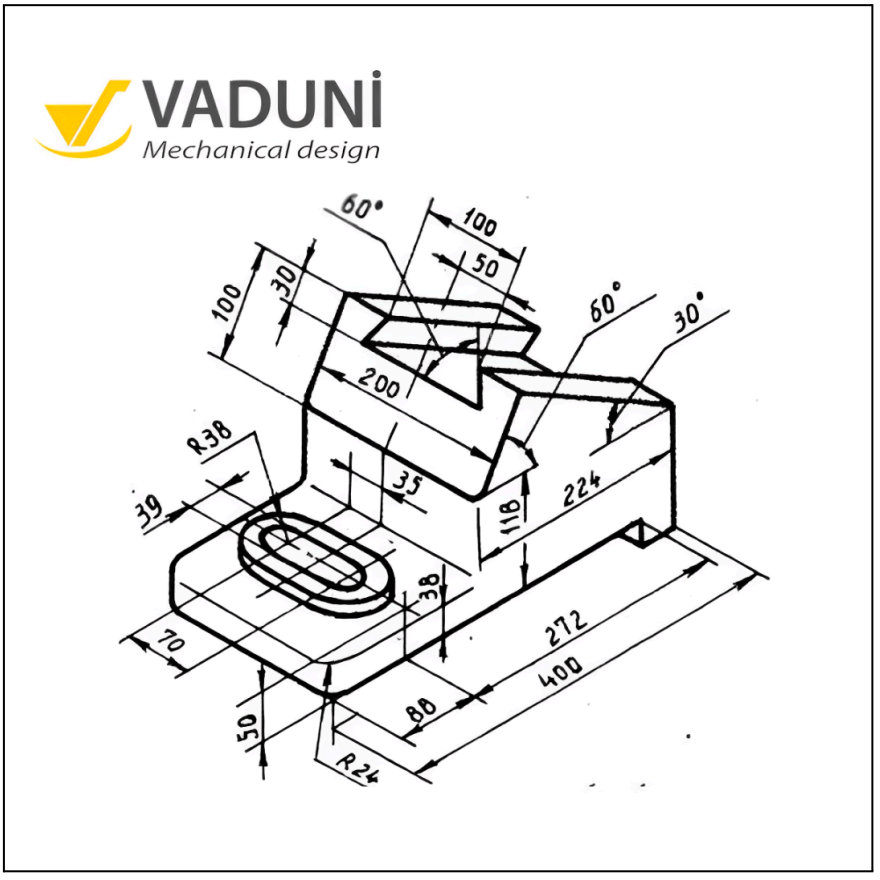

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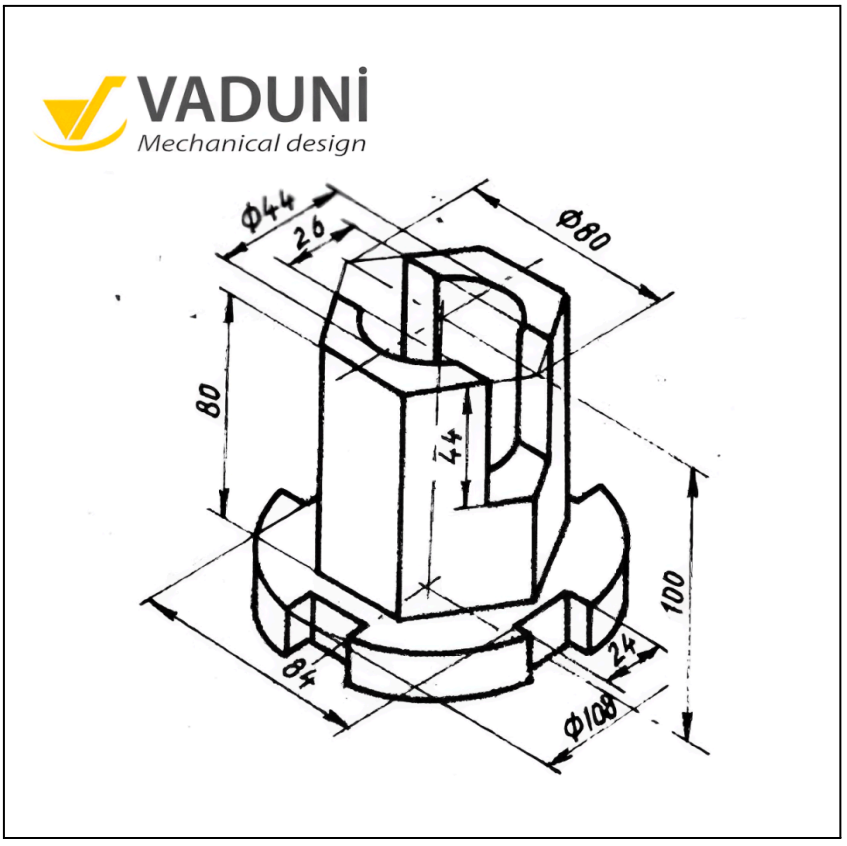

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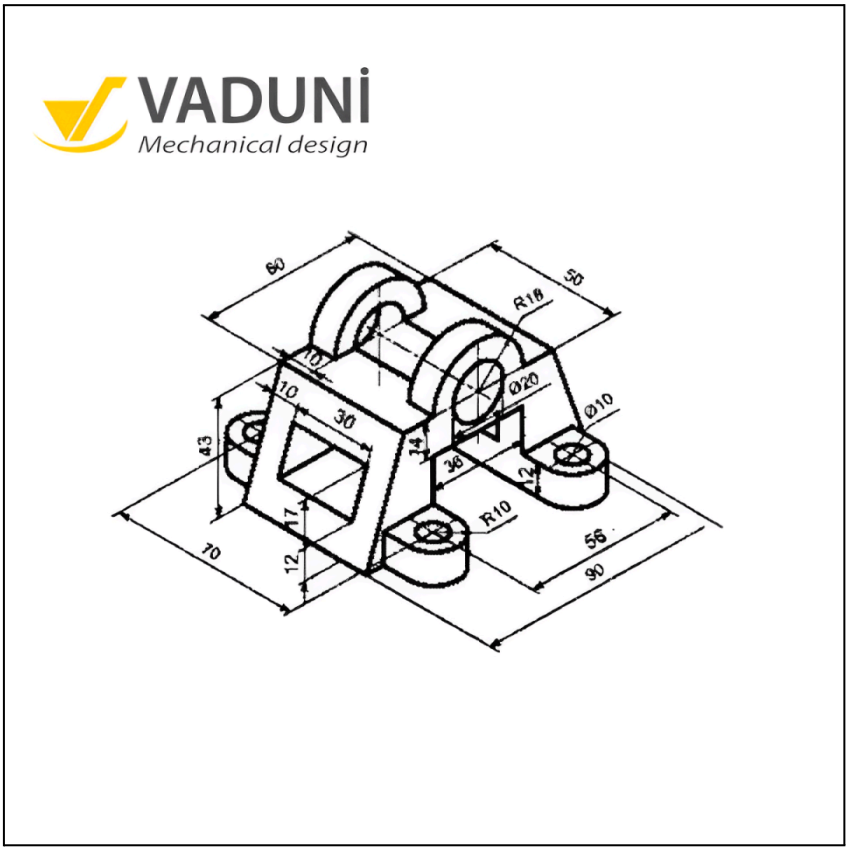

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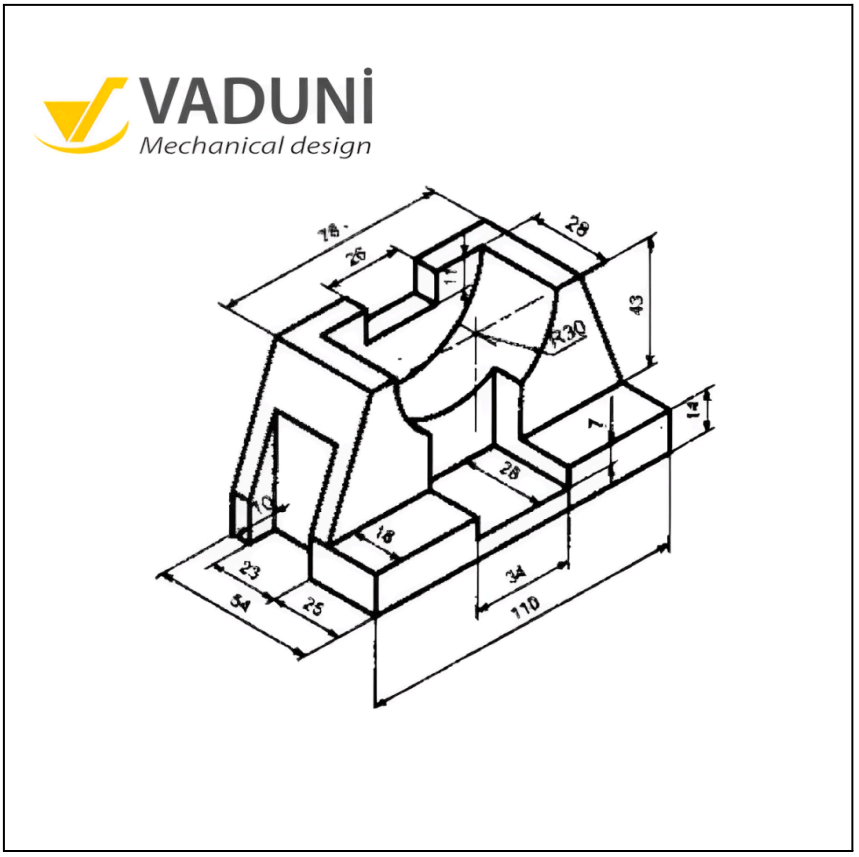

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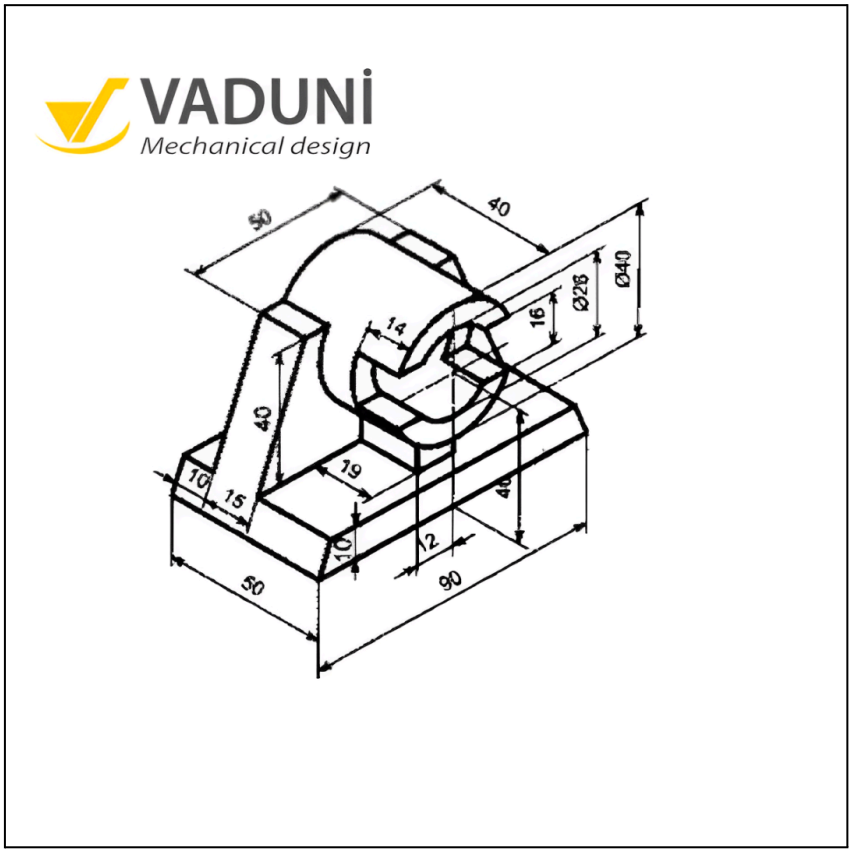

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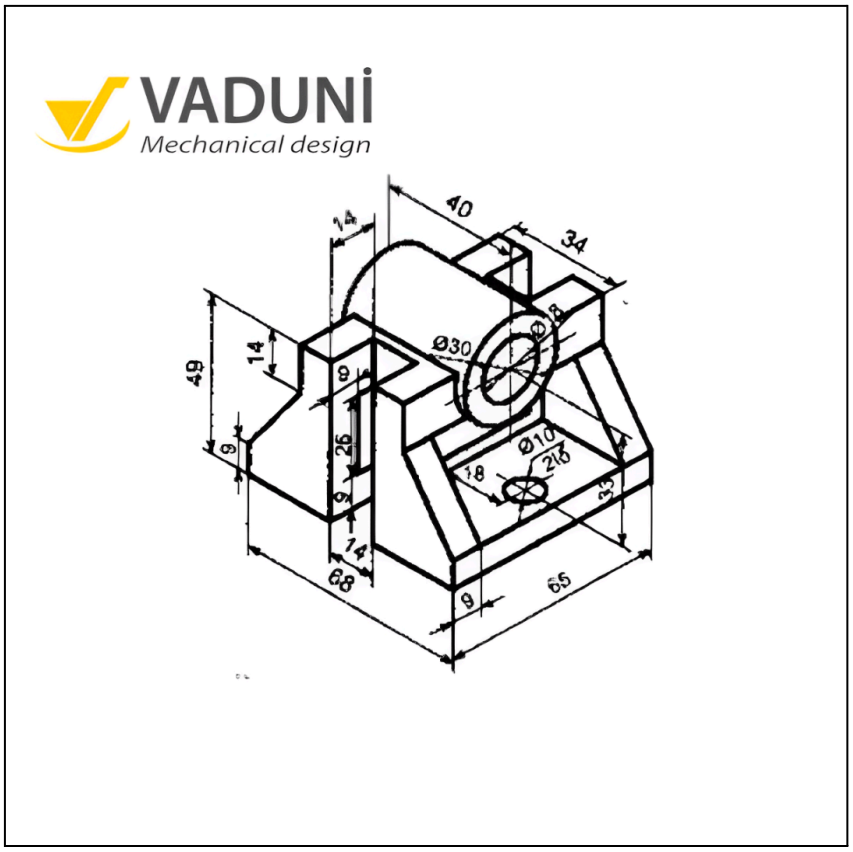

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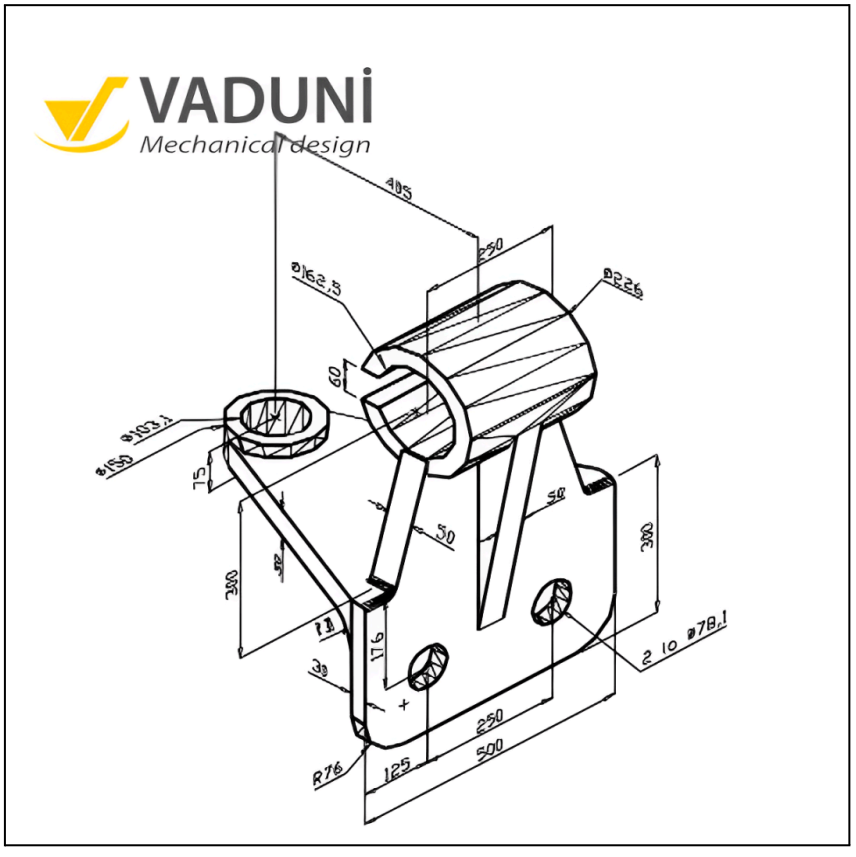

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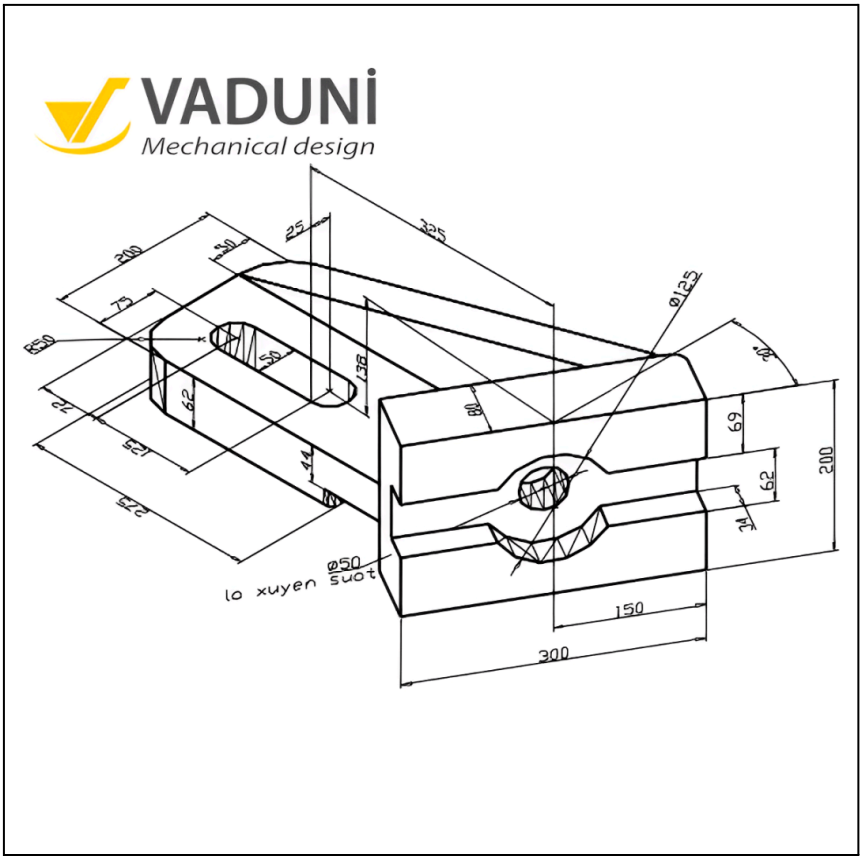

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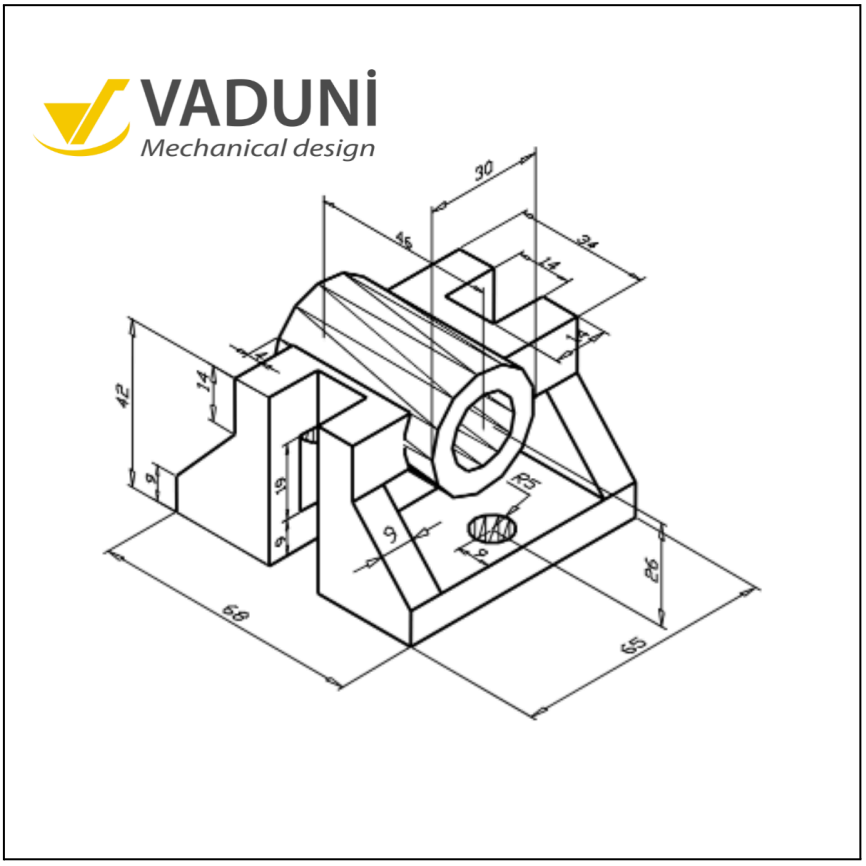

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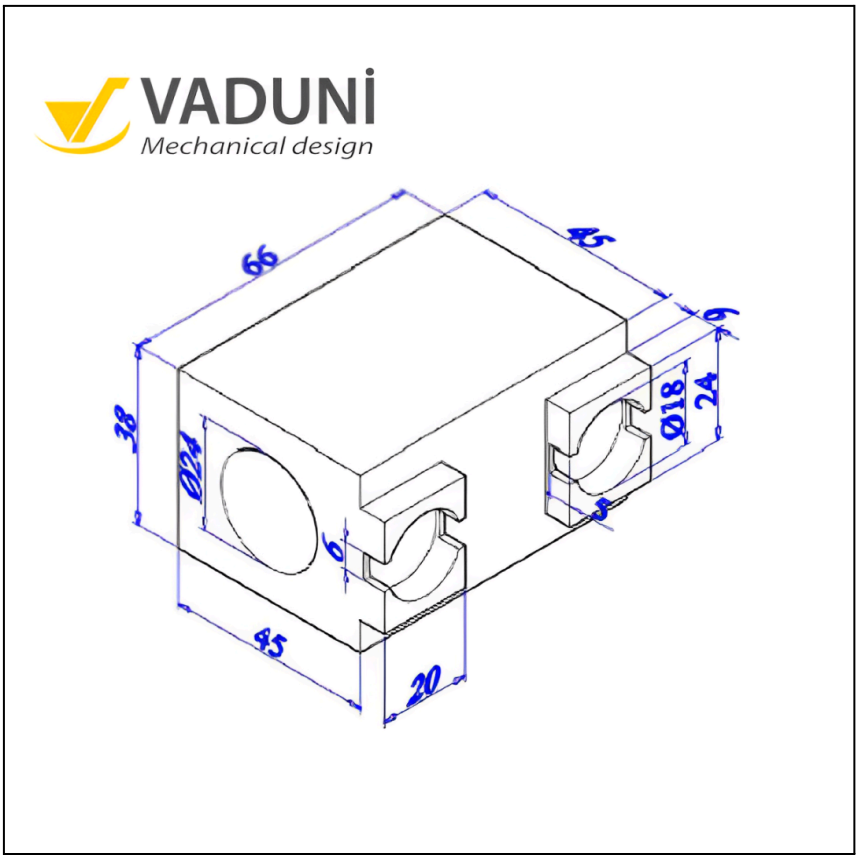

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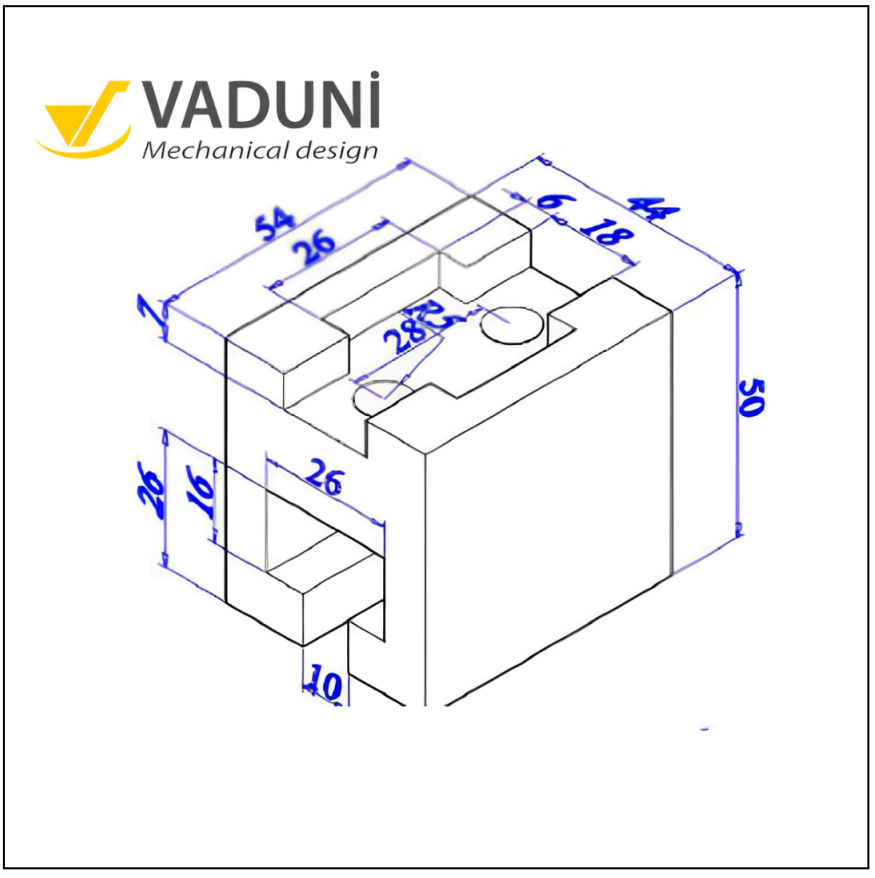

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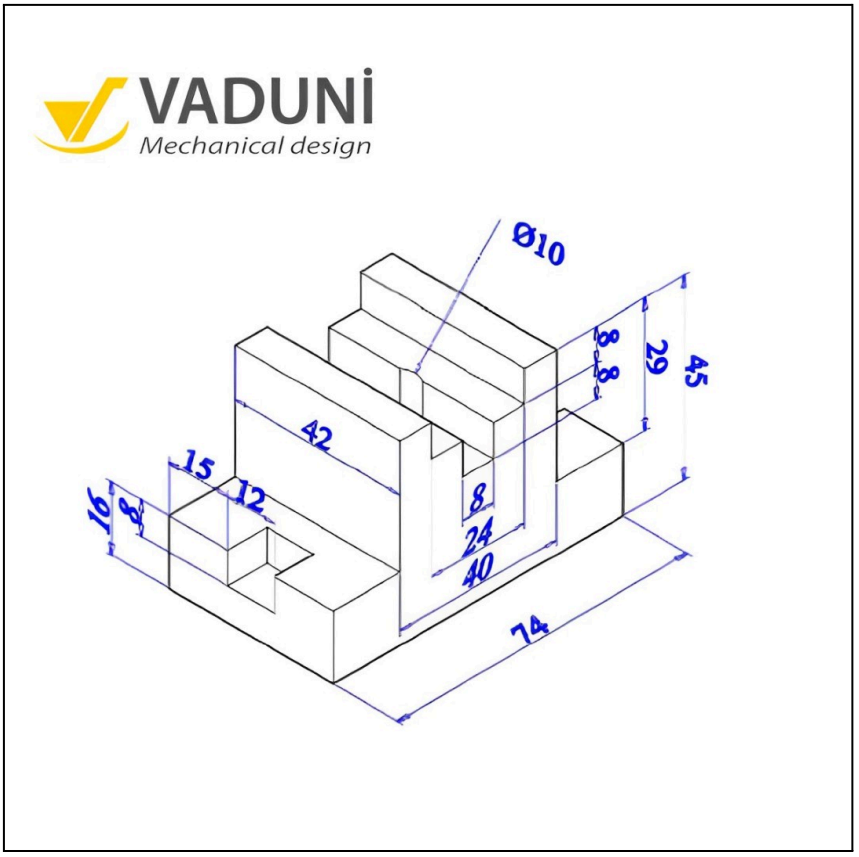

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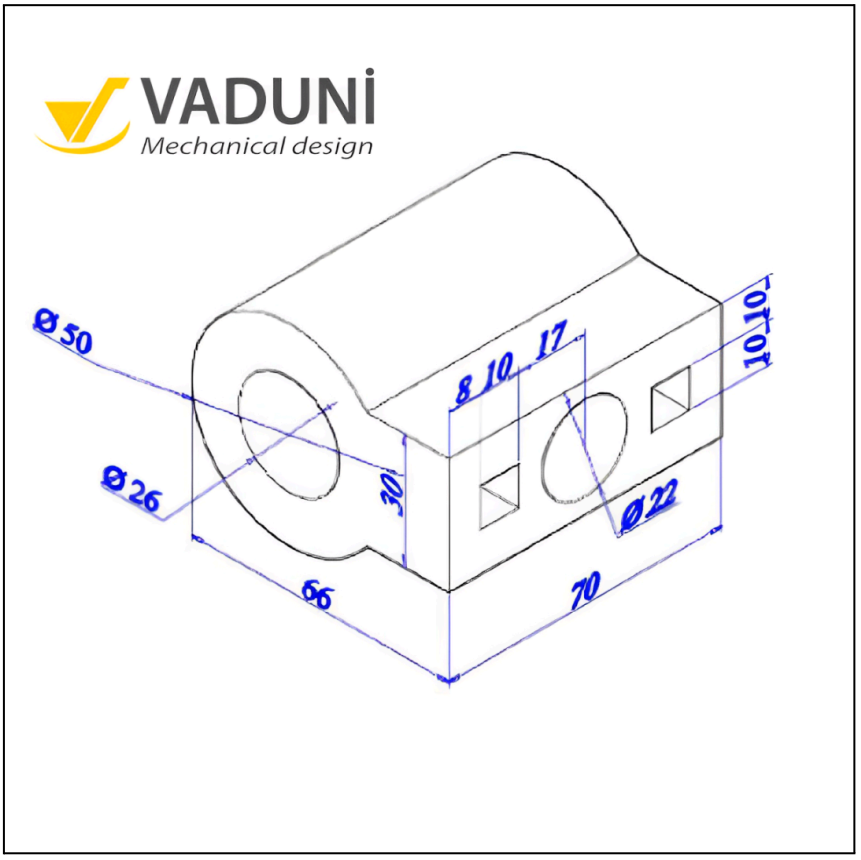

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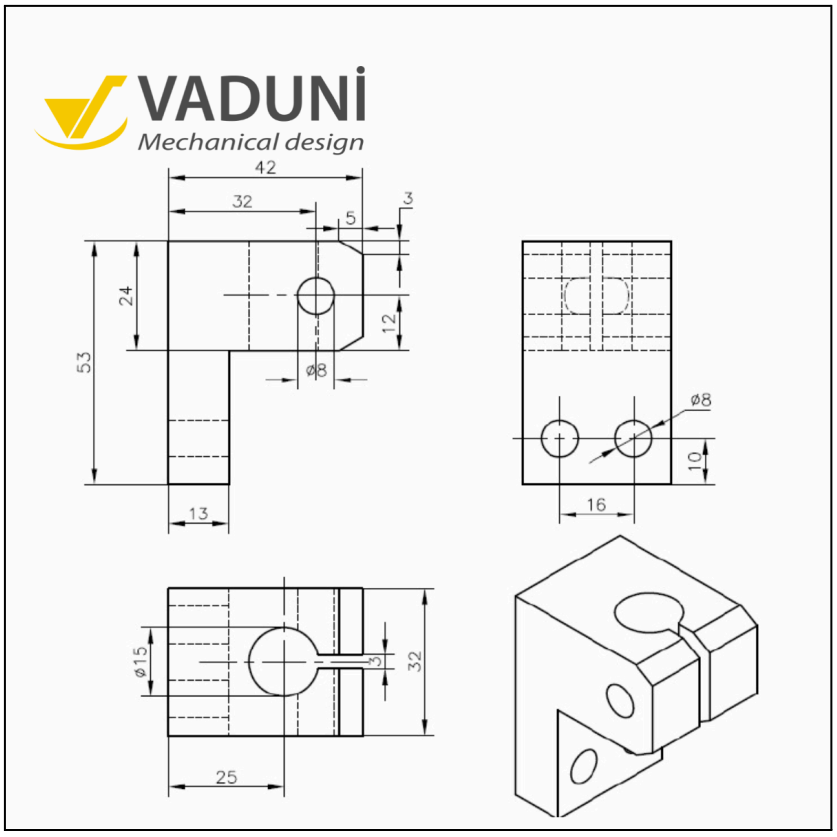

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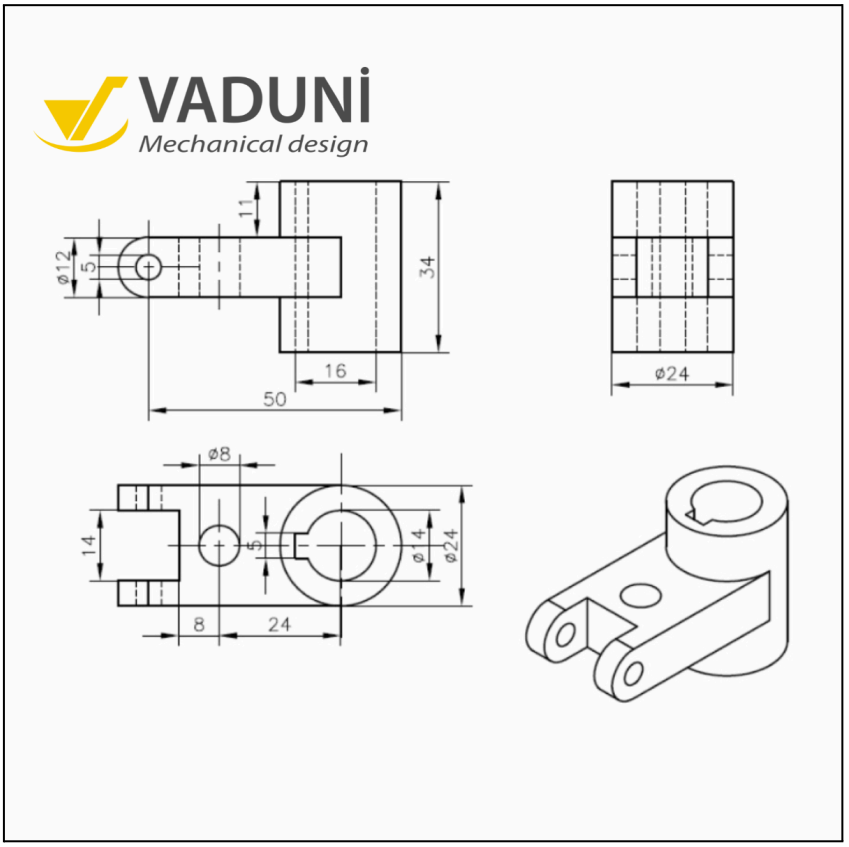

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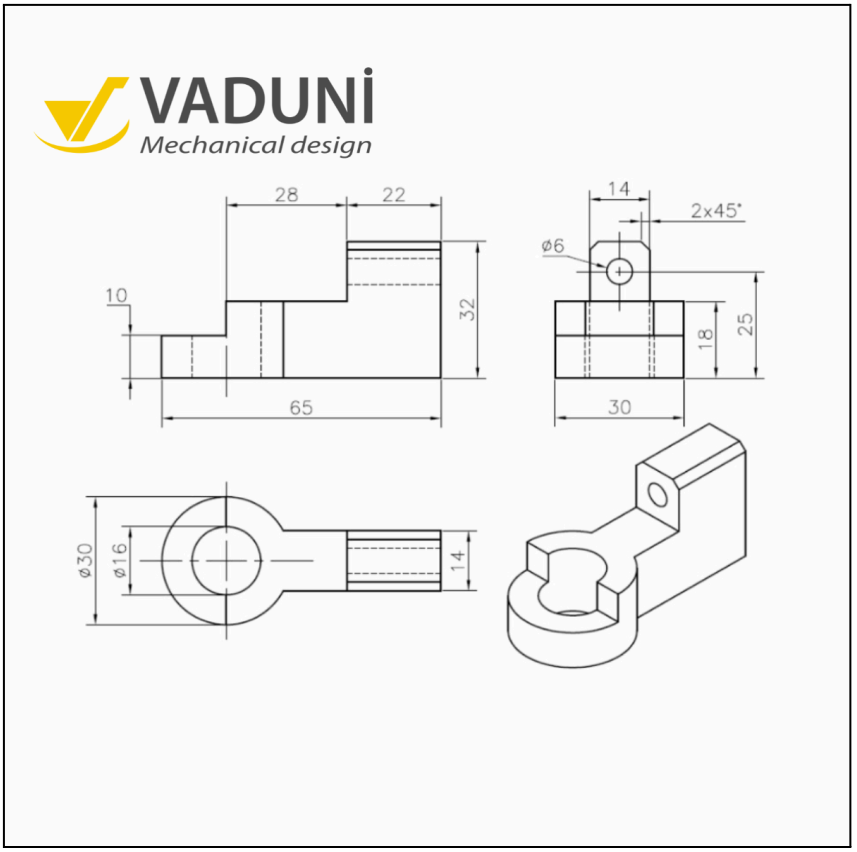

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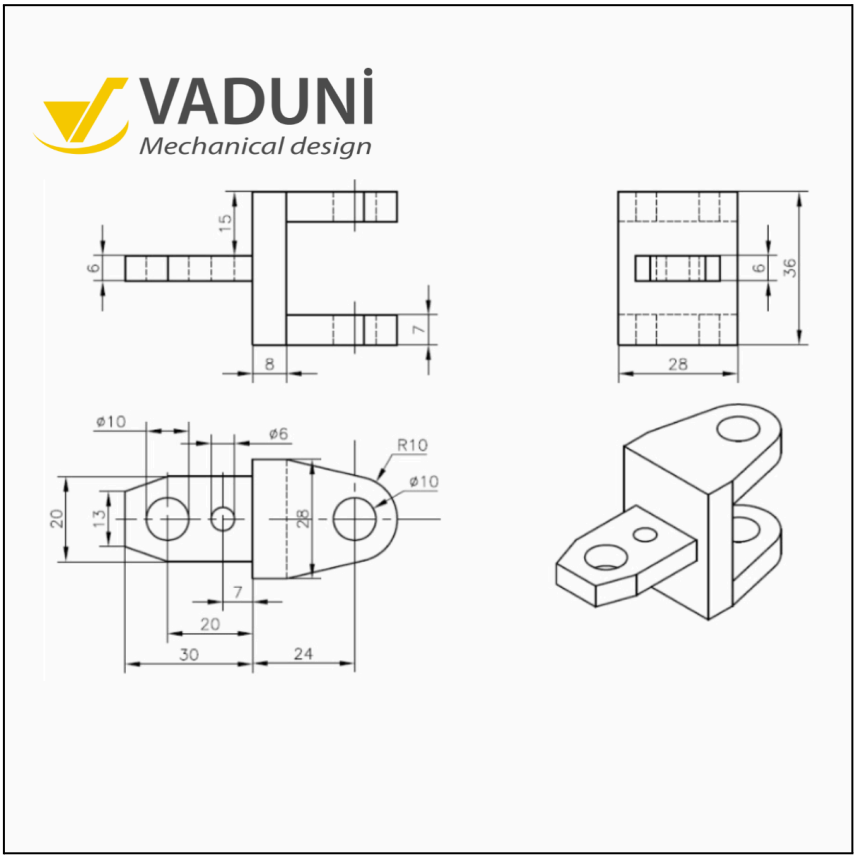

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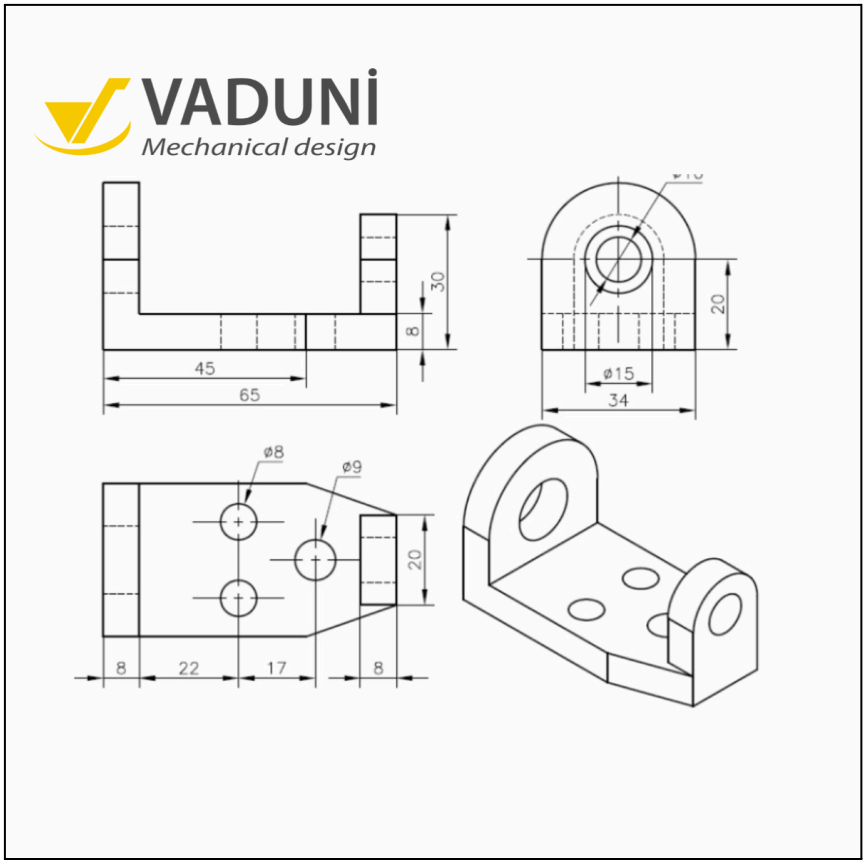

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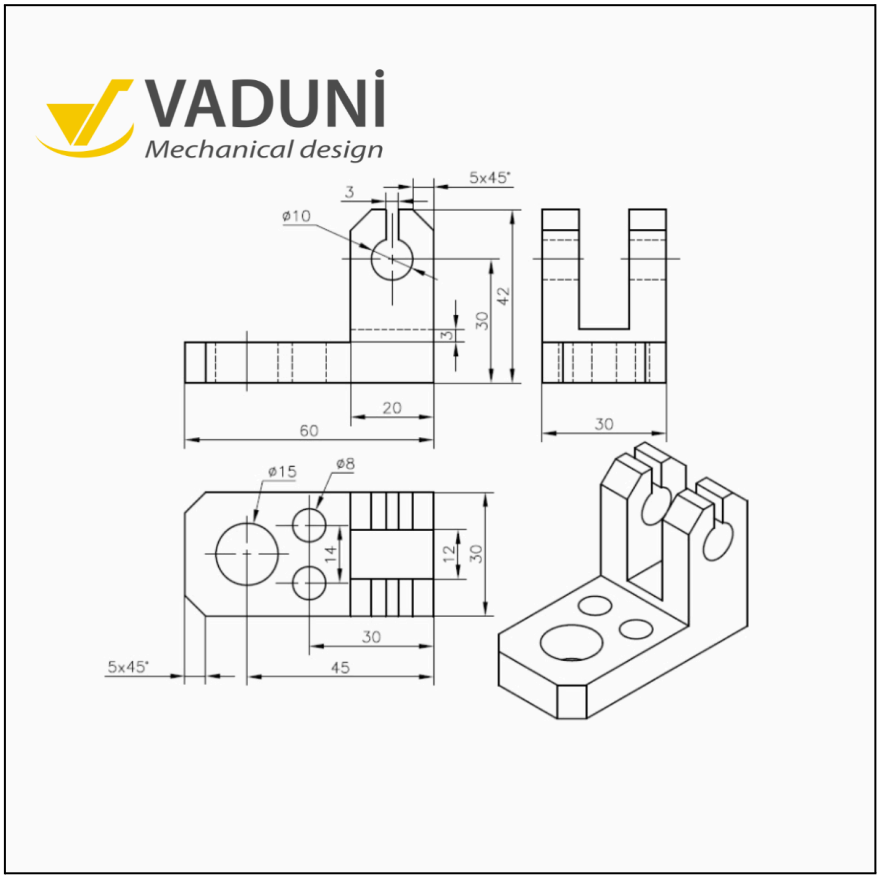

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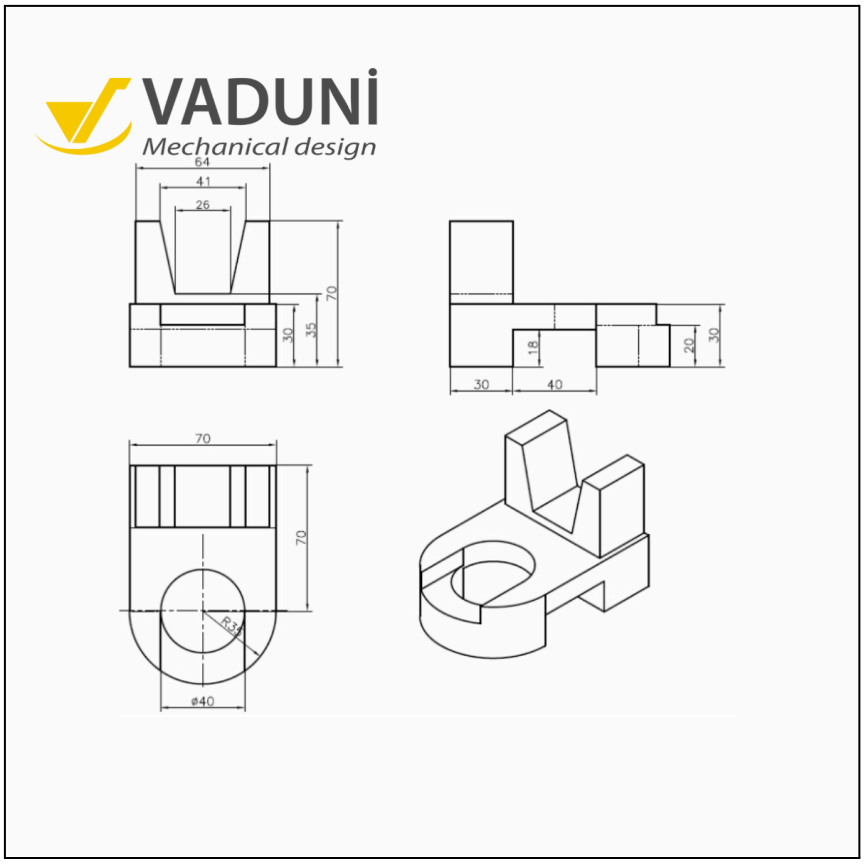

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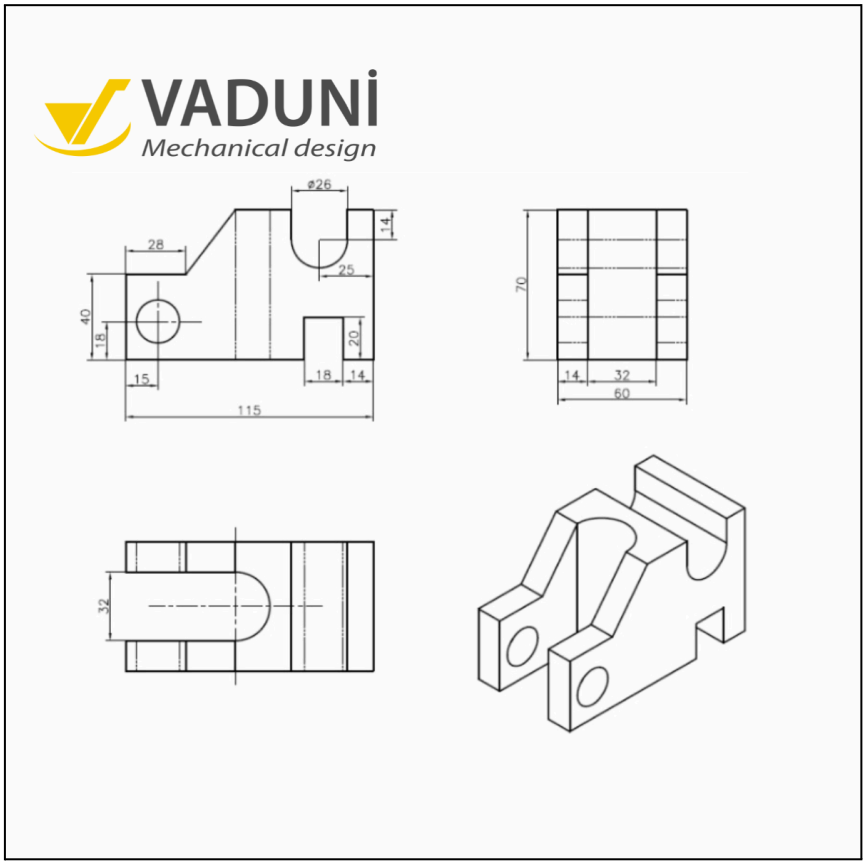

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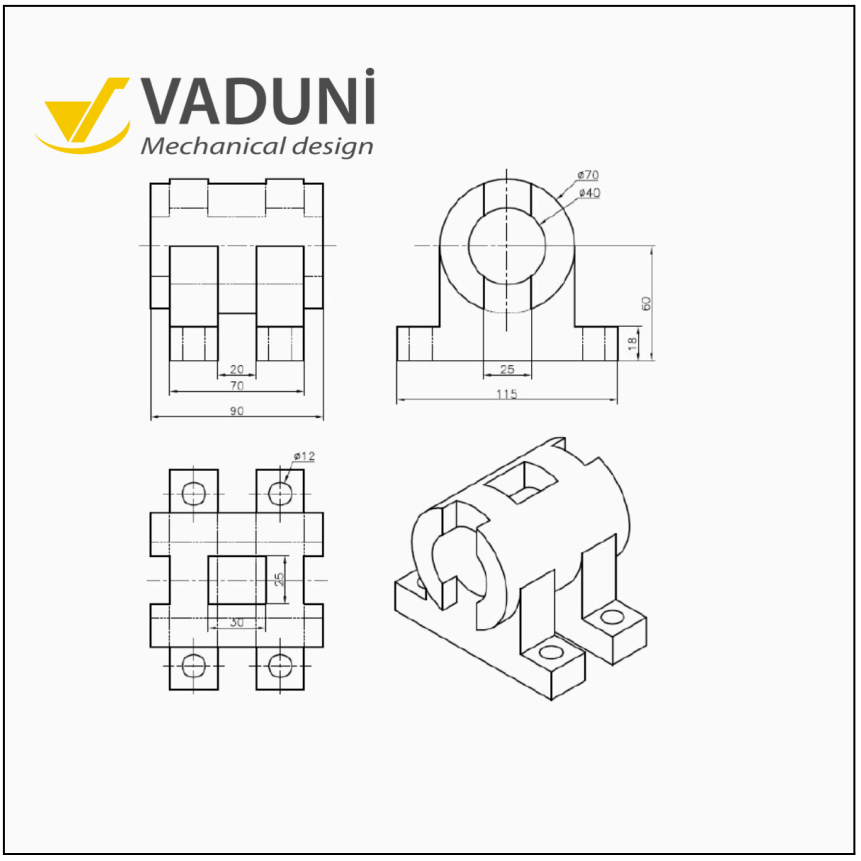

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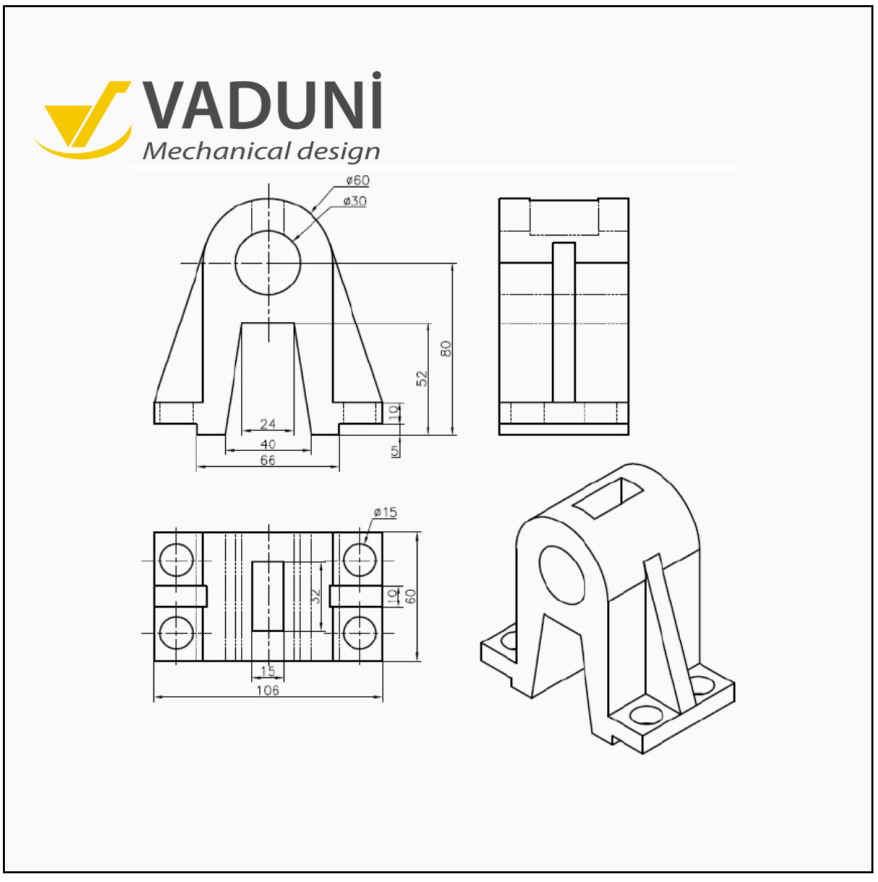

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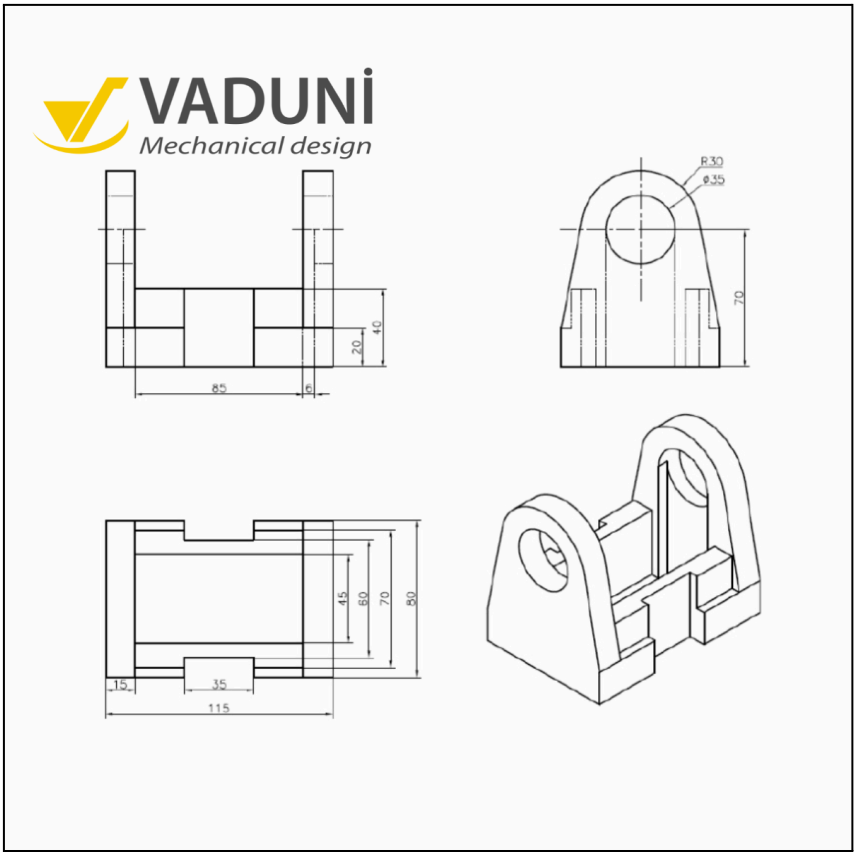

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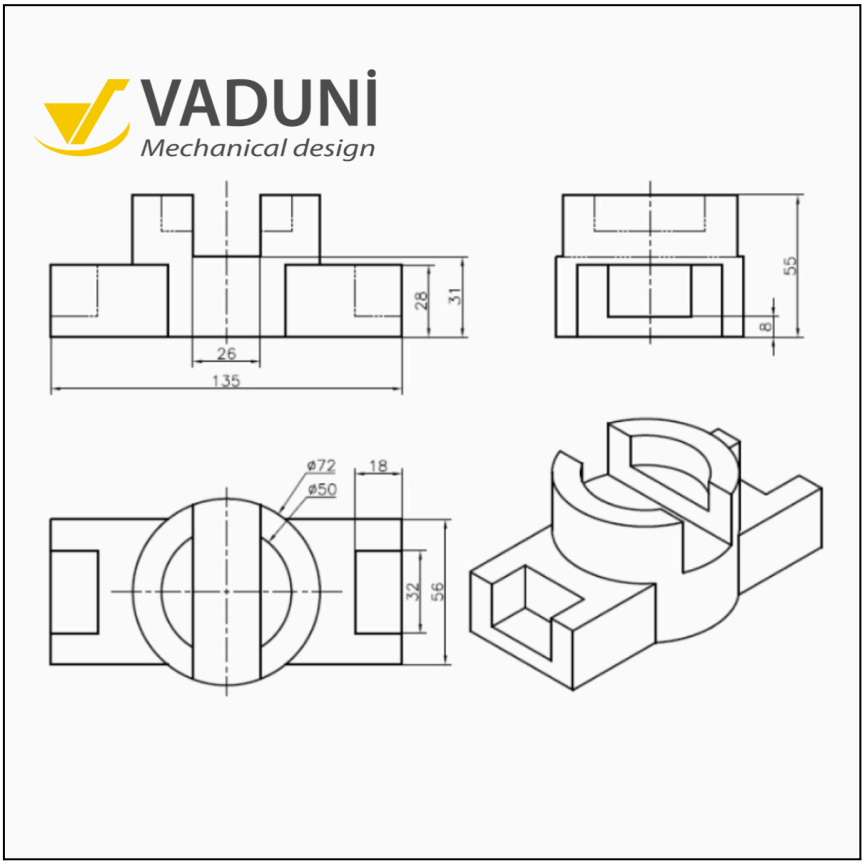

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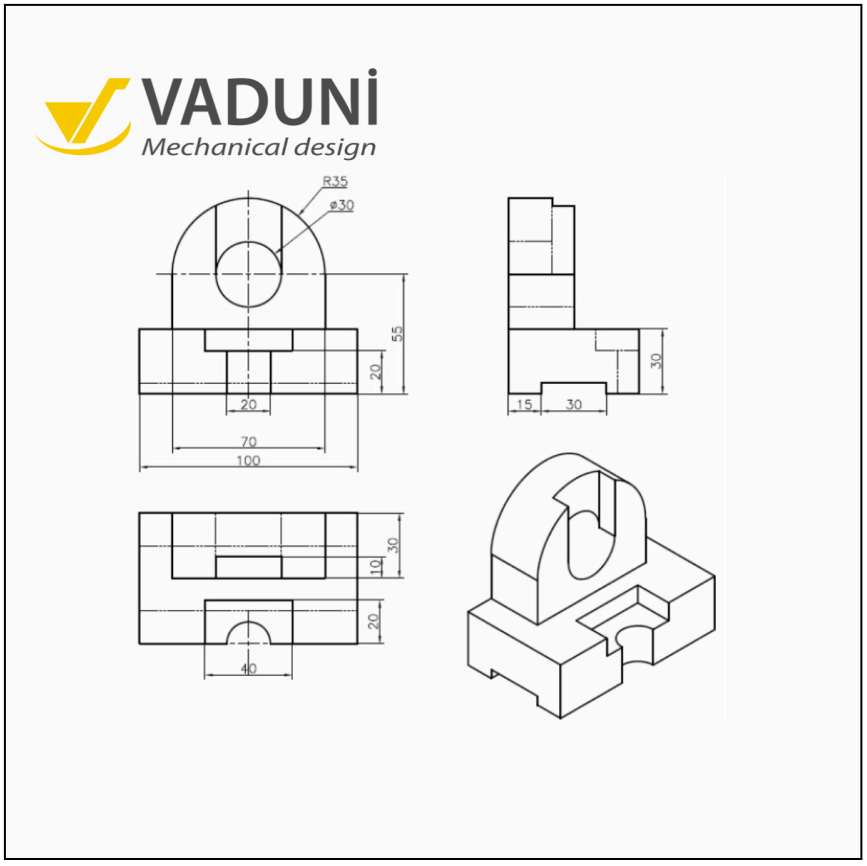

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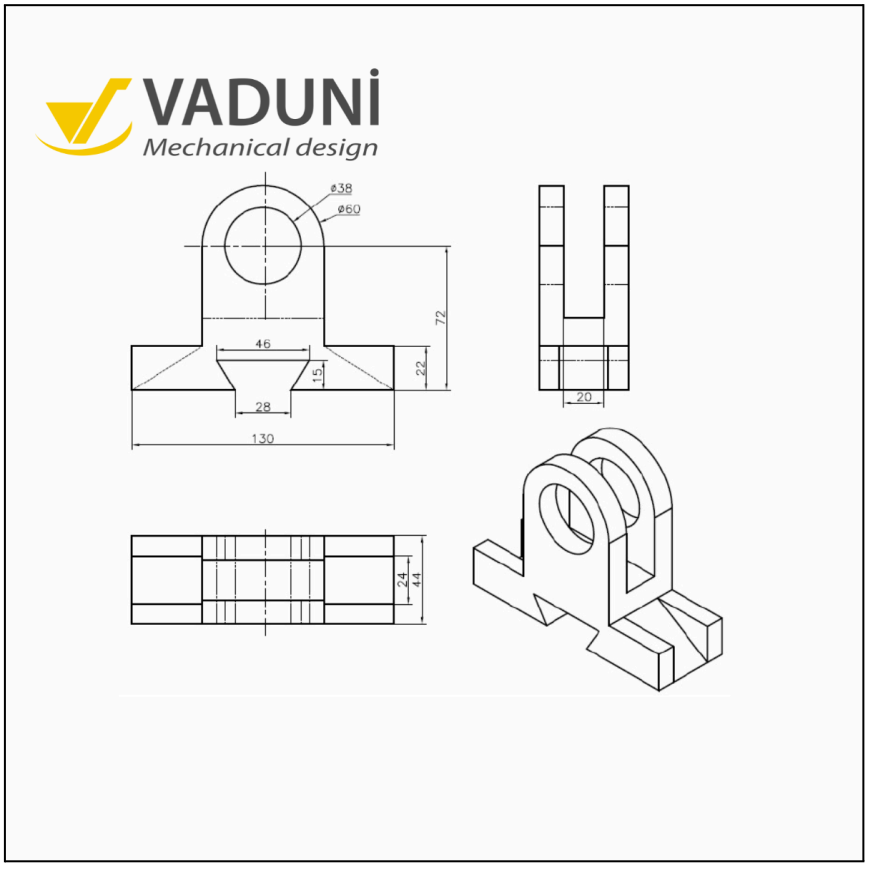

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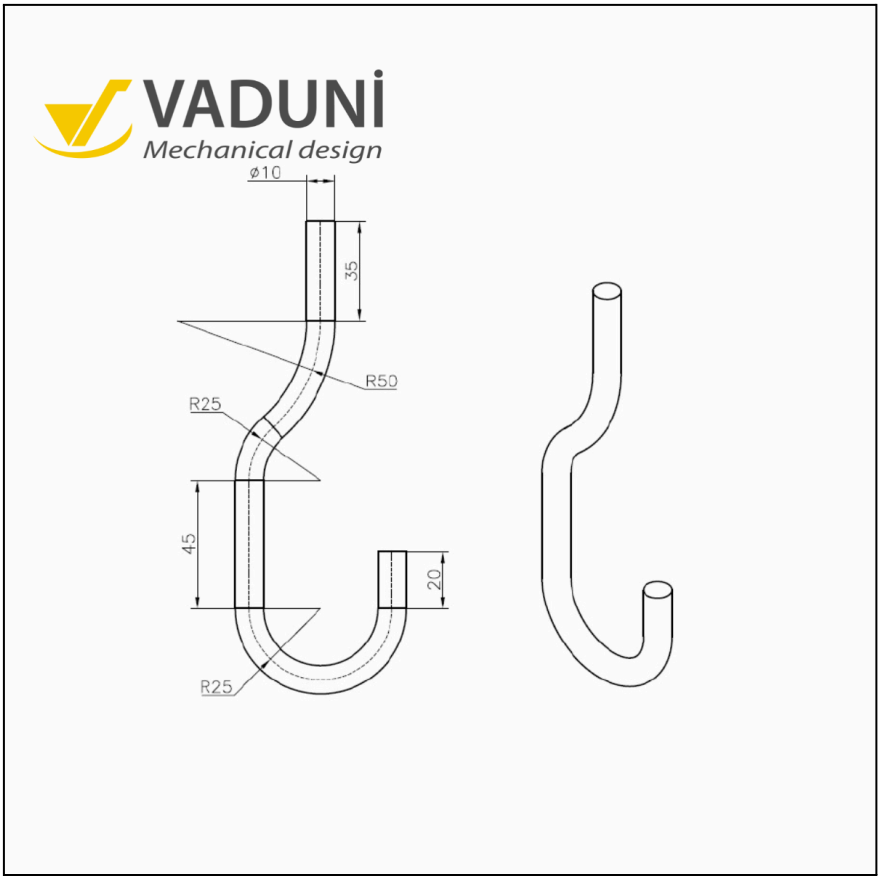

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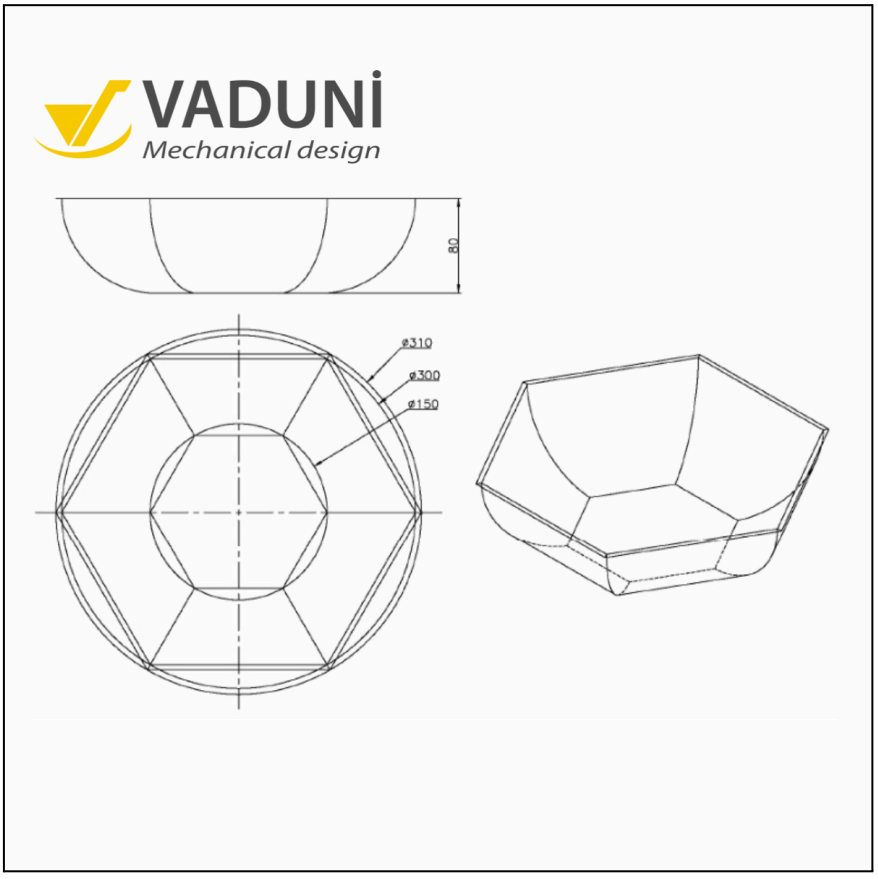

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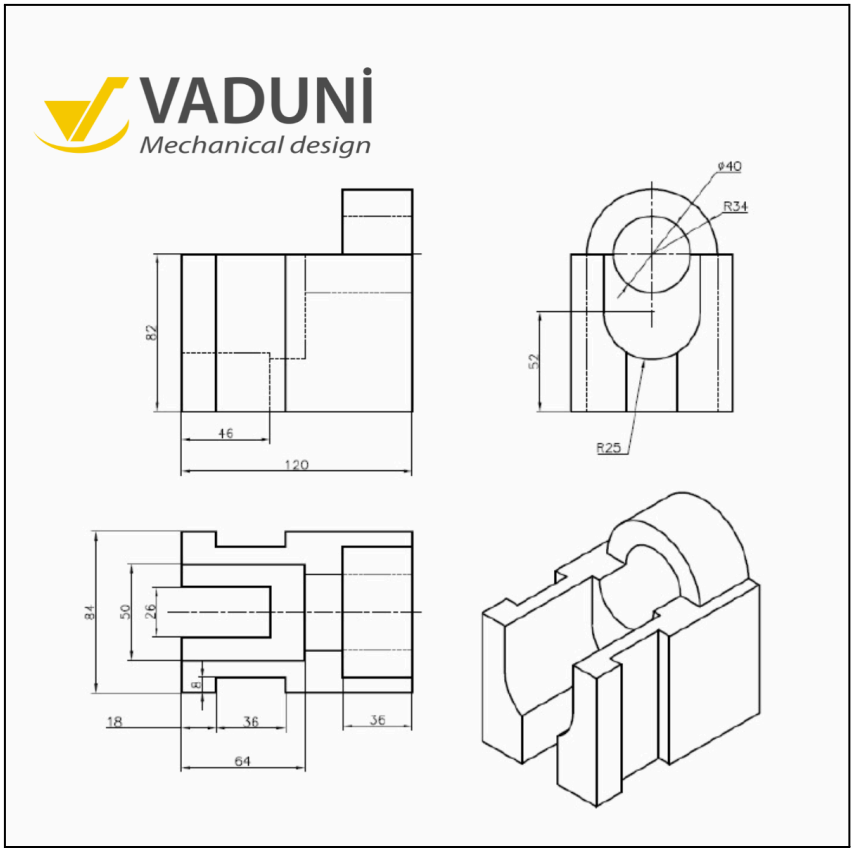

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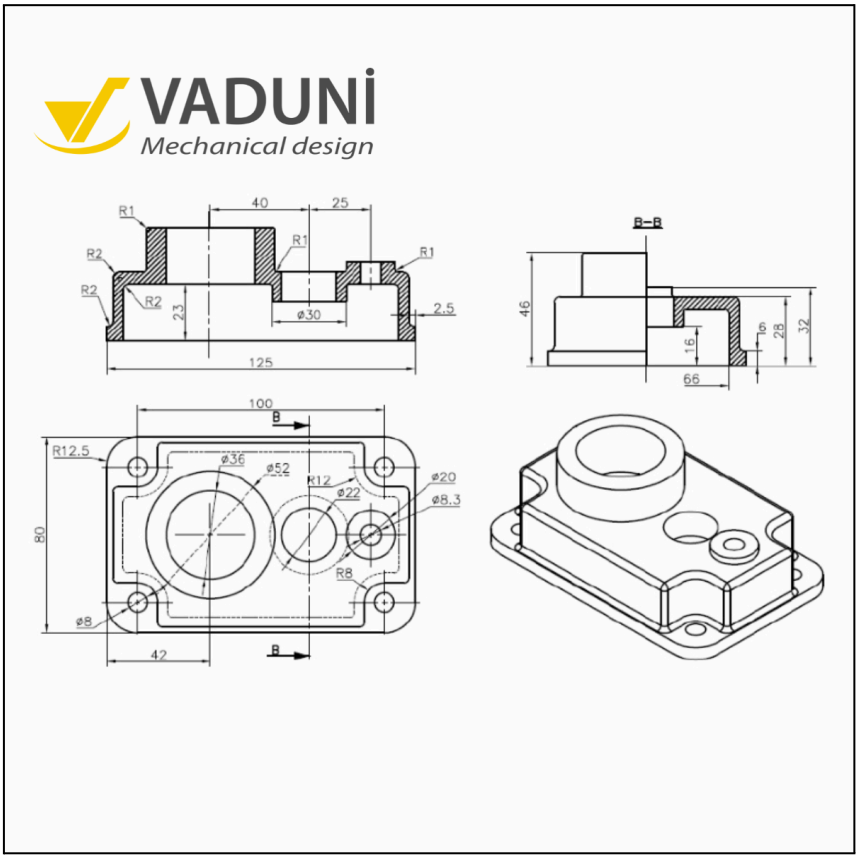

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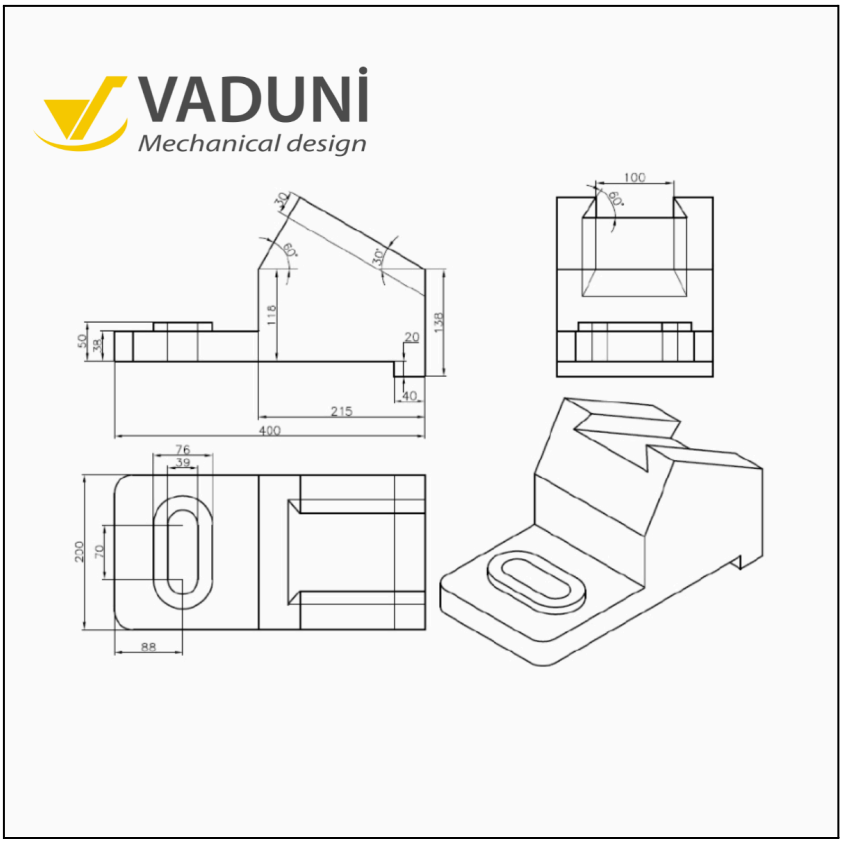

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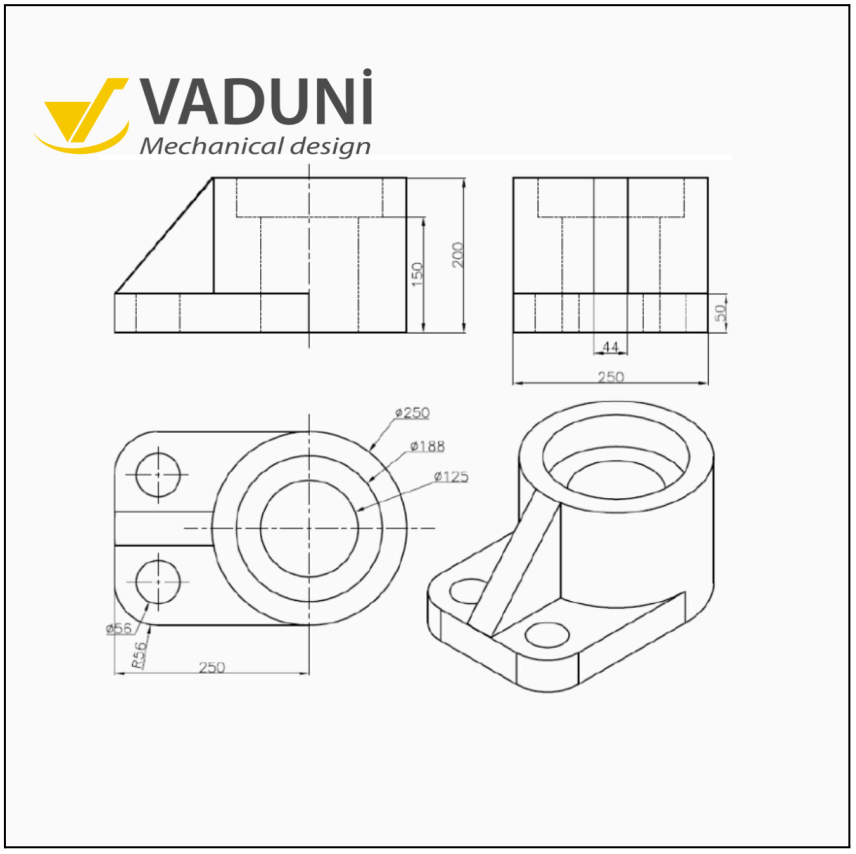

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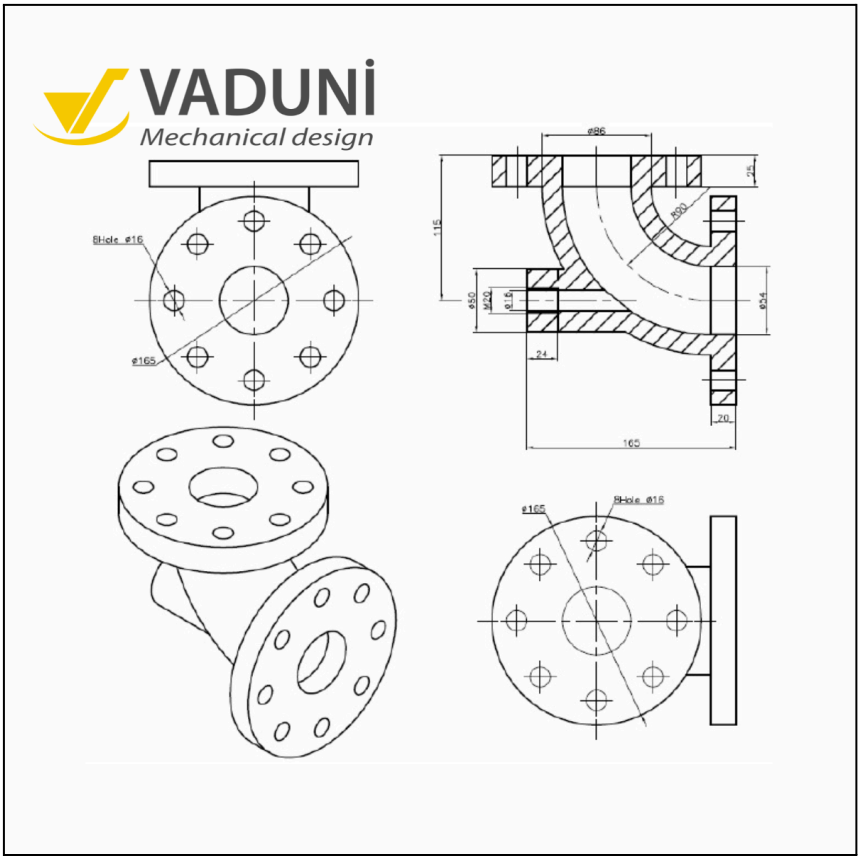

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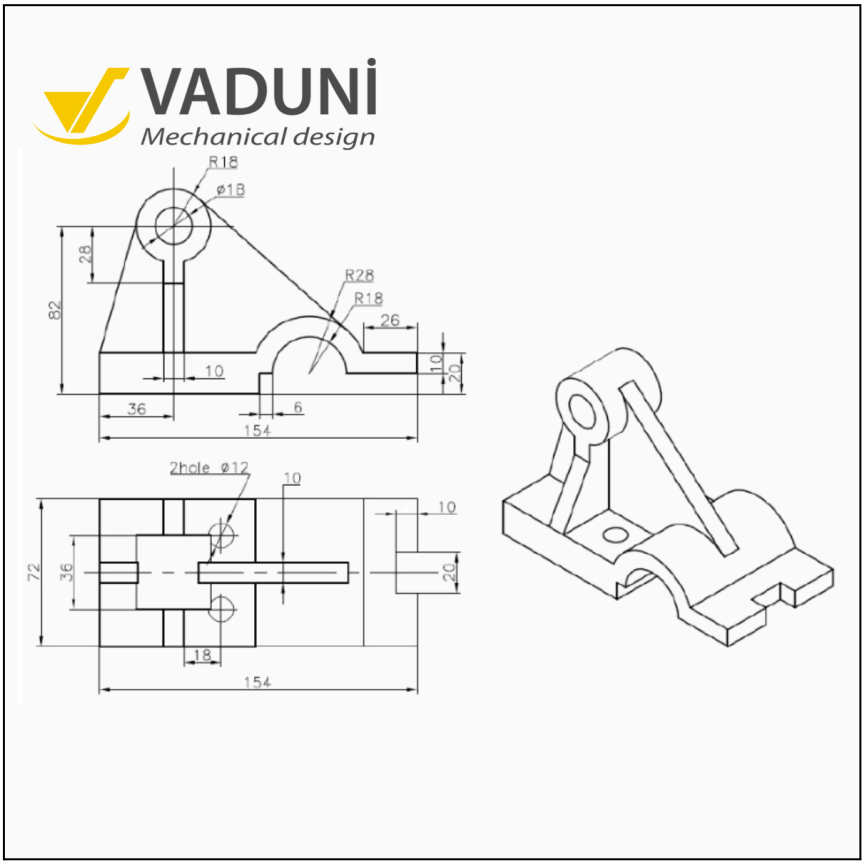

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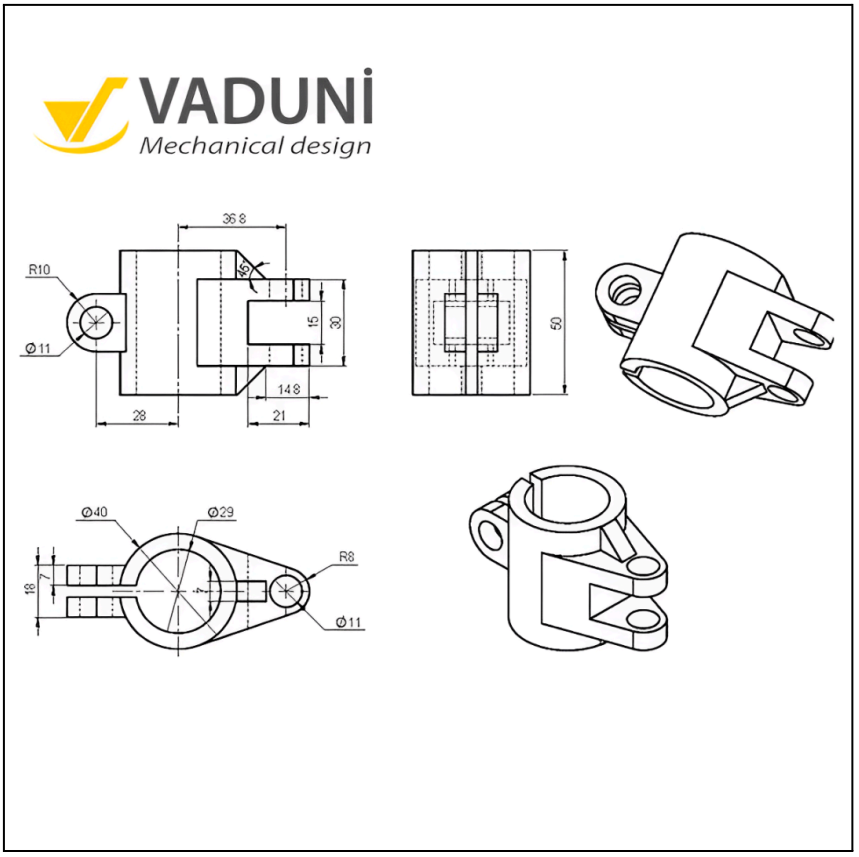
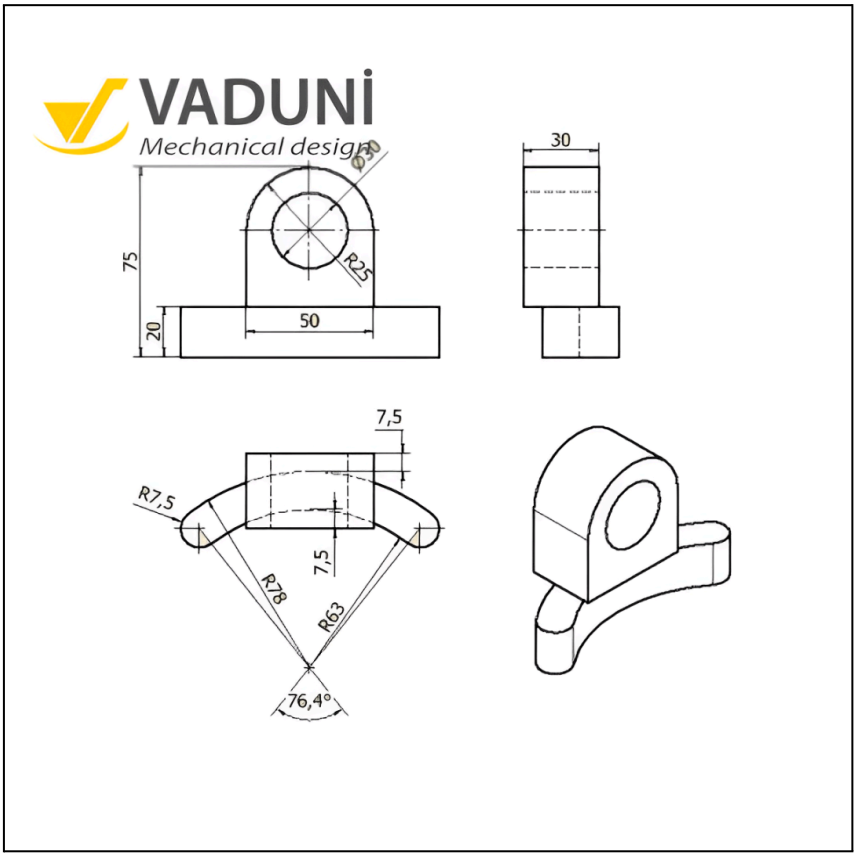
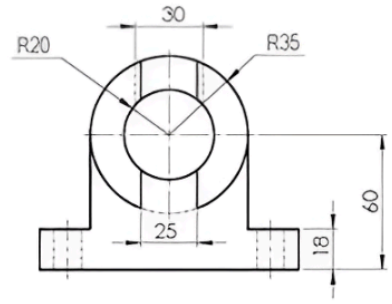


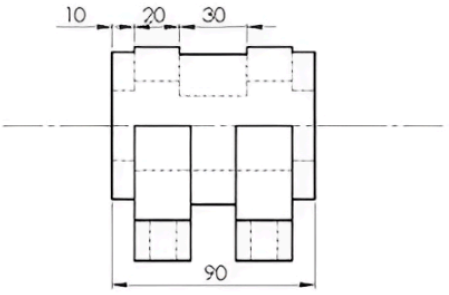
Bài tập 48

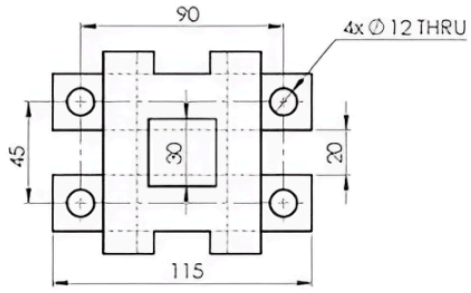


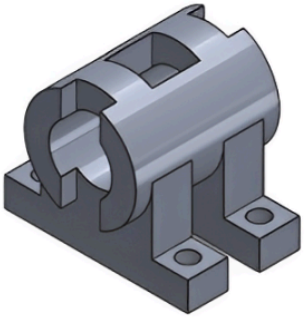
Bài tập 49

VADUNI
Mechanical design



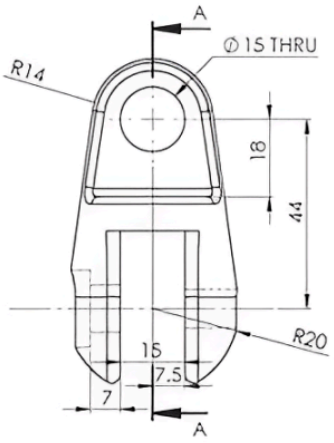


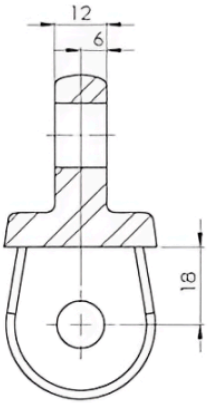




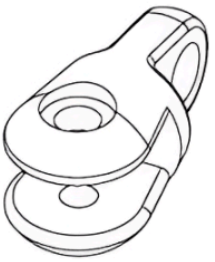
Bài tập 50

VADUNİ
Mechanical design



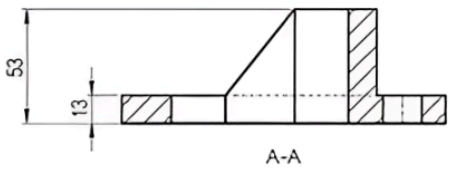


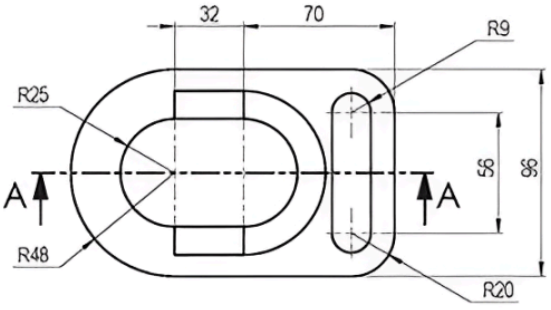
SECTION A-A

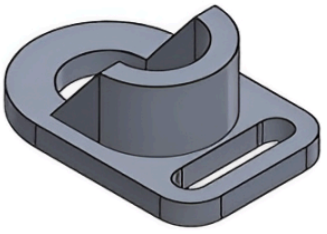


Bài tập 51

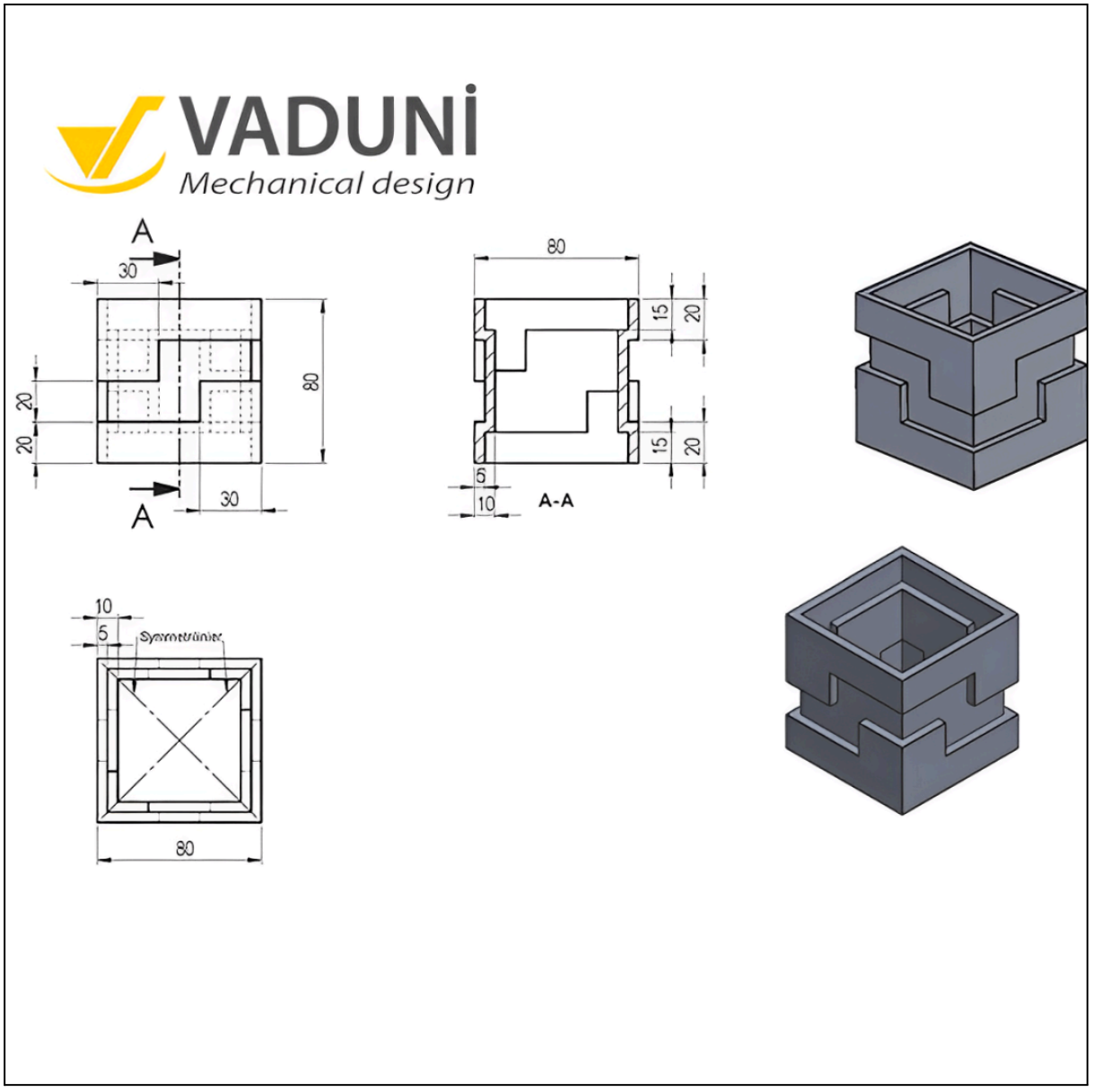
VADUNI
Mechanical design



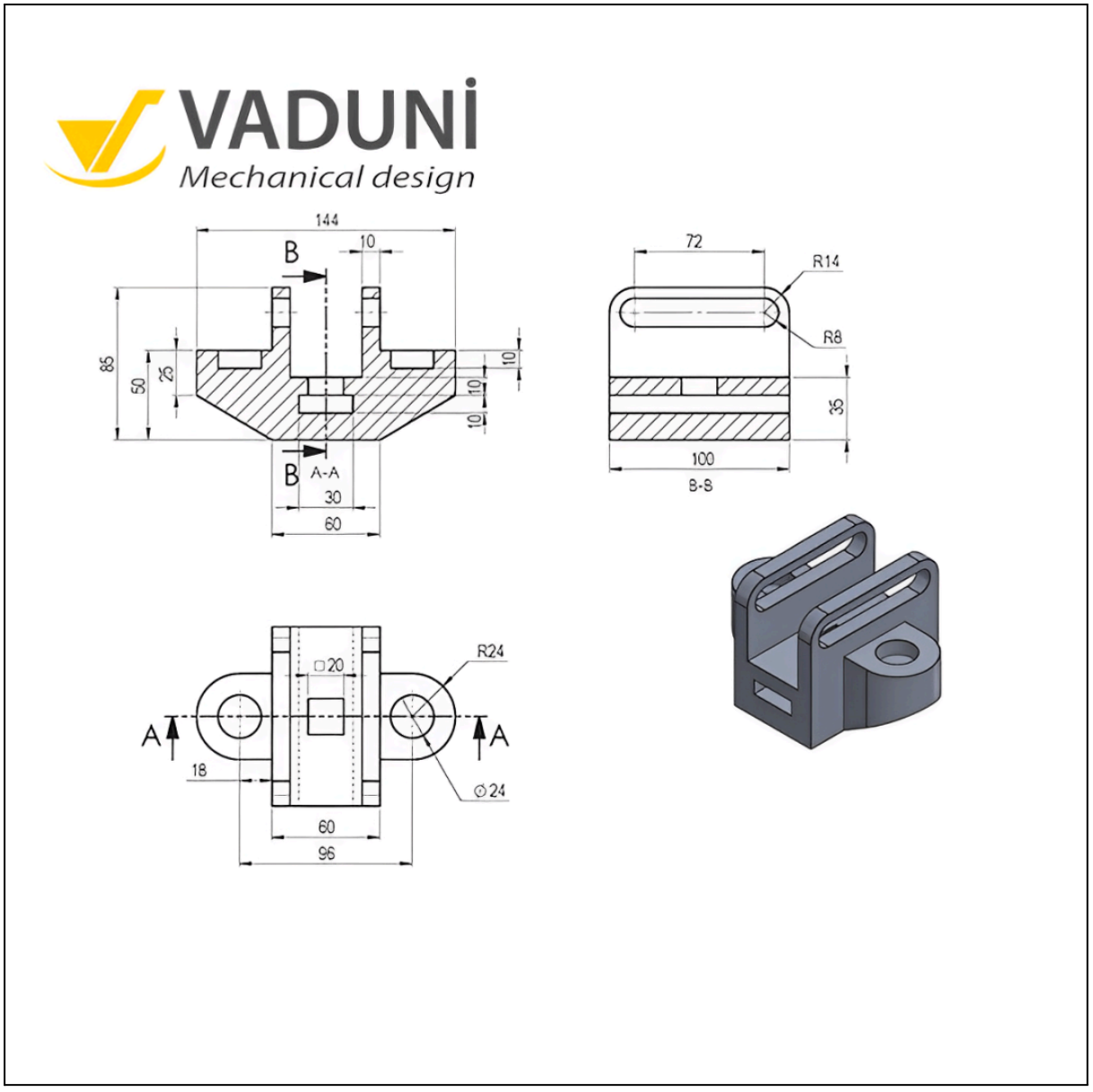




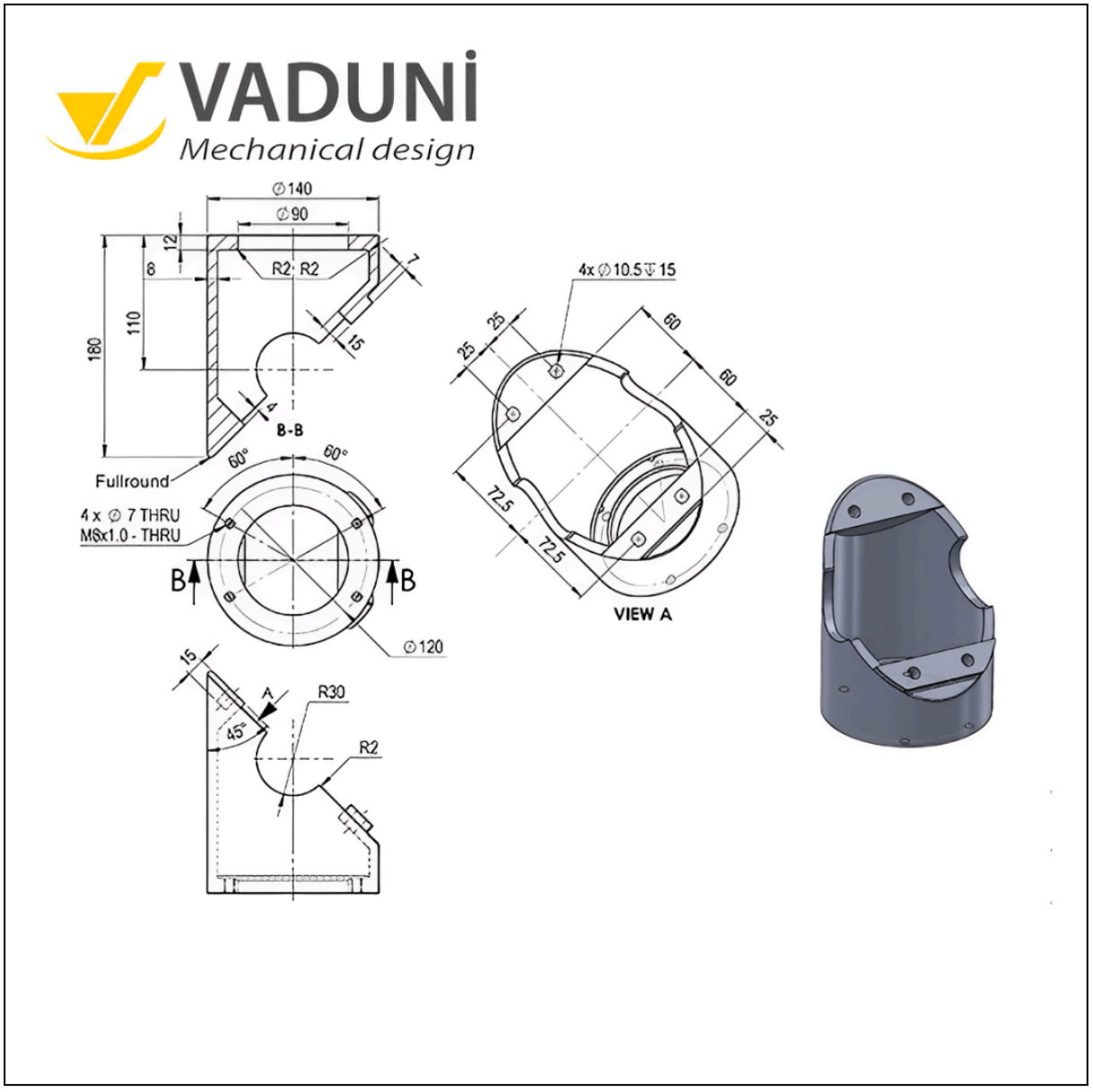
Bài tập 52


VADUNİ
Mechanical design
A
30
80
20
20
30
A
80
15
20
15
20
5
10
A-A
10
5
80

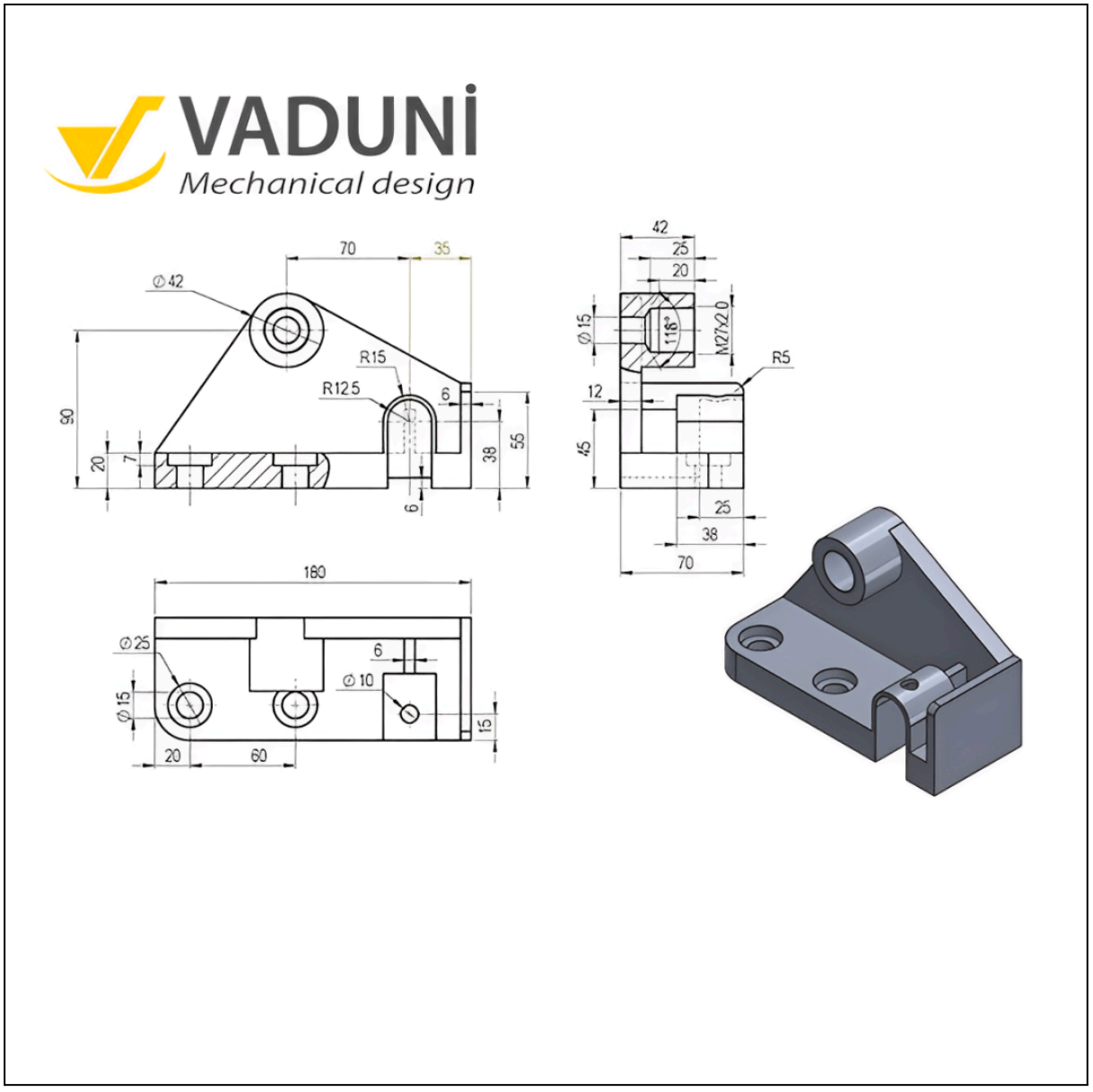
Bài tập 53


VADUNİ
Mechanical design
144
10
B
85
50
25
10
10
10
B
A-A
30
60
72
R14
R8
35
100
B-B
R24
□20
A
A
18
⌀24
60
96

Bài tập 54

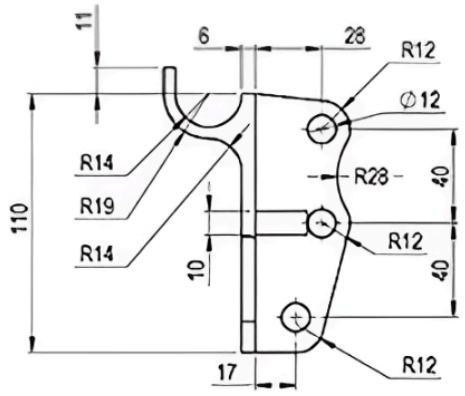

VADUNİ
Mechanical design
∅140
∅90
12
8
110
180
R2
R2
7
15
4
B-B
Fullround
60°
60°
4 x ∅ 7 THRU
M8x1.0 - THRU
B
B
∅120
15
45°
A
R30
R2
4x ∅10.5↧15
25
25
60
60
25
72.5
72.5
VIEW A

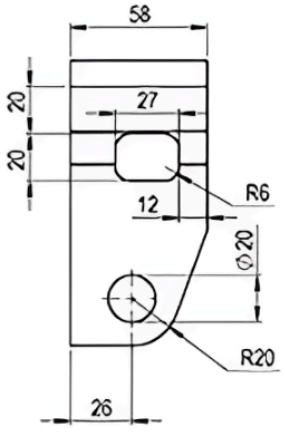
Bài tập 55

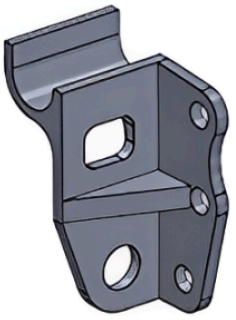

VADUNI
Mechanical design
70
35
∅42
R15
R12.5
6
90
20
7
38
55
6
180
∅25
6
∅10
∅15
15
20
60
42
25
20
∅15
M27x2.0
118°
R5
12
45
25
38
70

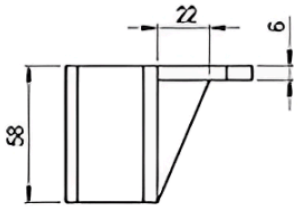
Bài tập 56

VADUNİ
Mechanical design

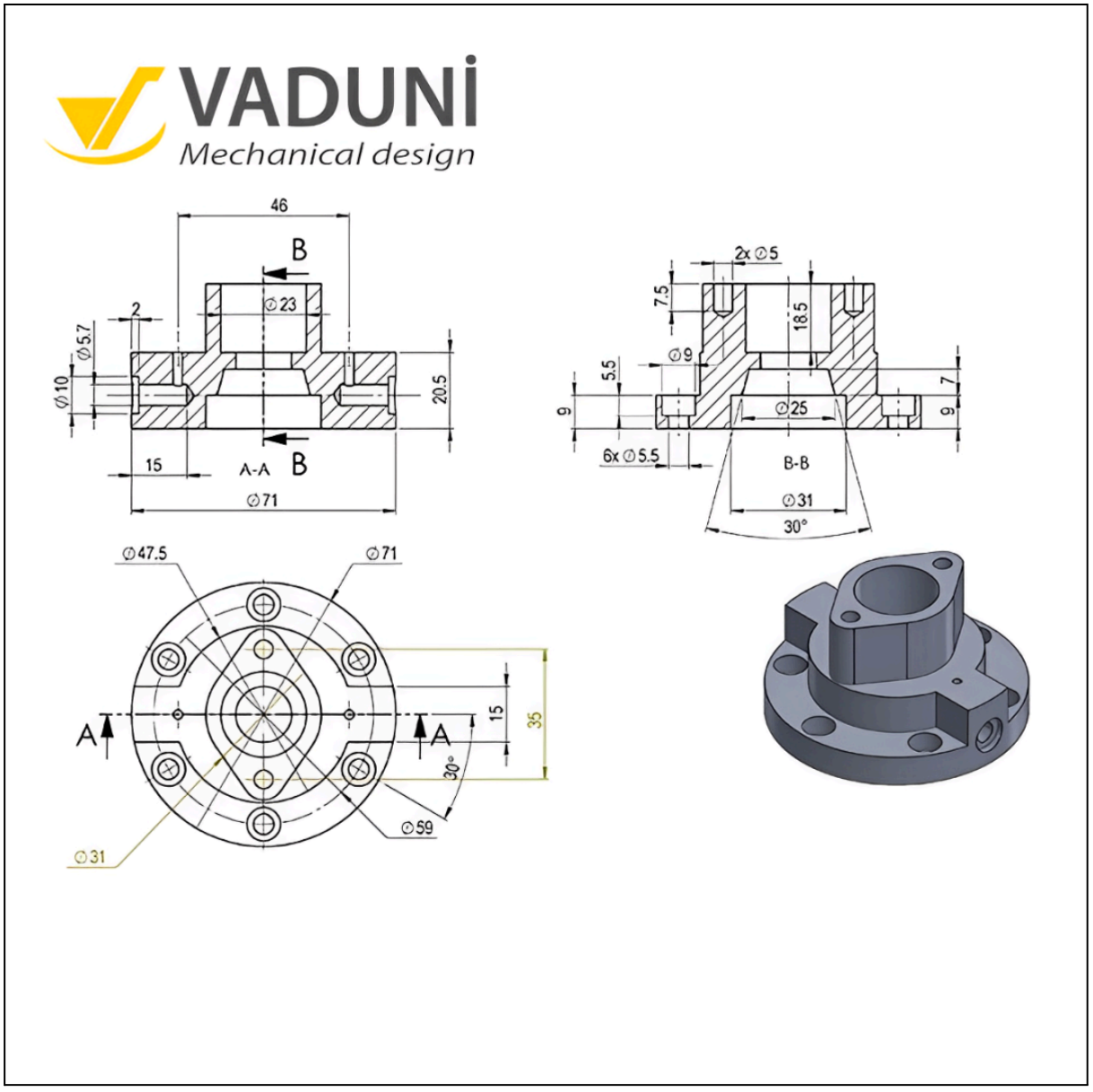




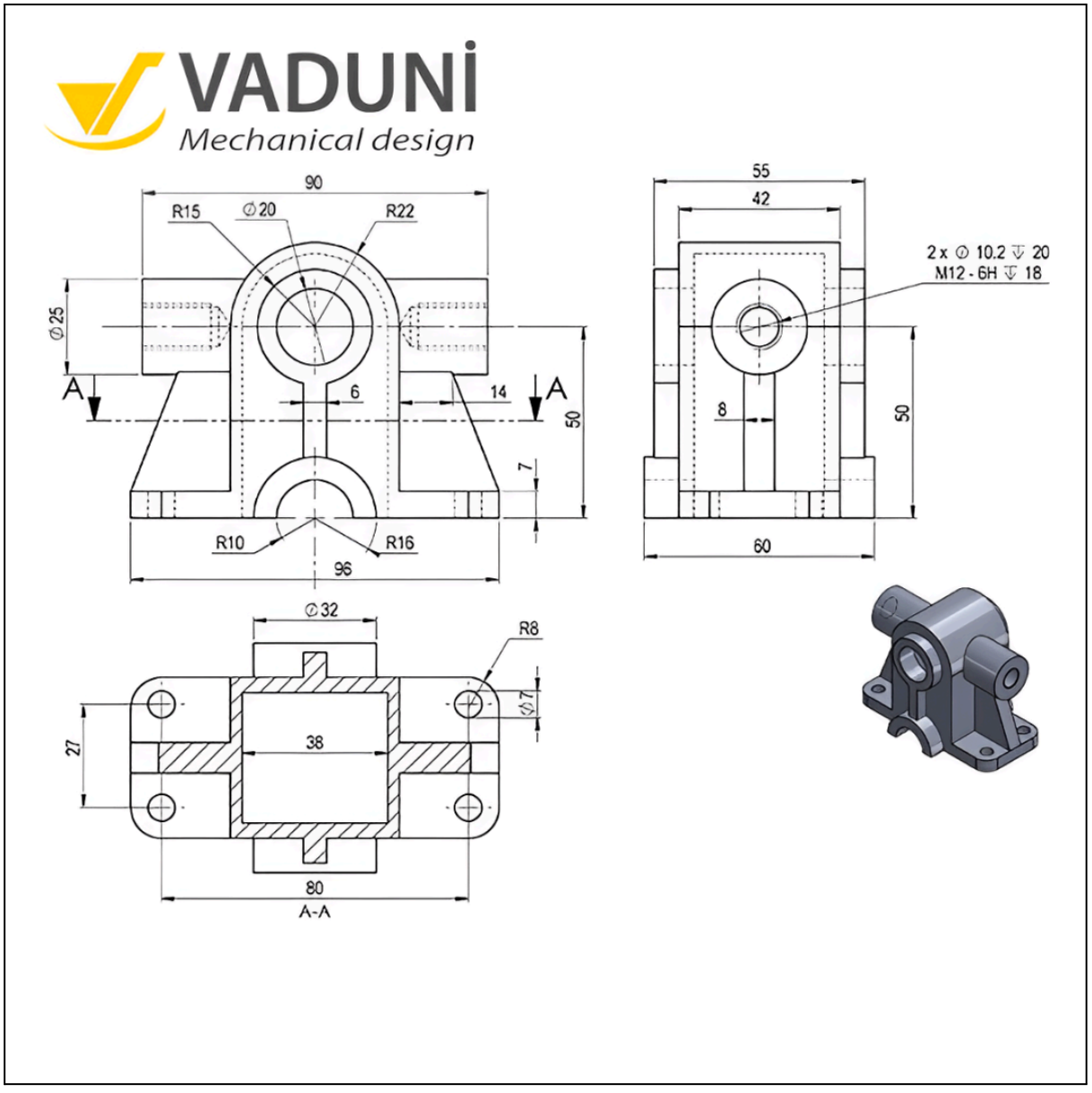




Bài tập 57

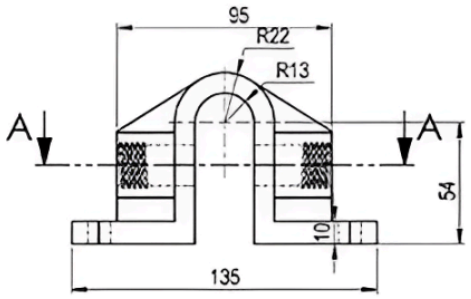

VADUNİ
Mechanical design
46
B
∅23
2
∅5.7
∅10
20.5
15
A-A
B
∅71
2x ∅5
7.5
18.5
∅9
5.5
9
7
∅25
6x ∅5.5
B-B
∅31
30°
∅47.5
∅71
A
A
15
35
30°
∅59
∅31

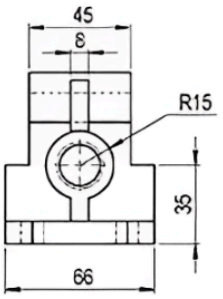
Bài tập 58

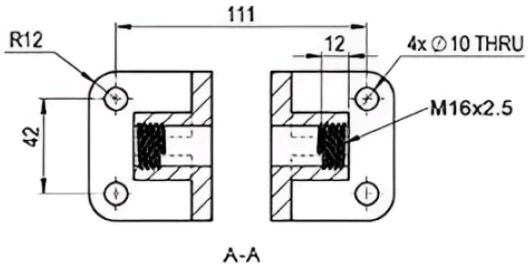

VADUNI
Mechanical design
90
R15
⌀20
R22
⌀25
A
A
6
14
50
7
R10
R16
96
55
42
2 x ⌀ 10.2 ↧ 20
M12 - 6H ↧ 18
8
50
60
⌀32
R8
⌀7
27
38
80
A-A

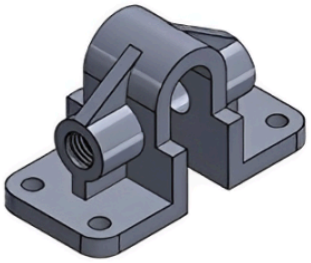
Bài tập 59

VADUNİ
Mechanical design

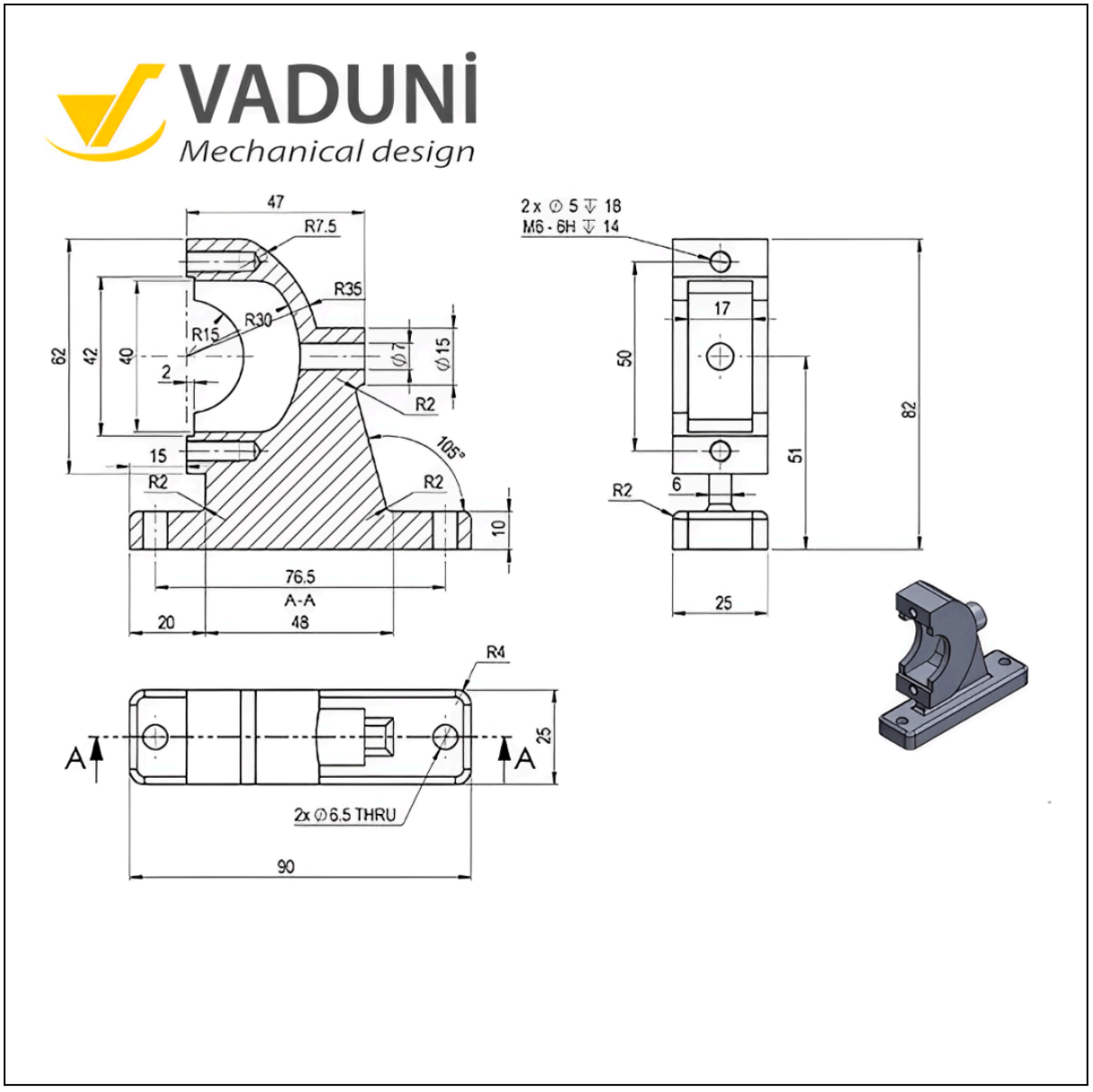




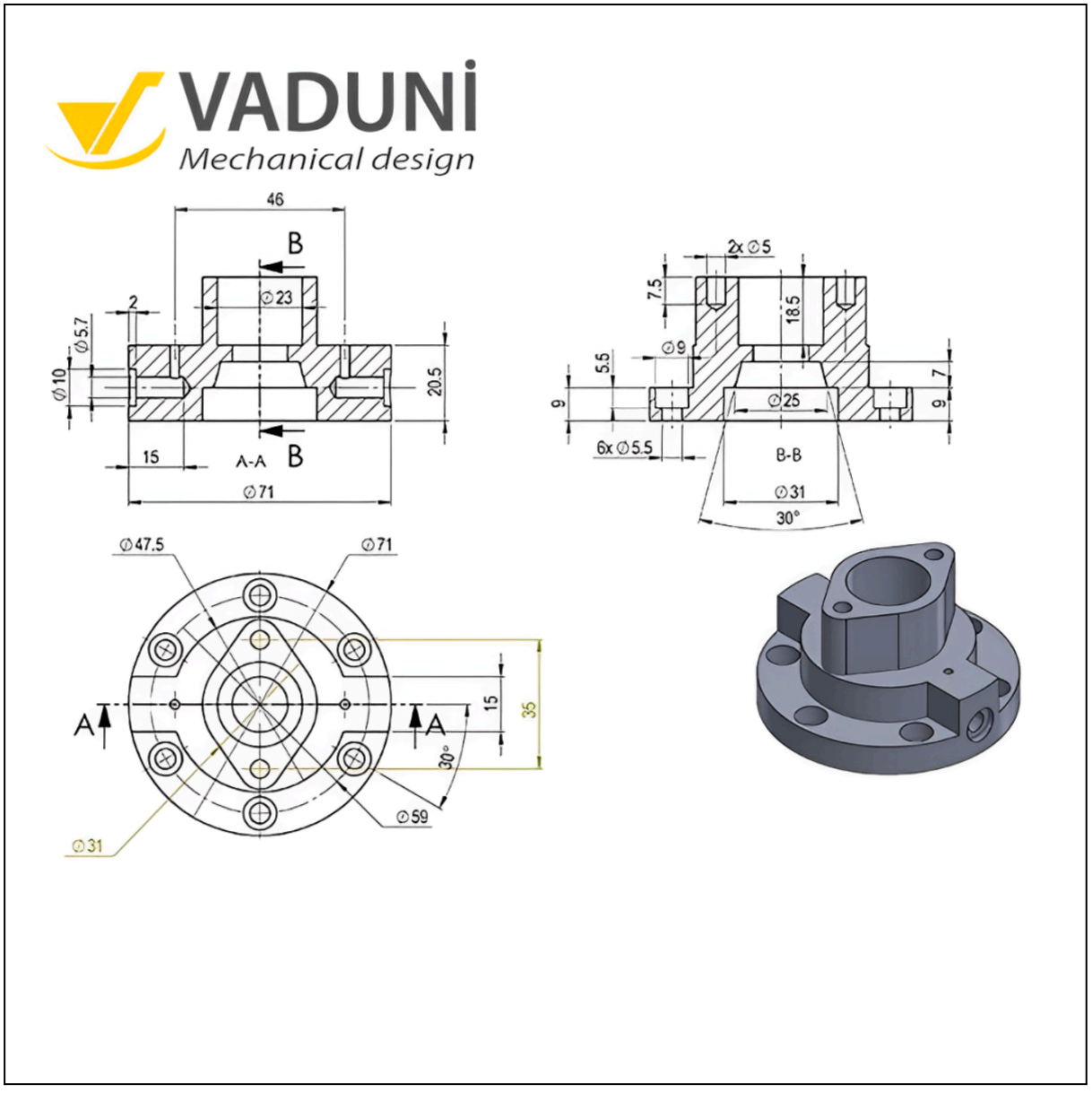




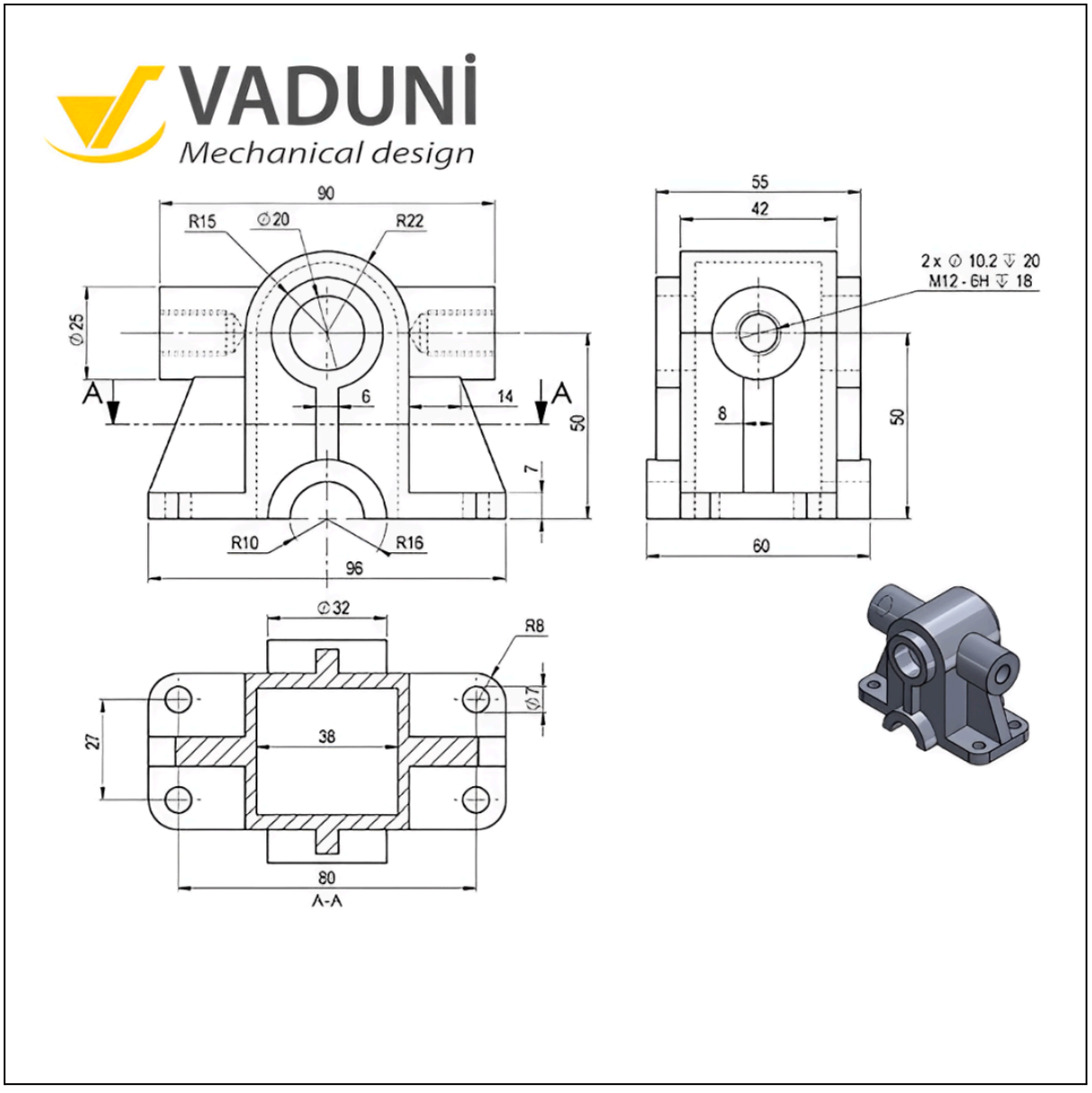
Bài tập 60


VADUNI
Mechanical design
47
R7.5
R35
R30
R15
62
42
40
2
Ø7
Ø15
R2
105°
15
R2
R2
10
76.5
A-A
20
48
R4
A
A
25
2x Ø6.5 THRU
90
2 x Ø 5 ↧ 18
M6 - 6H ↧ 14
17
50
82
51
R2
6
25

Bài tập 61

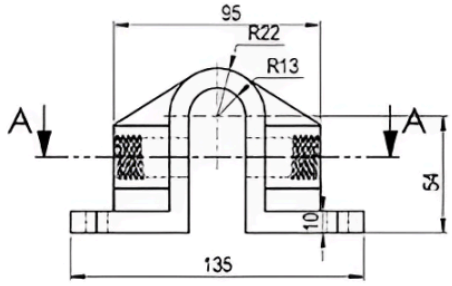

VADUNİ
Mechanical design
46
B
∅23
2
∅5.7
∅10
20.5
15
A-A
B
∅71
2x ∅5
7.5
18.5
∅9
5.5
9
7
∅25
6x ∅5.5
B-B
∅31
30°
∅47.5
∅71
A
A
15
35
30°
∅59
∅31

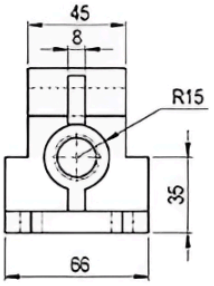
Bài tập 62

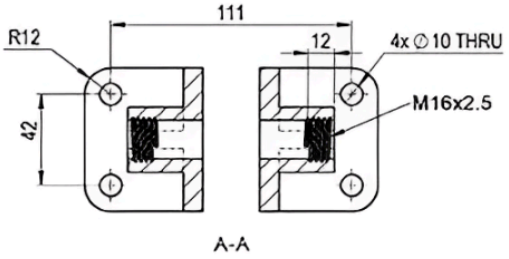

VADUNI
Mechanical design
90
R15
∅20
R22
∅25
A
A
6
14
50
7
R10
R16
96
55
42
2 x ∅ 10.2 ↧ 20
M12 - 6H ↧ 18
8
50
60
∅32
R8
∅7
27
38
80
A-A

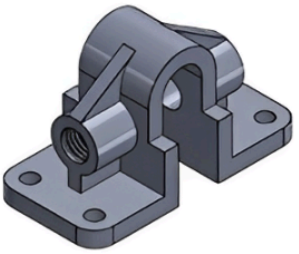
Bài tập 63

VADUNİ
Mechanical design



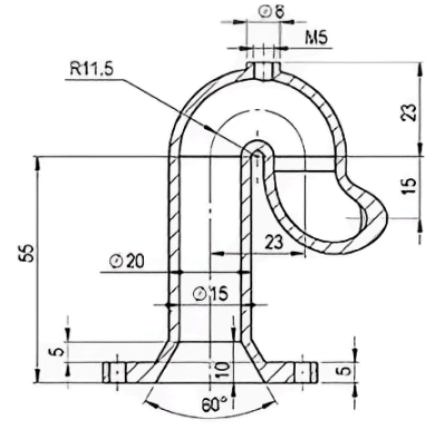




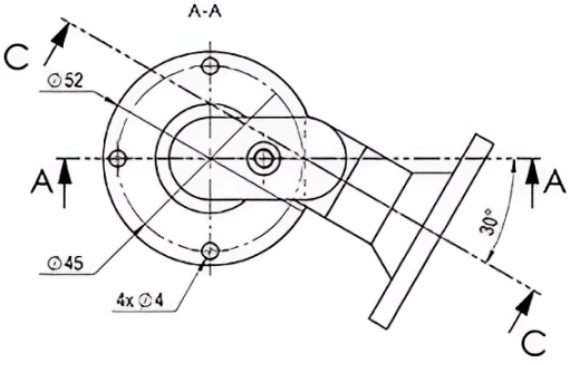


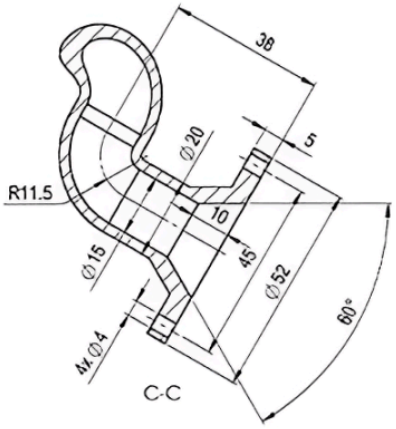
Bài tập 64

VADUNİ
Mechanical design



A-A

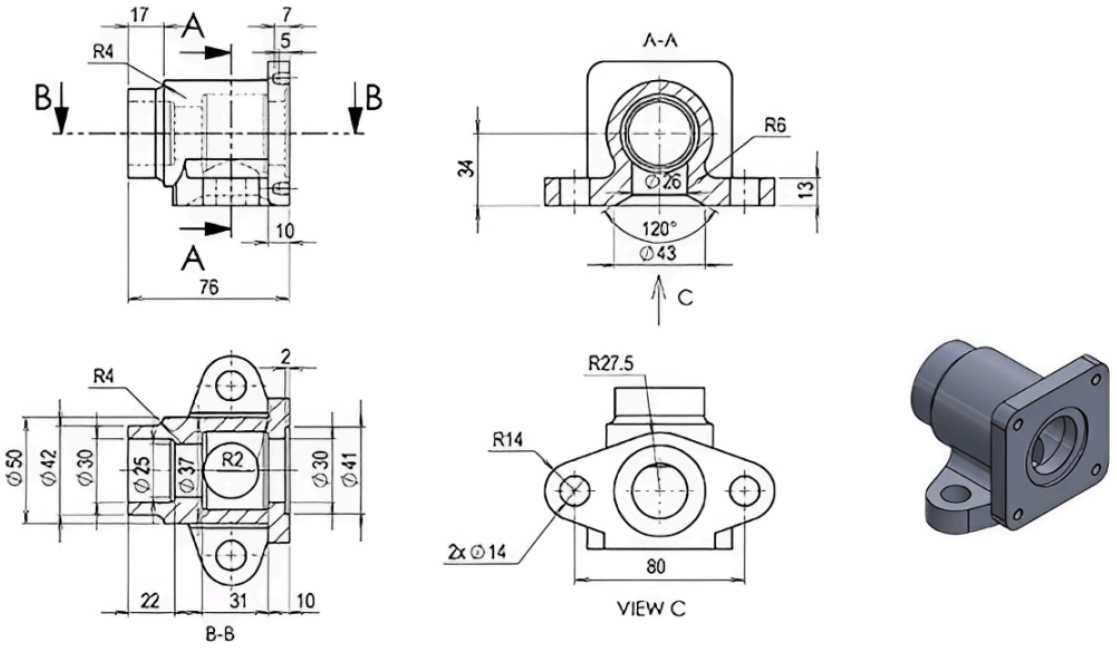




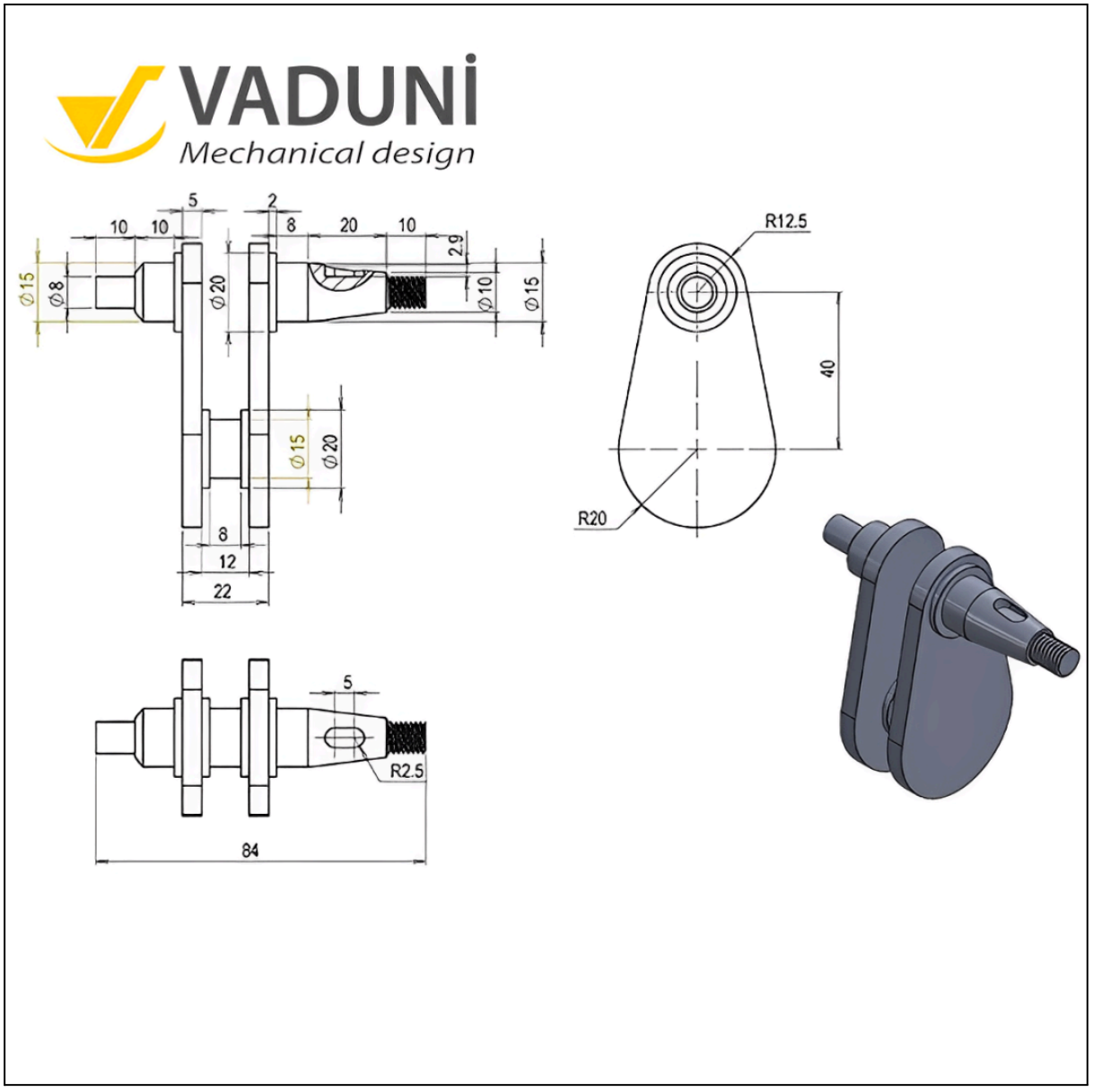
C-C

Bài tập 65

VADUNİ
Mechanical design



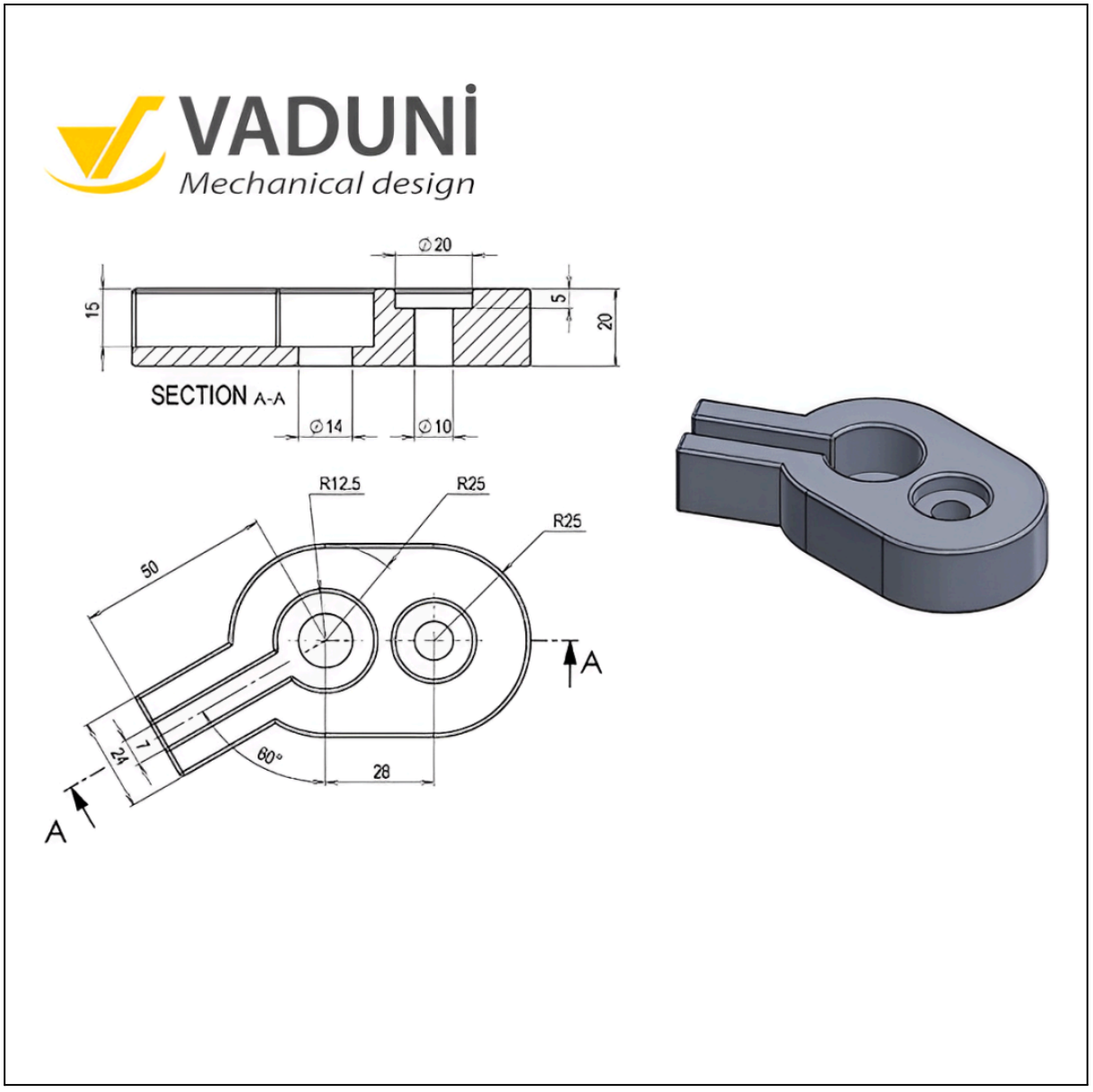
Bài tập 66


VADUNİ
Mechanical design
5
2
10
10
8
20
10
2.9
Ø15
Ø8
Ø20
Ø10
Ø15
Ø15
Ø20
8
12
22
5
R2.5
84
R12.5
40
R20

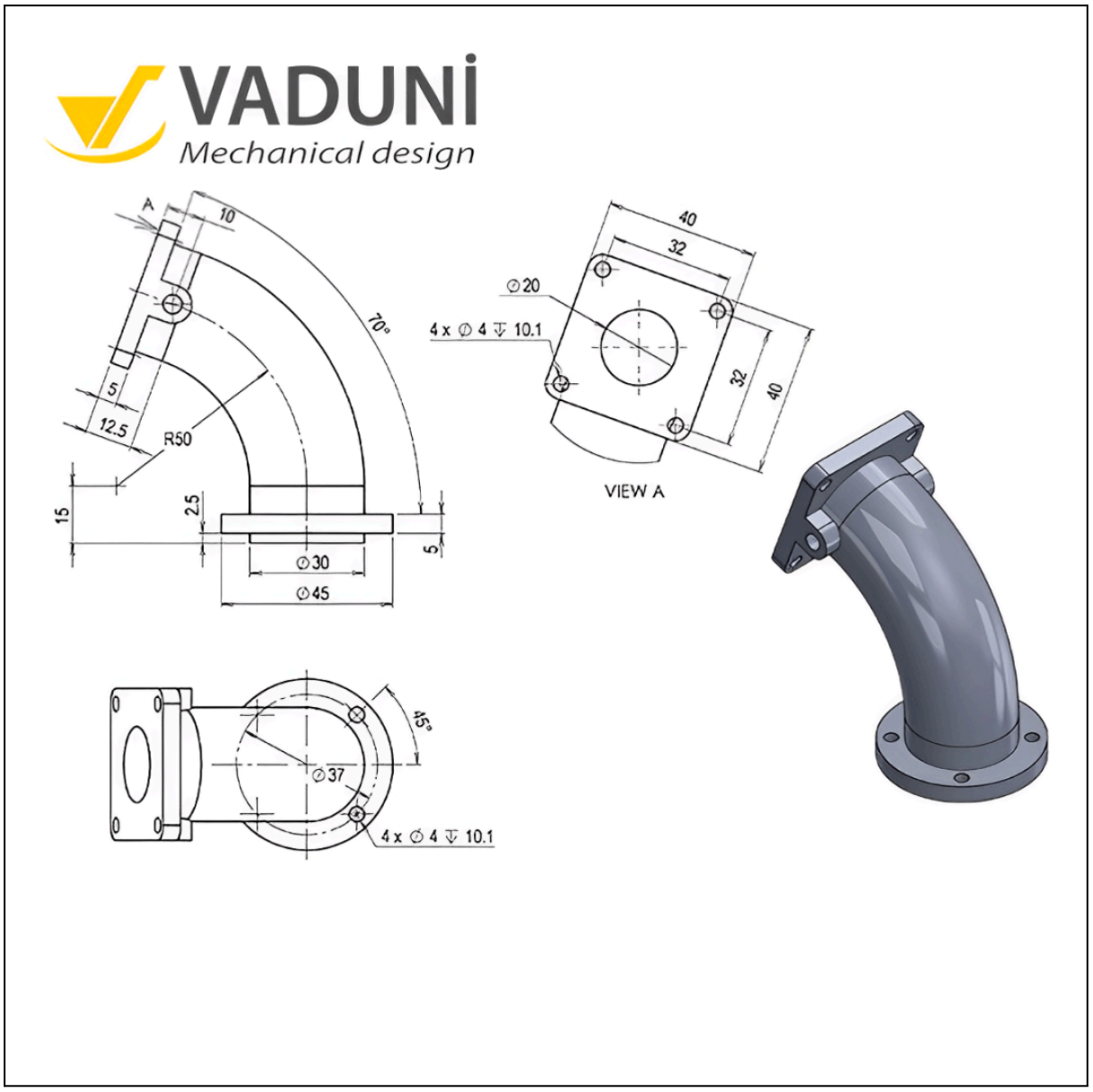
Bài tập 67

VADUNİ
Mechanical design
6
∅2
R25
R20
38
R5
R5
R15
45°
55
B
6
VIEW B
R5
M10
∅10
40
10

Bài tập 68

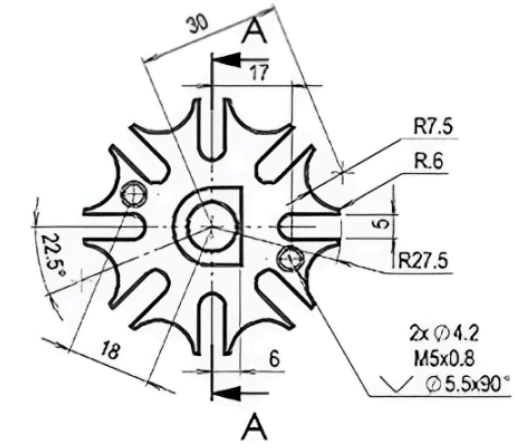

VADUNİ
Mechanical design
∅20
15
5
20
SECTION A-A
∅14
∅10
R12.5
R25
R25
50
A
A
7
24
60°
28

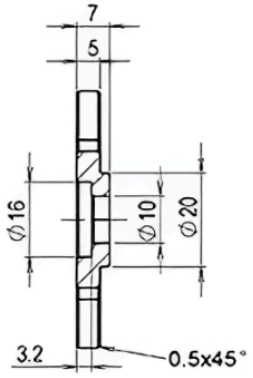
Bài tập 69


VADUNİ
Mechanical design
A
10
70°
5
12.5
R50
15
2.5
5
∅30
∅45
40
32
∅20
4 x ∅ 4 ↧ 10.1
32
40
VIEW A
45°
∅37
4 x ∅ 4 ↧ 10.1

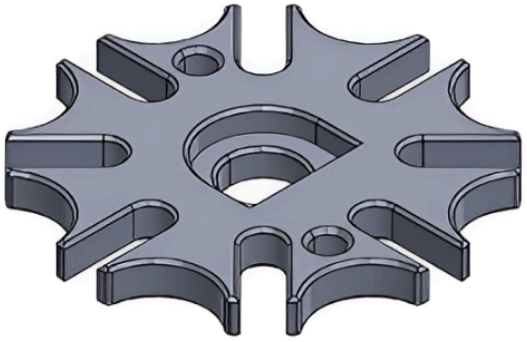
Bài tập 70

VADUNİ
Mechanical design





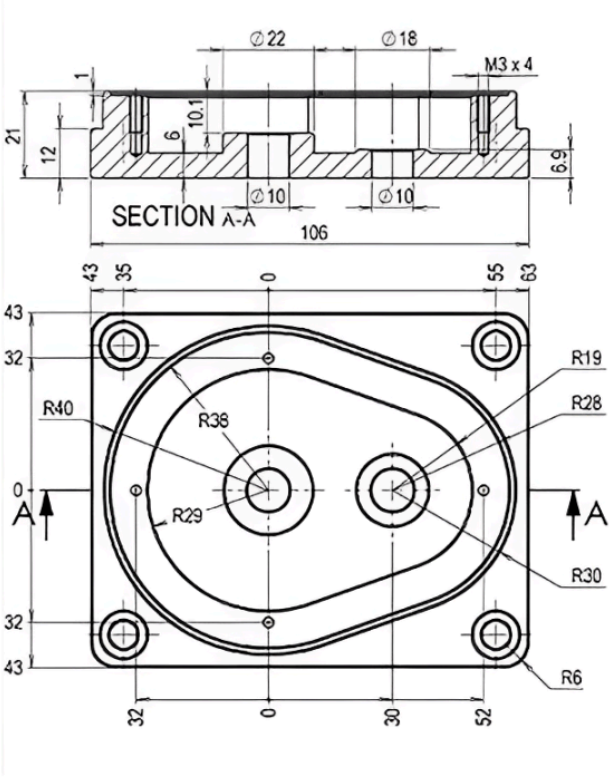
SECTION A-A

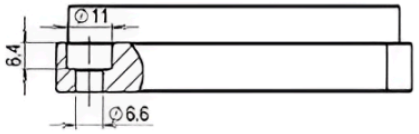


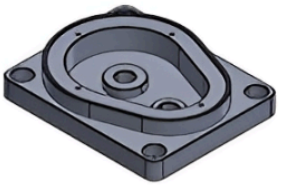
All chamfers 0.5mm

Bài tập 71

VADUNİ
Mechanical design



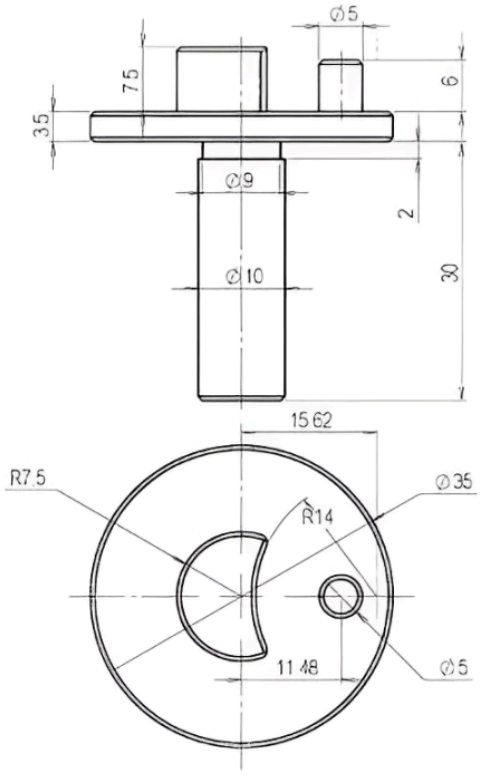


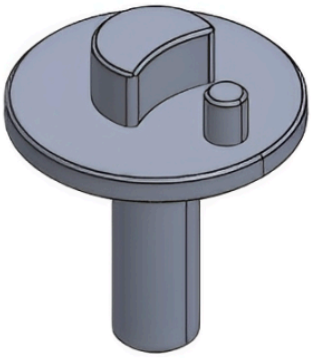


All chamfers 0.5mm

Bài tập 72

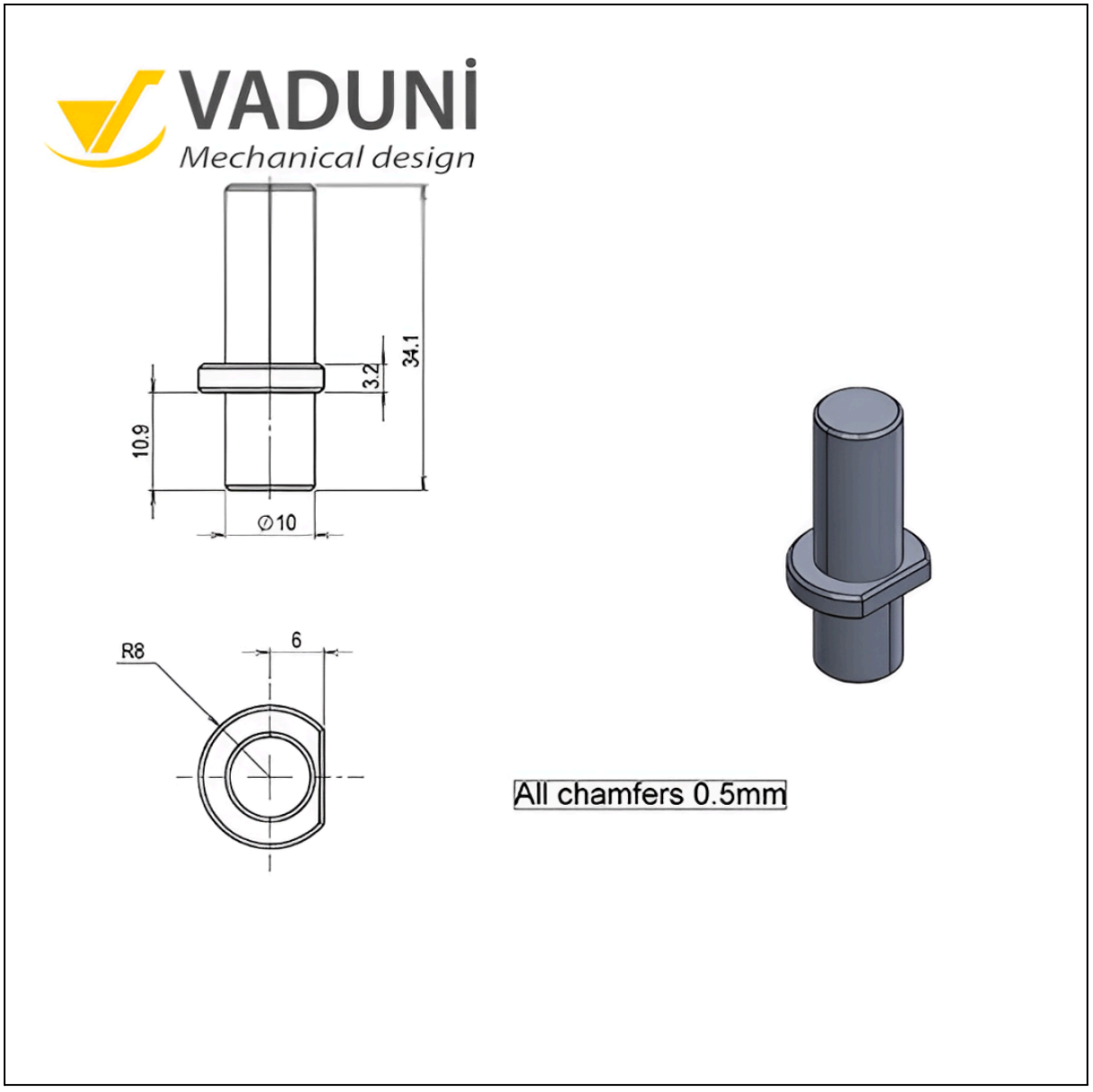
VADUNİ
Mechanical design





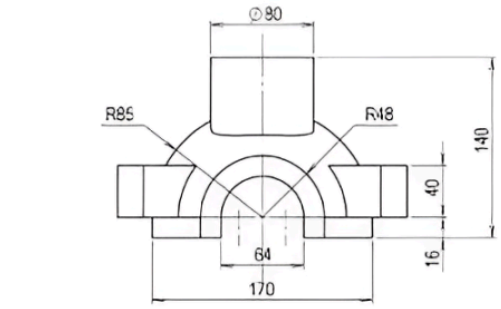
All chamfers 0.5mm

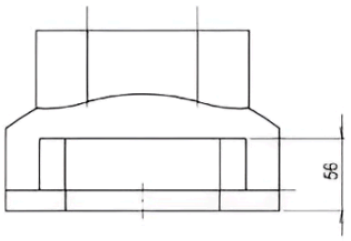
Bài tập 73

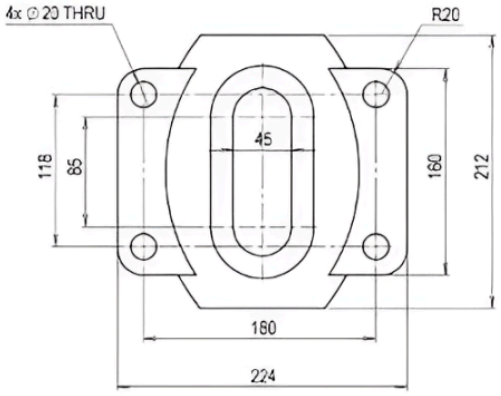

VADUNİ
Mechanical design
34.1
3.2
10.9
∅10
R8
6
All chamfers 0.5mm

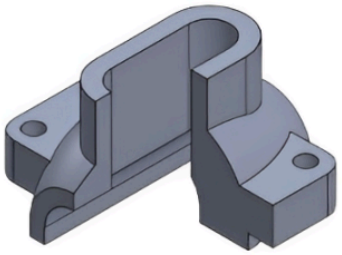
Bài tập 74

VADUNİ
Mechanical design

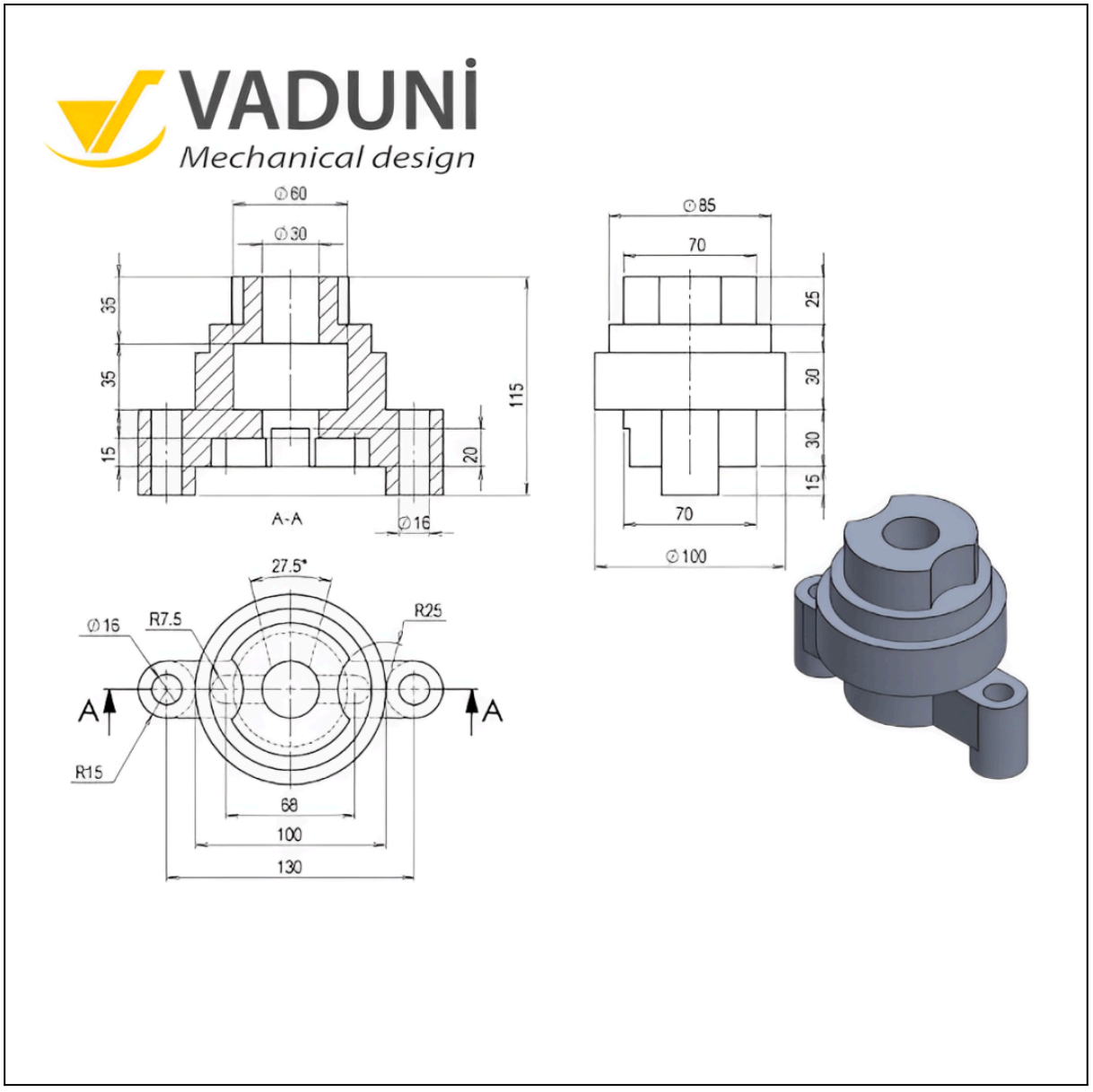




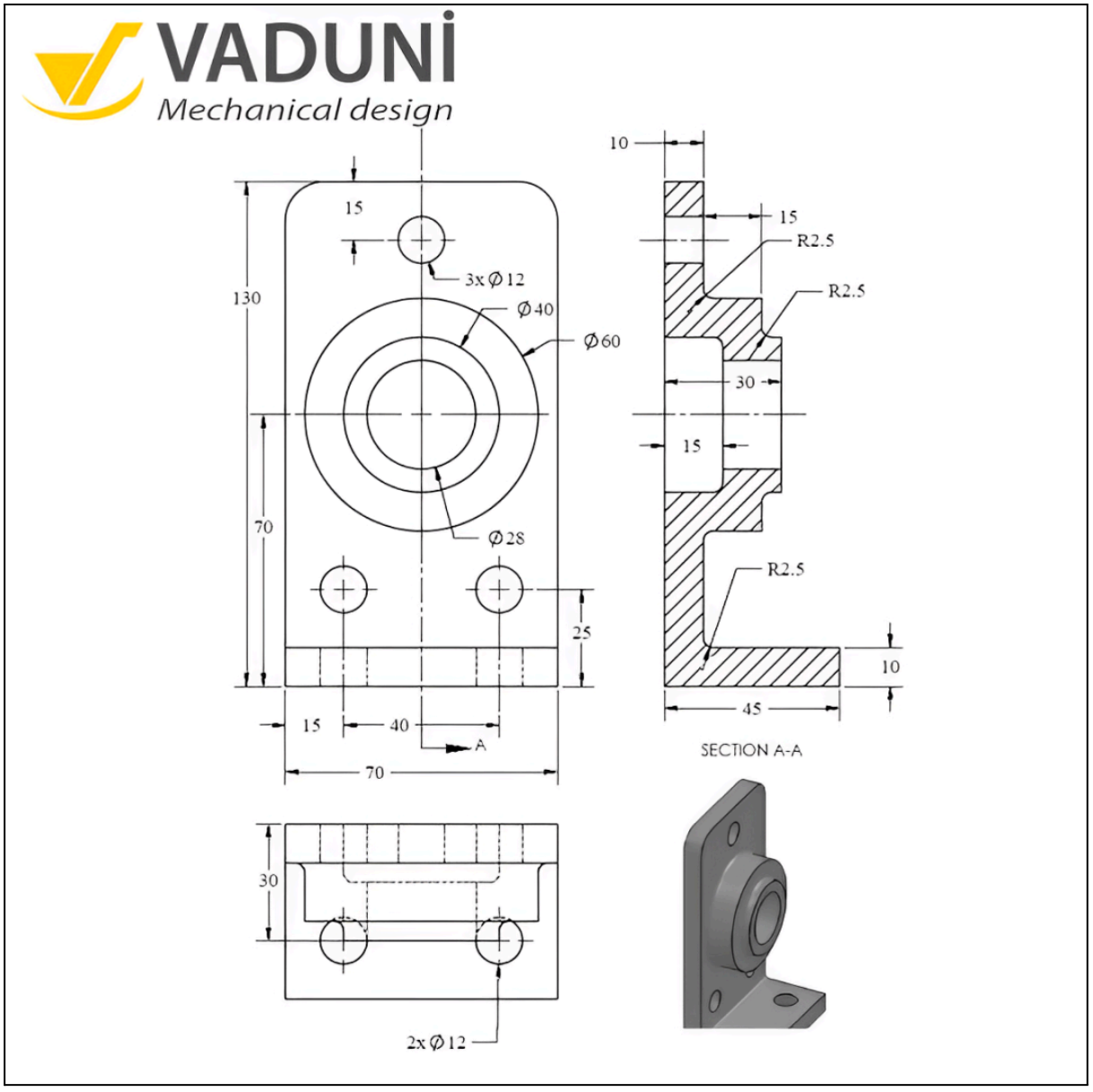




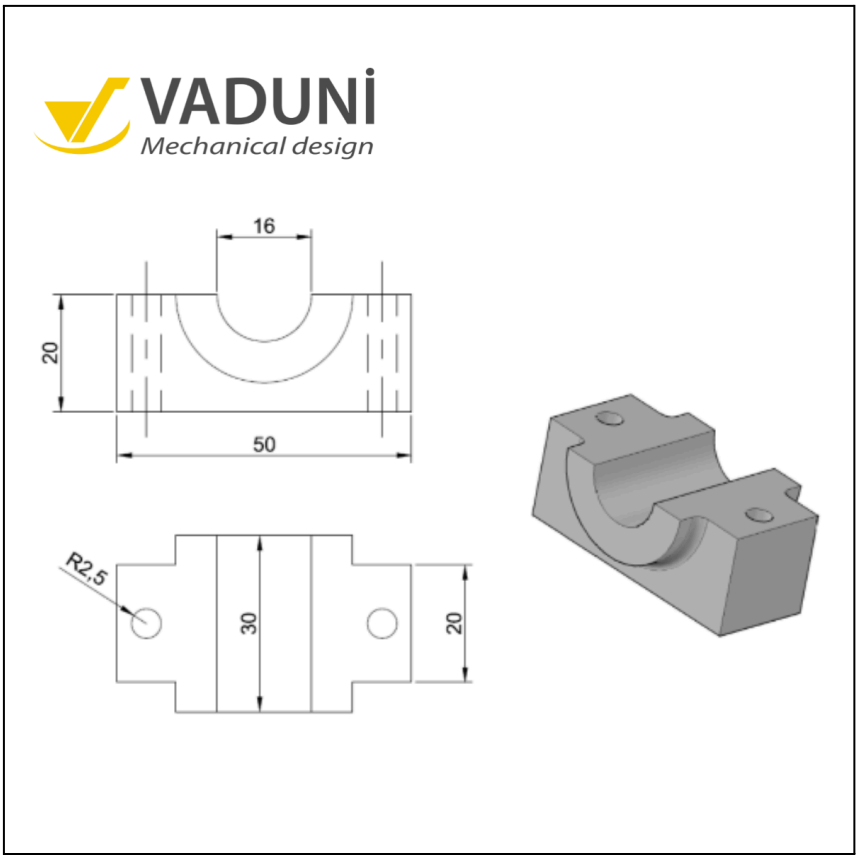
Bài tập 75


VADUNİ
Mechanical design
∅60
∅30
35
35
15
115
20
A-A
∅16
∅85
70
25
30
30
15
70
∅100
27.5°
∅16
R7.5
R25
A
A
R15
68
100
130

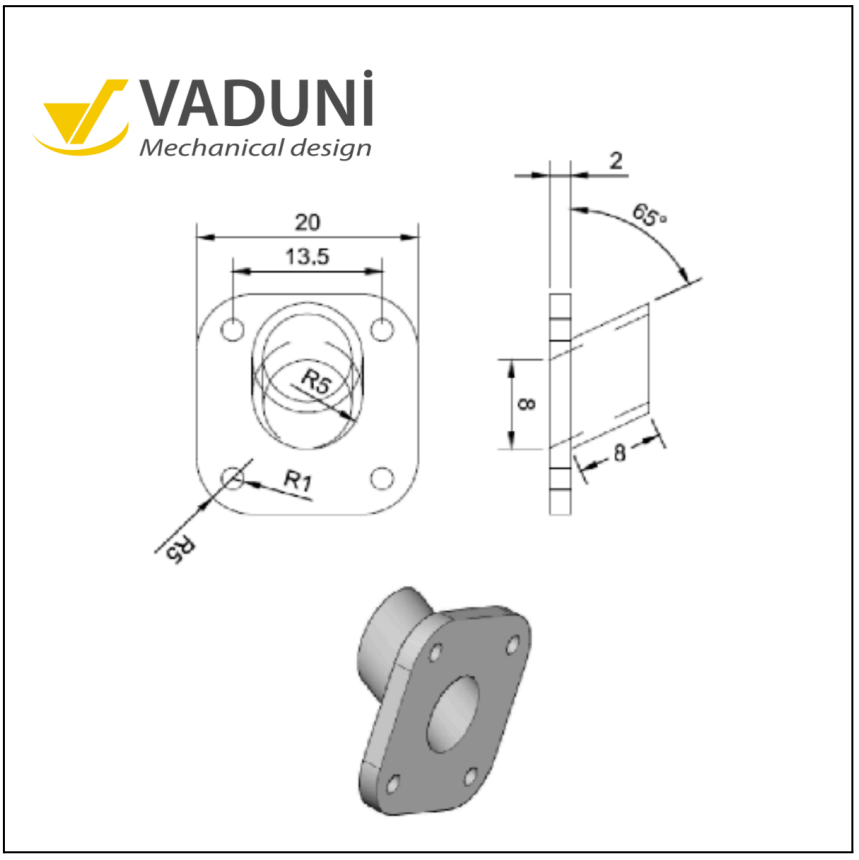
Bài tập 76


VADUNI
Mechanical design
15
3x Ø12
130
Ø40
Ø60
70
Ø28
25
15
40
A
70
30
2x Ø12
10
15
R2.5
R2.5
30
15
R2.5
10
45
SECTION A-A

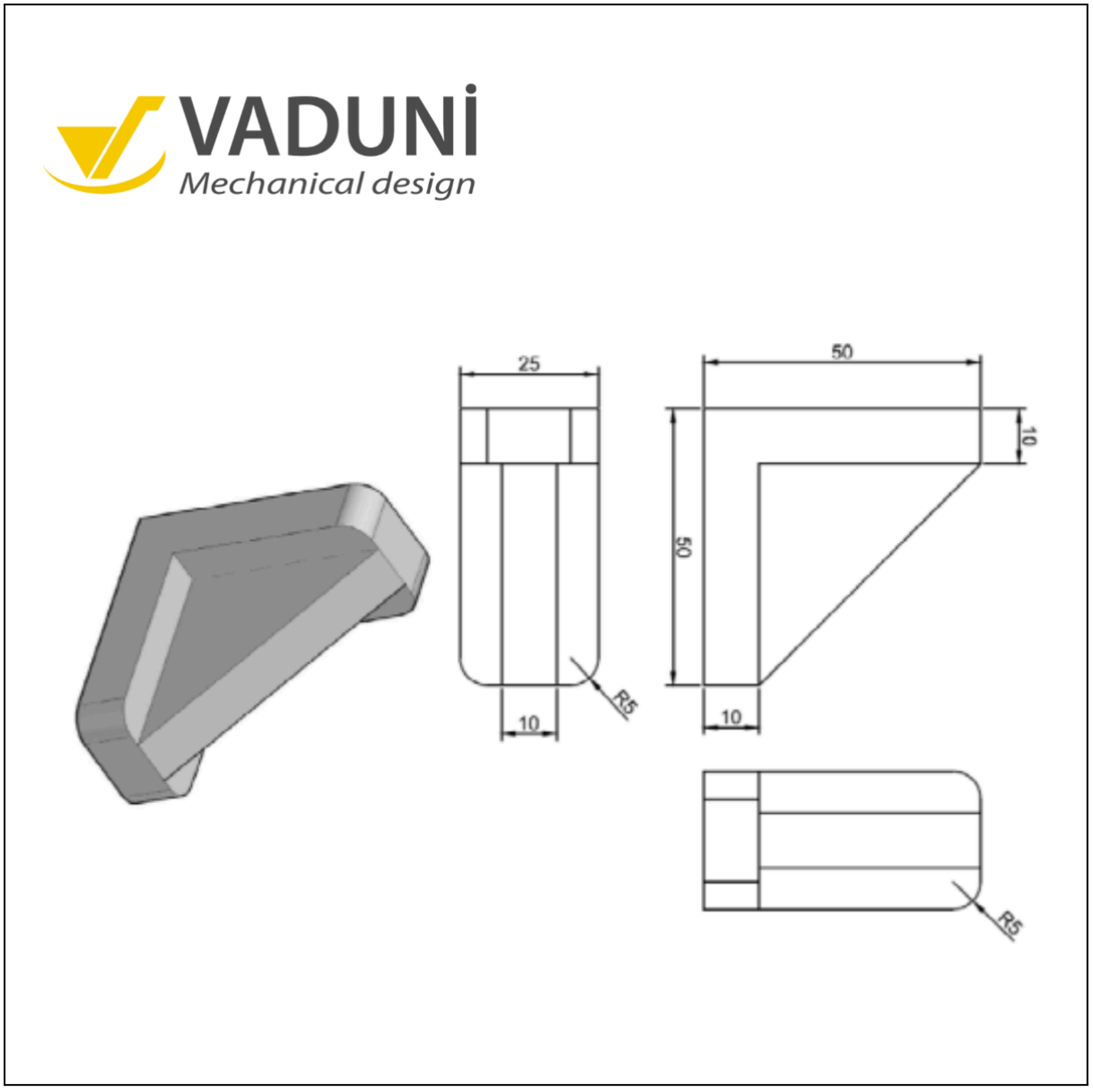
Bài tập 77



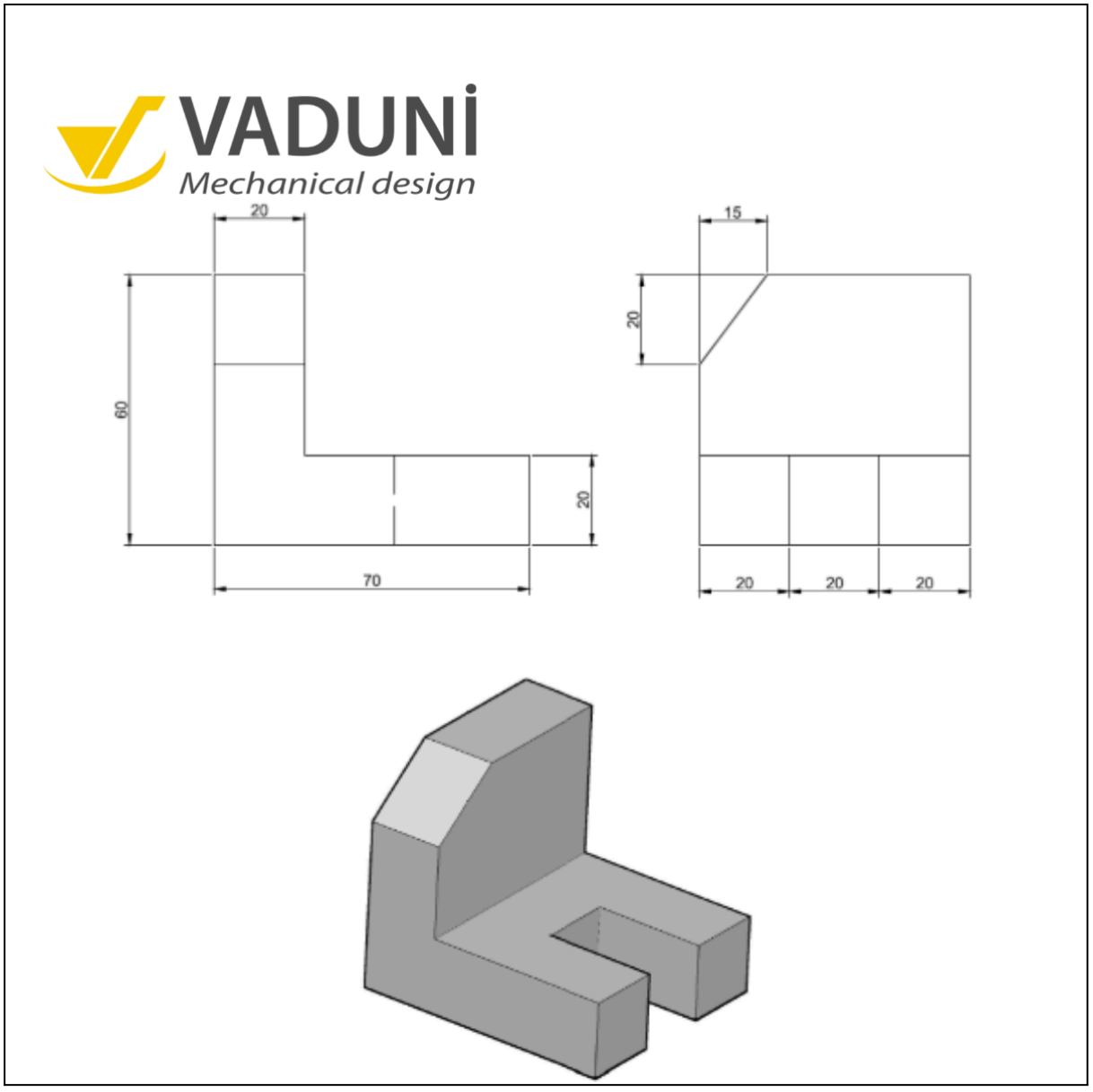
Bài tập 78



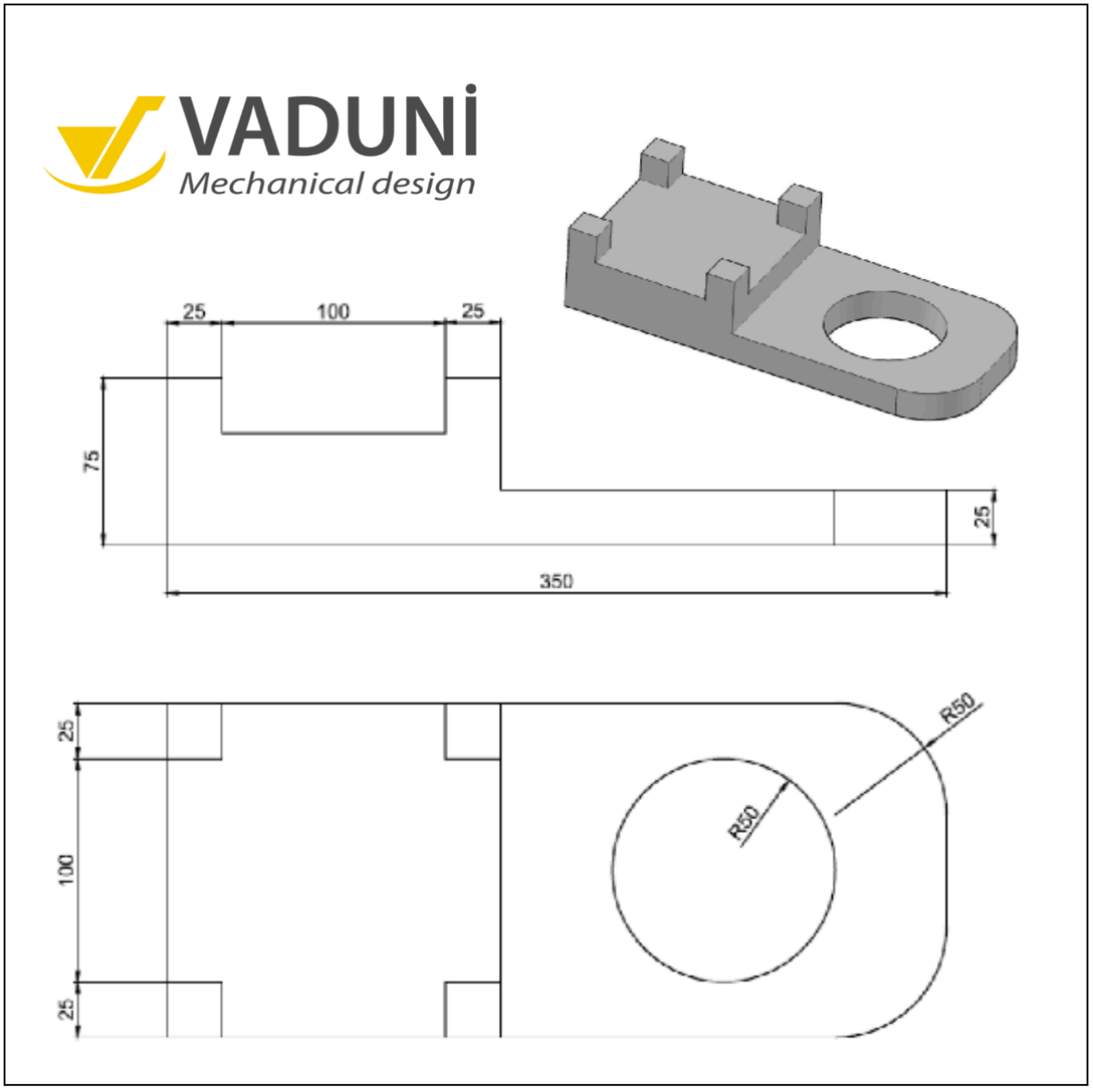
Bài tập 79



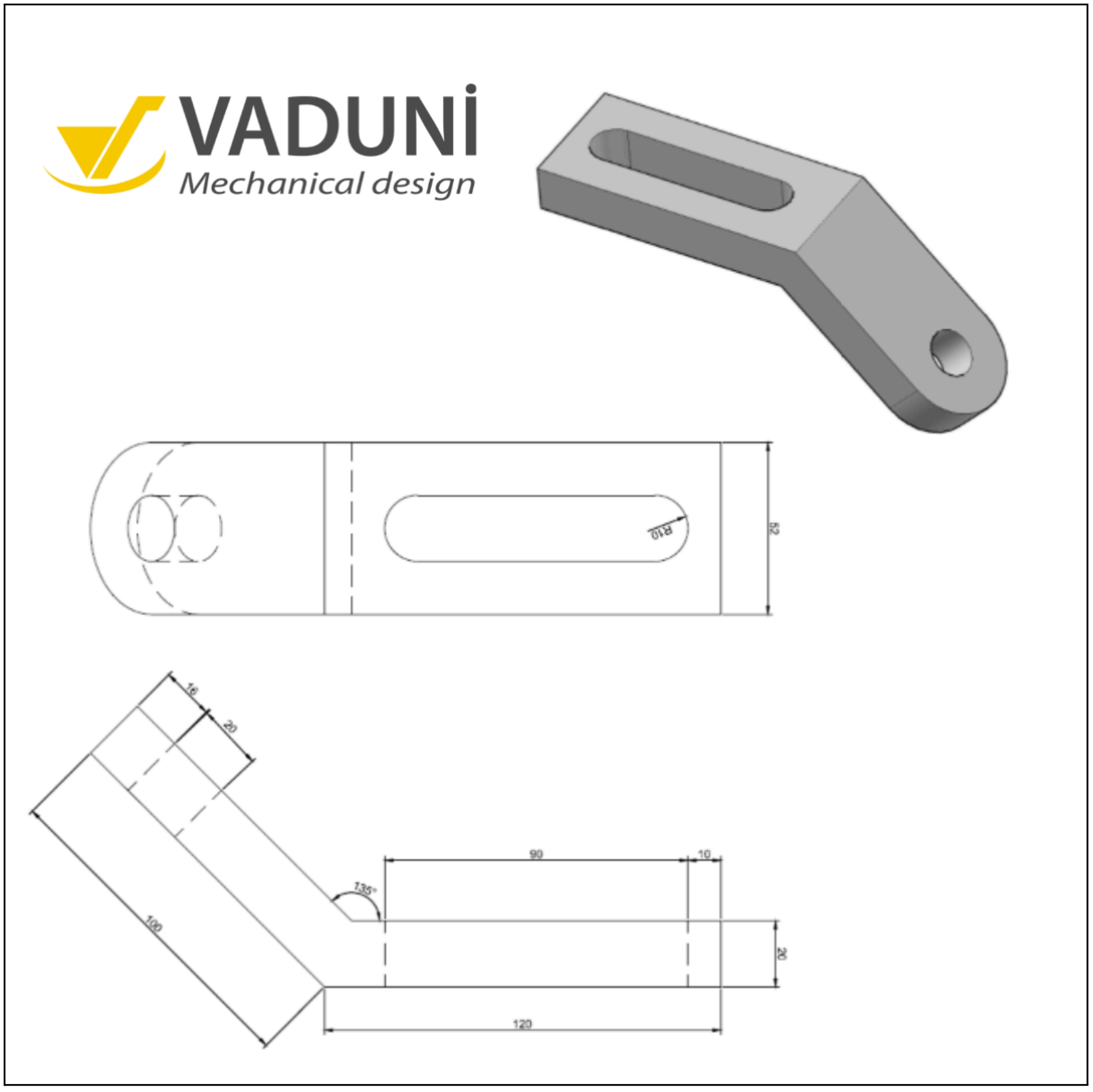
Bài tập 80



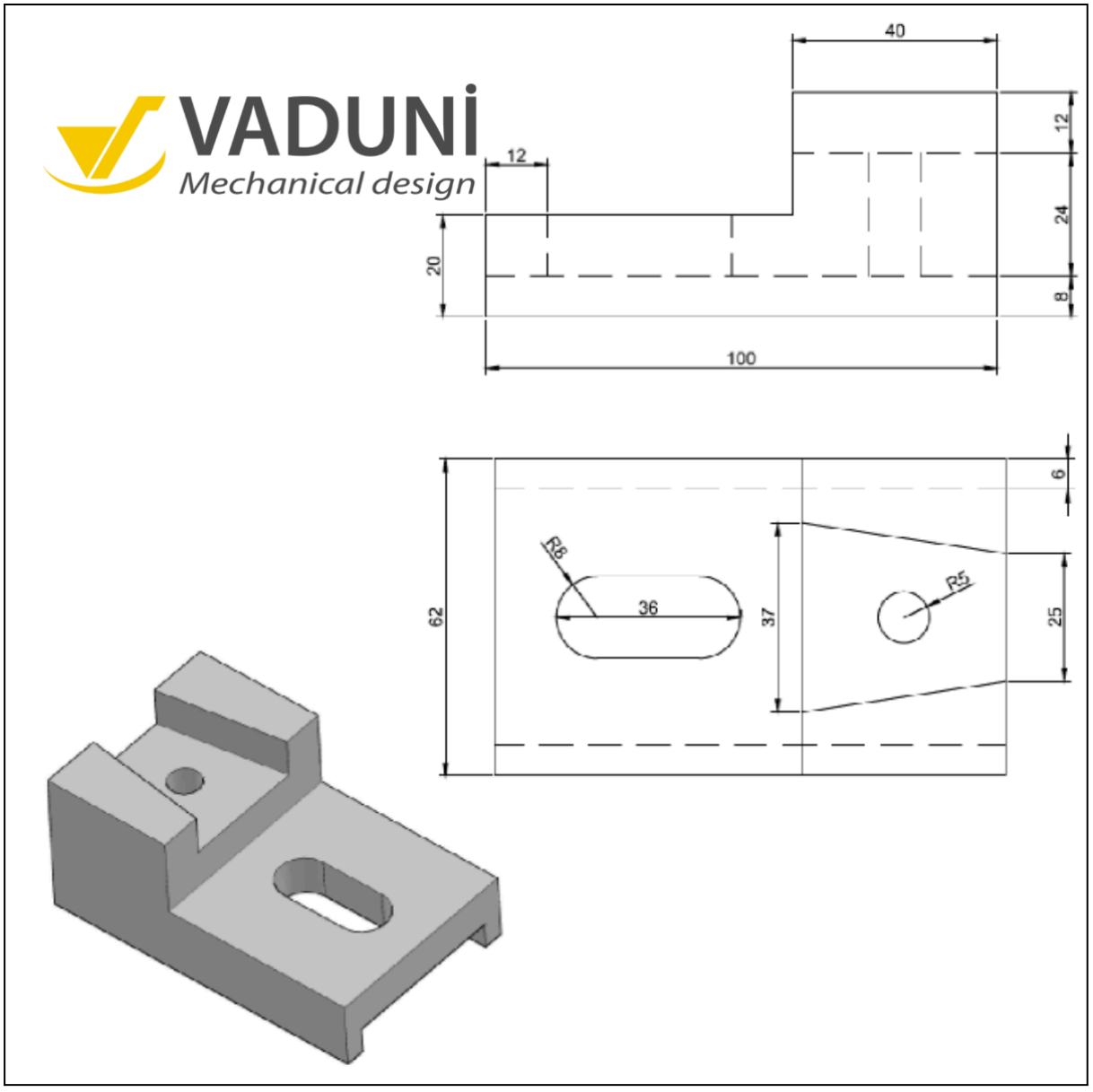
Bài tập 81



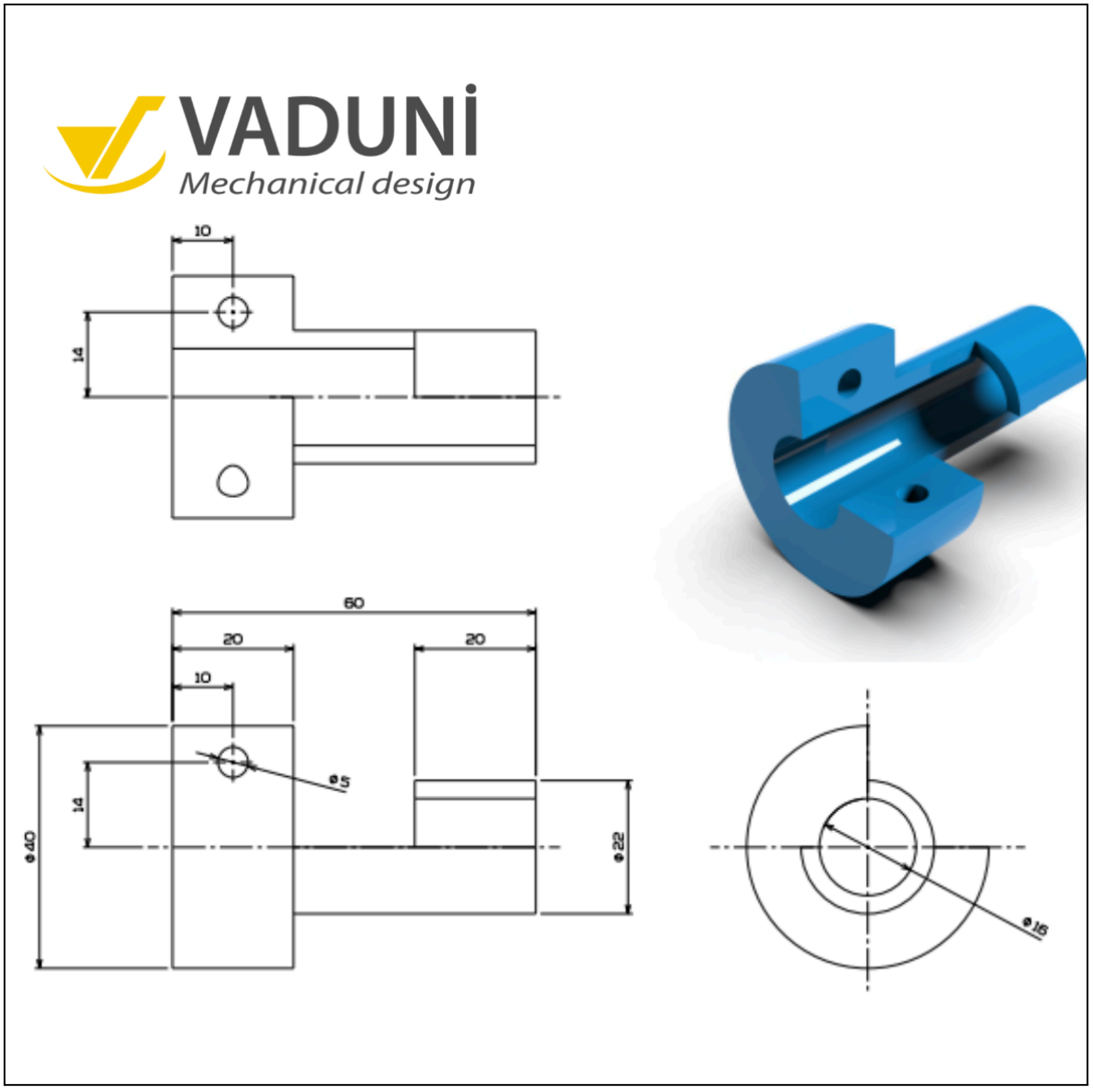
Bài tập 82



Bài tập 83

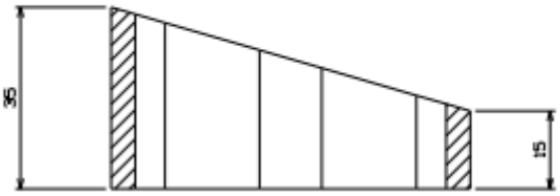


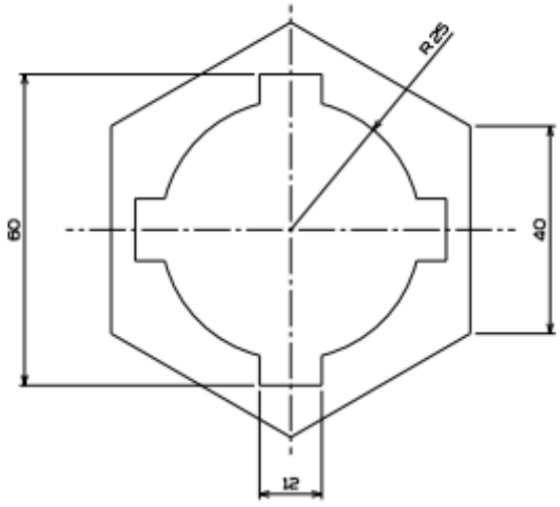
Bài tập 84

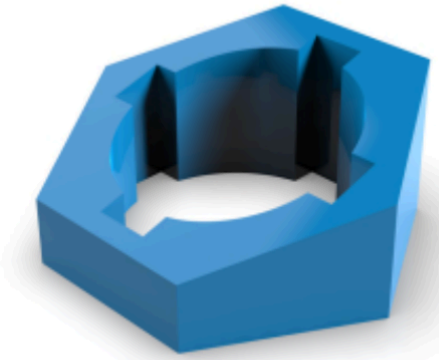


Bài tập 85

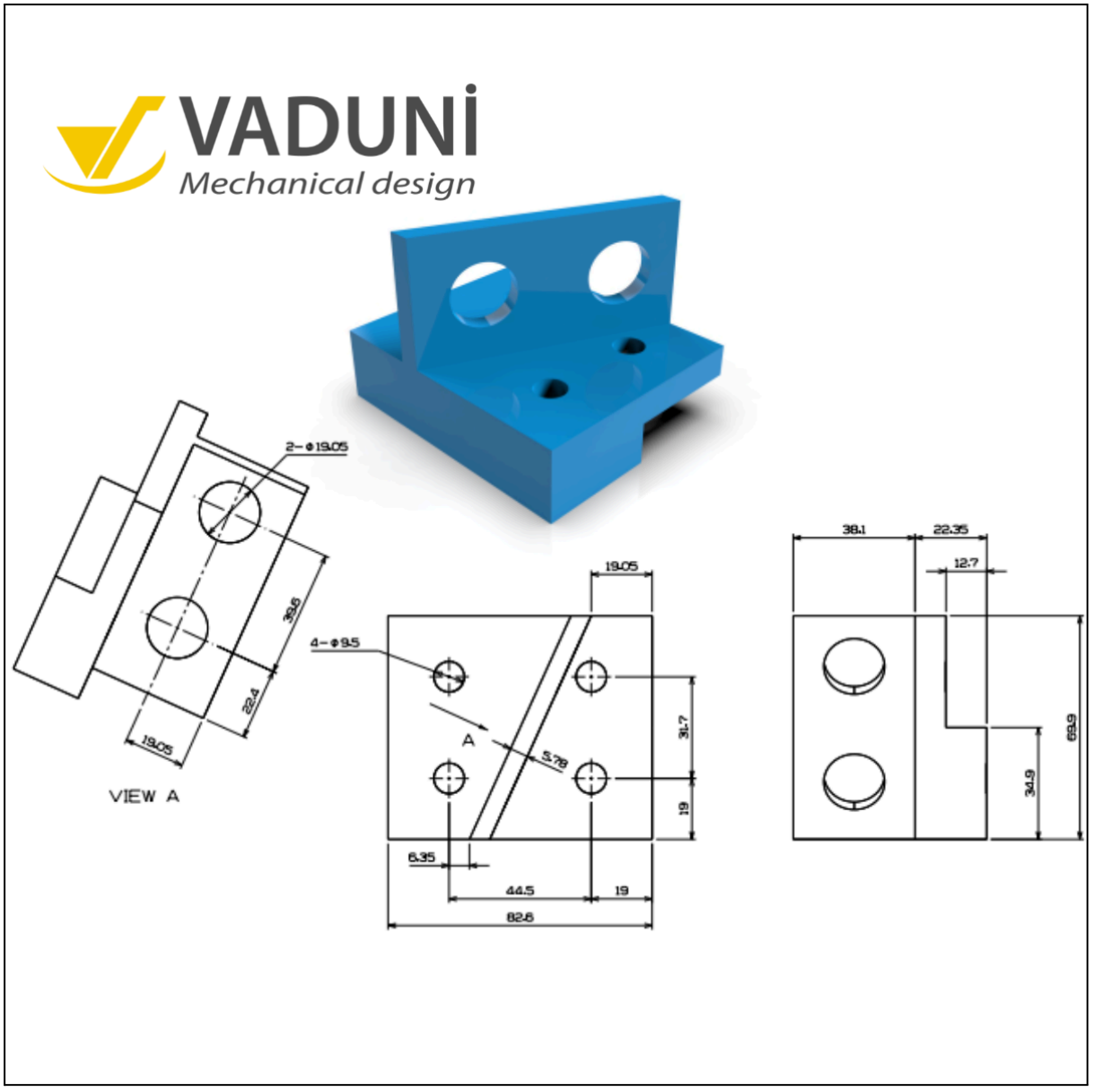
VADUNİ
Mechanical design



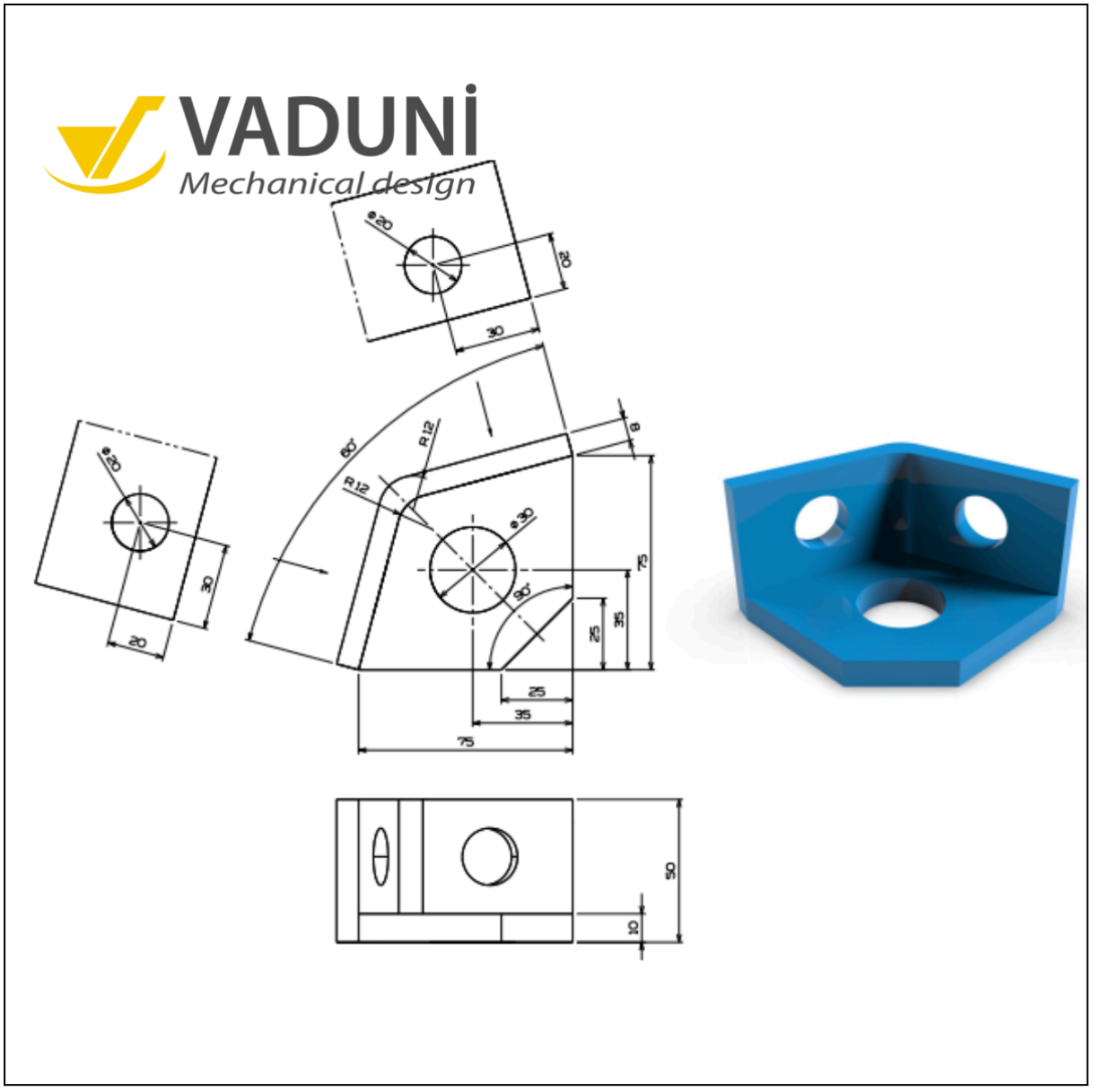




Bài tập 86

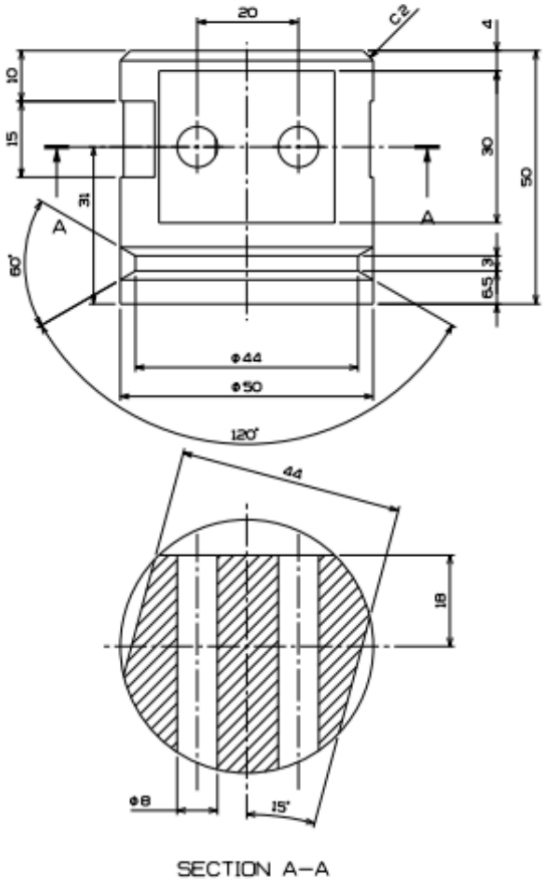

VADUNI
Mechanical design
2-Φ19.05
39.6
22.4
19.05
VIEW A
4-Φ9.5
19.05
A
5.78
31.7
19
6.35
44.5
19
82.6
38.1
22.35
12.7
34.9
63.9

Bài tập 87


VADUNİ
Mechanical design
ø20
20
30
ø20
30
20
60°
R12
R12
8
ø30
75
90°
25
35
25
35
75
50
10

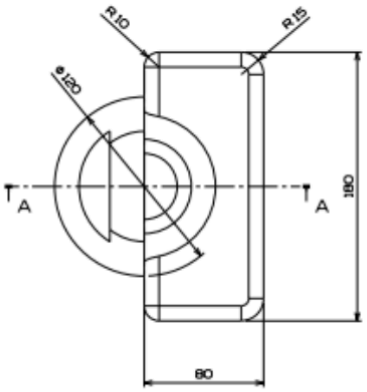
Bài tập 88

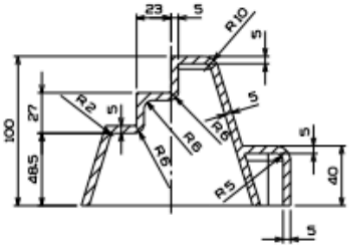
VADUNİ
Mechanical design



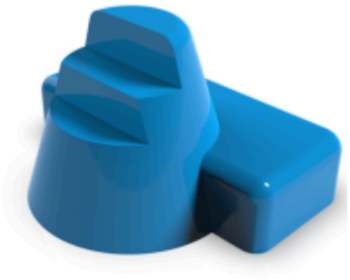
Bài tập 89

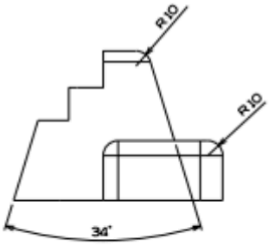
VADUNİ
Mechanical design

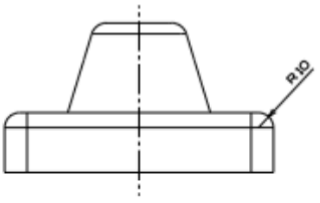




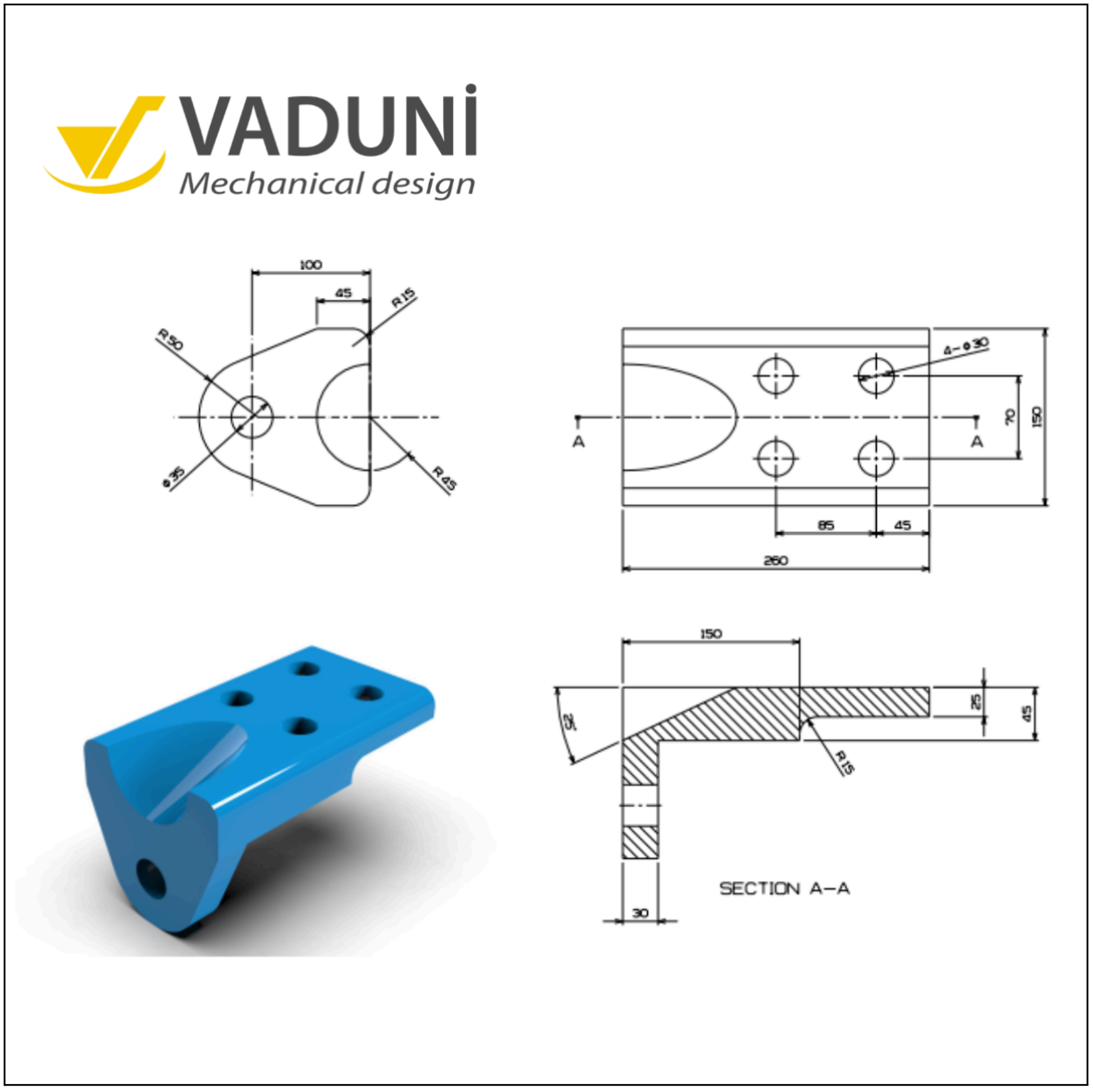
SECTION A–A





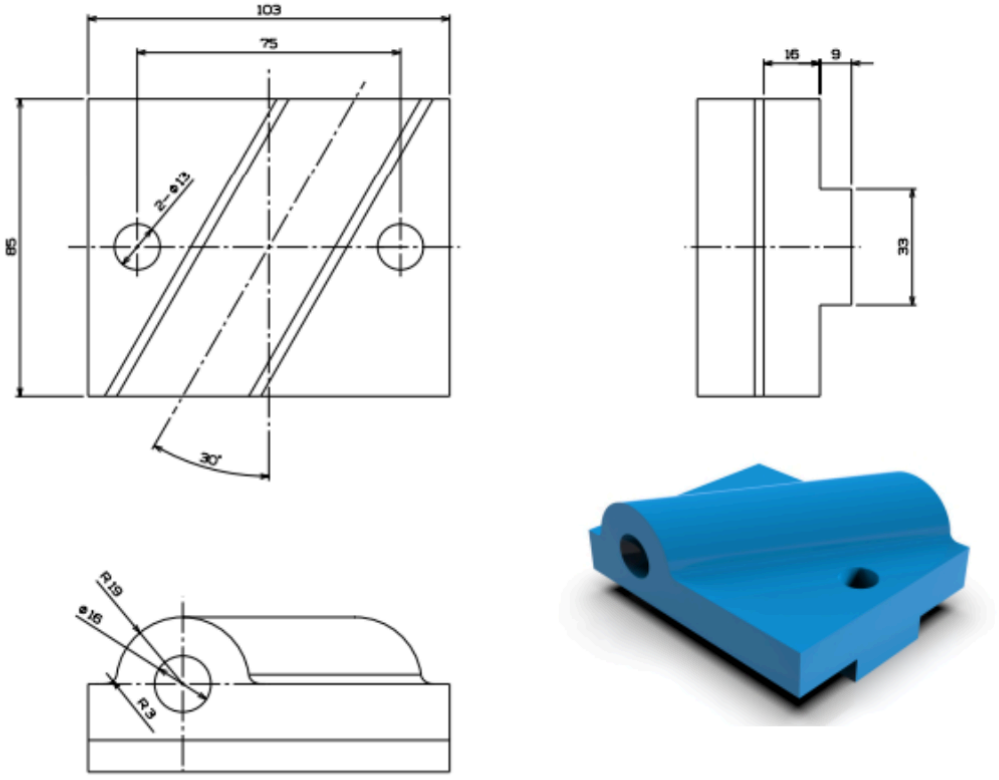


Bài tập 90

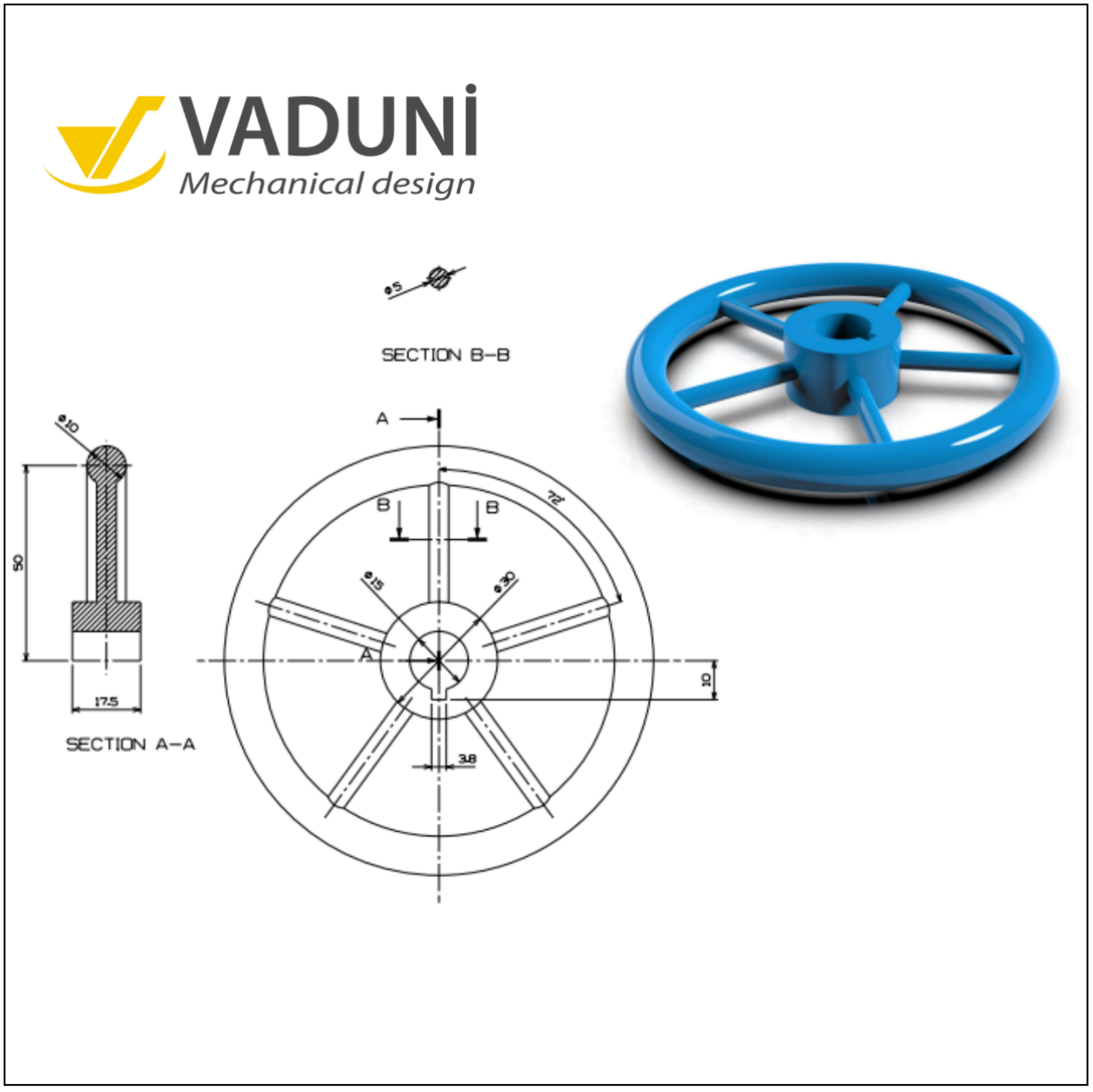

VADUNİ
Mechanical design
100
45
R15
R50
ø35
R45
4-ø30
A
A
70
150
65
45
260
150
25
45
R15
30
SECTION A–A

Bài tập 91

VADUNİ
Mechanical design

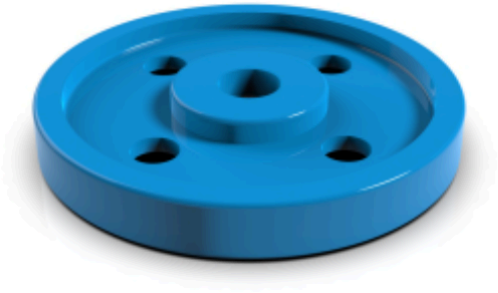


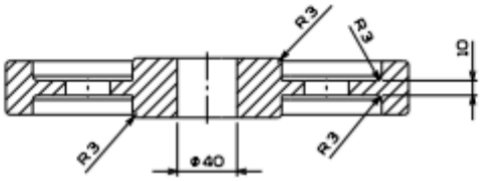
Bài tập 92

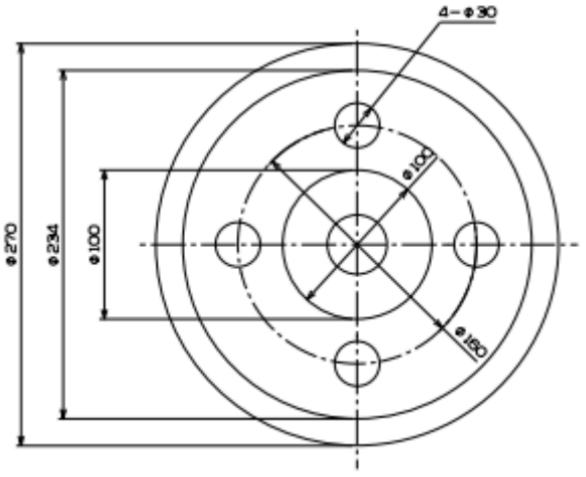

VADUNİ
Mechanical design
SECTION B–B
SECTION A–A
A
B
B
72
ø15
ø30
ø10
50
17.5
10
3.8

Bài tập 93

VADUNİ
Mechanical design

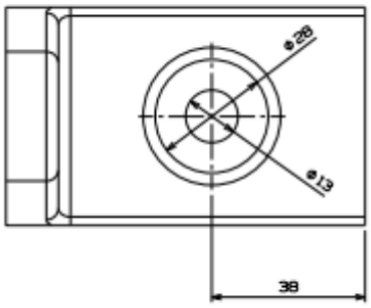


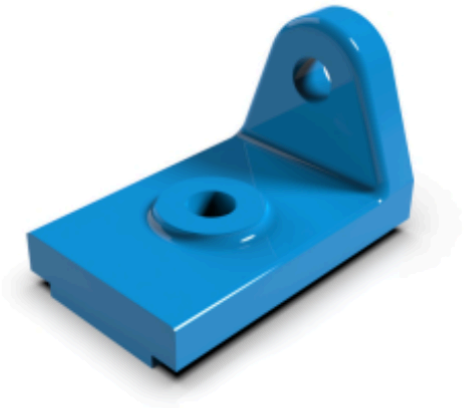


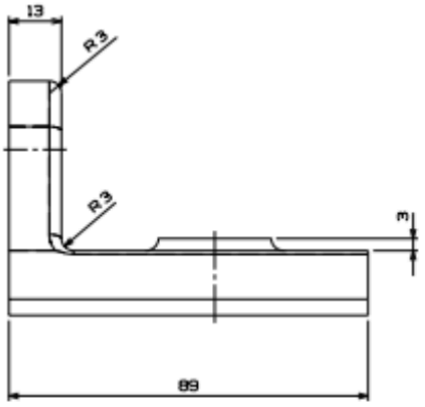


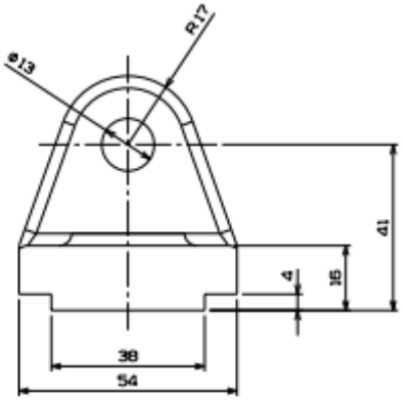
Bài tập 94

VADUNİ
Mechanical design



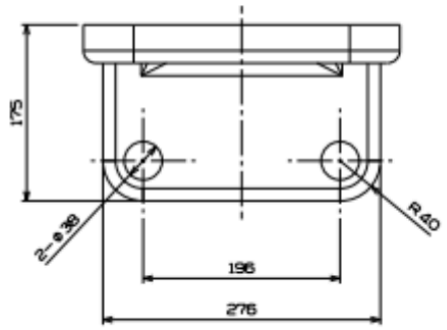


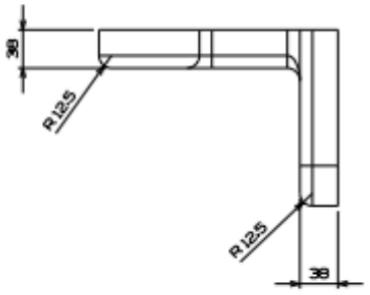


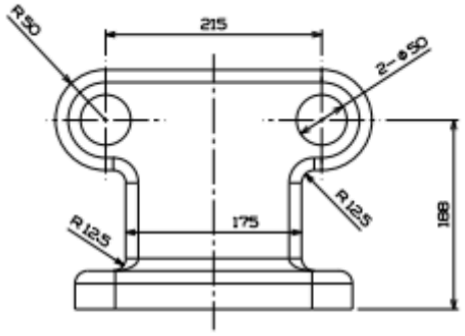


Bài tập 95

VADUNİ
Mechanical design

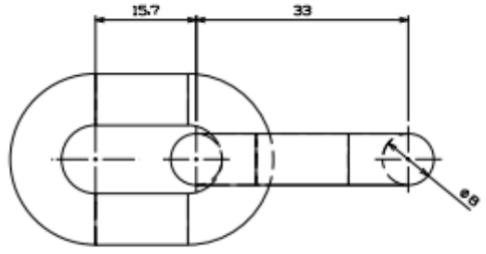


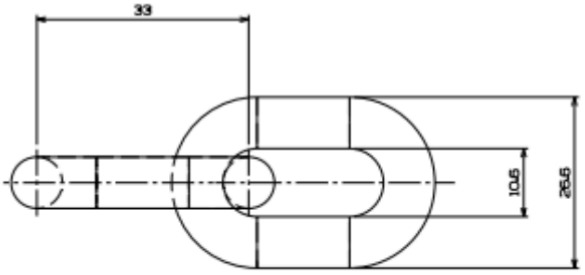


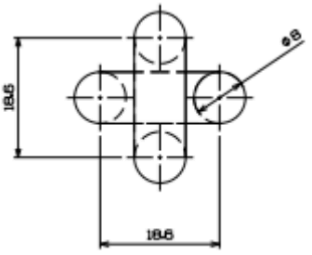


Bài tập 96

VADUNİ
Mechanical design

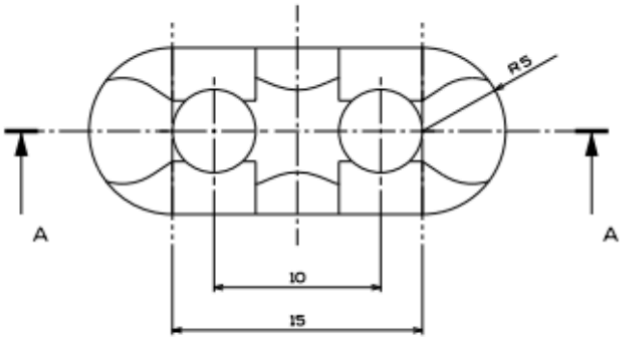


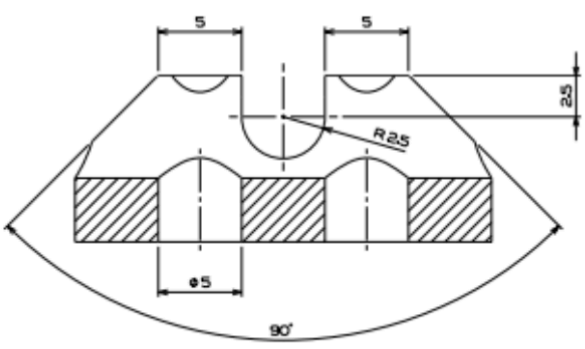




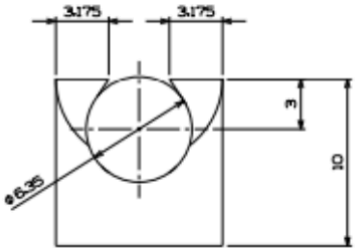
Bài tập 97

VADUNİ
Mechanical design

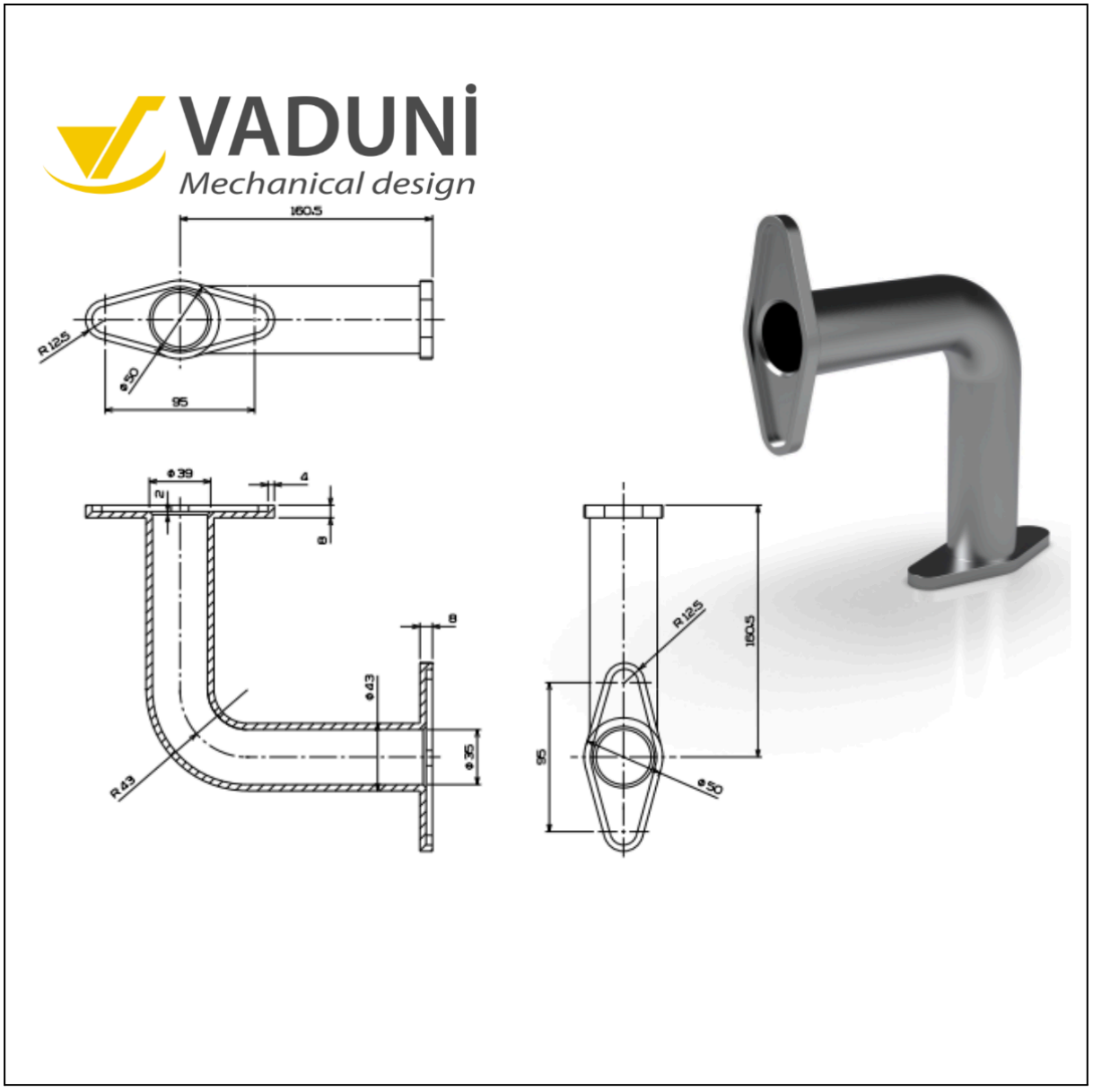




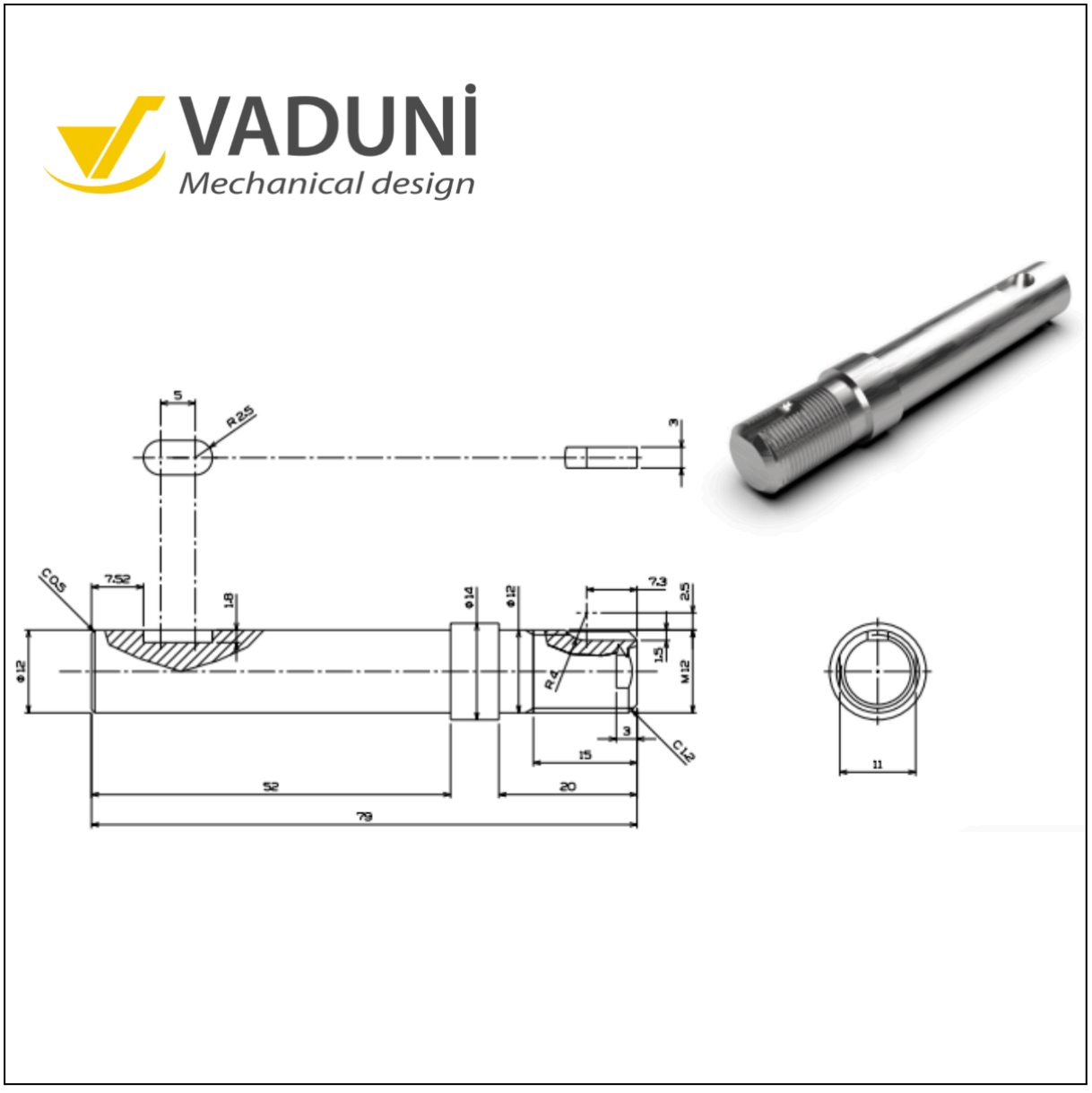
SECTION A–A



Bài tập 98

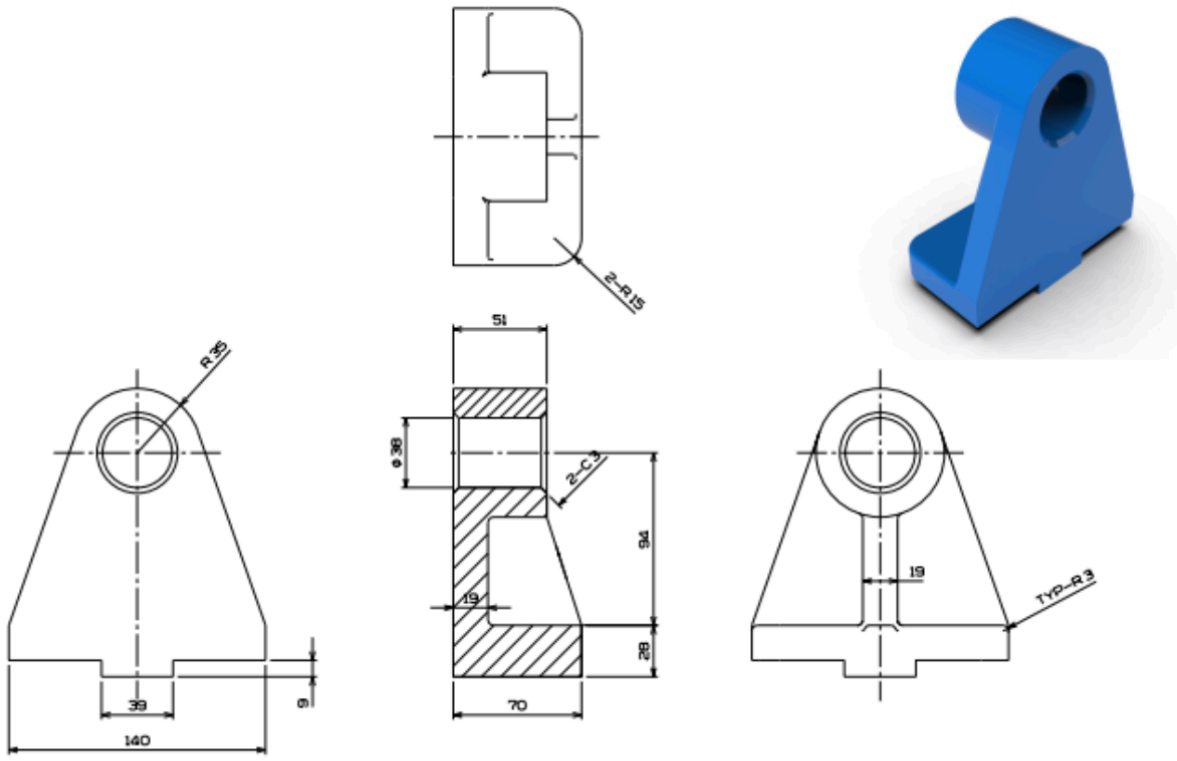

VADUNİ
Mechanical design
160.5
R12.5
ø50
95
ø39
4
8
ø43
ø35
R43
R12.5
160.5
95
ø50

Bài tập 99


VADUNİ
Mechanical design
5
R2.5
3
C0.5
7.52
18
ø14
ø12
7.3
2.5
1.5
M12
R4
3
C1.2
15
52
20
79
11

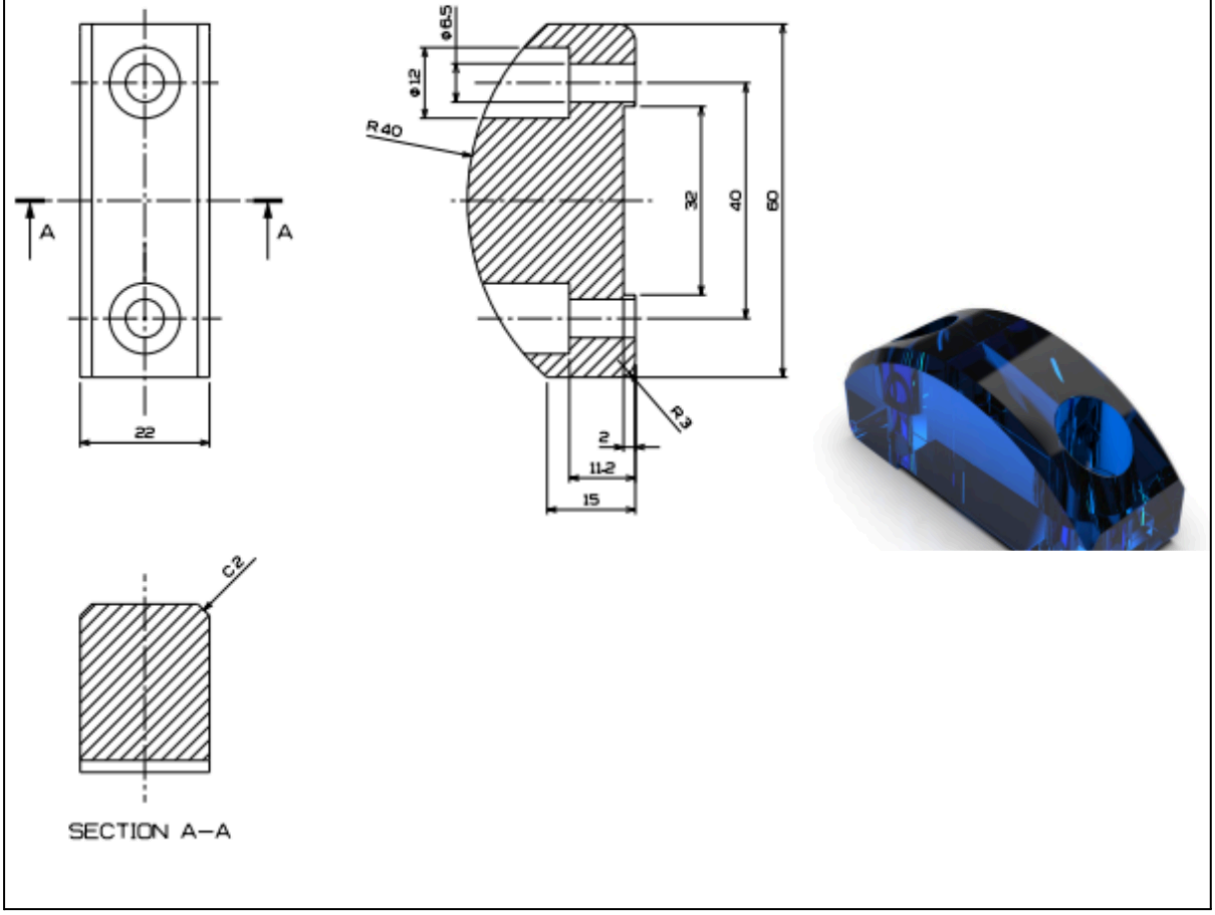
Bài tập 100

VADUNİ
Mechanical design



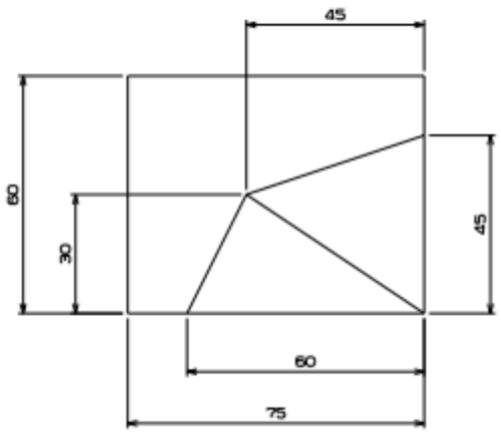
Bài tập 101

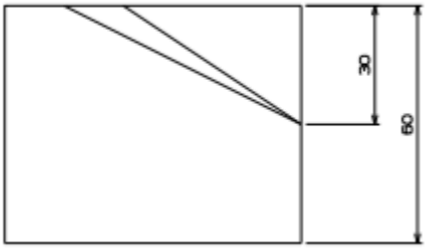
VADUNİ
Mechanical design

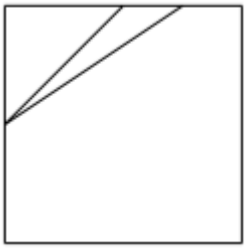


Bài tập 102

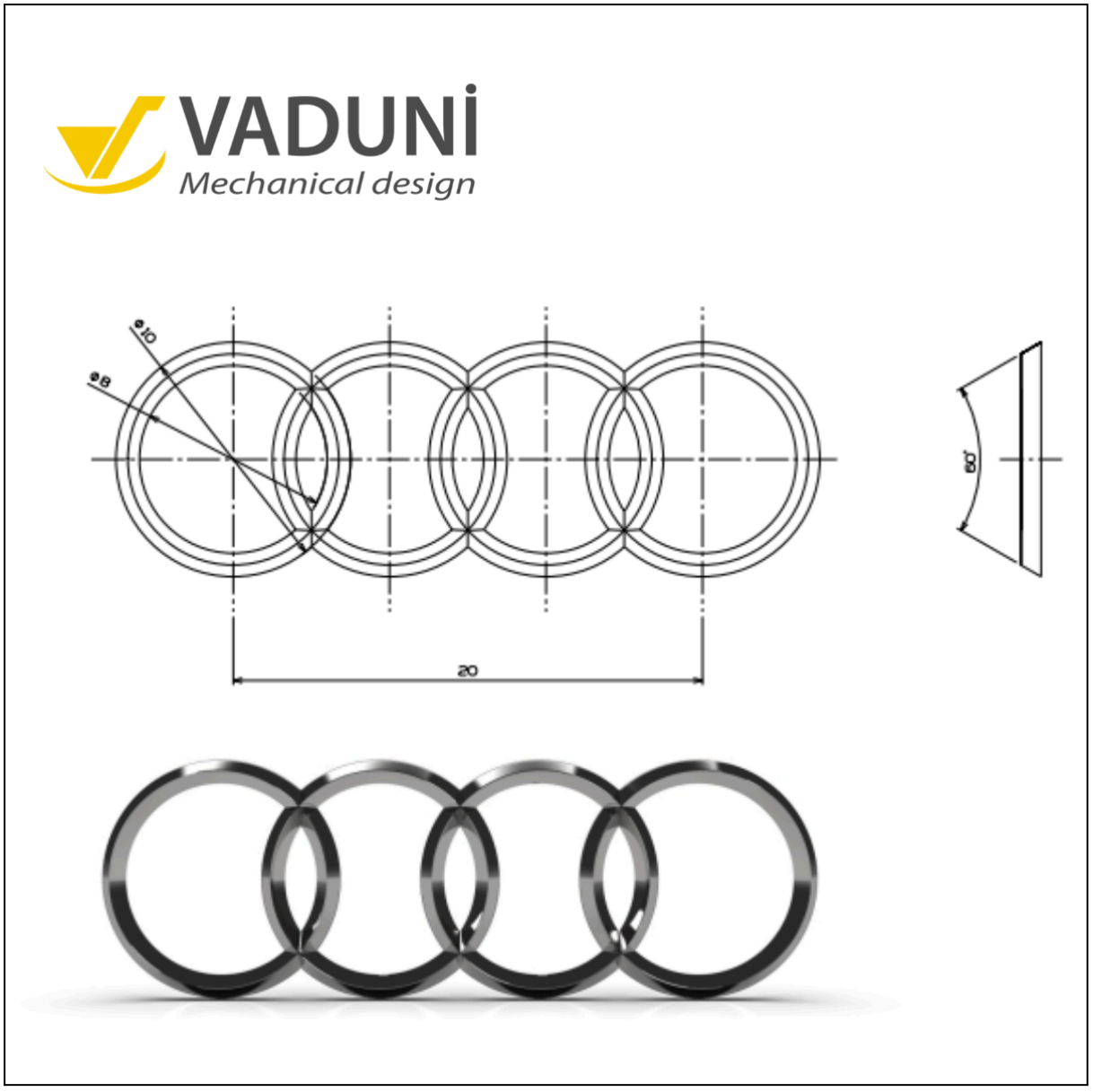
VADUNİ
Mechanical design



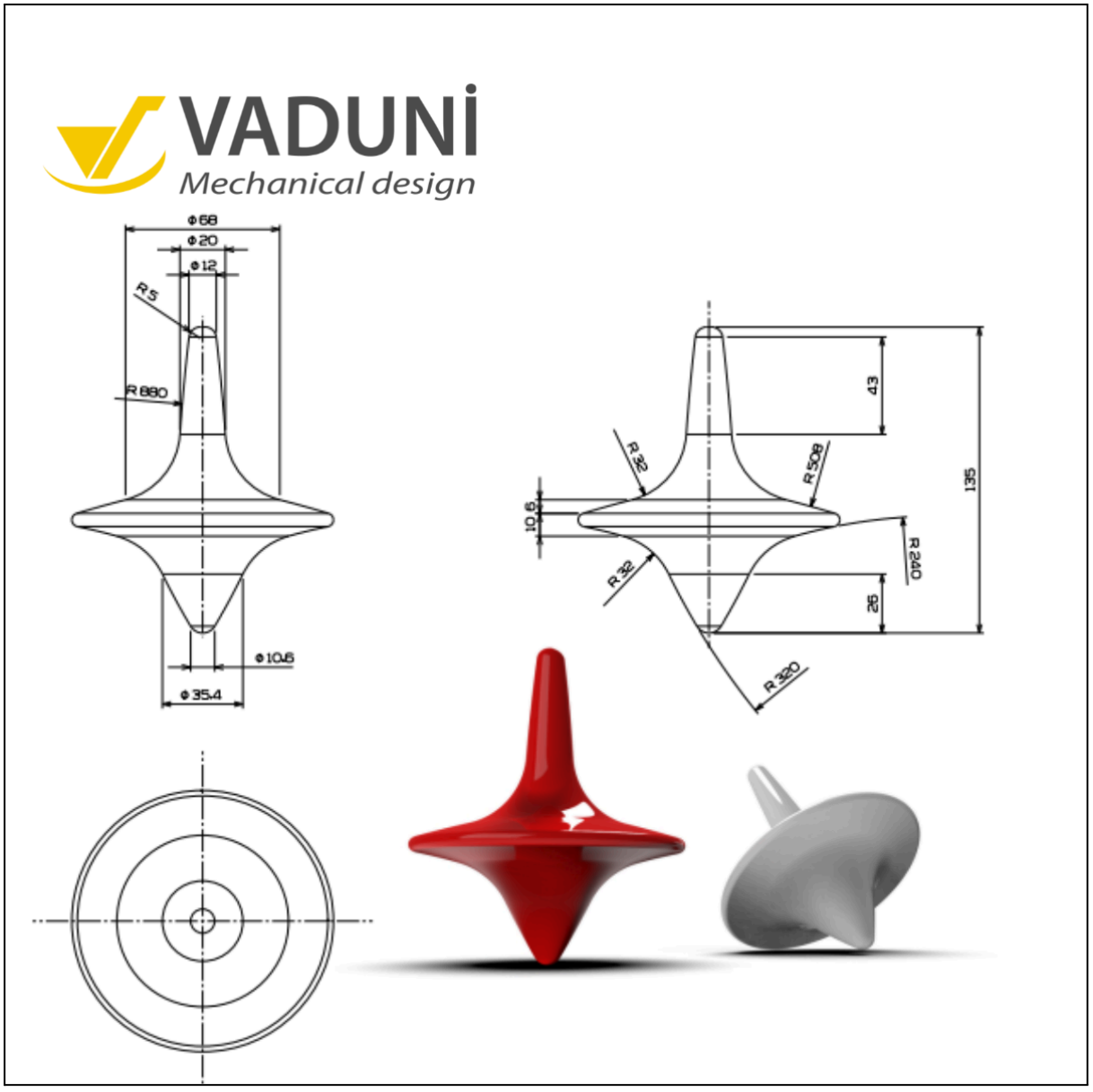




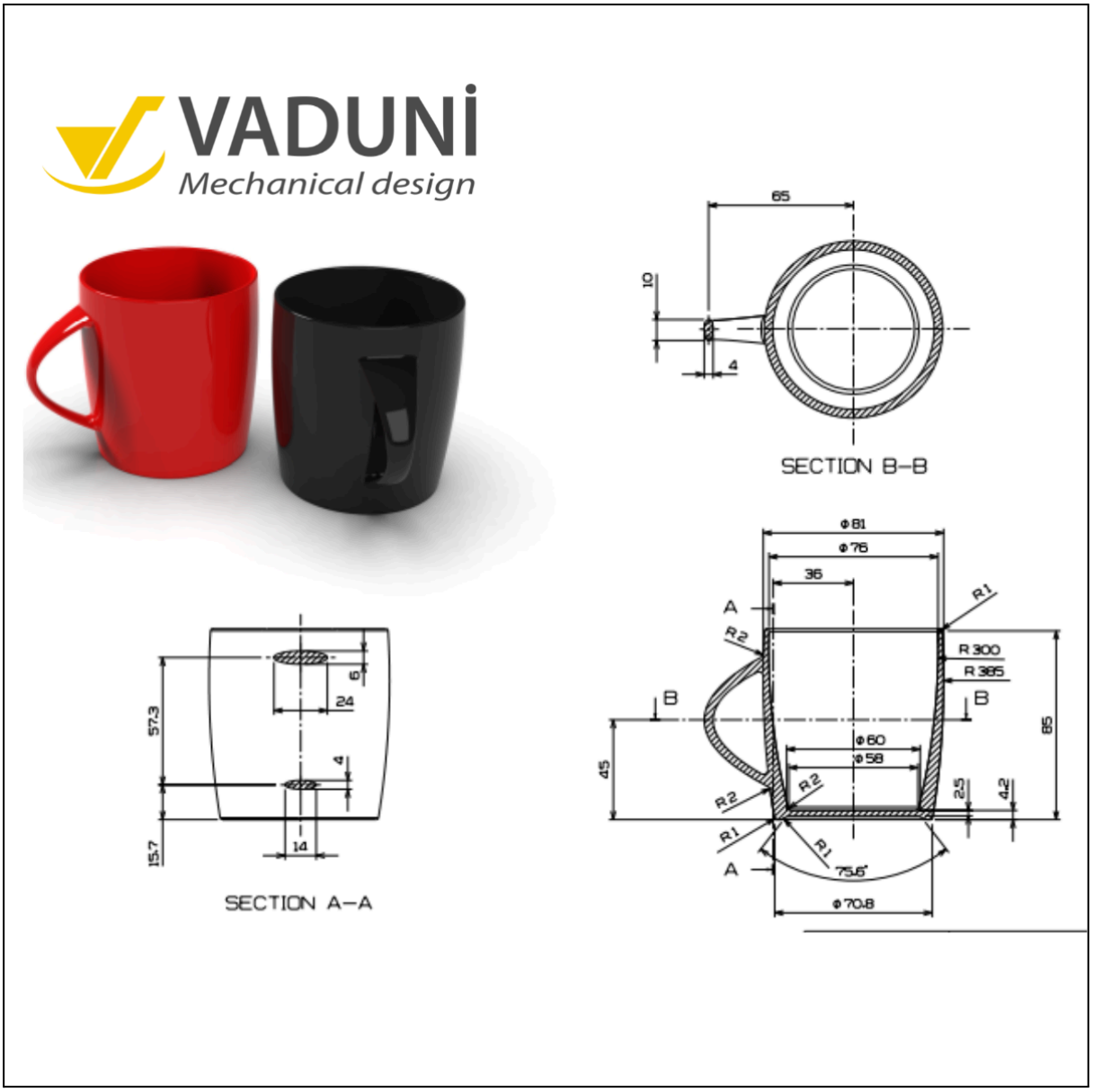
Bài tập 103



Bài tập 104

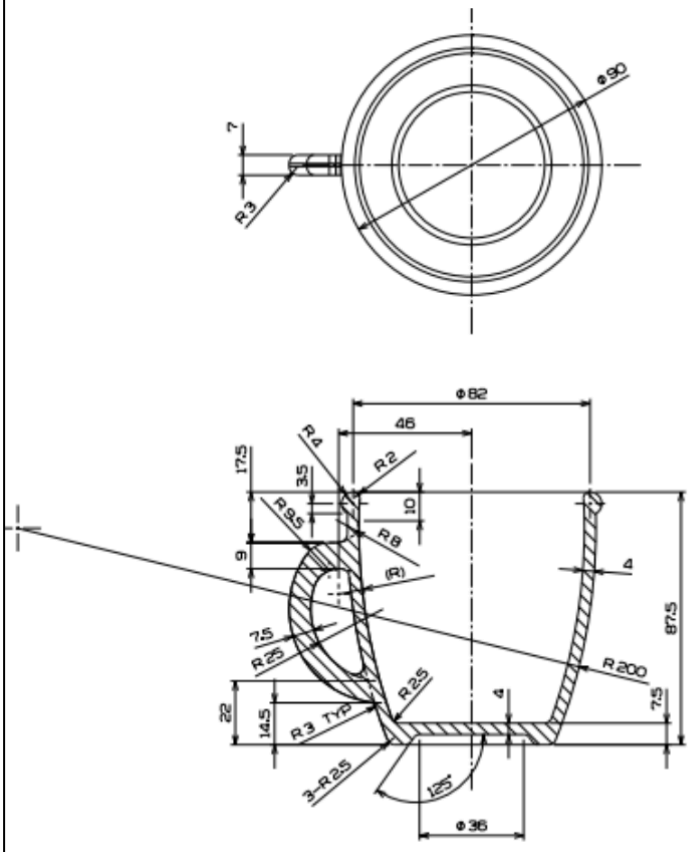

VADUNİ
Mechanical design
Φ68
Φ20
Φ12
R5
R880
Φ10.8
Φ35.4
43
R32
R508
135
10.1
R240
R32
26
R320

Bài tập 105

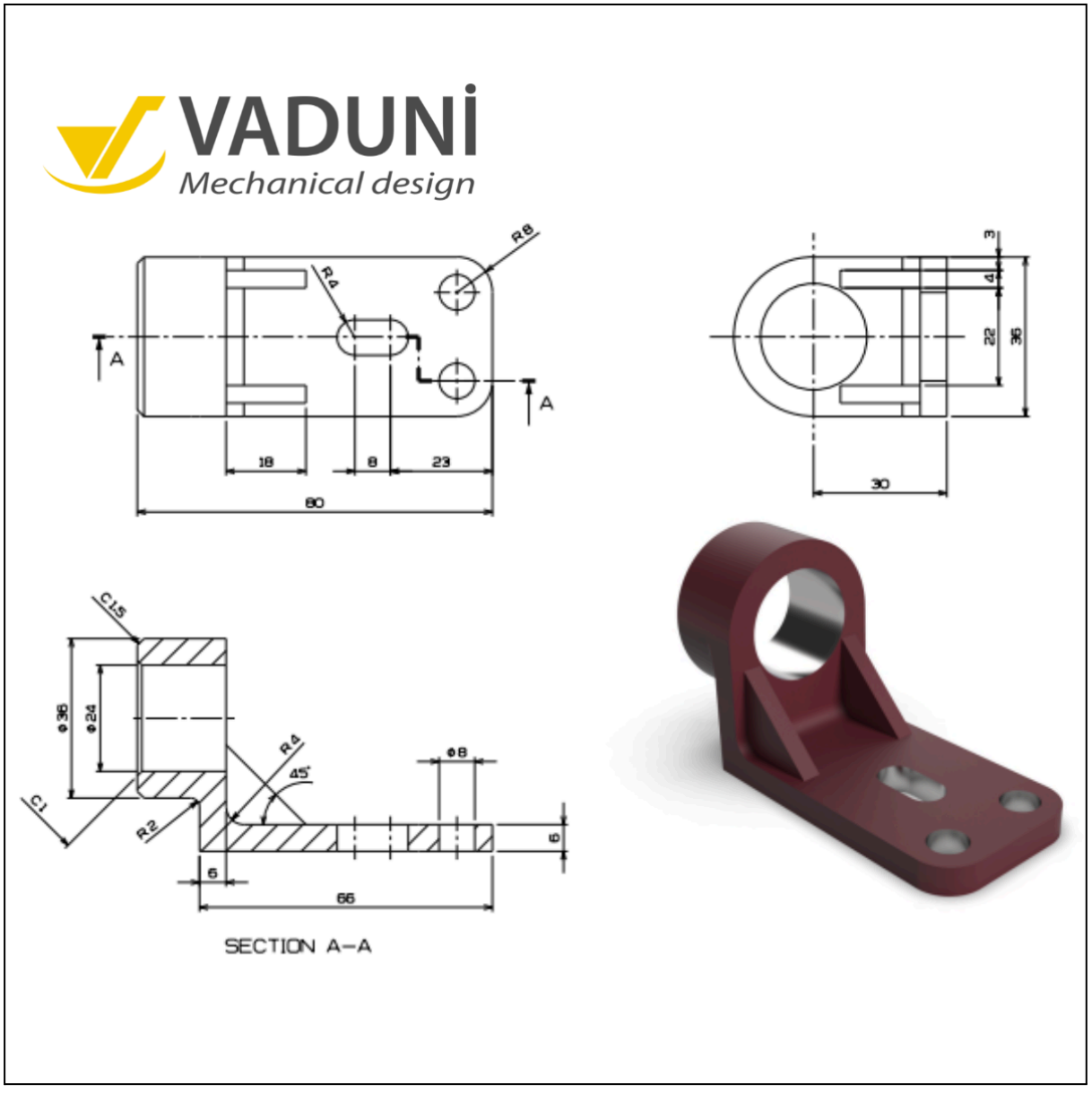

VADUNİ
Mechanical design
65
10
4
SECTION B–B
Φ81
Φ76
36
R1
A
R2
R300
R365
B
B
Φ60
Φ58
45
85
R2
R2
2.5
4.2
R1
R1
A
75.6°
Φ70.8
57.3
6
24
4
15.7
14
SECTION A–A

Bài tập 106

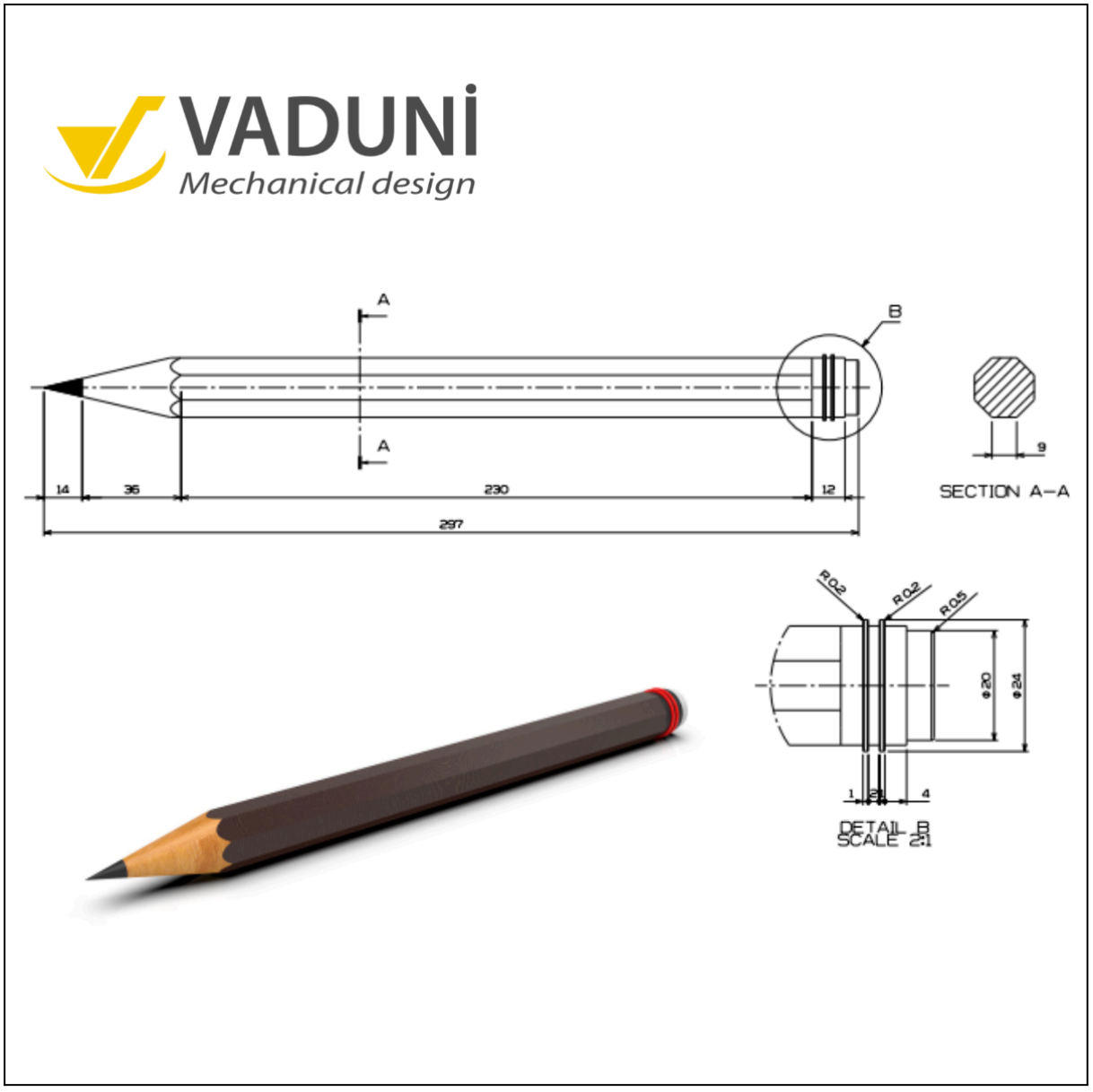
VADUNİ
Mechanical design



Bài tập 107

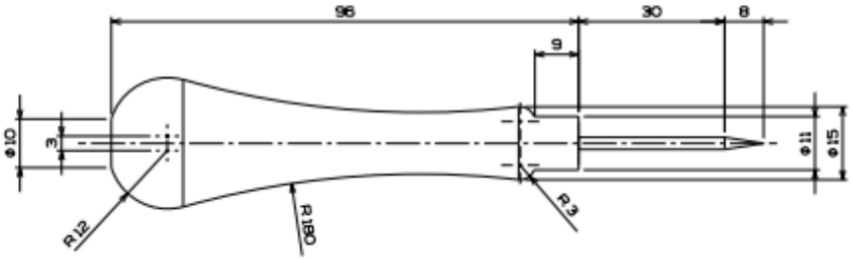

VADUNİ
Mechanical design
R8
R4
A
A
18
8
23
80
3
4
22
36
30
C1.5
ø36
ø24
R4
45°
ø8
C1
R2
6
6
66
SECTION A–A

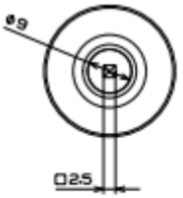
Bài tập 108


VADUNİ
Mechanical design
A
B
A
14
36
230
12
297
9
SECTION A–A
R0.2
R0.2
R0.5
ø20
ø24
1
2
4
DETAIL B
SCALE 2:1

Bài tập 109

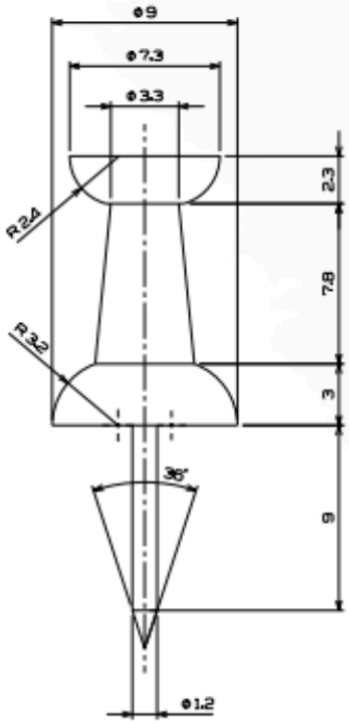
VADUNİ
Mechanical design



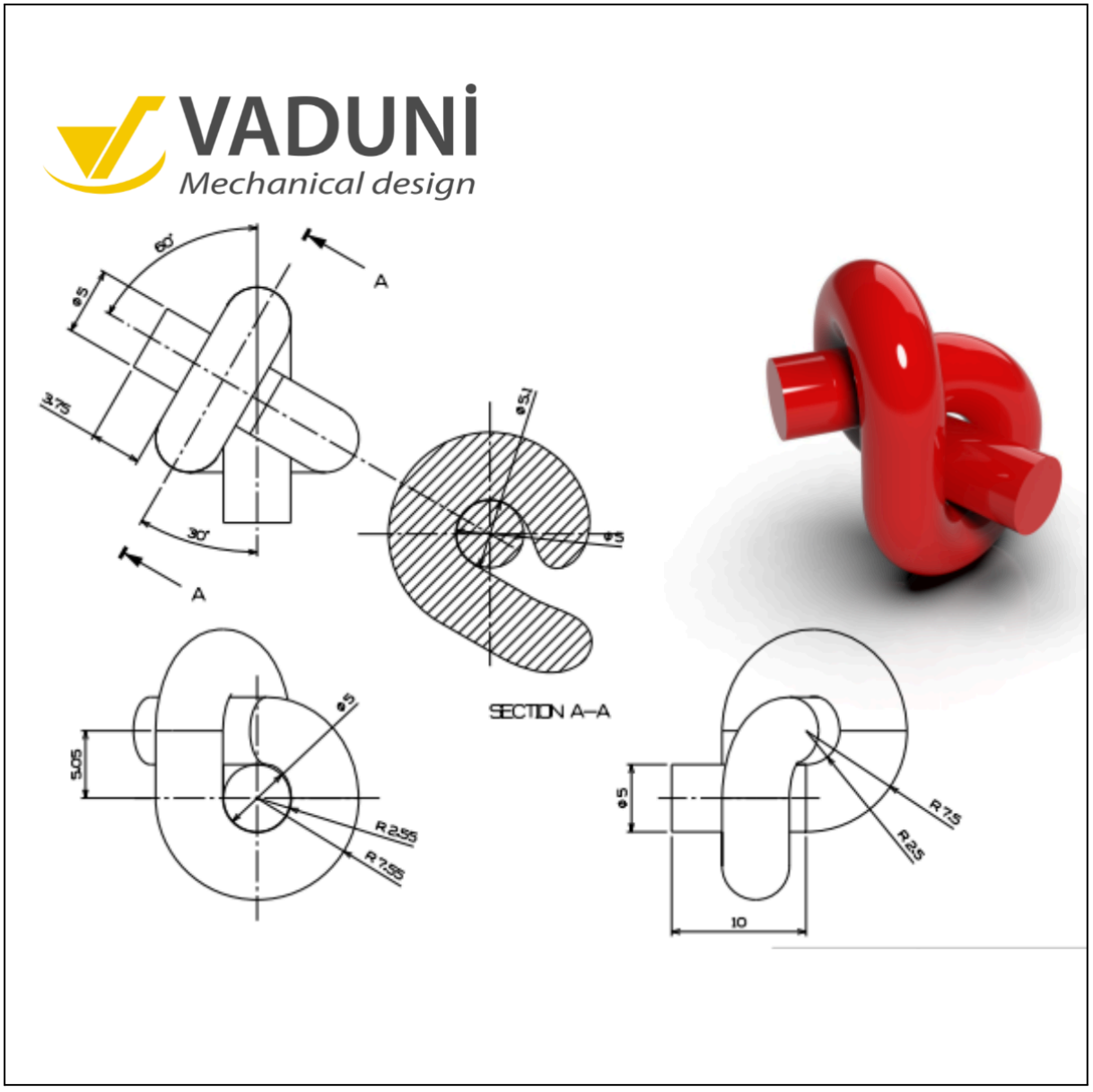


Bài tập 110

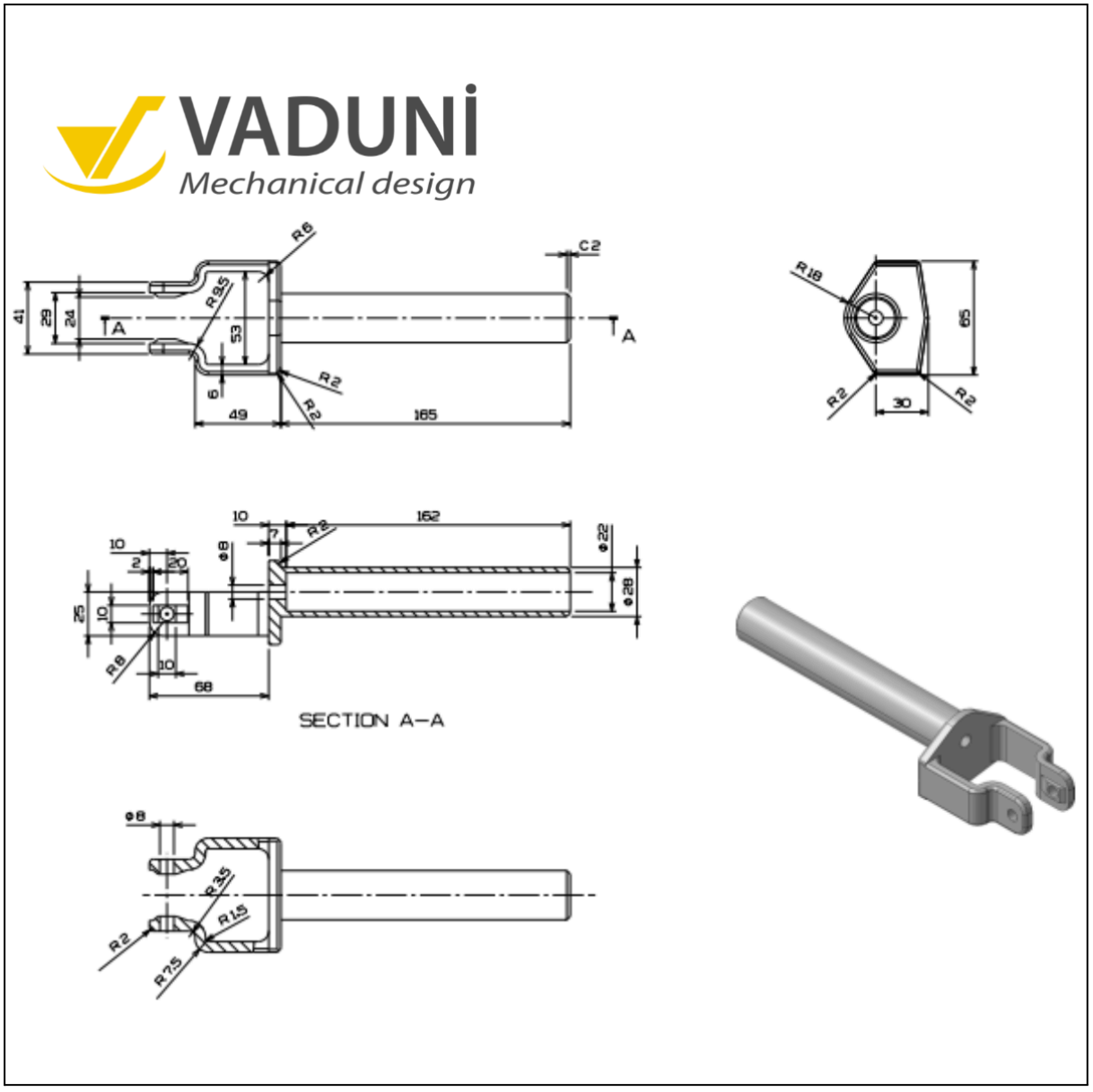
VADUNİ
Mechanical design



Bài tập 111

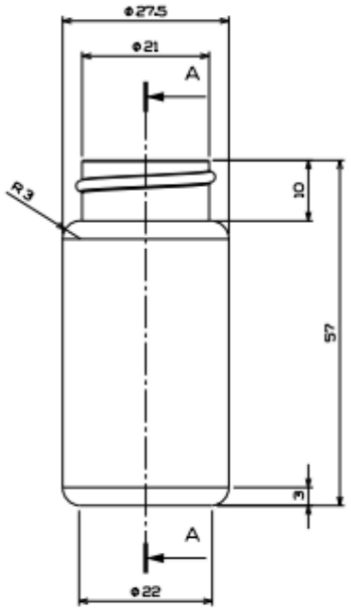

VADUNİ
Mechanical design
60°
ø5
3.75
A
30°
A
ø5.1
ø5
SECTION A–A
5.05
ø5
R2.55
R7.55
ø5
R7.5
R2.5
10

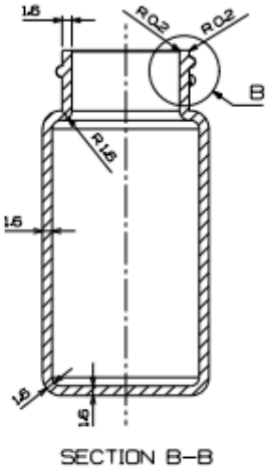
Bài tập 112


VADUNİ
Mechanical design
R6
C2
R35
41
29
24
A
53
6
49
R2
165
R18
65
30
10
R2
162
Ø22
Ø28
Ø8
2
20
25
R8
68
SECTION A–A
R2.35
R1.5
R2
R7.5

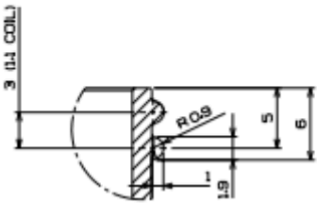
Bài tập 113

VADUNİ
Mechanical design



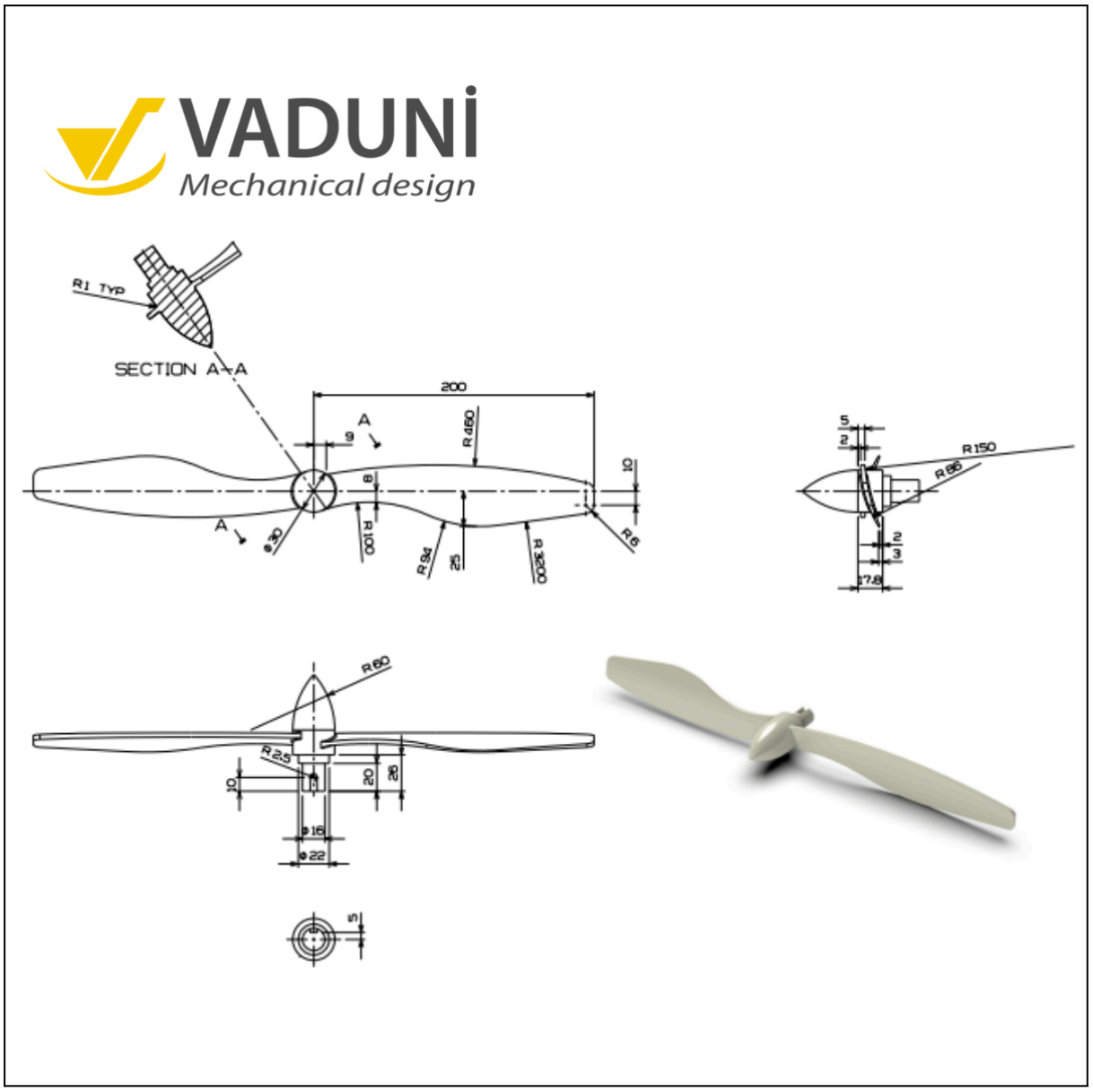


SECTION B–B

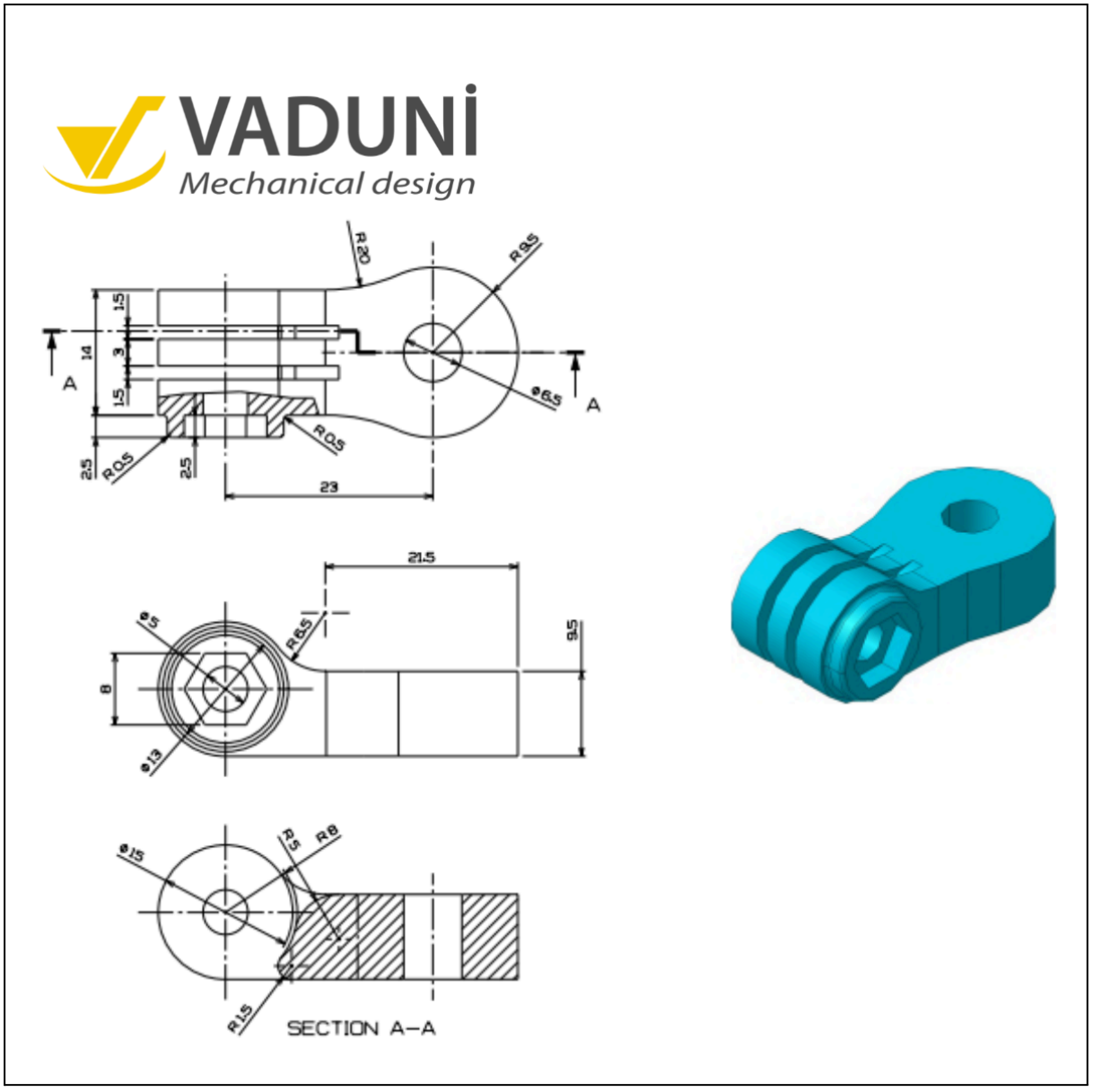


DETAIL B
SCALE 2:1

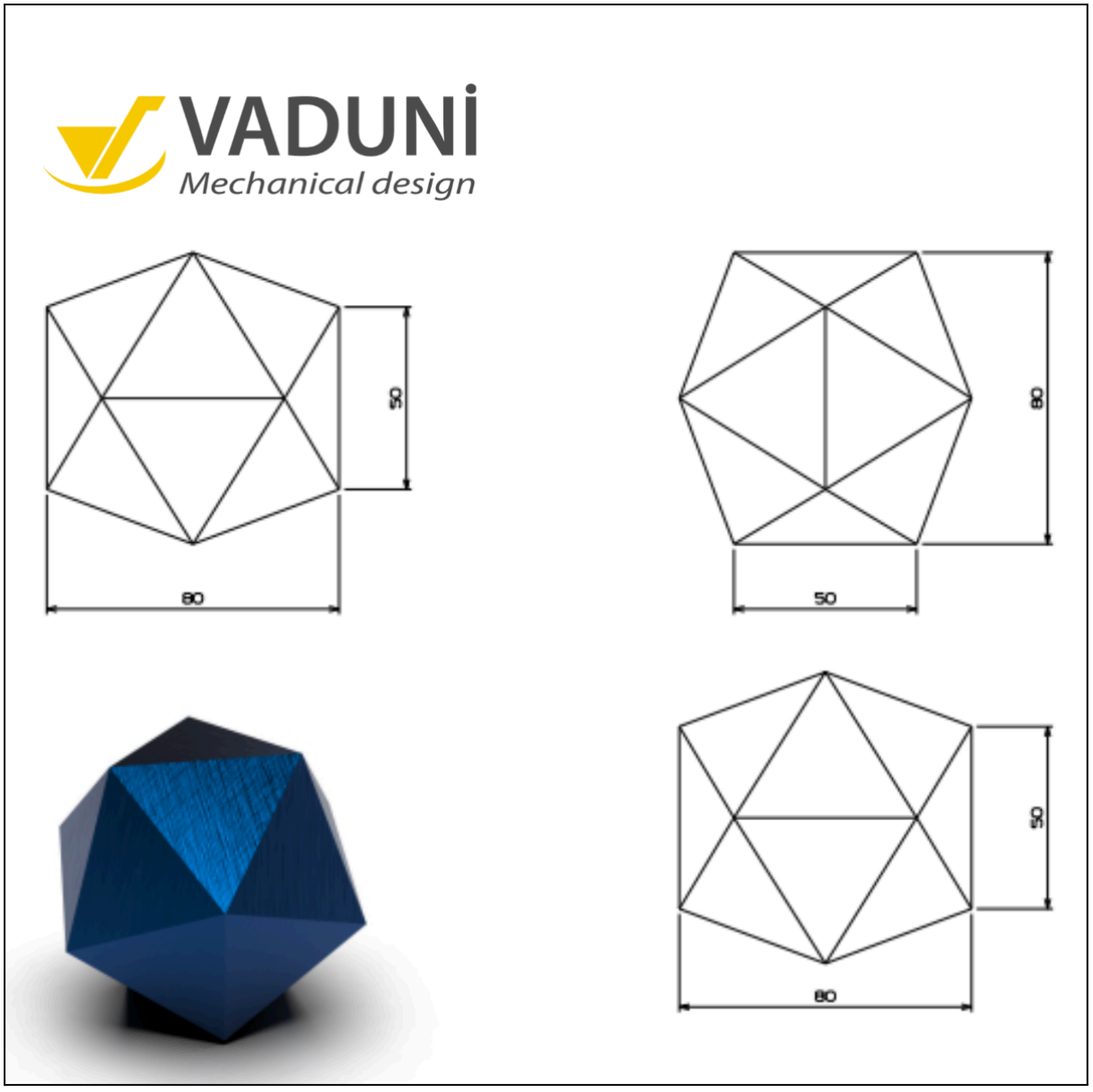
Bài tập 114


VADUNİ
Mechanical design
R1 TYP
SECTION A–A
200
A
9
R460
10
8
R100
R94
25
R3200
R6
ø30
5
2
R150
R86
2
3
7.8
R60
R25
10
20
28
ø16
ø22
5

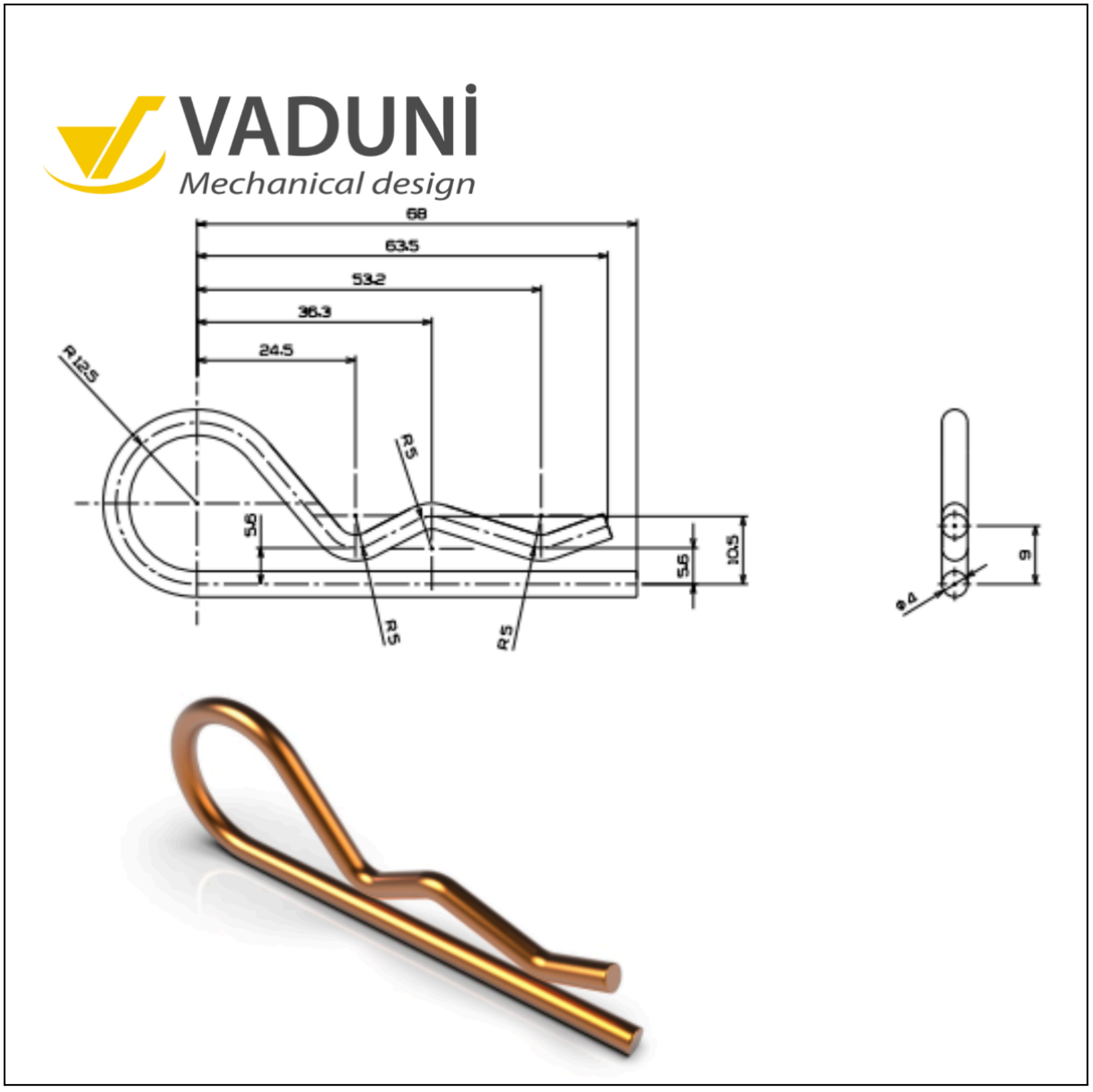
Bài tập 115


VADUNİ
Mechanical design
R20
R9.5
1.5
14
3
1.5
A
A
ø6.5
R0.5
2.5
R0.5
2.5
23
21.5
ø5
R6.5
9.5
8
ø13
ø15
R5
R8
R15
SECTION A–A

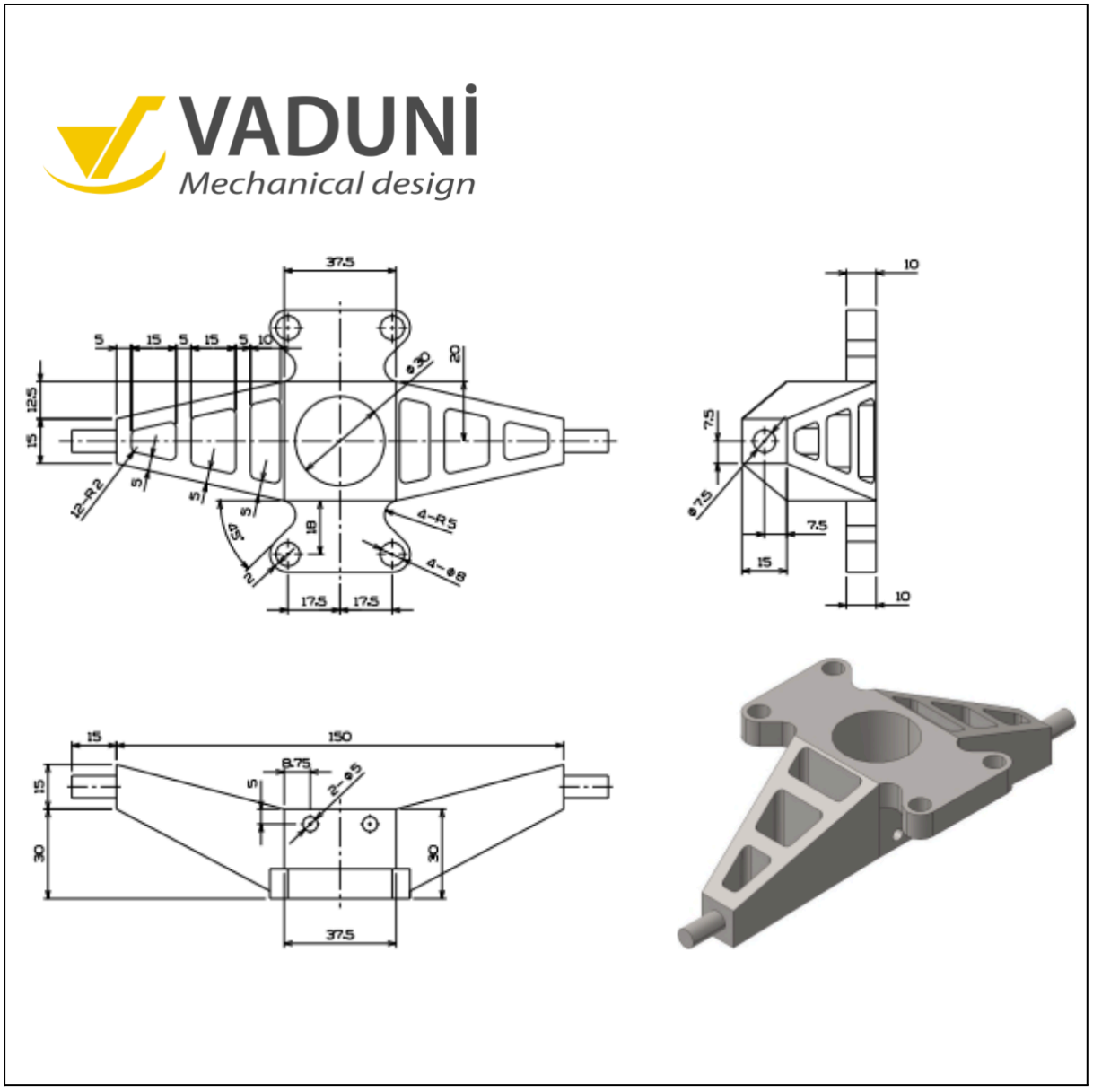
Bài tập 116



Bài tập 117

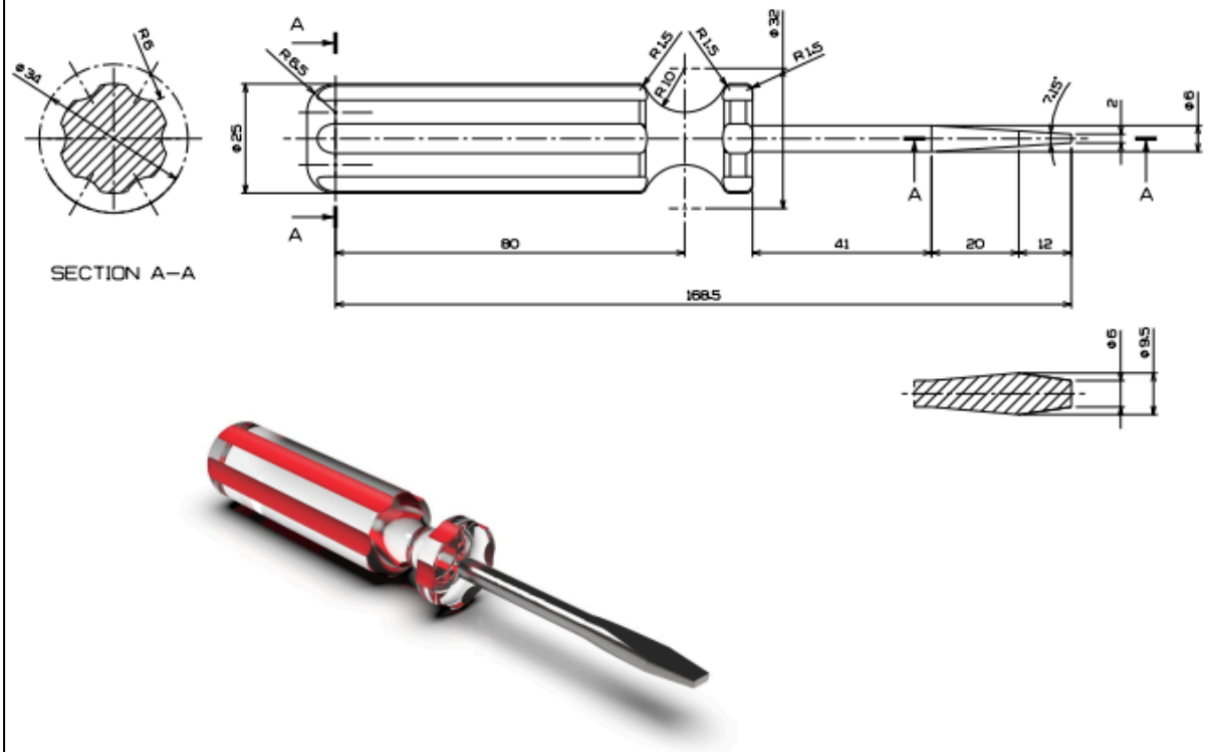

VADUNİ
Mechanical design
68
63.5
53.2
36.3
24.5
R12.5
R5
R5
R5
5.6
5.6
10.5
ø4
5

Bài tập 118


VADUNİ
Mechanical design
37.5
5
15
5
15
5
10
12.5
15
20
12-R2
5
5
5
5
45°
2
18
4-R5
4-ø8
17.5
17.5
10
7.5
ø7.5
7.5
15
10
15
150
8.75
15
5
2-ø5
30
30
37.5

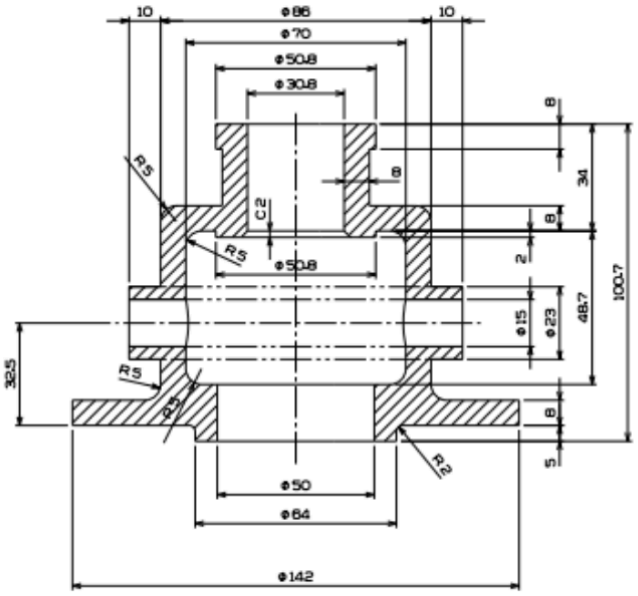
Bài tập 119

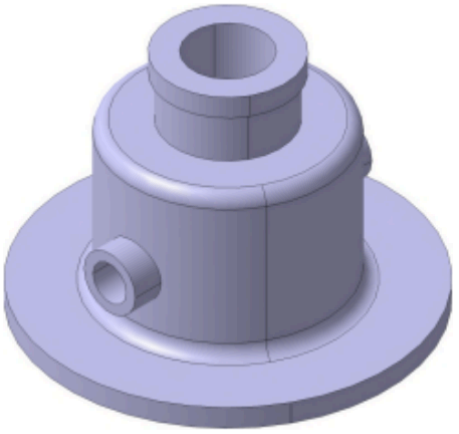
VADUNİ
Mechanical design



Bài tập 120

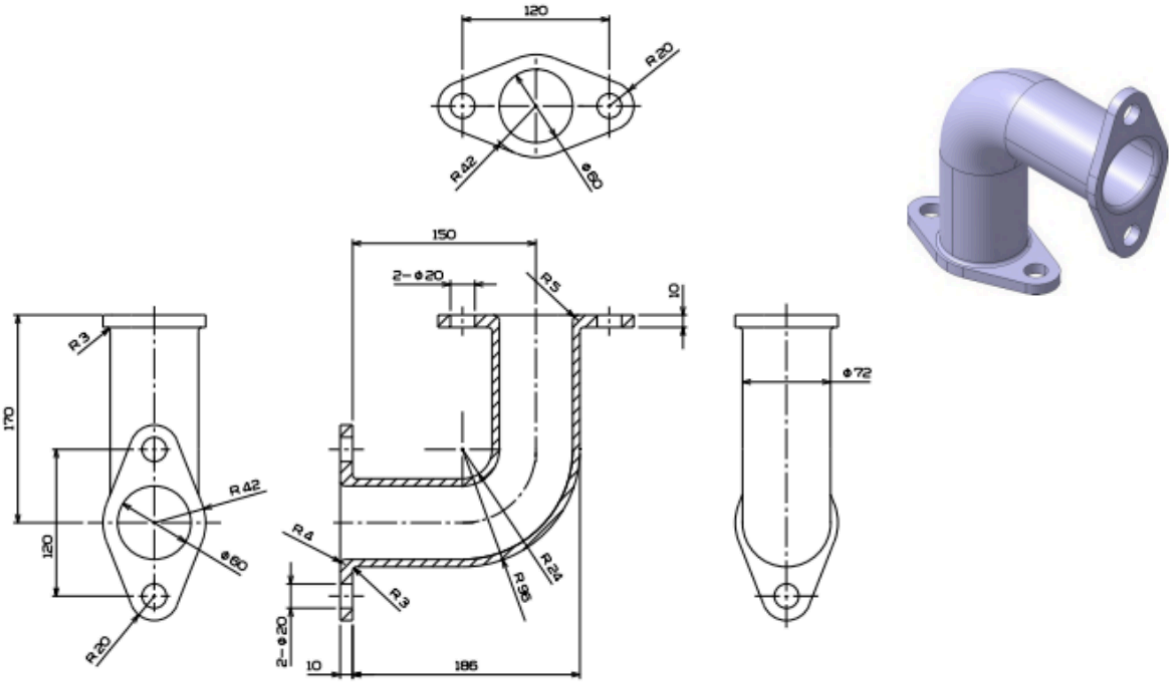
VADUNİ
Mechanical design





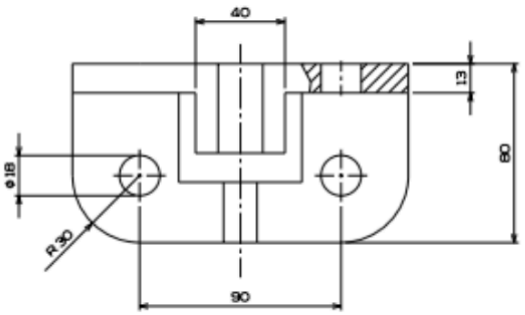
Bài tập 121

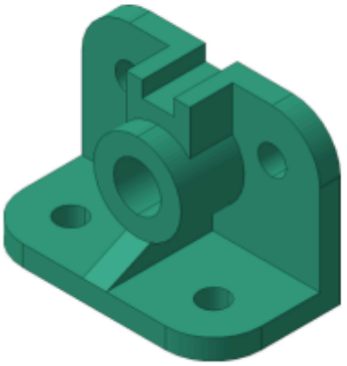
VADUNİ
Mechanical design

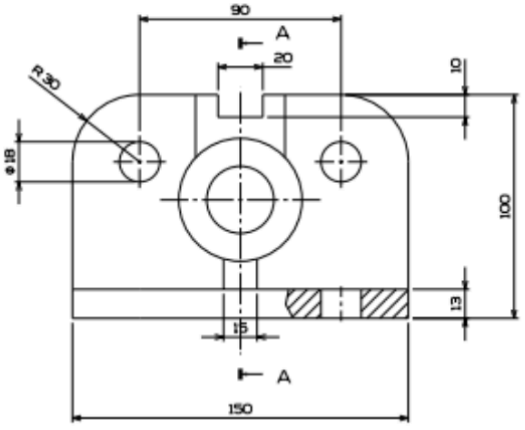


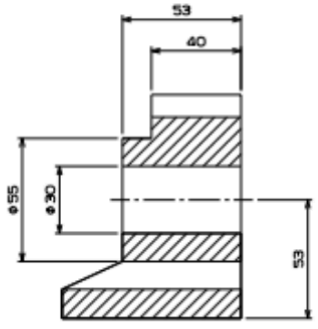
Bài tập 122

VADUNİ
Mechanical design





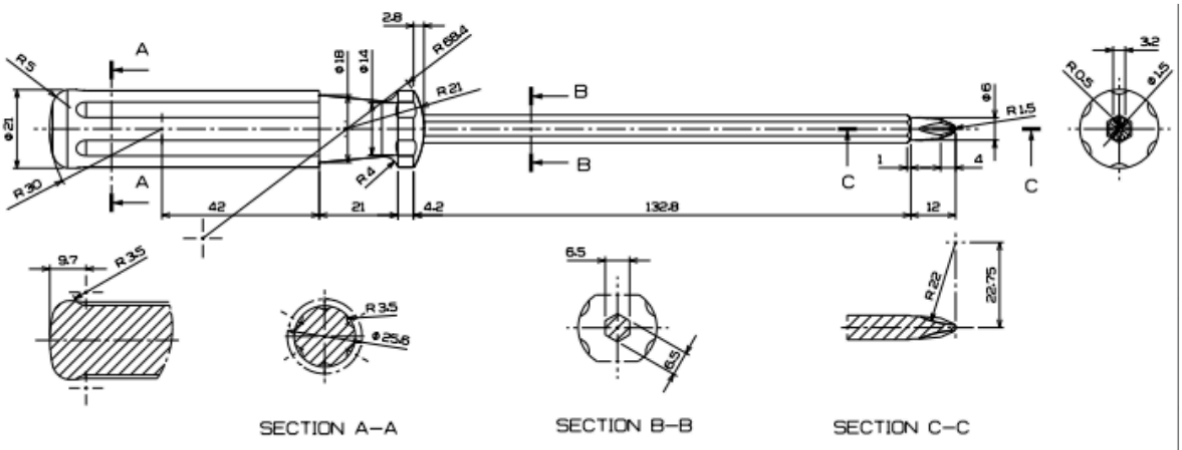




SECTION A–A

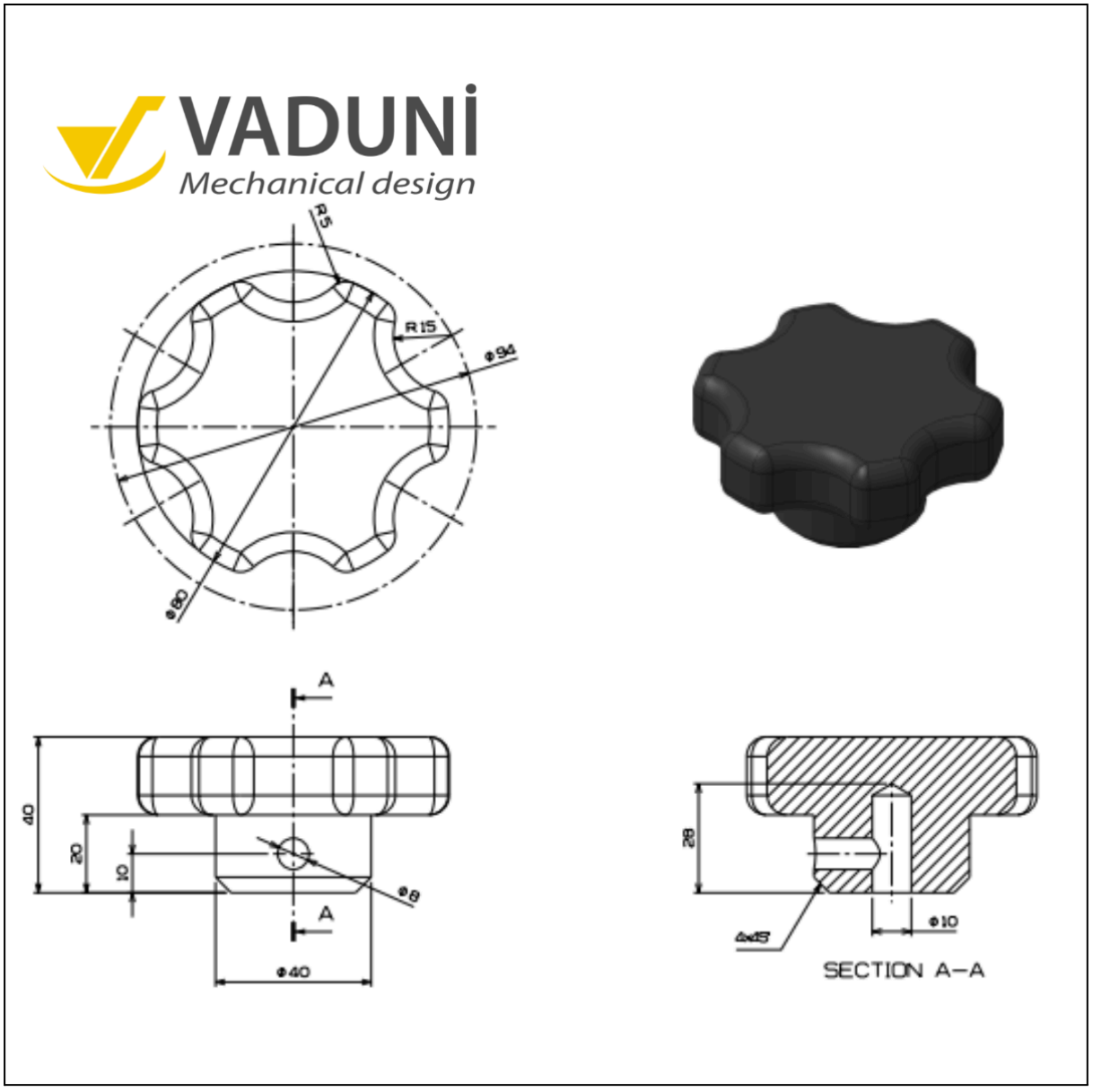
Bài tập 123

VADUNİ
Mechanical design



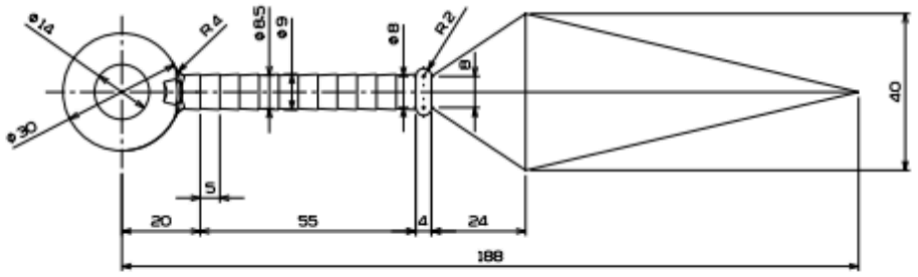
SECTION A–A SECTION B–B SECTION C–C

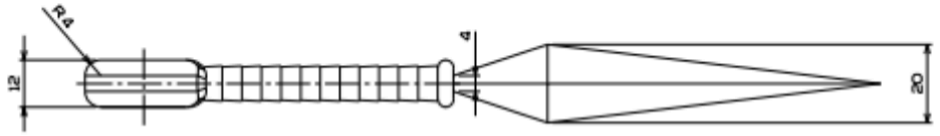
Bài tập 124


VADUNİ
Mechanical design
R5
R15
ø94
ø80
A
40
20
10
ø8
A
ø40
28
4x45
ø10
SECTION A–A

Bài tập 125

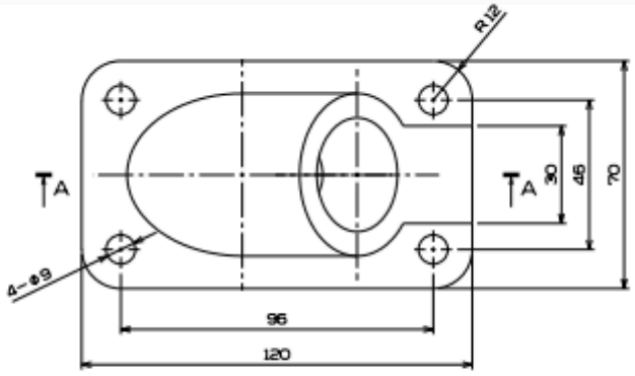
VADUNİ
Mechanical design

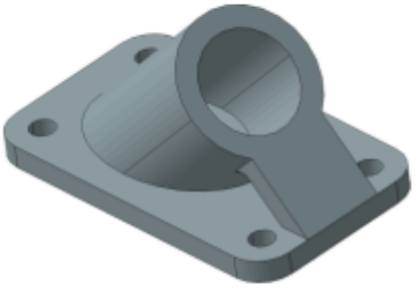


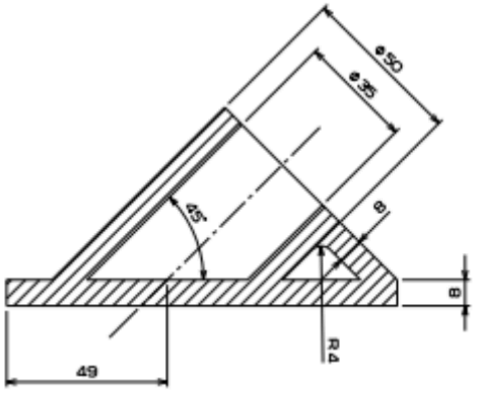


Bài tập 126

VADUNİ
Mechanical design



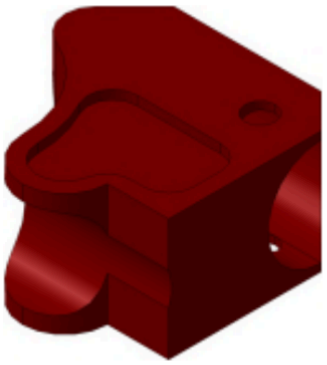


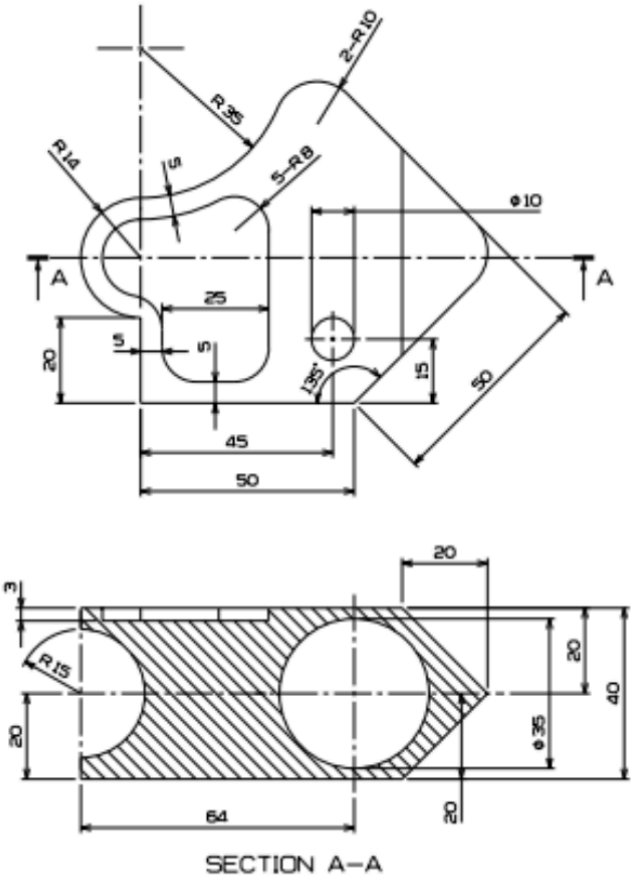


SECTION A–A

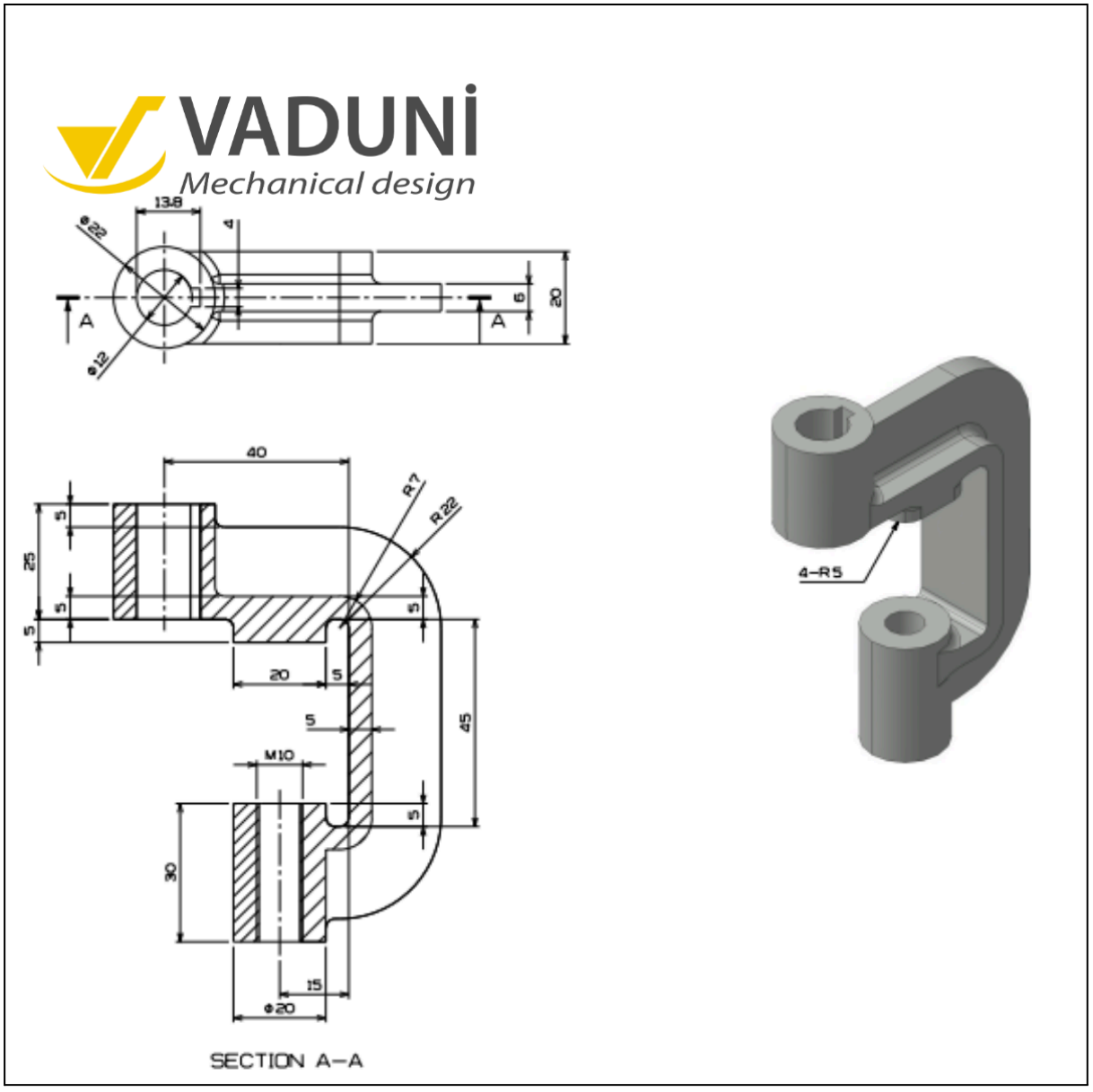
Bài tập 127

VADUNI
Mechanical design



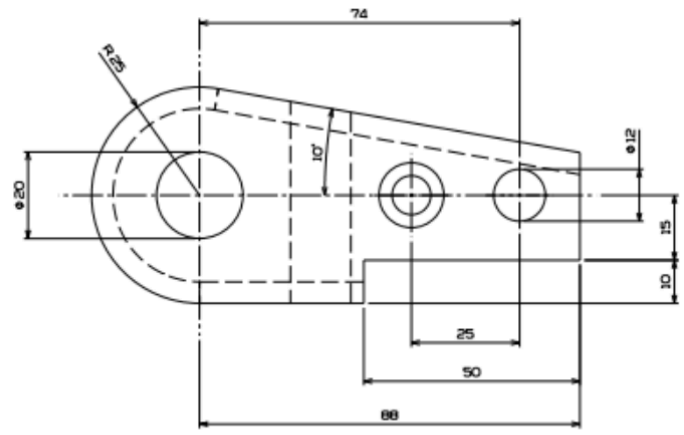


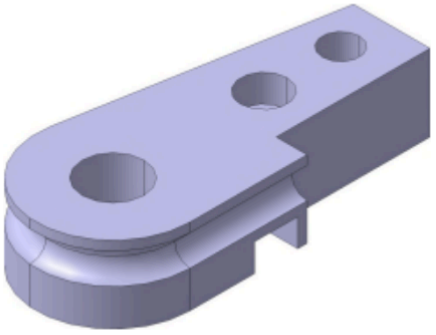
Bài tập 128

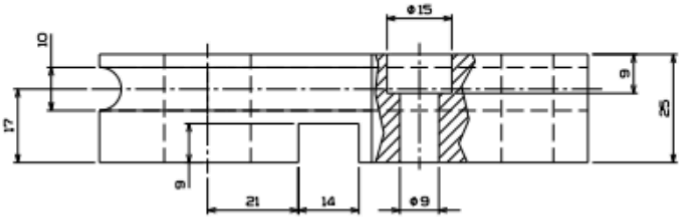

VADUNİ
Mechanical design
13.8
4
ø22
ø12
A
A
6
20
40
R7
R22
25
5
5
5
5
20
5
5
45
M10
5
30
15
ø20
4-R5
SECTION A-A

Bài tập 129

VADUNİ
Mechanical design

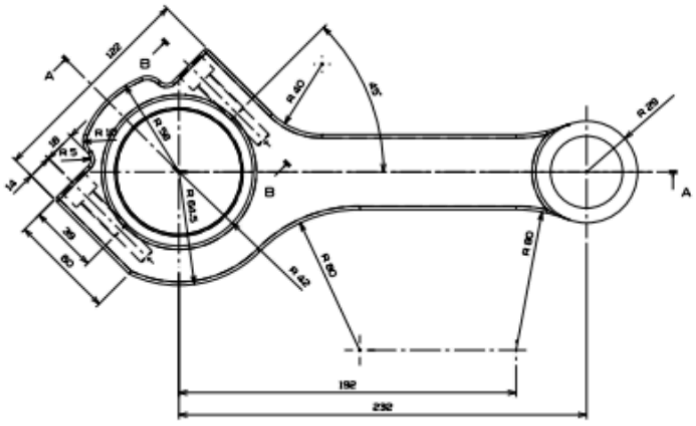


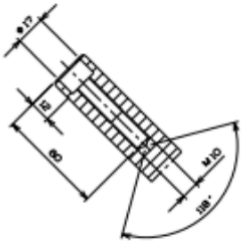




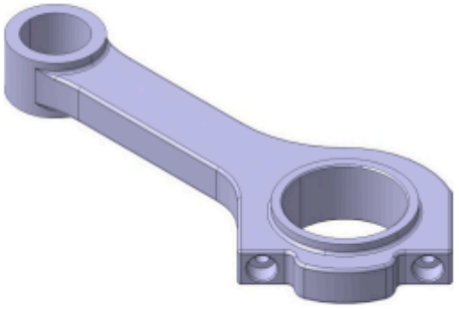
Bài tập 130

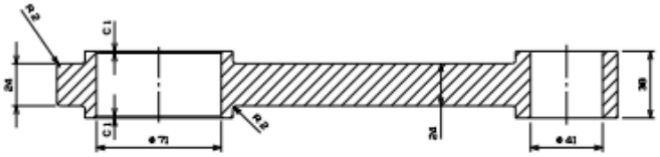
VADUNİ
Mechanical design





SECTION B–B

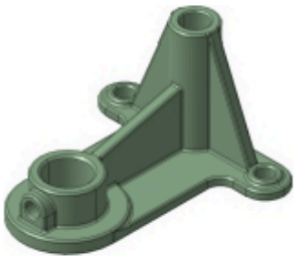


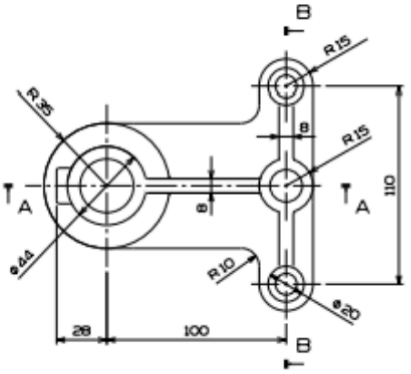


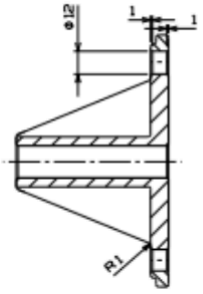
SECTION A–A

Bài tập 131

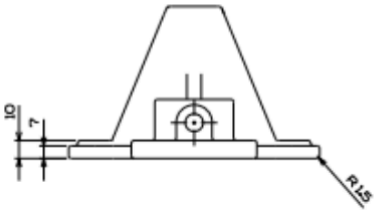
VADUNİ
Mechanical design

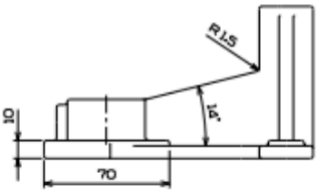


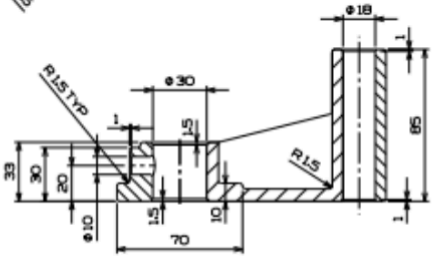




SECTION B–B

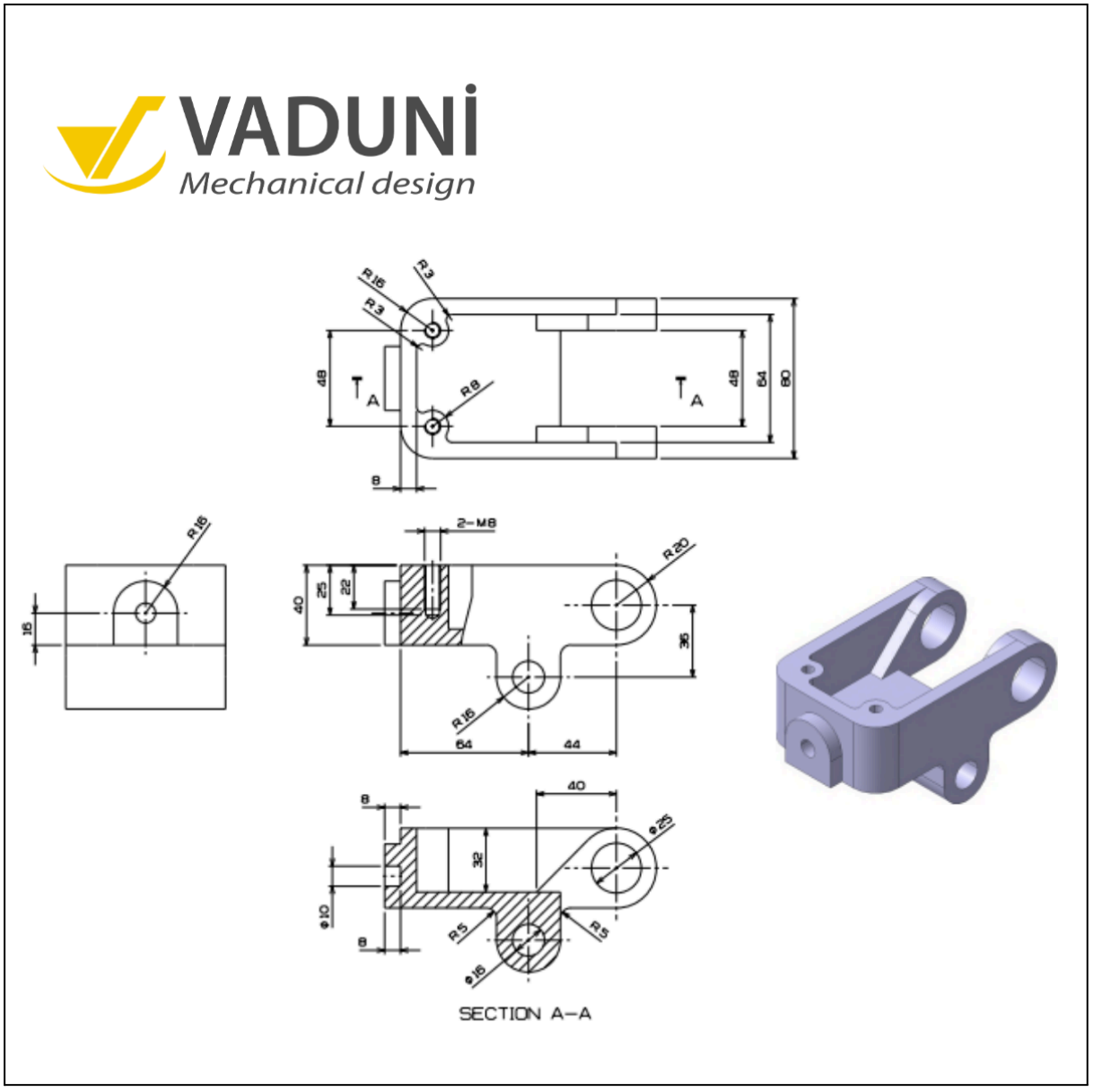




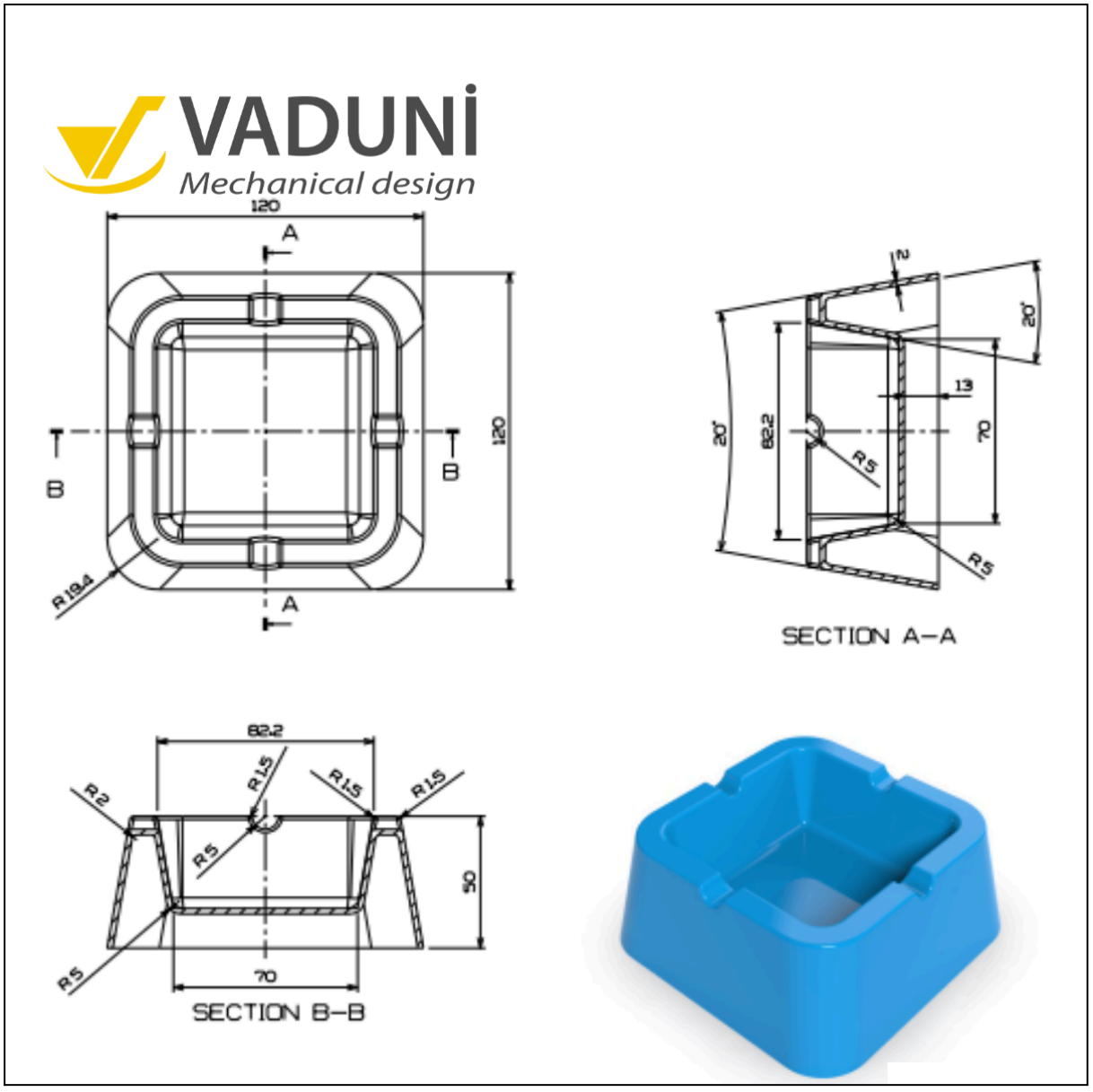


SECTION A–A

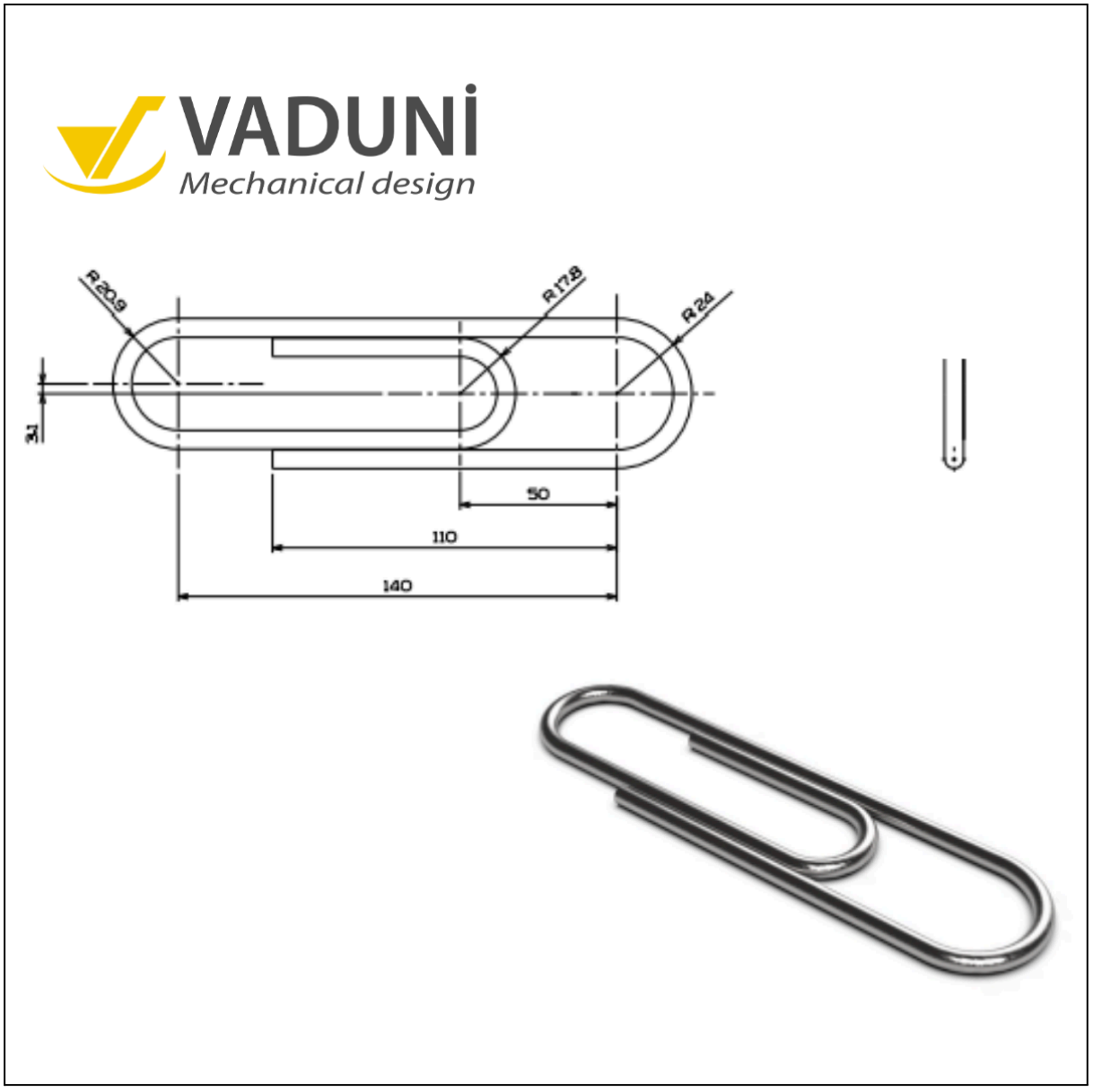
Bài tập 132


VADUNİ
Mechanical design
R16
R3
R3
48
A
R8
A
48
64
80
8
R16
16
2-M8
R20
40
25
22
36
R16
64
44
8
40
ø25
32
10
8
R5
R5
ø16
SECTION A–A

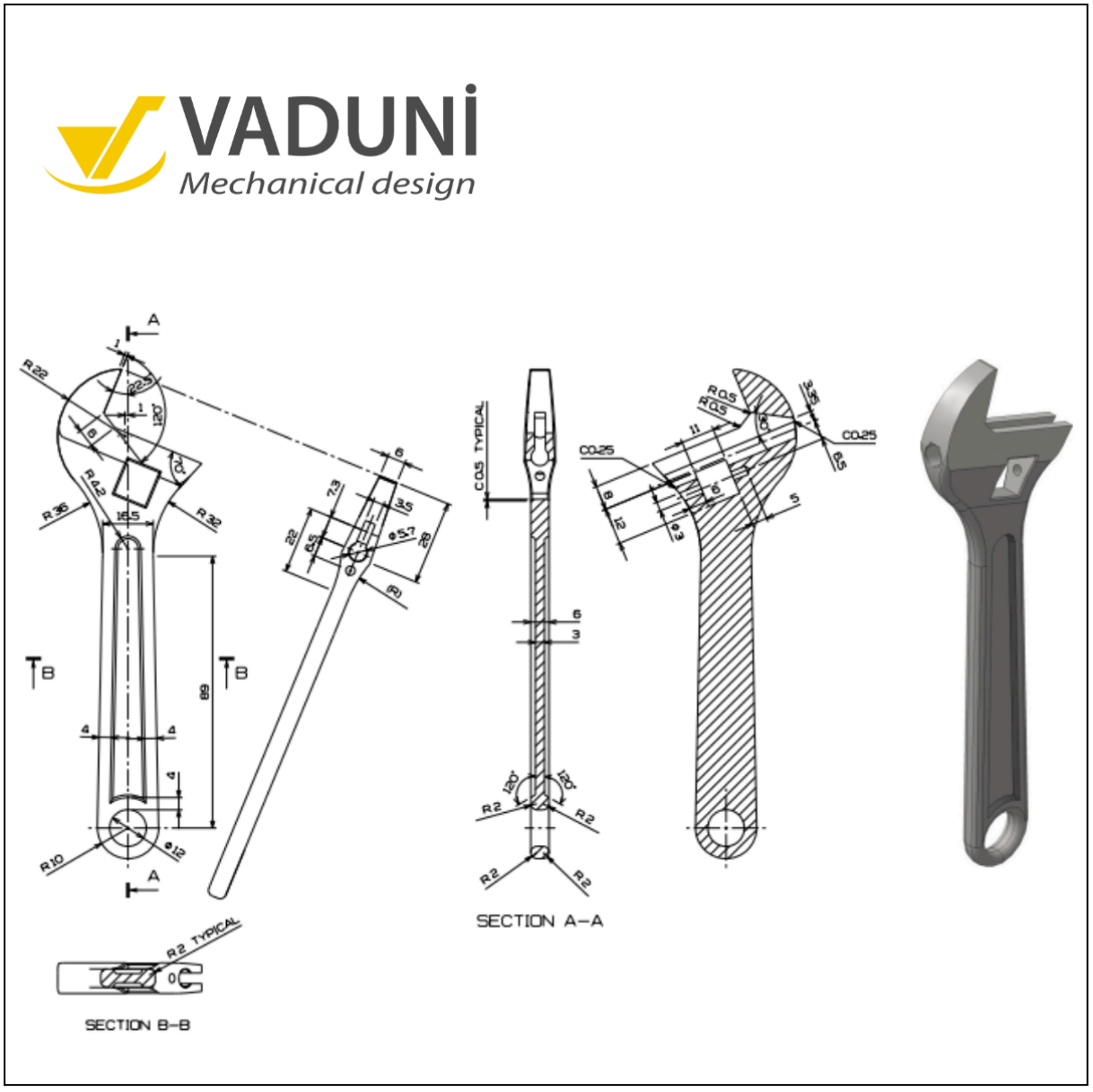
Bài tập 133


VADUNİ
Mechanical design
120
A
B
B
120
R19.4
A
2
20°
20°
13
82.2
70
R5
R5
SECTION A–A
82.2
R1.5
R1.5
R1.5
R2
R5
50
R5
70
SECTION B–B

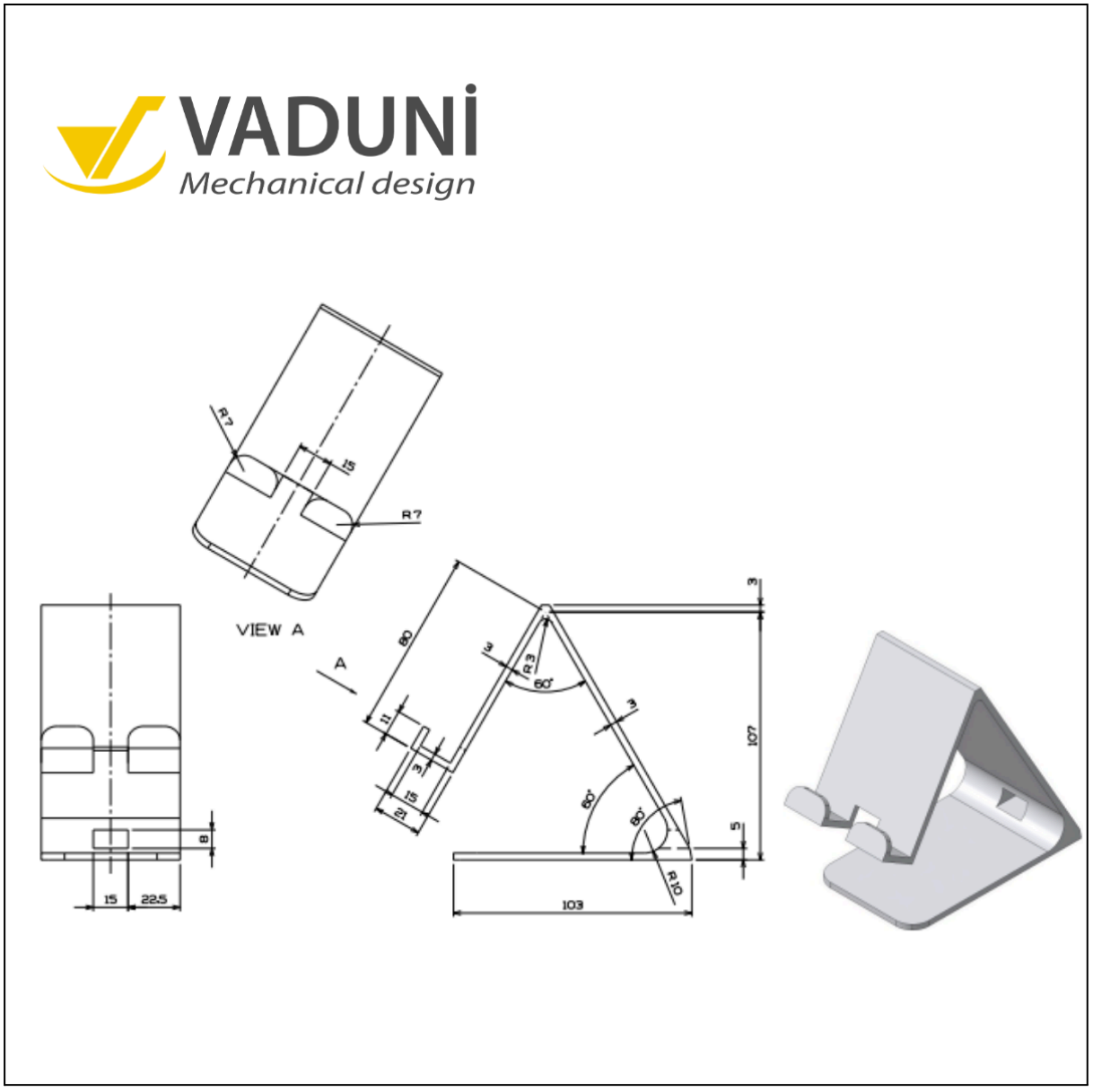
Bài tập 134



Bài tập 135

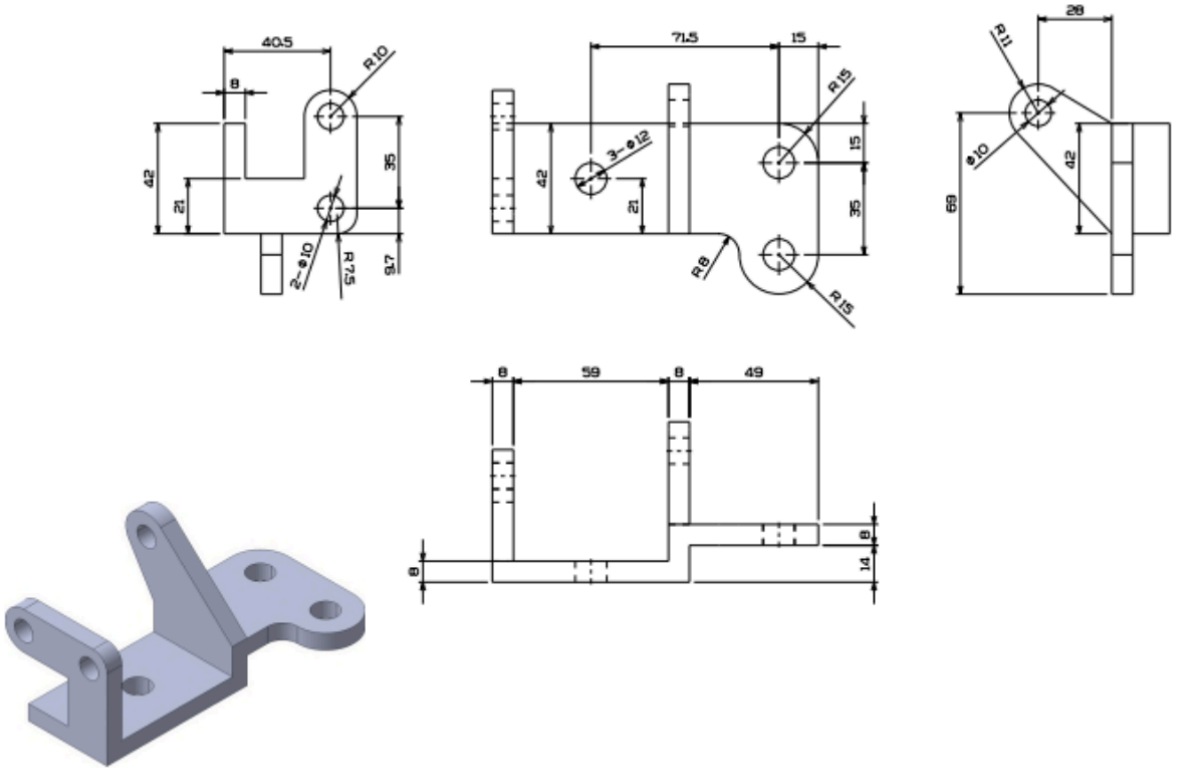


Bài tập 136

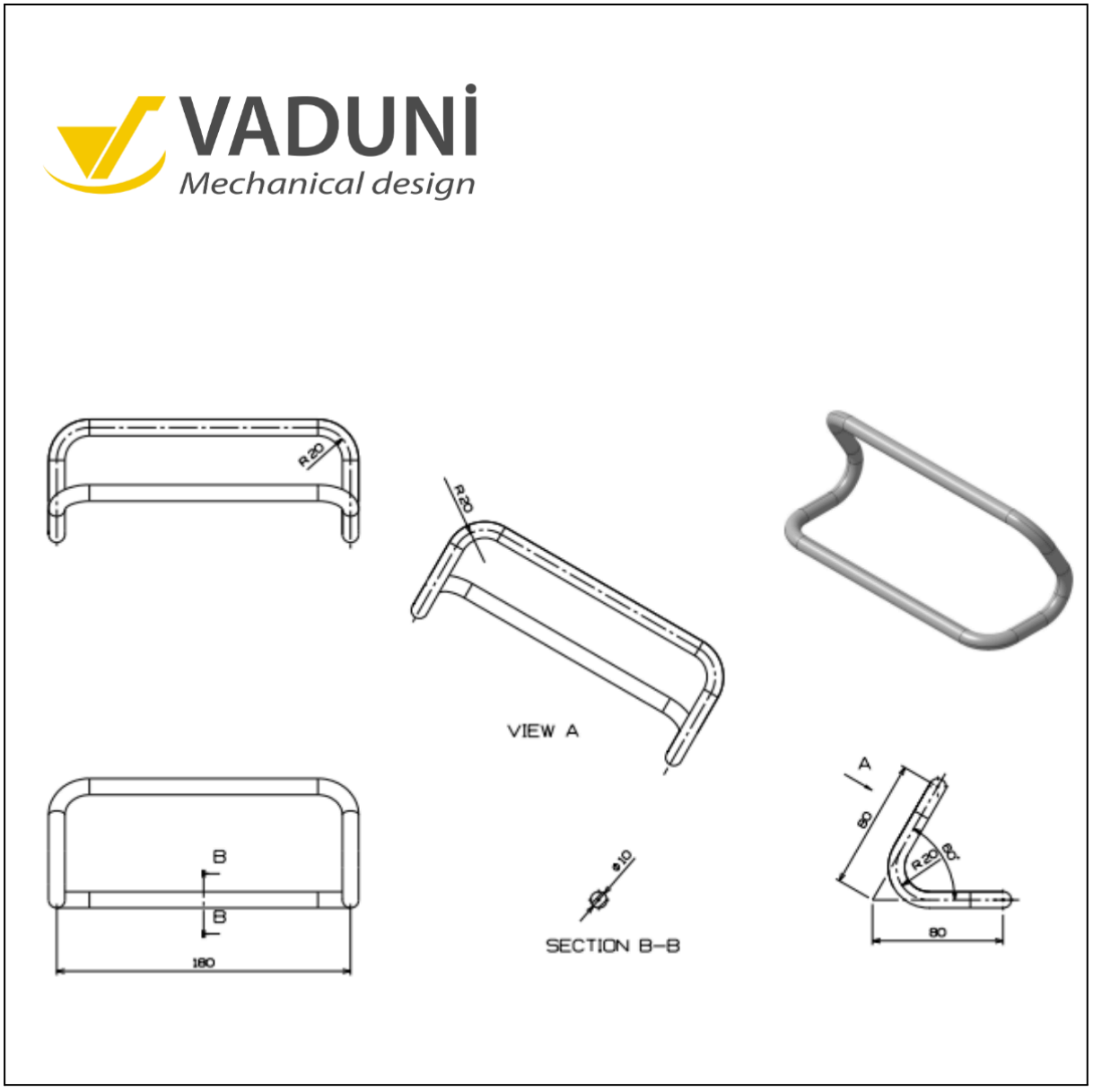

VADUNİ
Mechanical design
R7
15
R7
VIEW A
A
60
3
R3
60°
11
3
15
21
3
107
60°
80°
5
R10
103
8
15
22.5

Bài tập 137

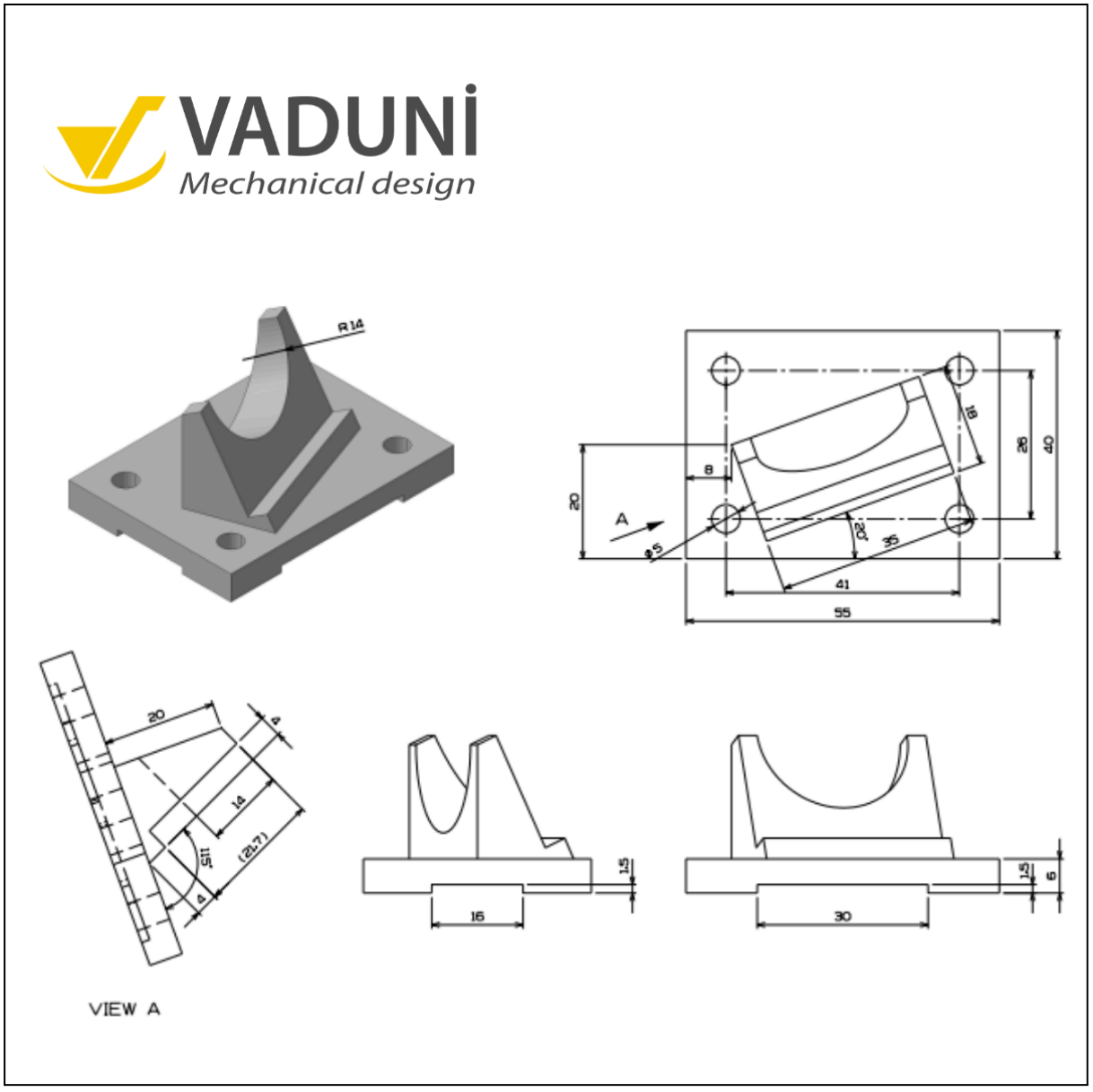
VADUNİ
Mechanical design



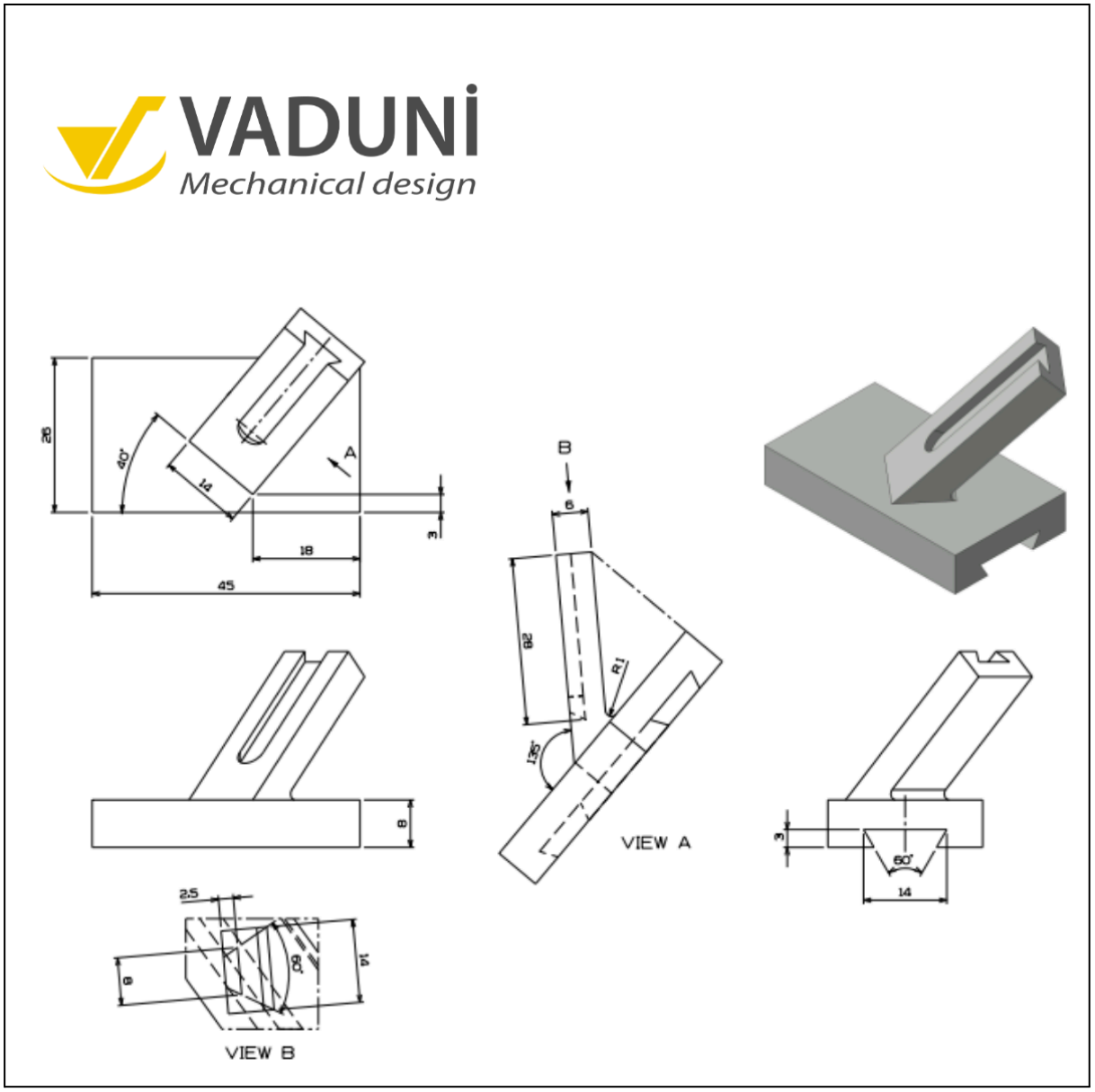
Bài tập 138


VADUNİ
Mechanical design
R20
R20
VIEW A
A
80
R20
80
80
B
B
180
ø10
SECTION B-B

Bài tập 139

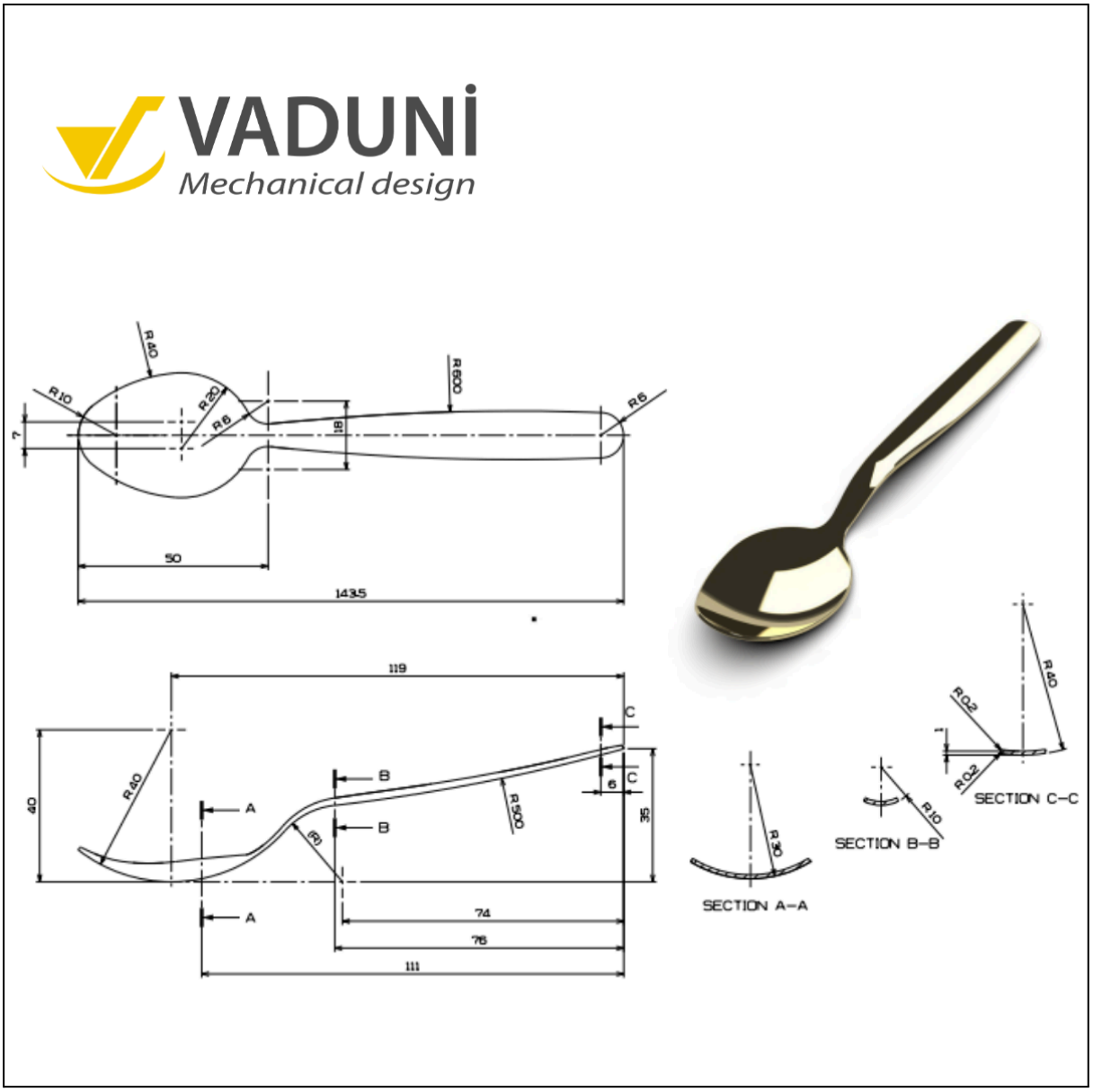

VADUNİ
Mechanical design
R14
20
A
8
18
26
40
Ø5
20°
35
41
55
20
4
14
(21,7)
5,11
4
15
16
15
6
30
VIEW A

Bài tập 140


VADUNİ
Mechanical design
26
40°
14
A
18
3
45
B
6
82
R1
135°
VIEW A
3
60°
14
8
2.5
8
60°
14
VIEW B

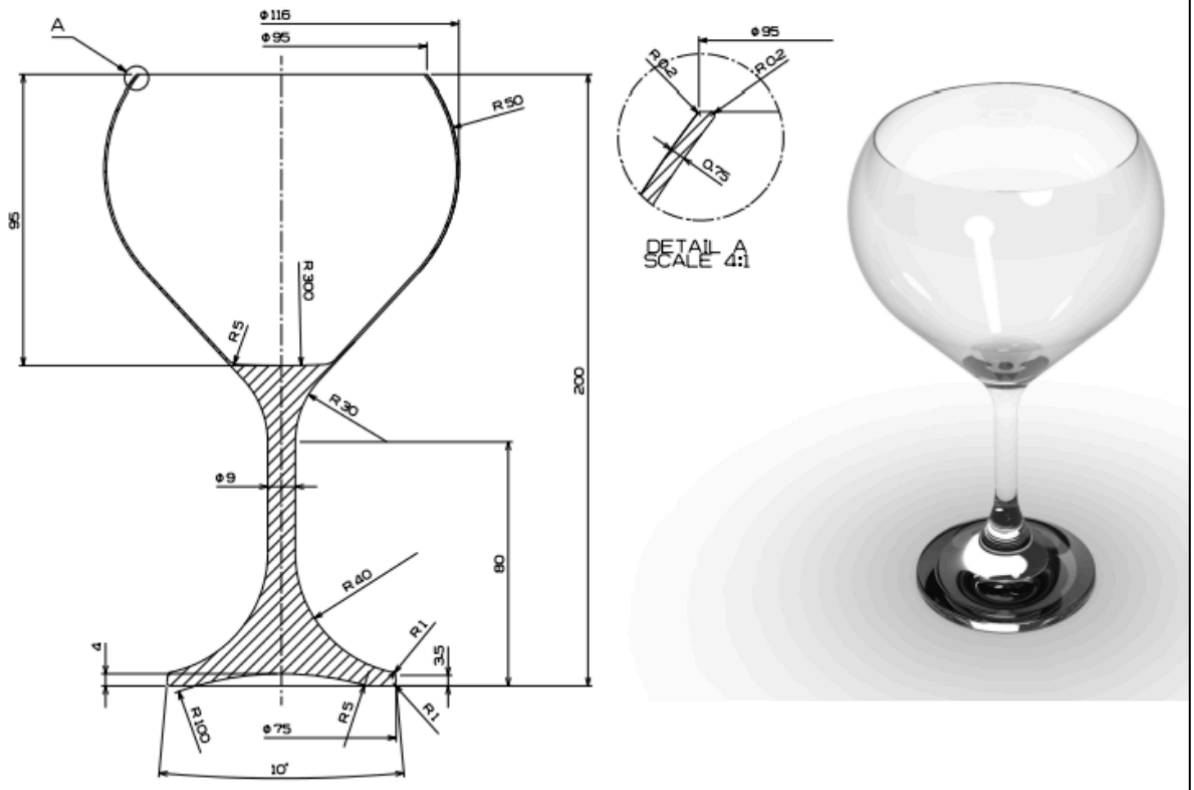
Bài tập 141

VADUNİ
Mechanical design



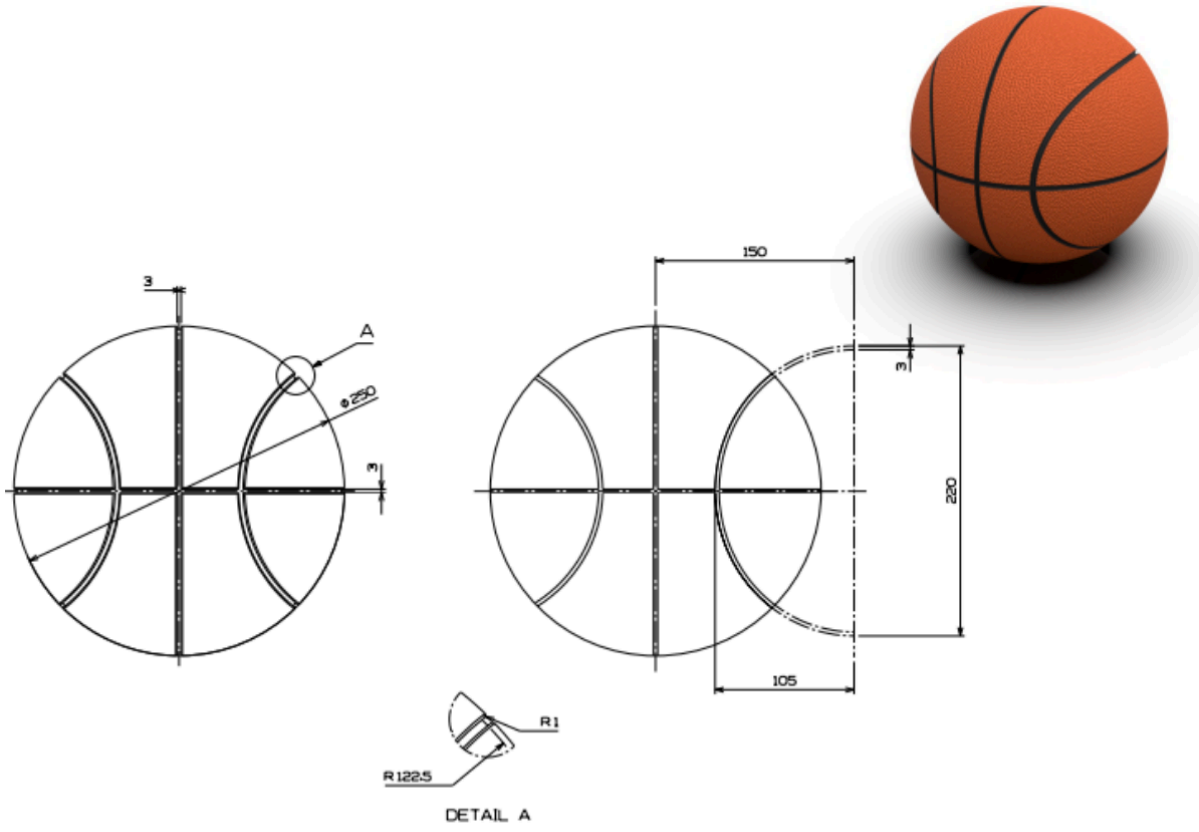
Bài tập 142

VADUNİ
Mechanical design



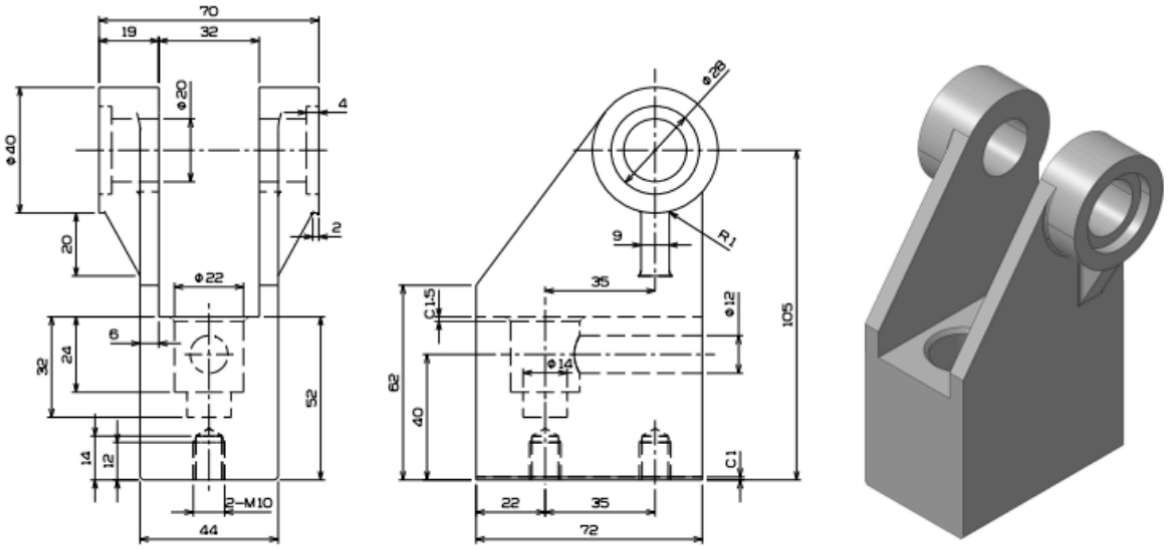
Bài tập 143

VADUNİ
Mechanical design



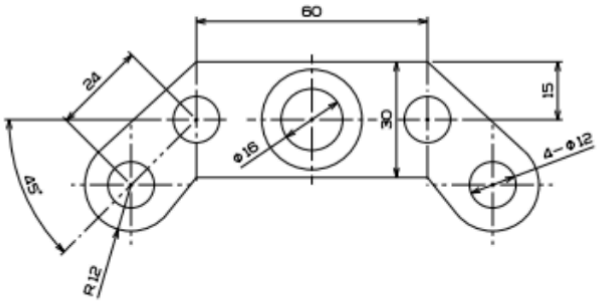
Bài tập 144

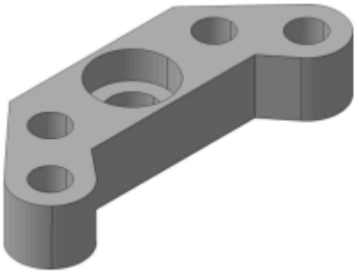
VADUNİ
Mechanical design

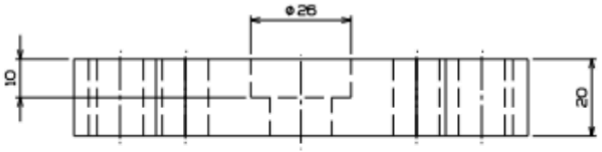


Bài tập 145

VADUNİ
Mechanical design

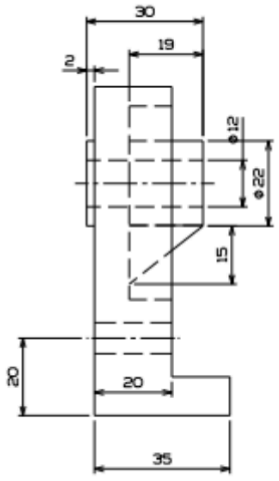


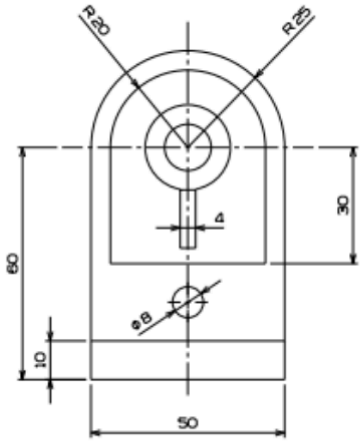


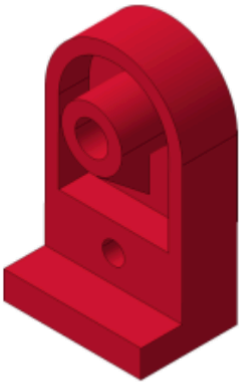


Bài tập 146

VADUNİ
Mechanical design

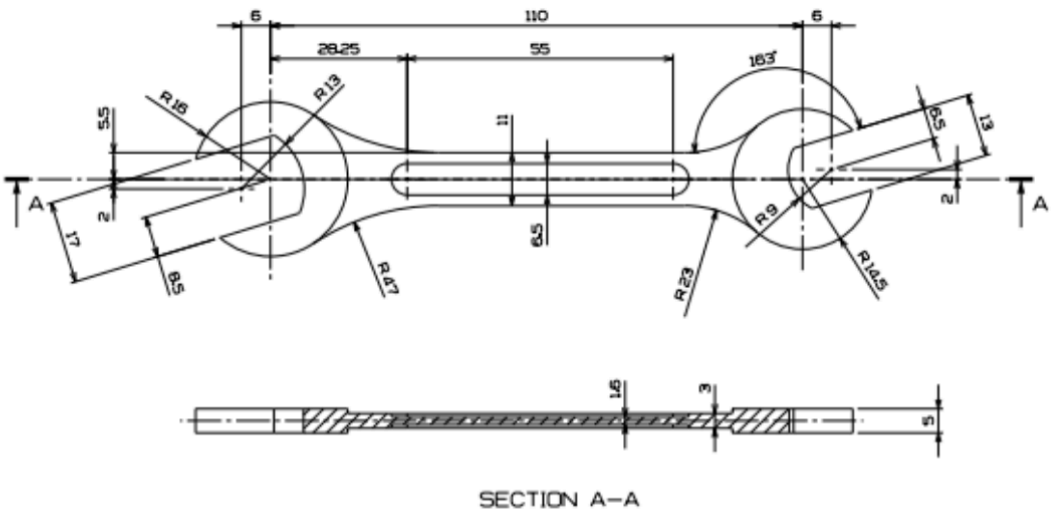






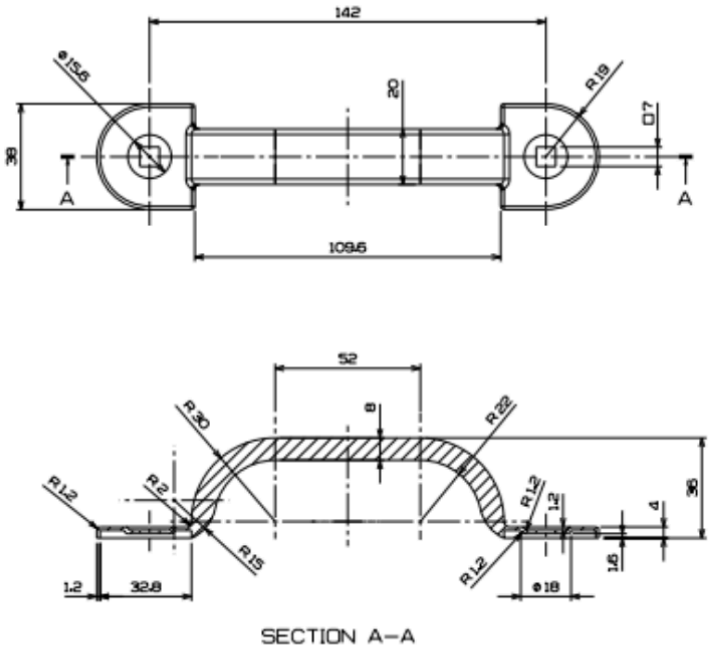
Bài tập 147

VADUNİ
Mechanical design



Bài tập 148

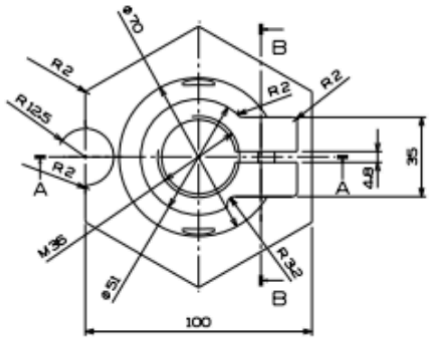
VADUNİ
Mechanical design

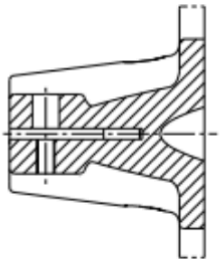


SECTION A–A

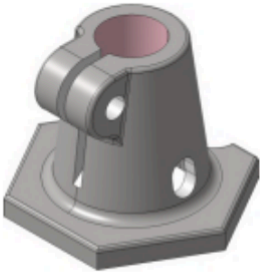
Bài tập 149

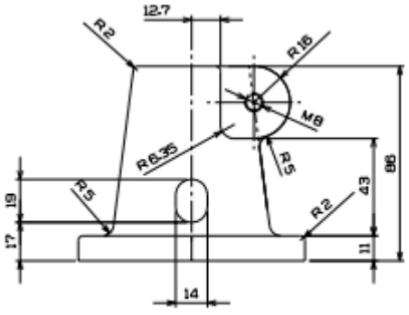
VADUNİ
Mechanical design

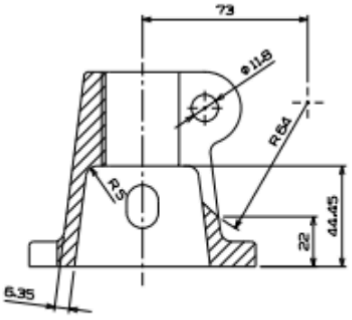




SECTION B–B

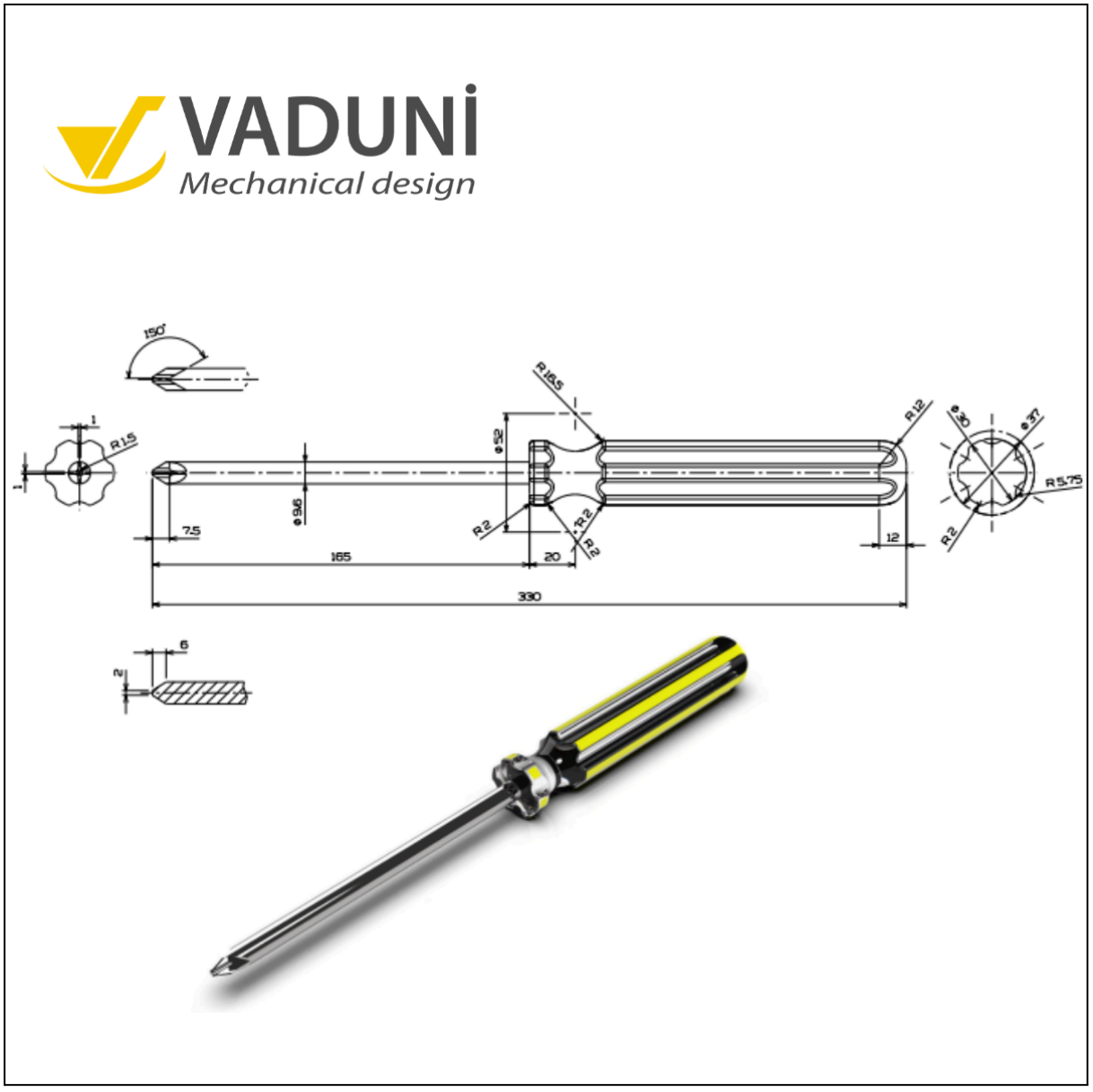






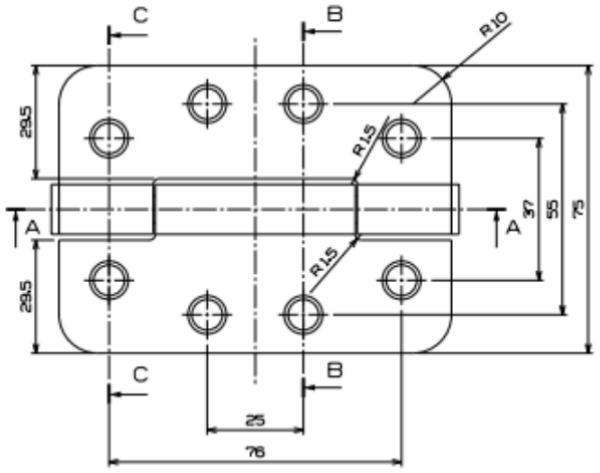
SECTION A–A

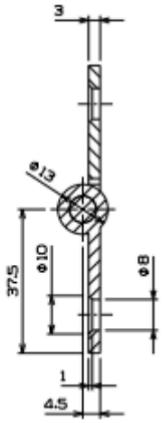
Bài tập 150


VADUNİ
Mechanical design
150°
R15
1
1
ø52
R185
R12
ø30
ø37
R5.75
ø36
7.5
165
20
R2
R2
R2
R2
12
330
6
2

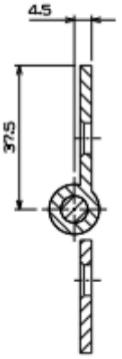
Bài tập 151

VADUNİ
Mechanical design

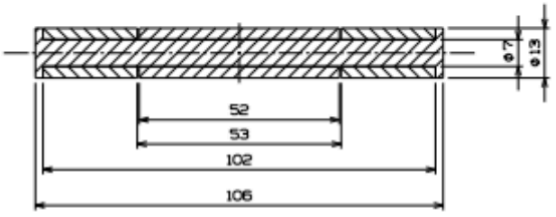




SECTION B–B



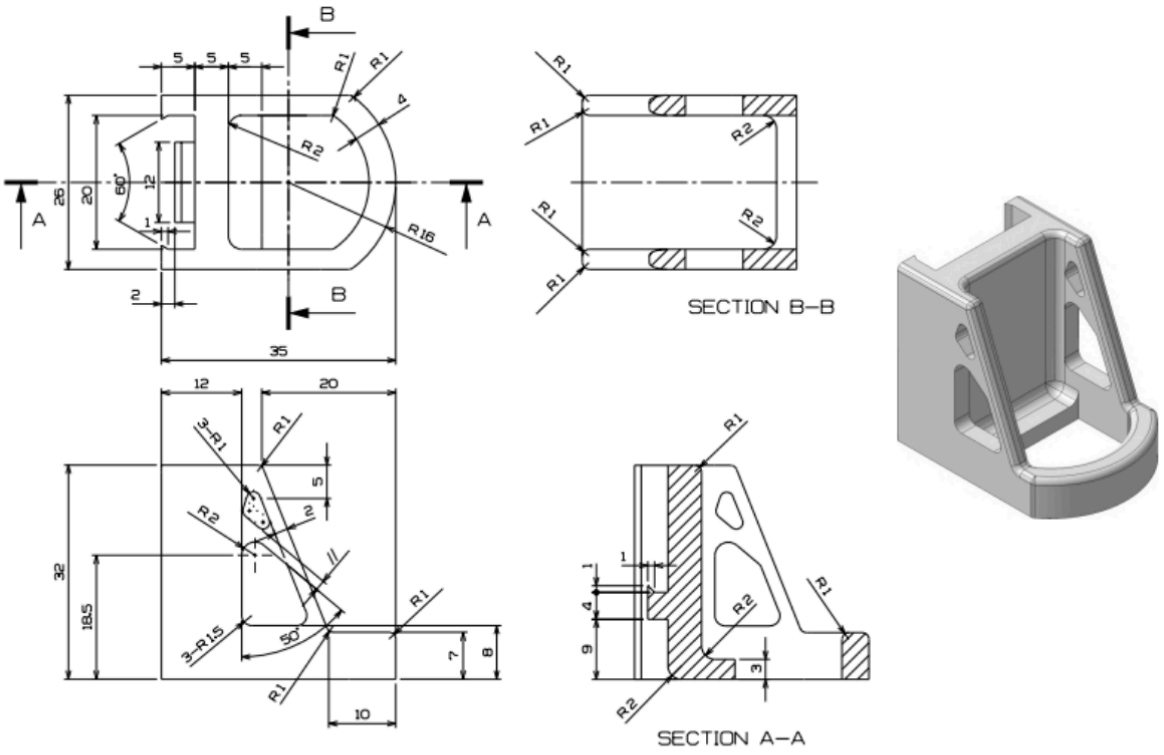
SECTION C–C



SECTION A–A

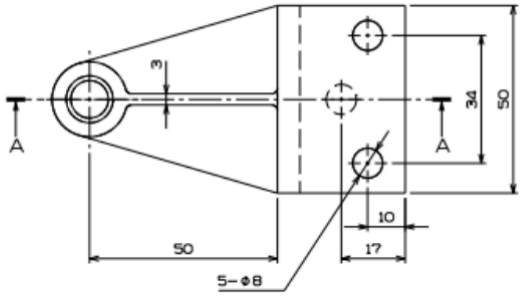
Bài tập 152

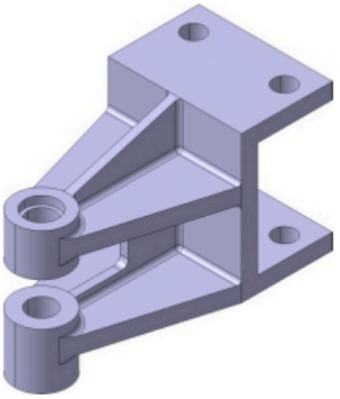
VADUNİ
Mechanical design

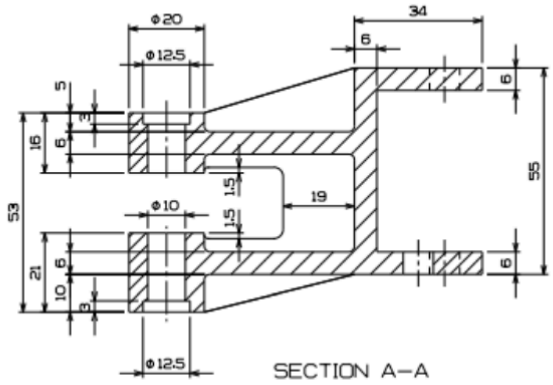


Bài tập 153

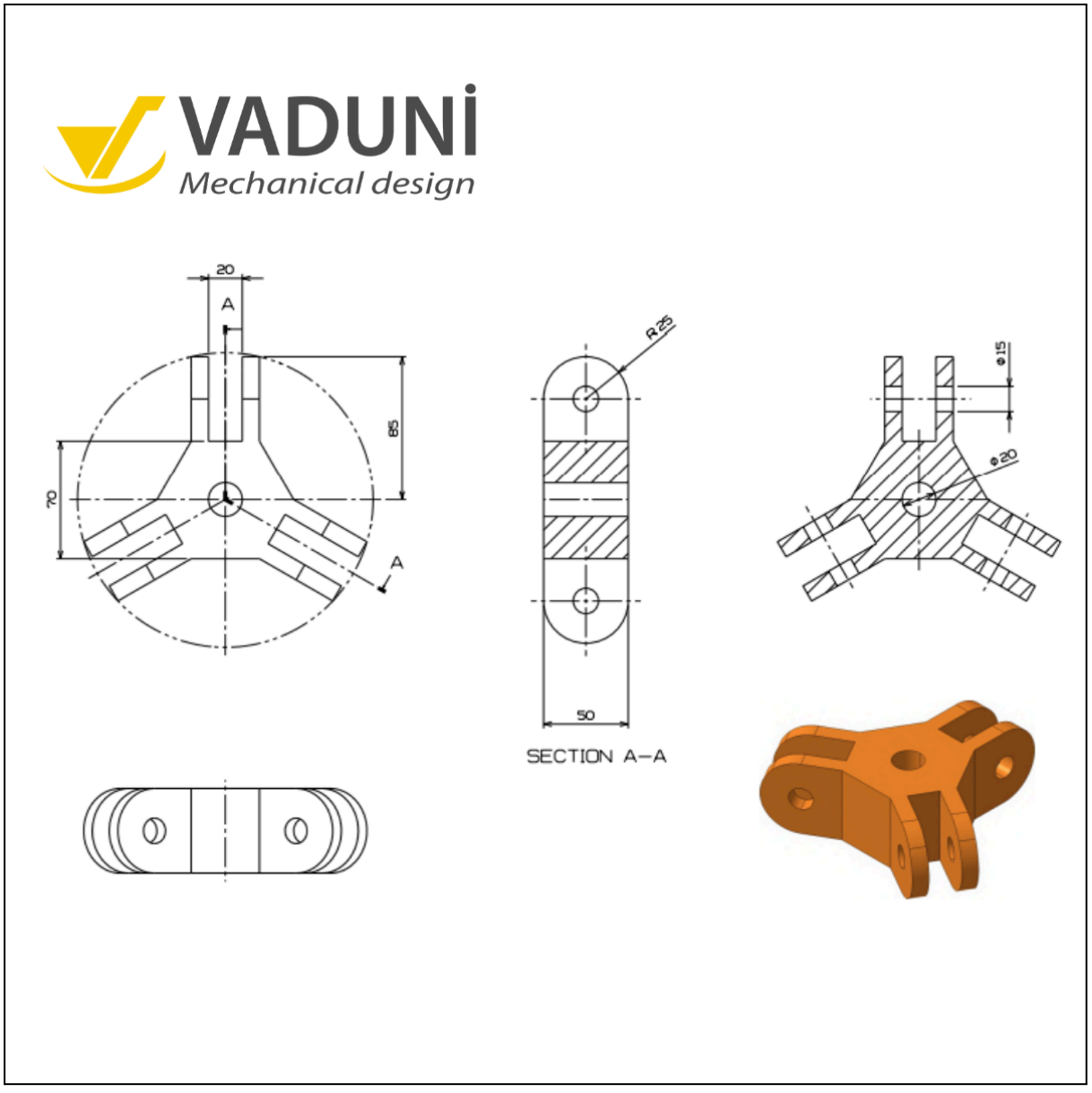
VADUNİ
Mechanical design



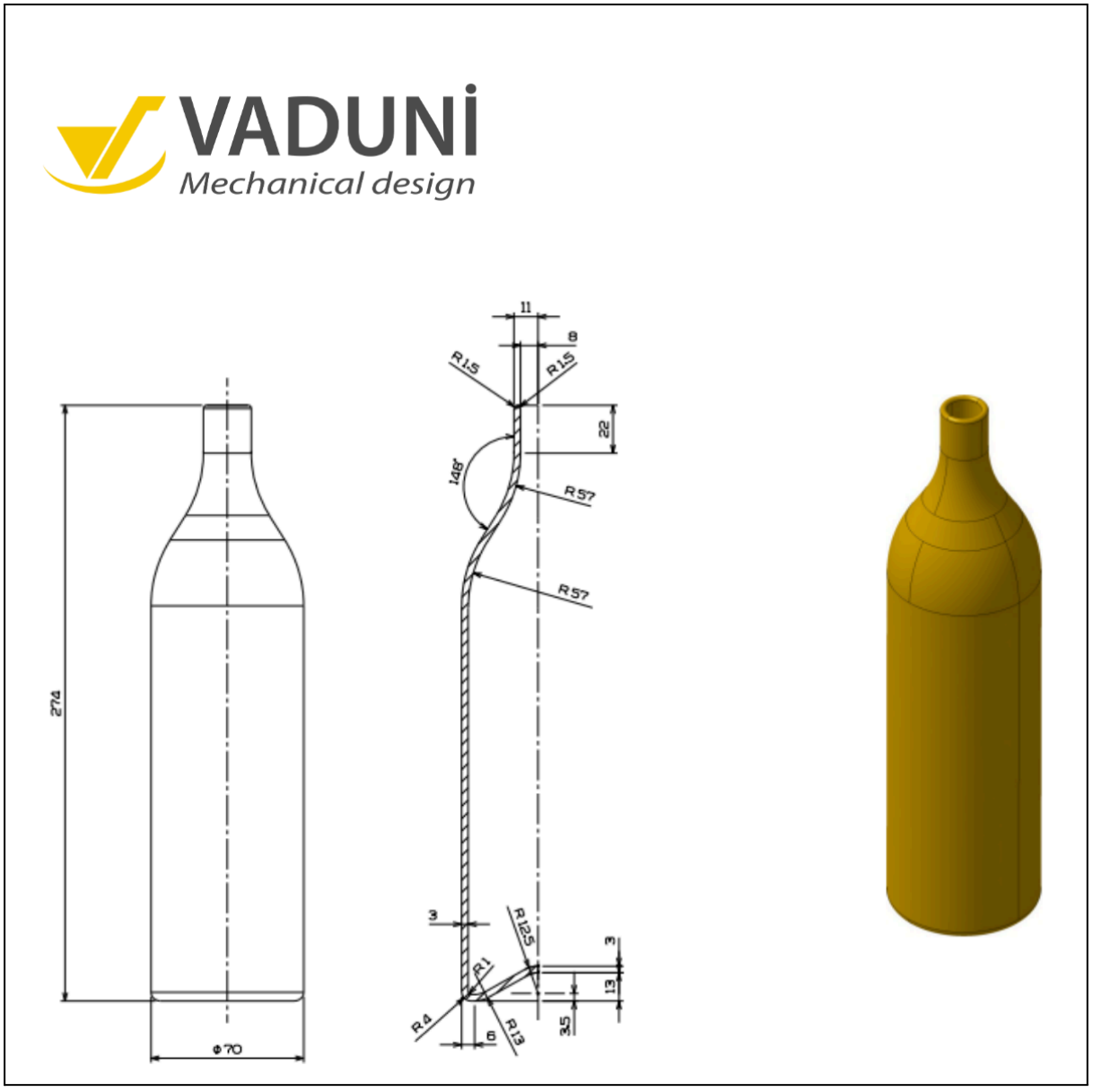




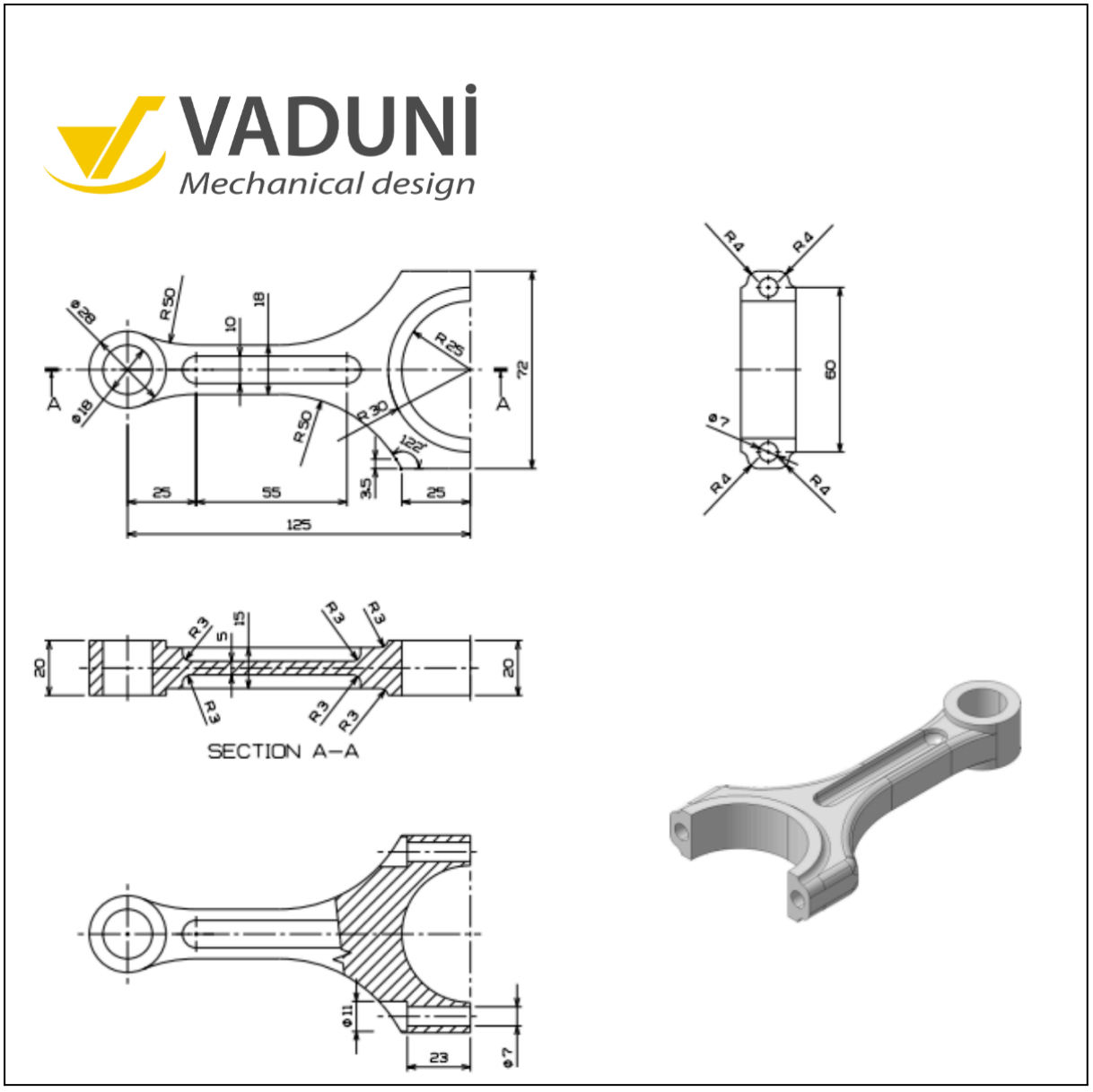
Bài tập 154


VADUNİ
Mechanical design
20
A
85
70
A
R25
50
SECTION A–A
ø15
ø20

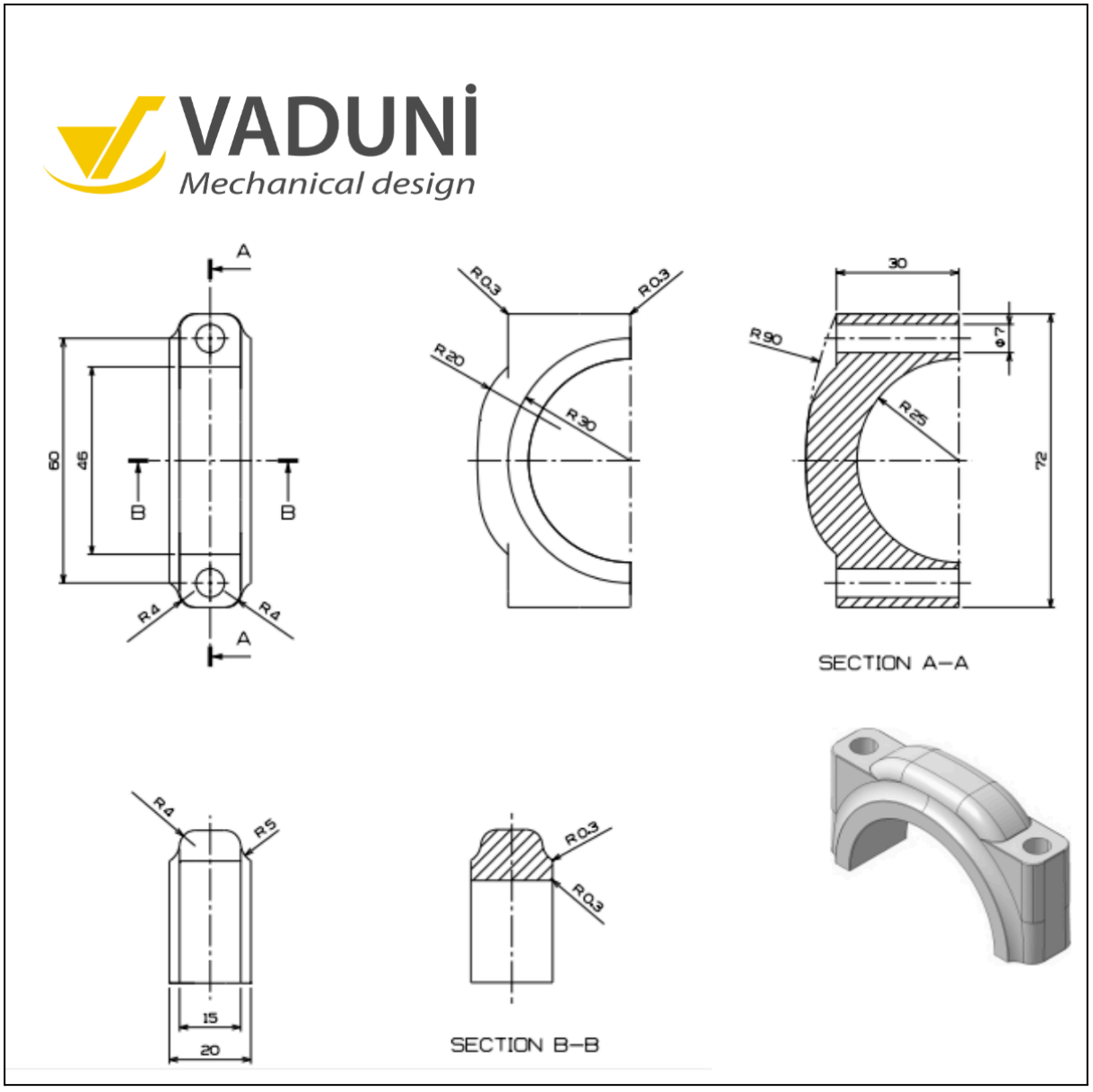
Bài tập 155


VADUNİ
Mechanical design
11
8
R15
R15
22
148°
R57
R57
274
3
R12,5
3
R1
13
R4
6
R13
35
ϕ70

Bài tập 156

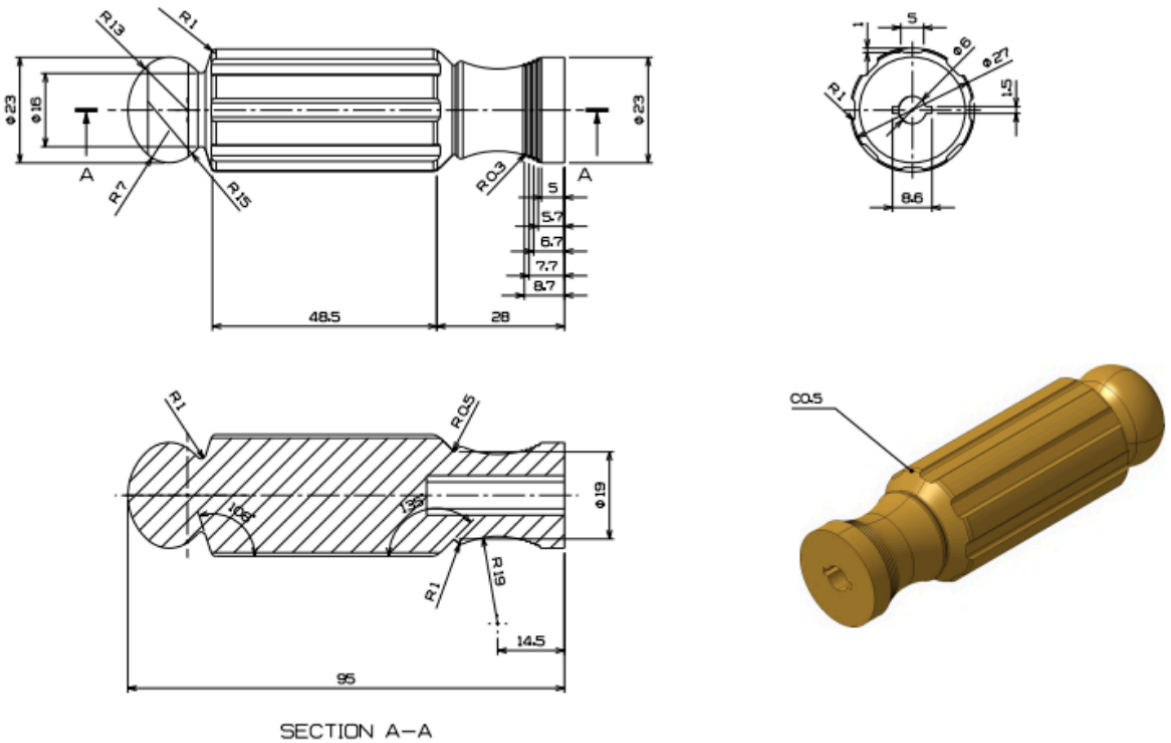

VADUNİ
Mechanical design
R4
R4
60
ø7
R4
R4
ø28
R50
10
18
R25
72
A
A
ø18
R50
R30
122
35
25
55
25
125
R3
15
5
R3
R3
20
20
R3
R3
R3
SECTION A–A
ø11
23
ø7

Bài tập 157


VADUNİ
Mechanical design
A
B
B
A
60
46
R4
R4
R0.3
R0.3
R20
R30
30
R90
ø7
R25
72
SECTION A–A
R4
R5
15
20
R0.3
R0.3
SECTION B–B

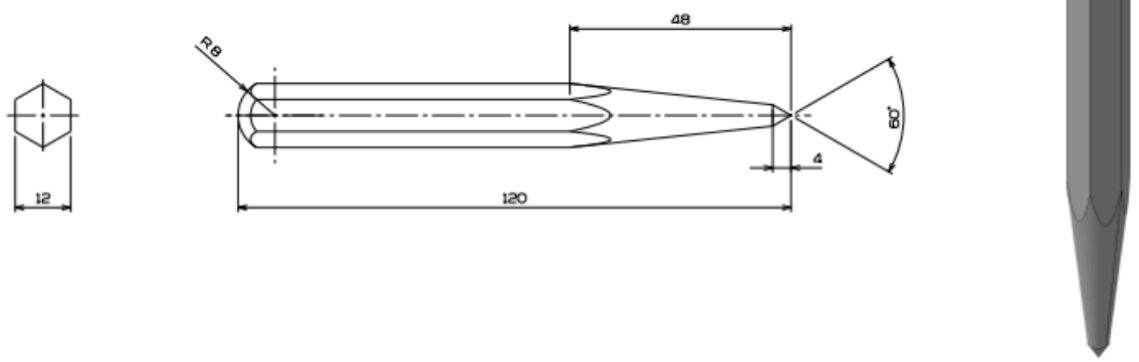
Bài tập 158

VADUNİ
Mechanical design



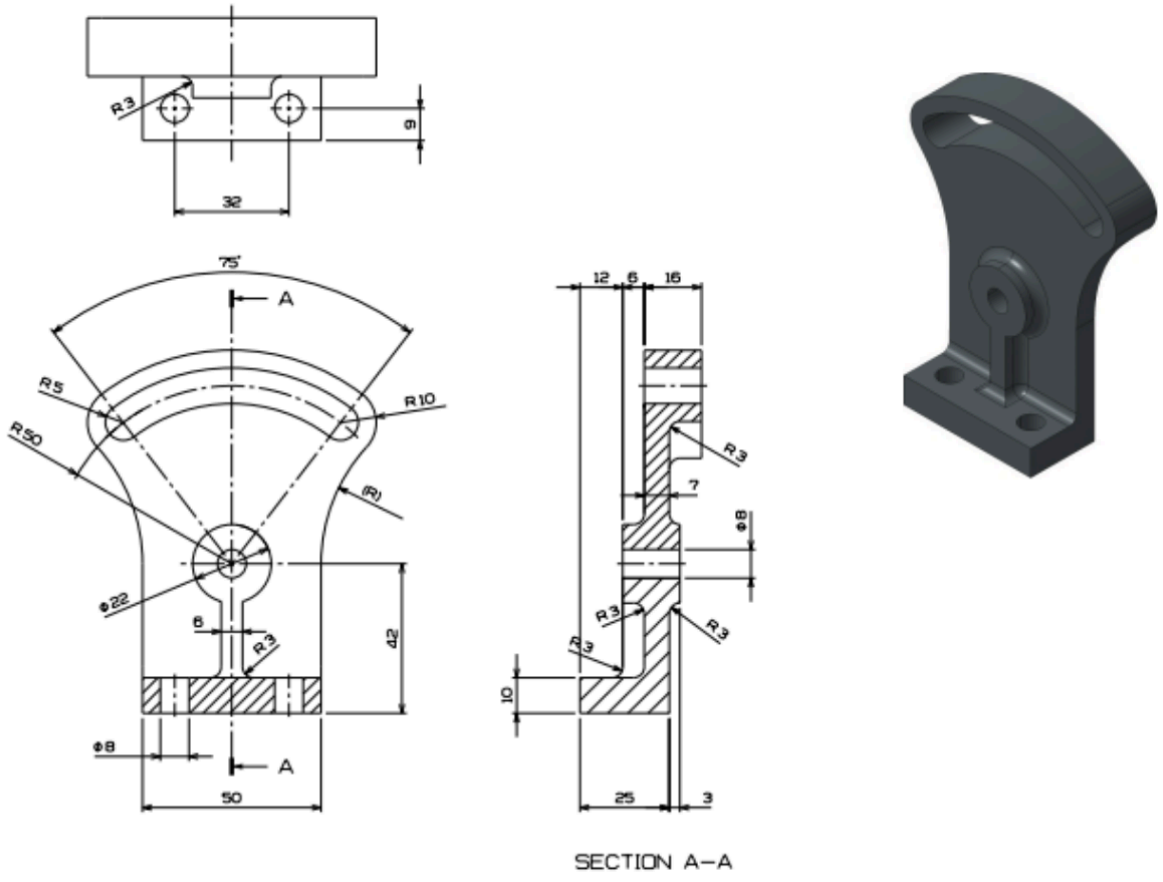
Bài tập 159

VADUNİ
Mechanical design



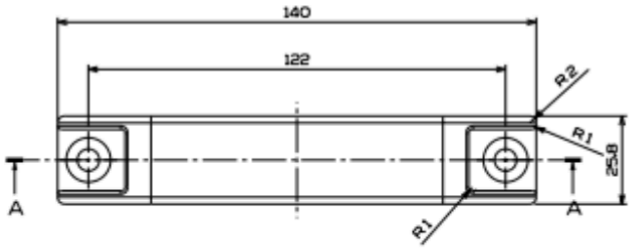
Bài tập 160

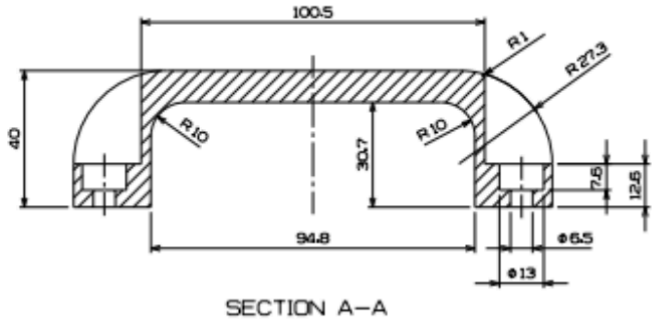
VADUNİ
Mechanical design



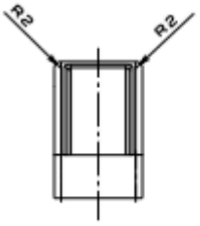
Bài tập 161

VADUNİ
Mechanical design

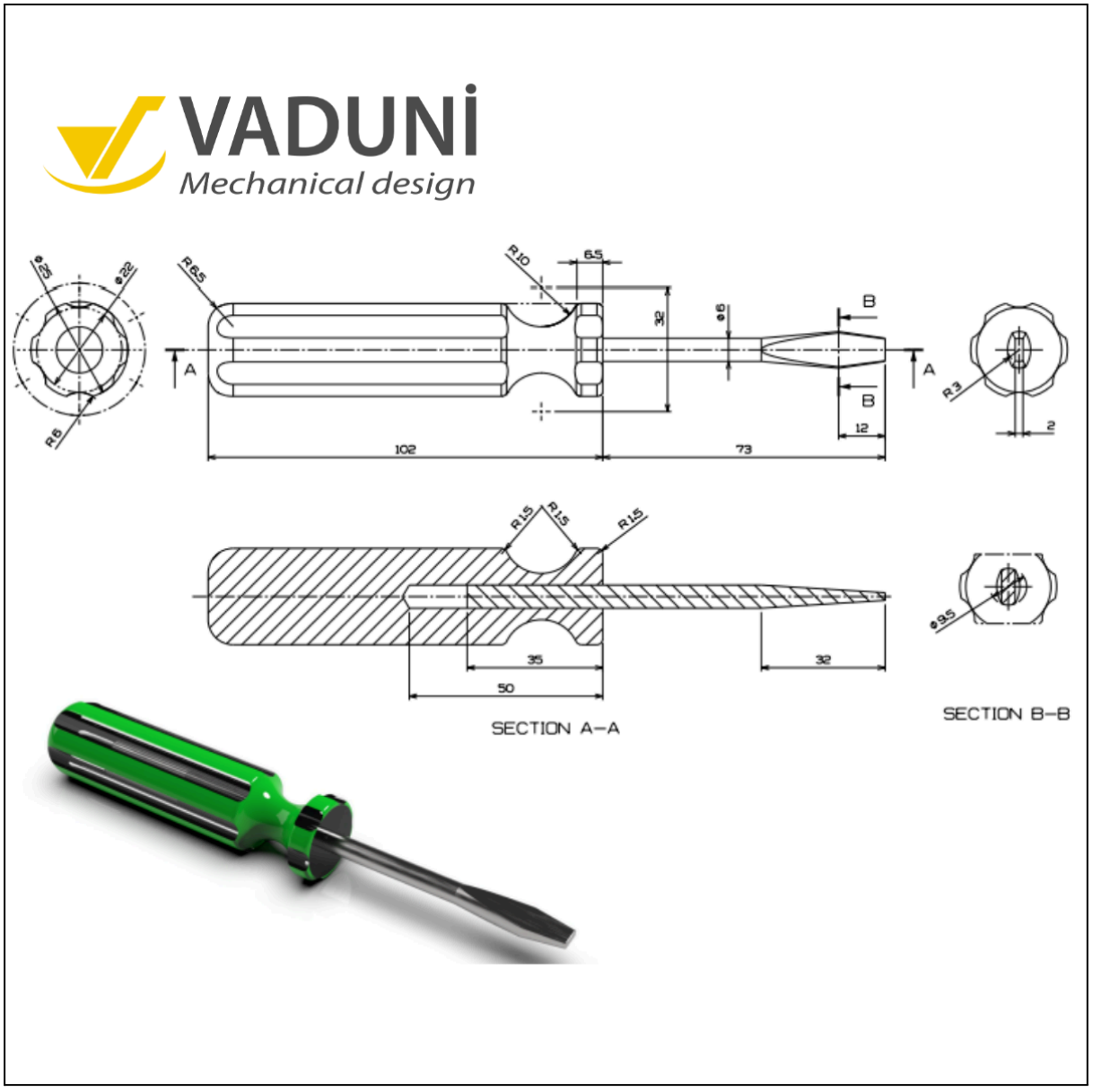




SECTION A–A

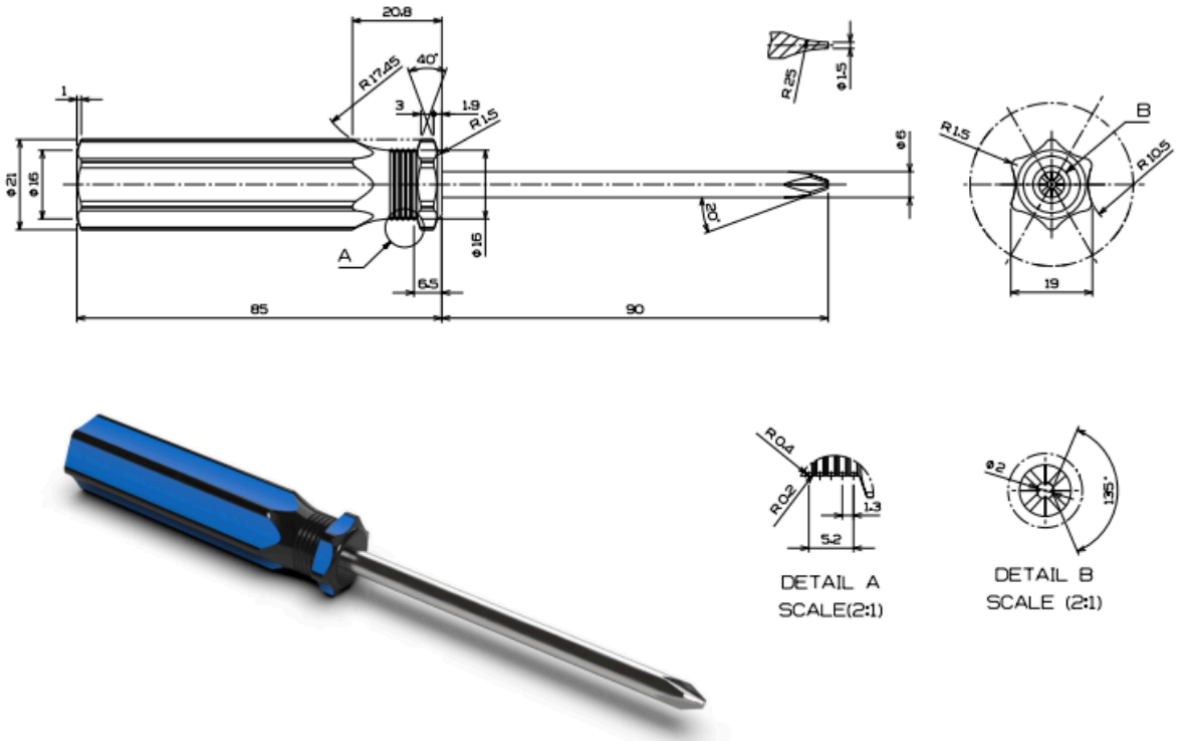


Bài tập 162


VADUNİ
Mechanical design
R10
6.5
R6.5
32
B
A
R3
2
102
73
12
R1.5
R1.5
R1.5
35
50
32
SECTION A–A
SECTION B–B

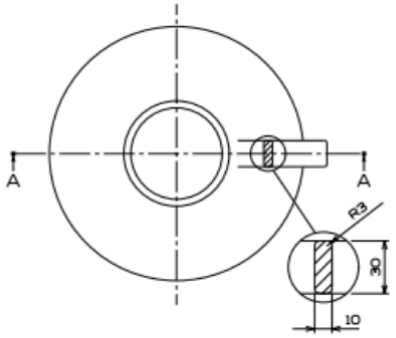
Bài tập 163

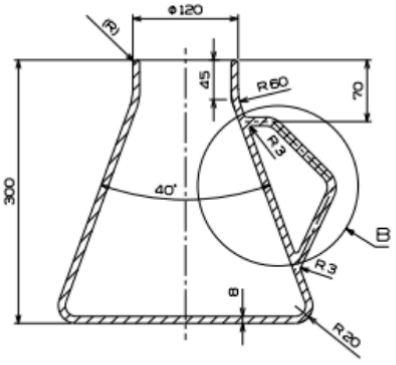
VADUNİ
Mechanical design



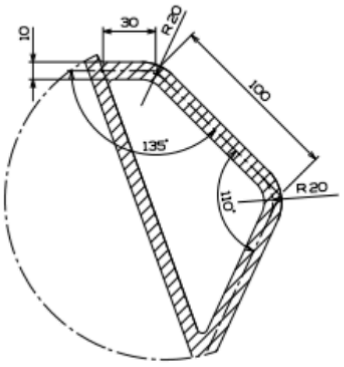
Bài tập 164

VADUNİ
Mechanical design

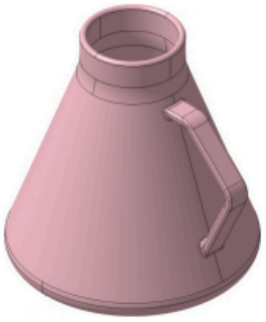




SECTION A–A

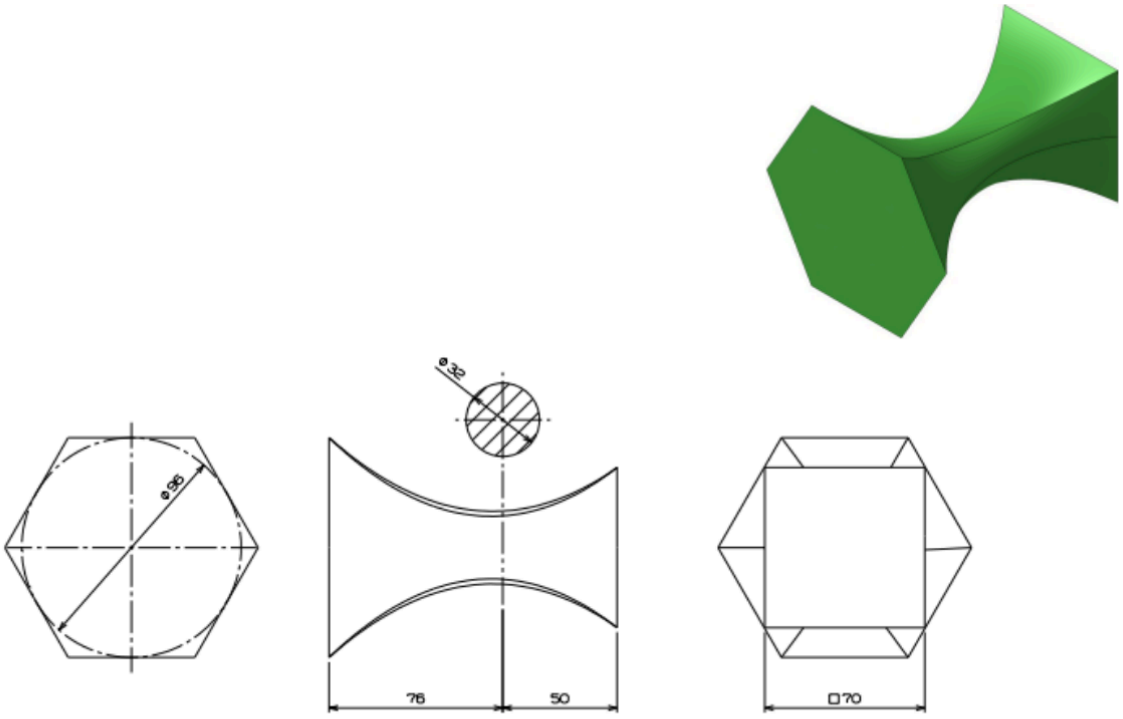


DETAIL B

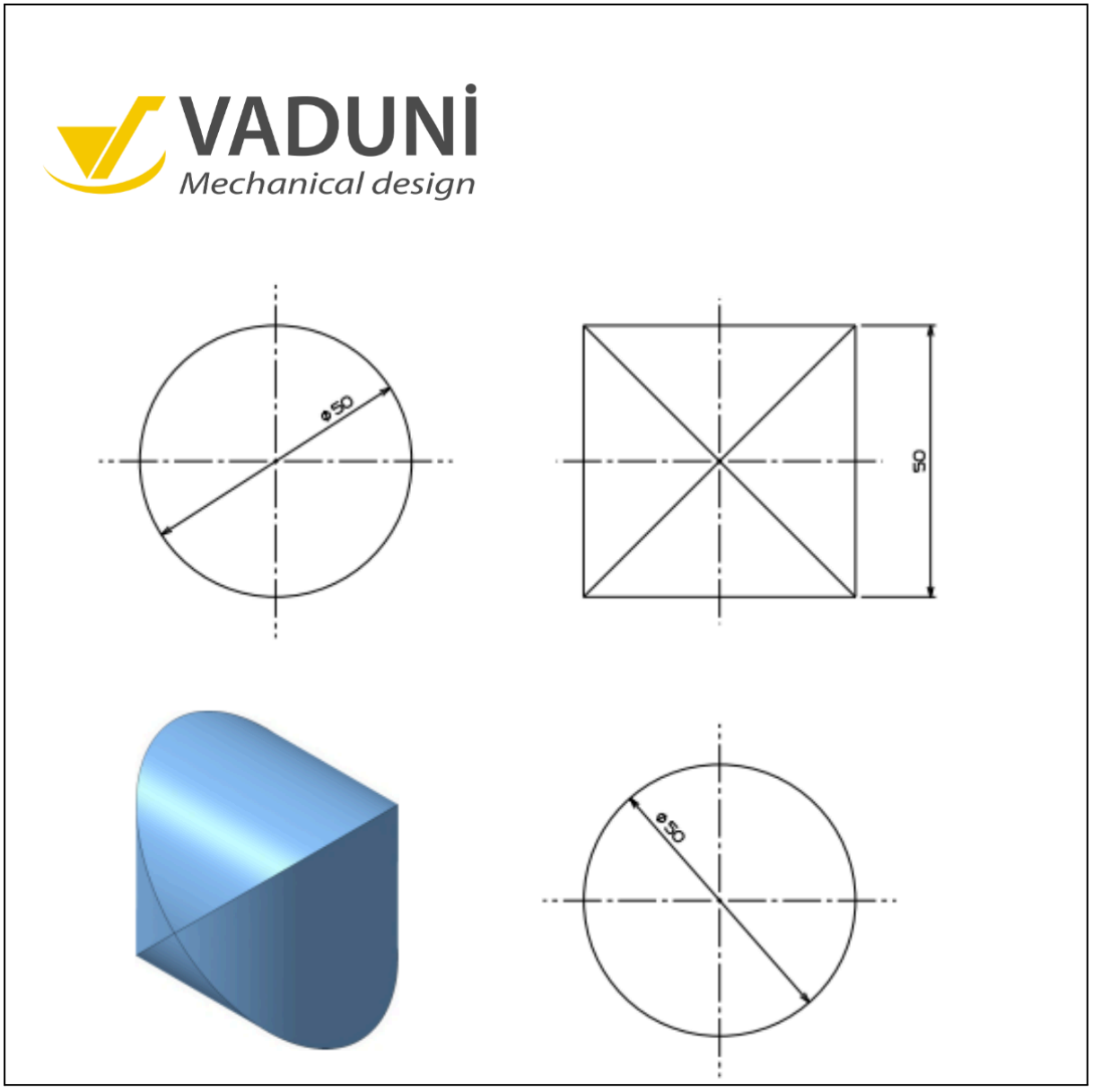


Bài tập 165

VADUNİ
Mechanical design

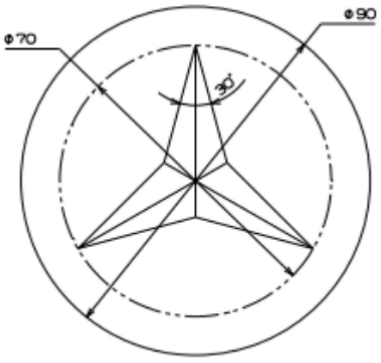


Bài tập 166



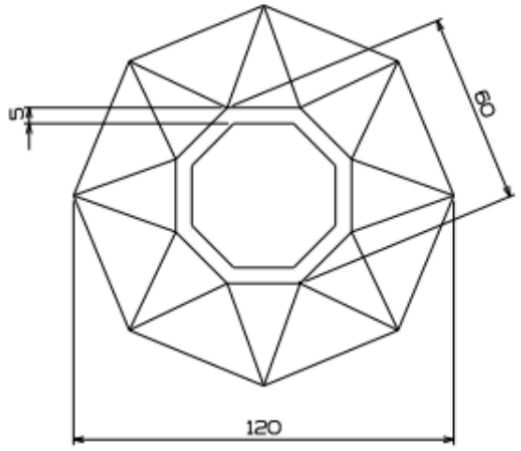
Bài tập 167

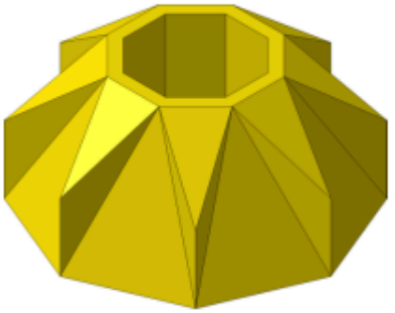
VADUNİ
Mechanical design

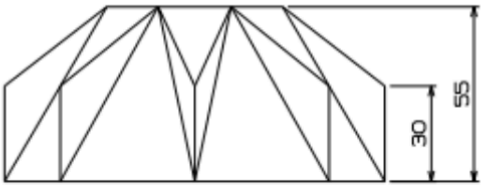


Bài tập 168

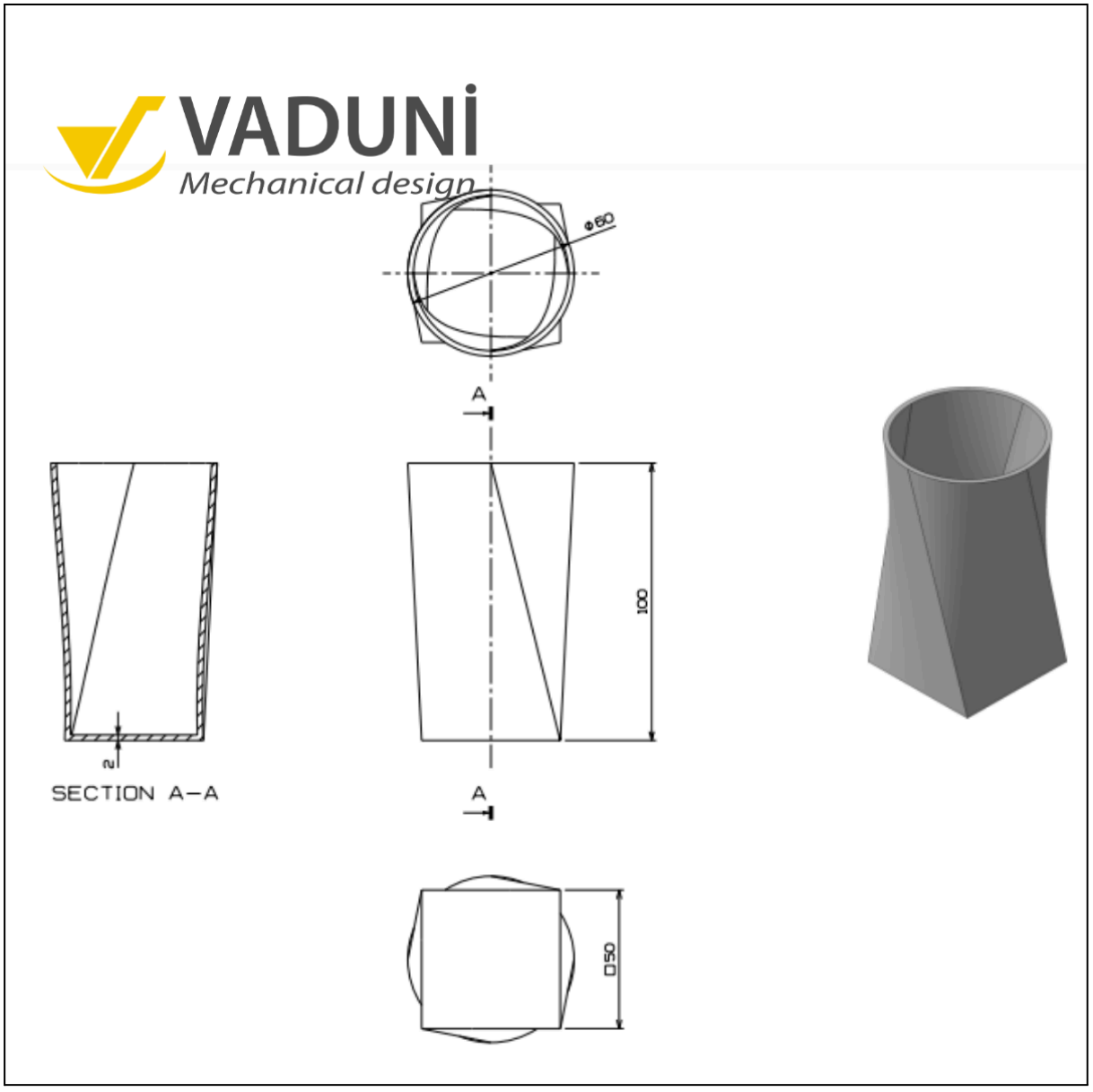
VADUNİ
Mechanical design





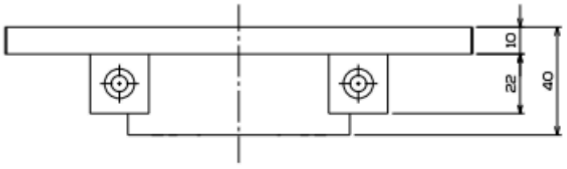


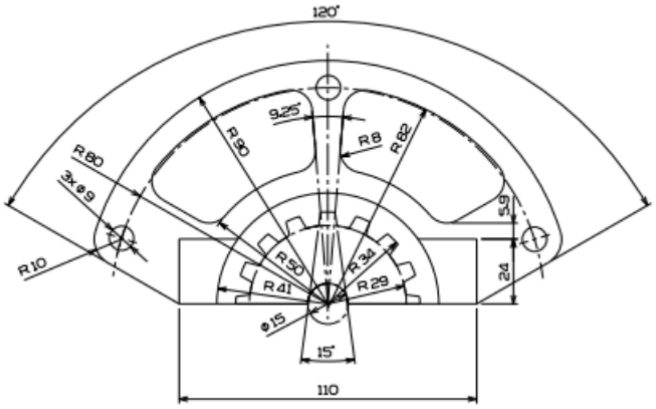
Bài tập 169

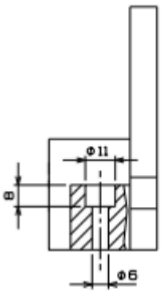


Bài tập 170

VADUNİ
Mechanical design

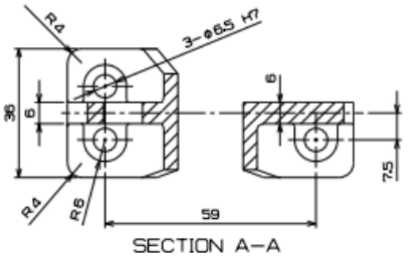




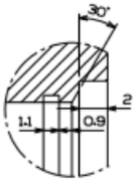


Bài tập 171

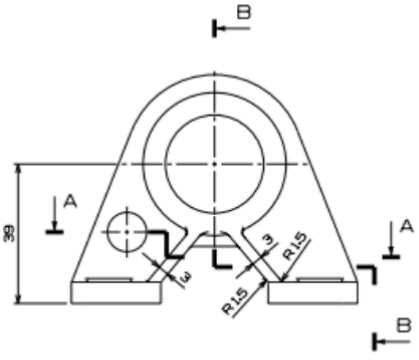
VADUNİ
Mechanical design

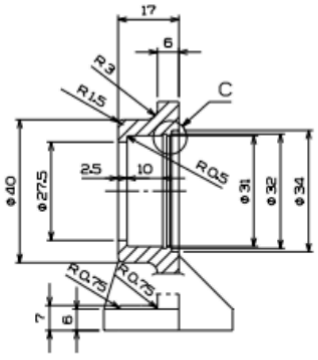


SECTION A–A

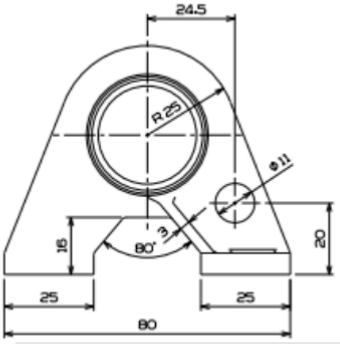


DETAIL C

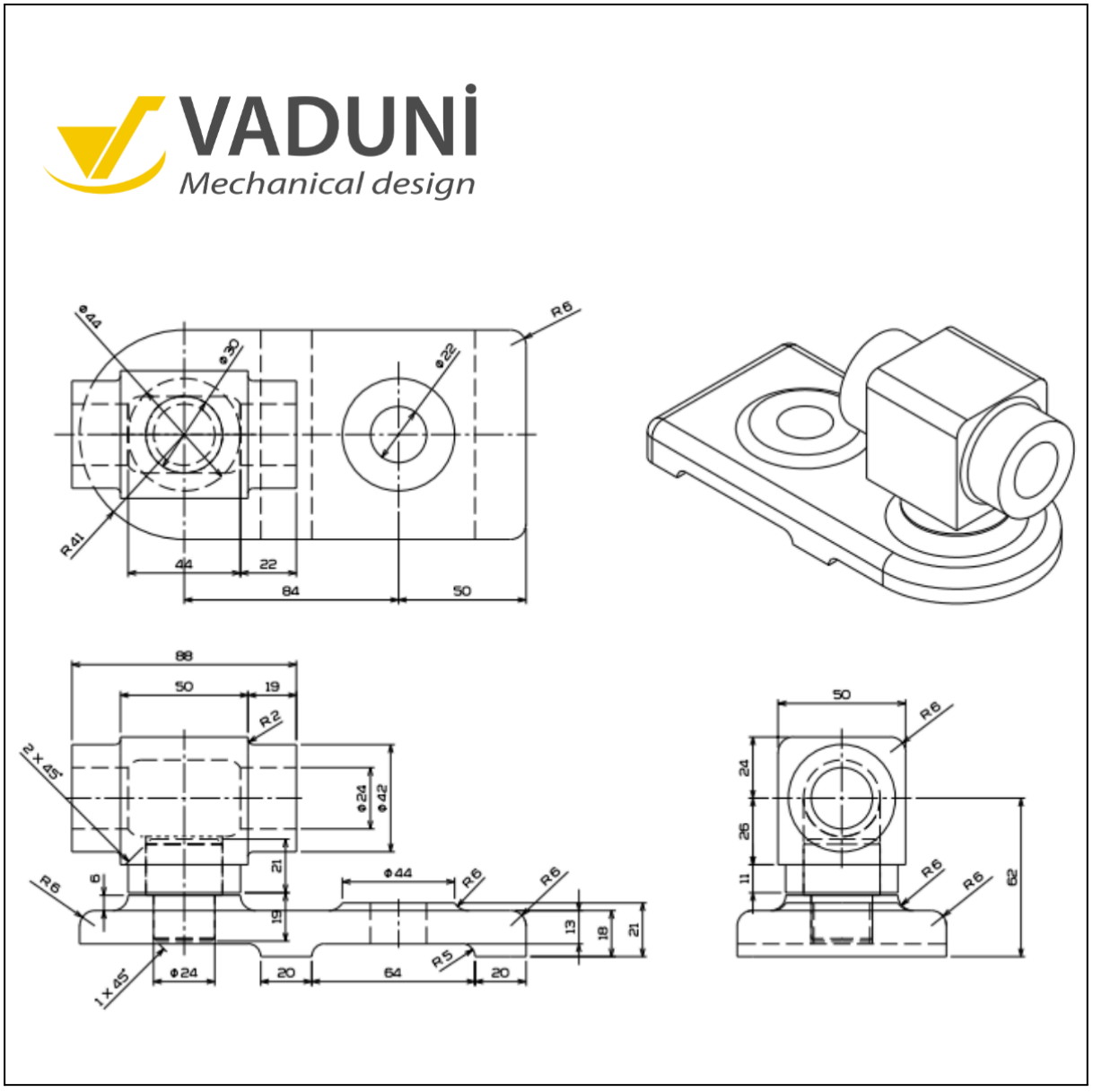




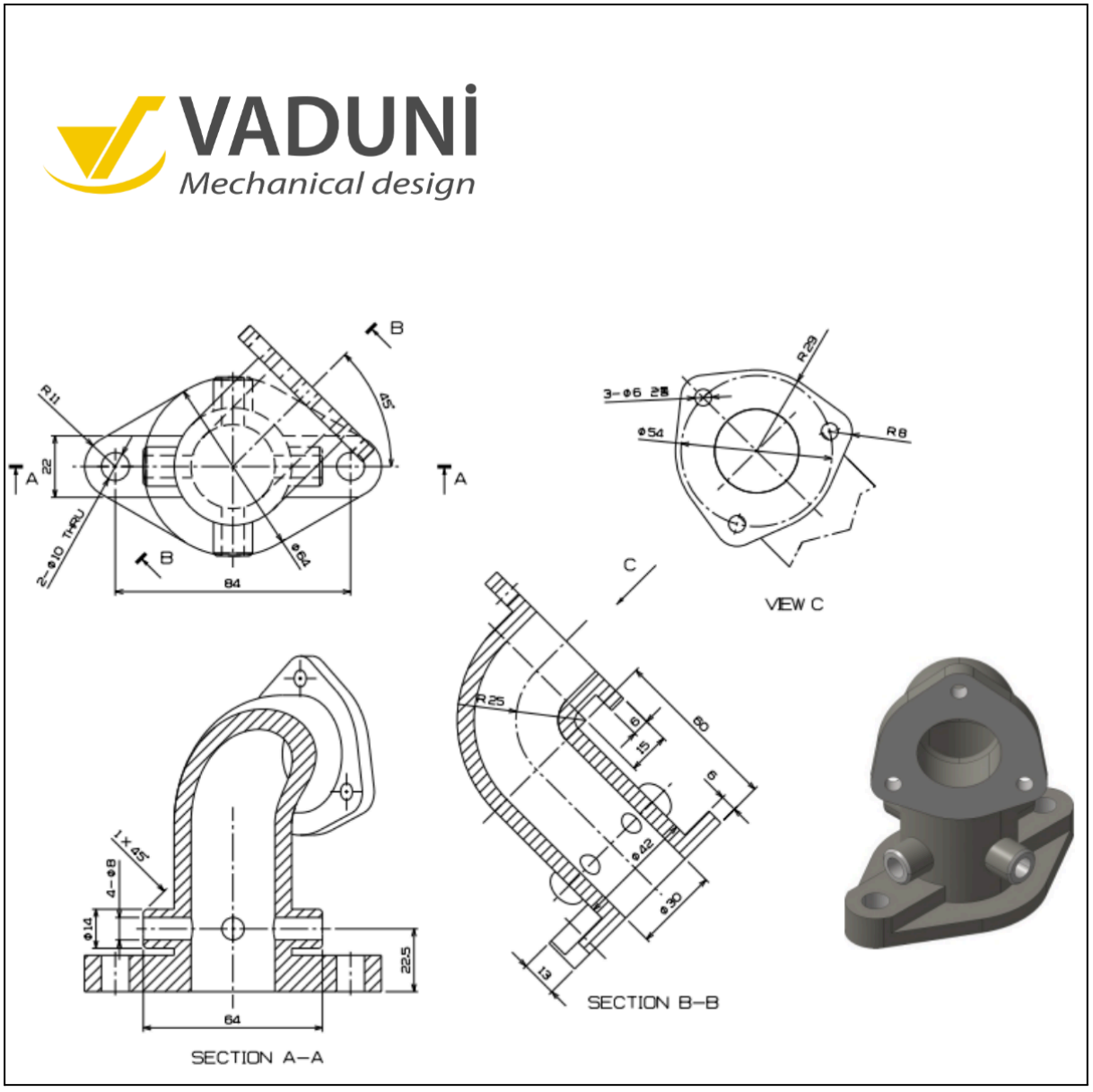
SECTOIN B–B



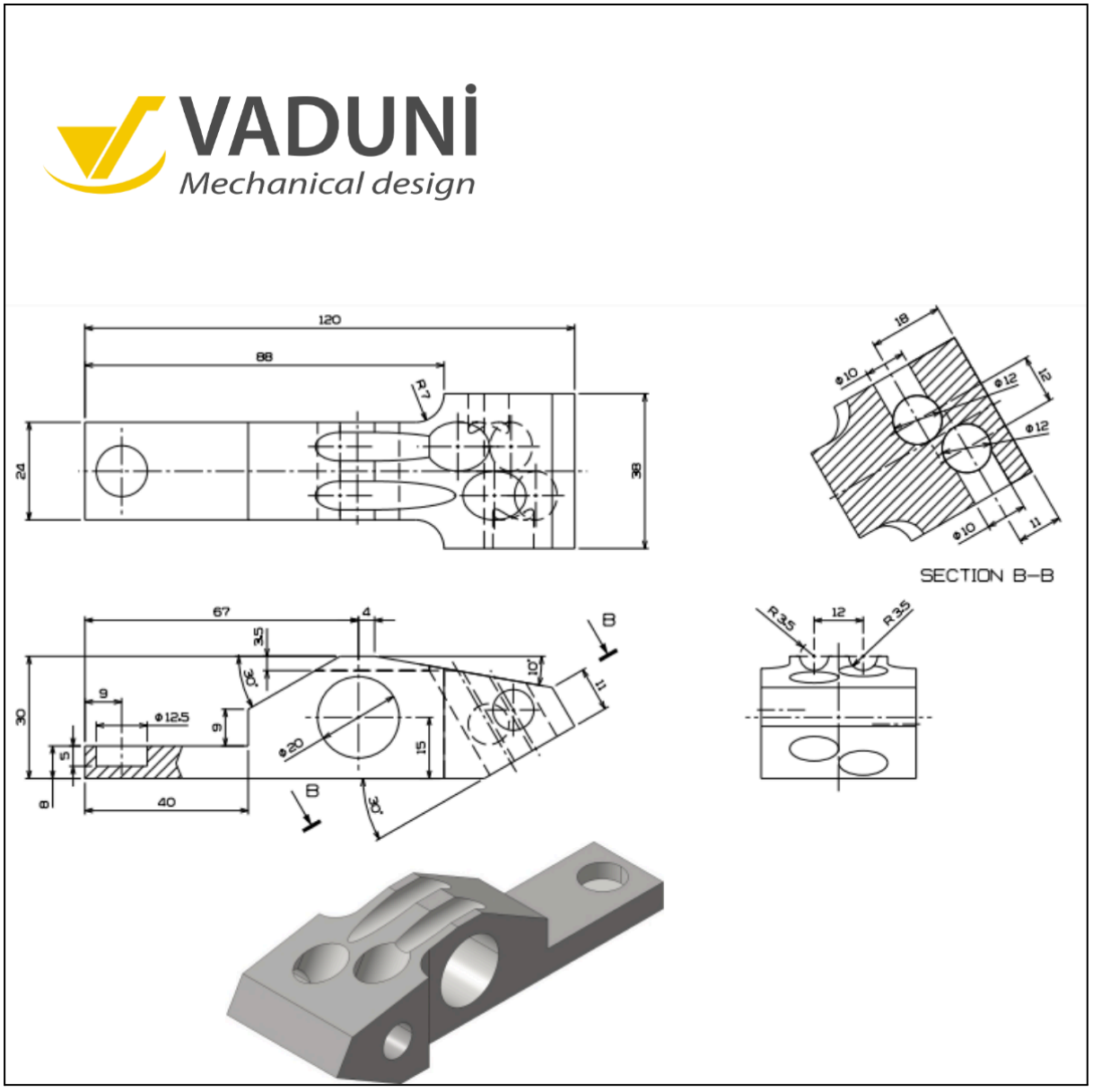
Bài tập 172


VADUNİ
Mechanical design
ø44
ø30
ø22
R6
R41
44
22
84
50
88
50
19
R2
2 X 45°
Φ24
Φ42
21
19
6
R6
Φ44
R6
R6
13
18
21
1 X 45°
Φ24
20
64
R5
20
50
R6
24
26
11
R6
R6
62

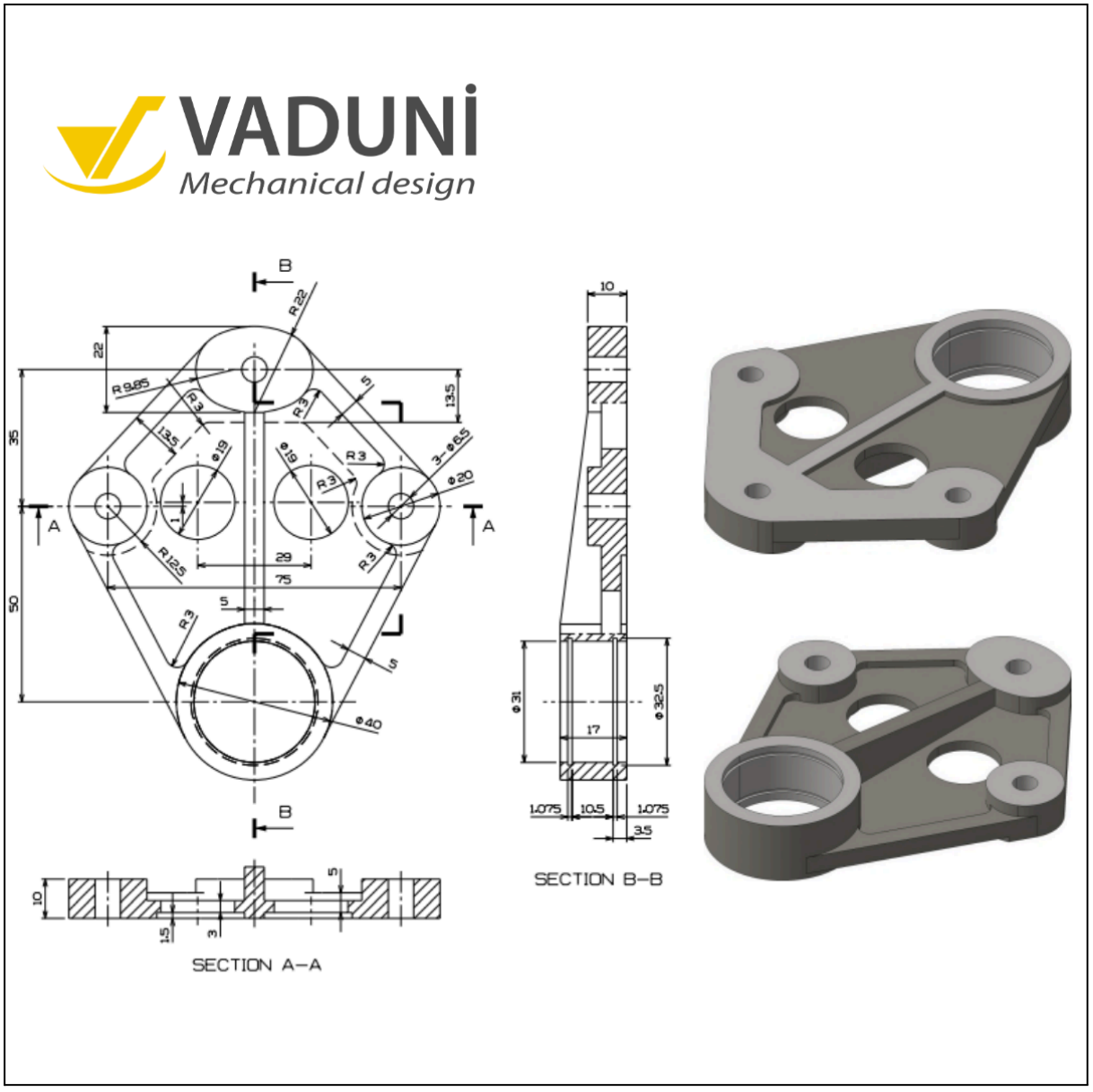
Bài tập 173


VADUNİ
Mechanical design
B
R11
45°
A
22
2–ϕ10 THRU
B
84
ϕ64
A
3–ϕ6 2⇧
ϕ54
R29
R8
VIEW C
C
R25
8
15
60
6
ϕ42
ϕ30
13
SECTION B–B
1 x 45°
4–ϕ8
ϕ14
225
64
SECTION A–A

Bài tập 174

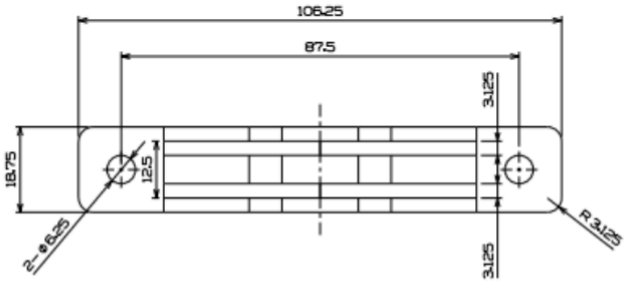

VADUNİ
Mechanical design
120
88
R7
24
38
18
Φ10
Φ12
12
Φ12
Φ10
11
SECTION B–B
67
4
35
30°
10°
11
9
Φ12.5
9
Φ20
15
5
8
40
30°
B
B
R3.5
12
R3.5

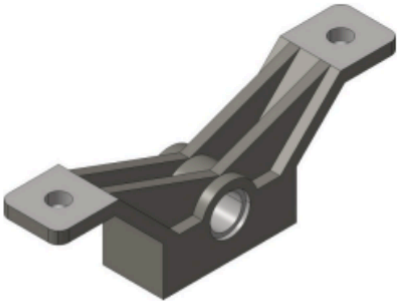
Bài tập 175

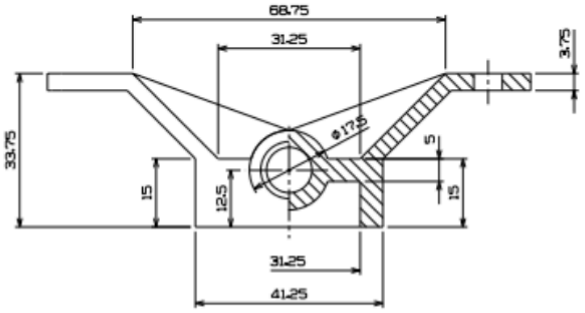

VADUNİ
Mechanical design
B
R22
22
R9.85
R3
5
13.5
35
13.5
ø19
ø19
R3
3-ø6.5
ø20
A
A
R12.5
29
75
R3
5
50
R3
5
ø40
B
10
5
1.5
3
SECTION A–A
10
ø31
ø32.5
17
1.075
10.5
1.075
3.5
SECTION B–B

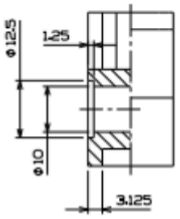
Bài tập 176

VADUNİ
Mechanical design



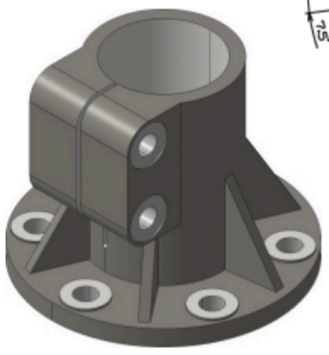


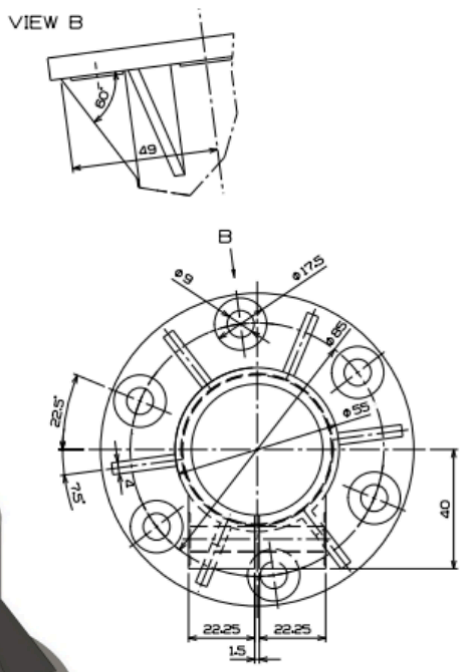


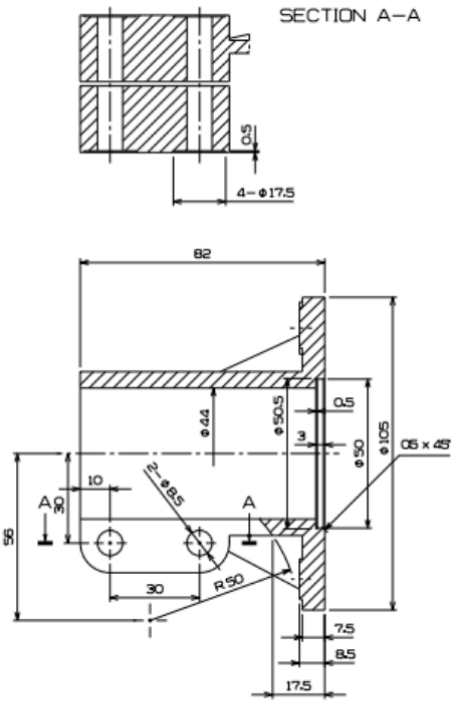


Bài tập 177

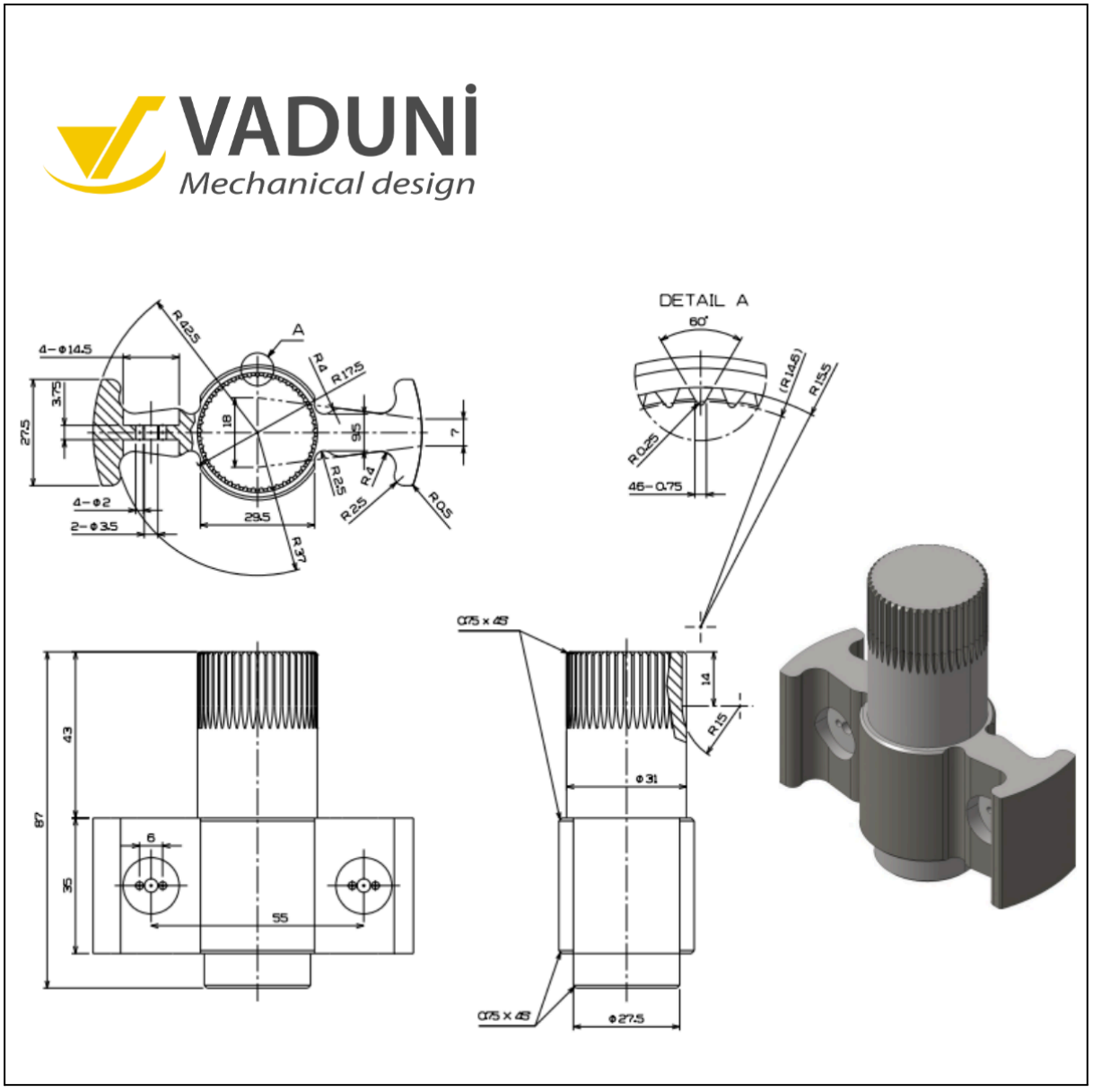
VADUNİ
Mechanical design



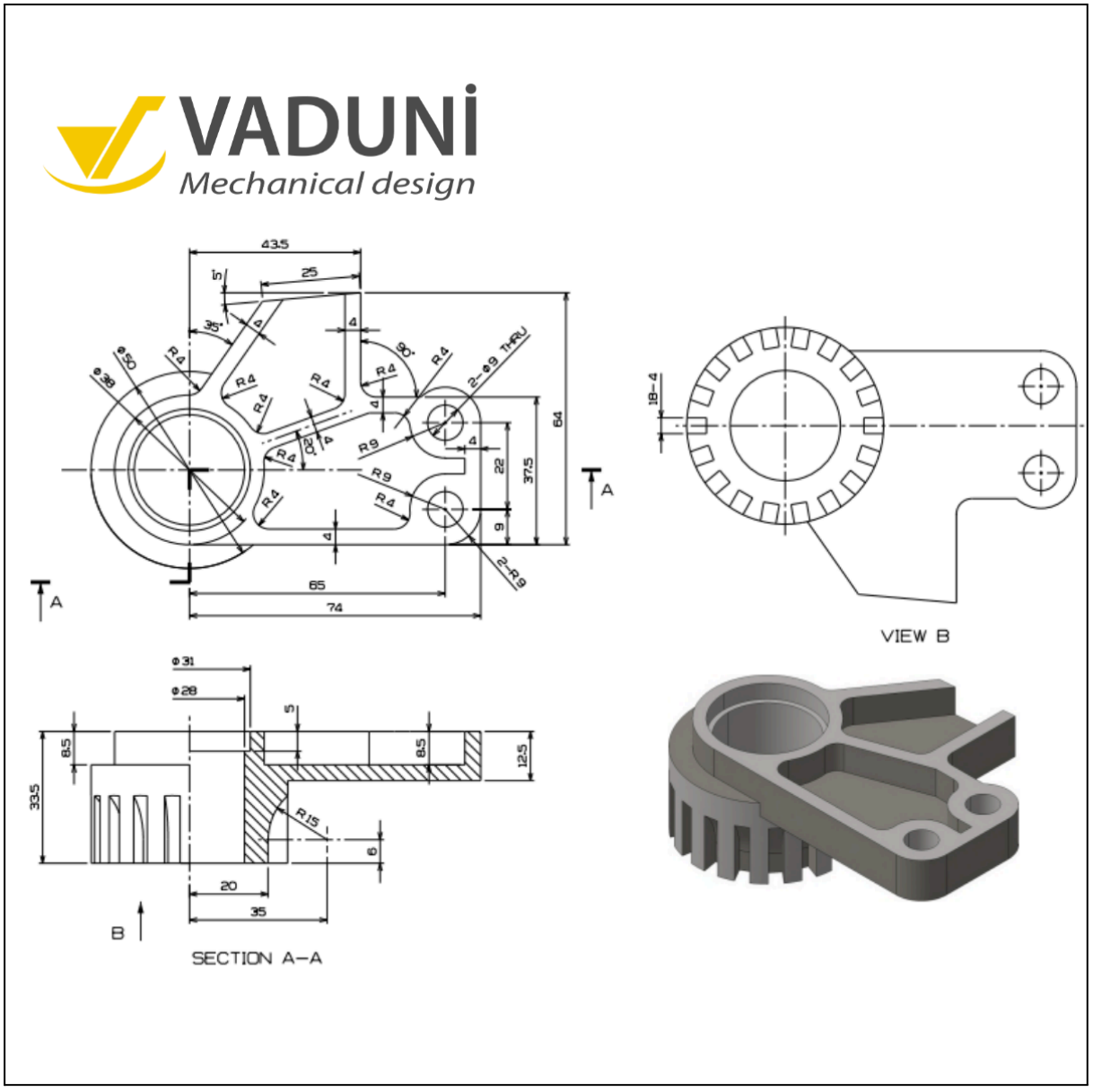




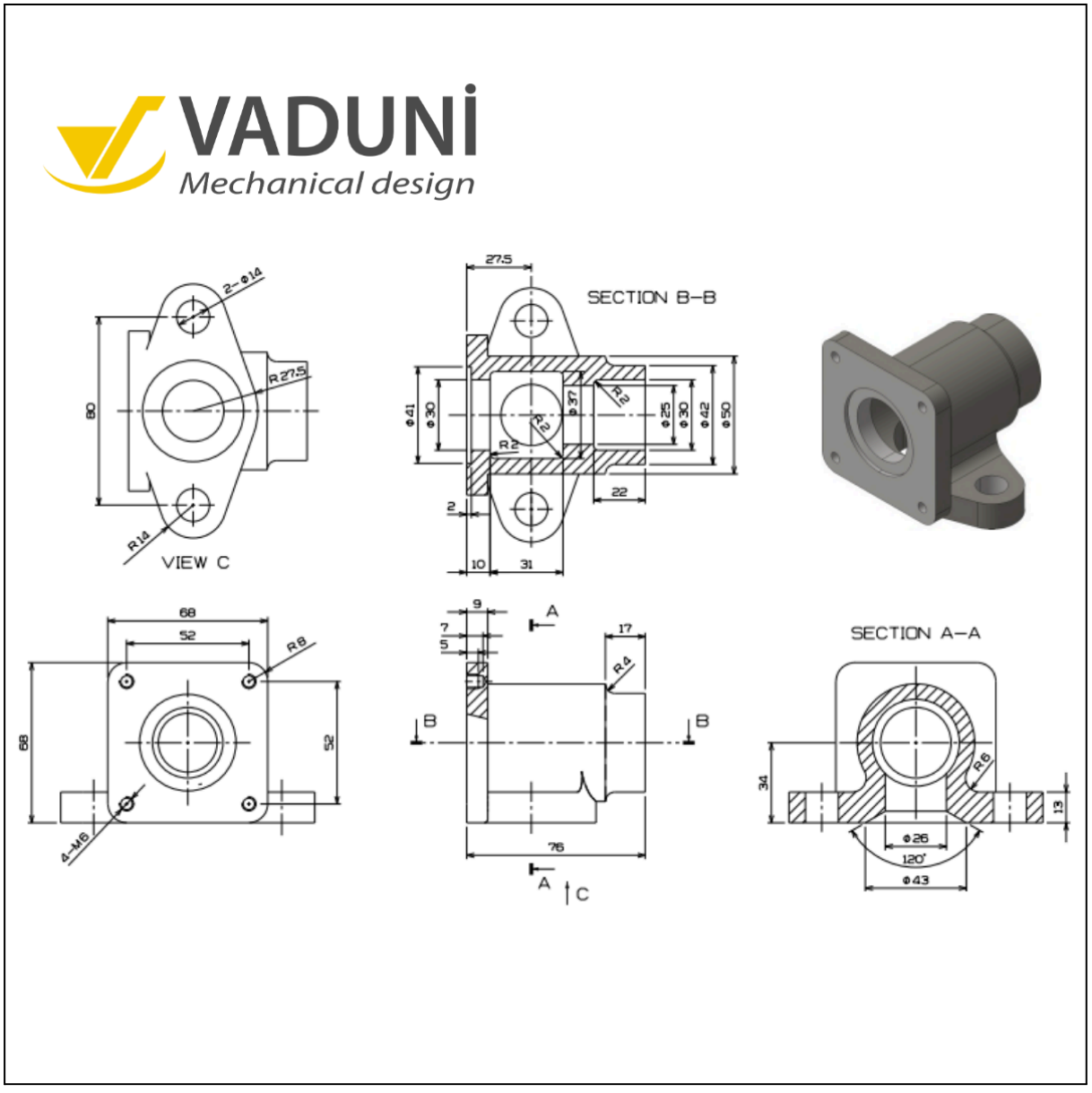
Bài tập 178


VADUNİ
Mechanical design
DETAIL A
60°
4–Φ14.5
R42.5
A
R4
R17.5
3.75
27.5
18
36
7
4–Φ2
2–Φ3.5
29.5
R2.5
R4
R2.5
R0.5
R37
R0.25
46–0.75
(R14.6)
R15.5
0.75 x 45°
14
R15
Φ31
43
87
6
35
55
0.75 x 45°
Φ27.5

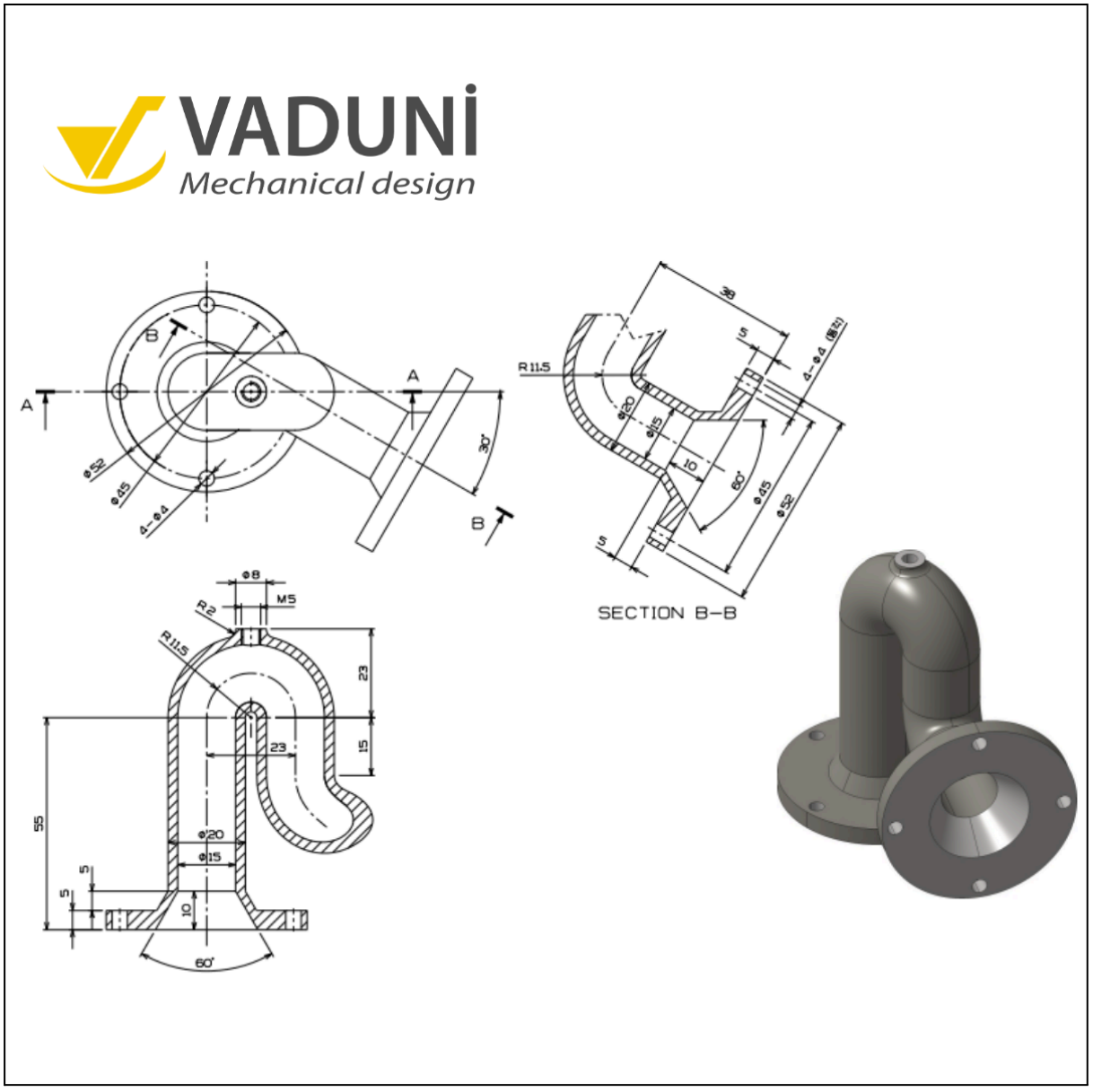
Bài tập 179


VADUNİ
Mechanical design
43.5
25
35°
90°
2-ø9 THRU
ø50
ø38
R4
R9
64
37.5
22
9
65
74
2-R9
A
VIEW B
18-4
ø31
ø28
5
8.5
12.5
33.5
R15
6
20
35
B
SECTION A-A

Bài tập 180

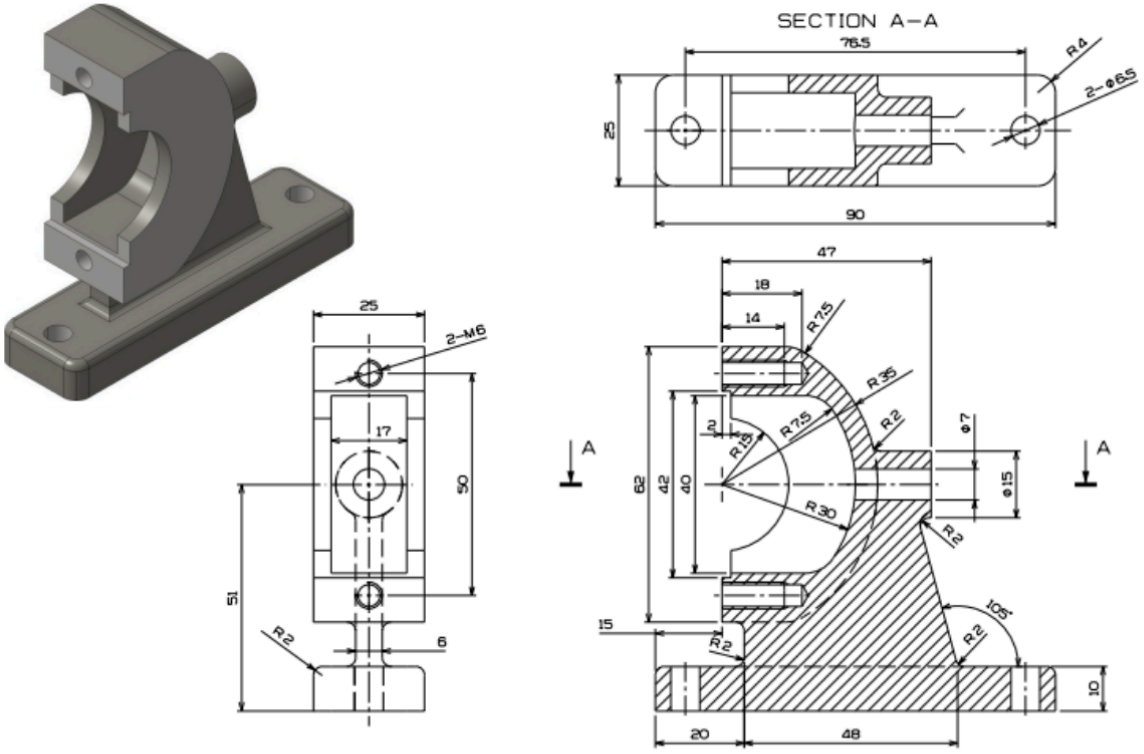

VADUNİ
Mechanical design
2-ϕ14
R27.5
80
R14
VIEW C
27.5
SECTION B-B
ϕ41
ϕ30
ϕ37
R2
R2
R2
ϕ25
ϕ30
ϕ42
ϕ50
22
2
10
31
68
52
R8
68
52
4-M6
9
7
5
A
17
R4
B
B
76
A
C
SECTION A-A
34
R6
13
ϕ26
120°
ϕ43

Bài tập 181

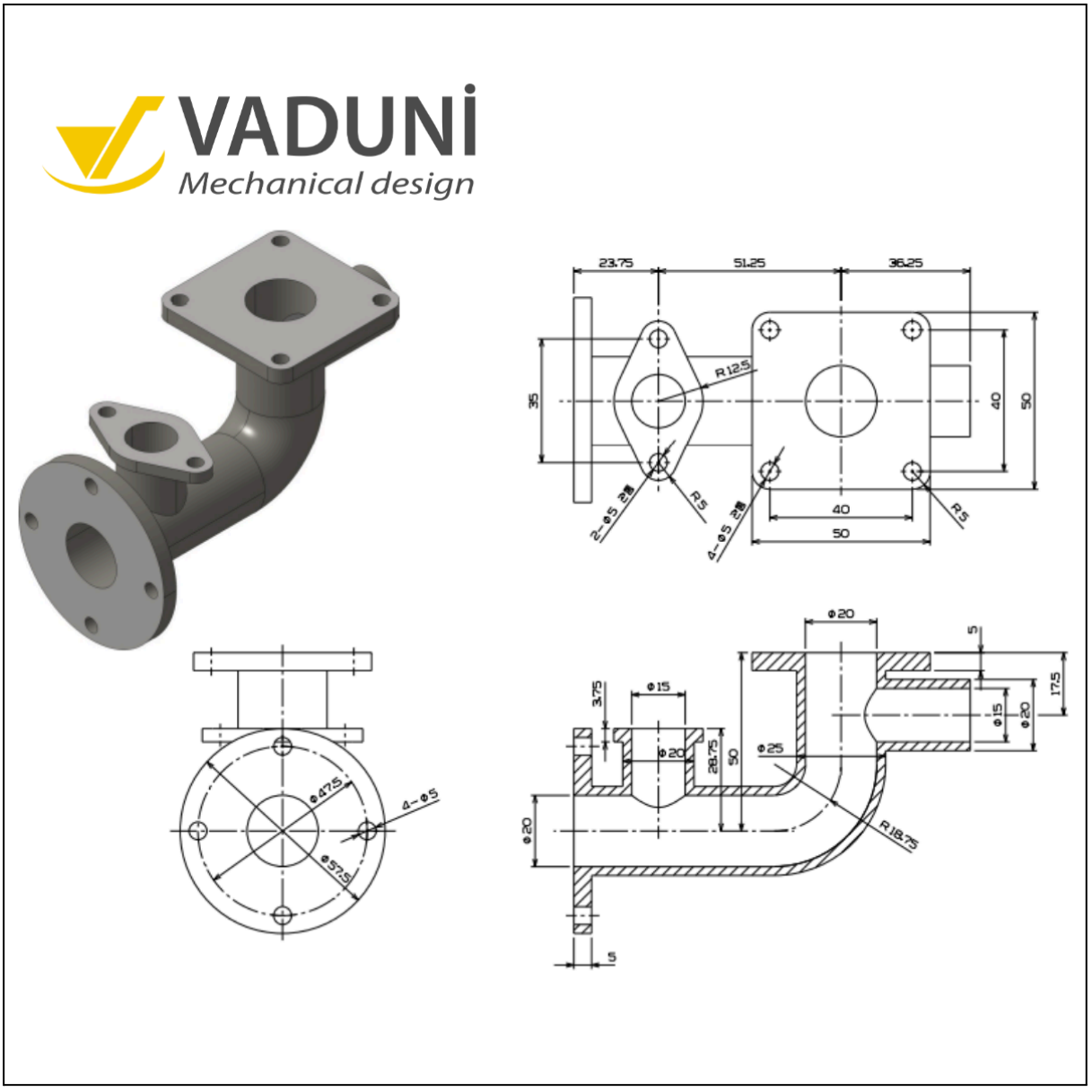

VADUNİ
Mechanical design
A
B
A
B
ø52
ø45
4-ø4
30°
R11.5
38
5
4-ø4.4 (通孔)
ø20
ø15
10
60°
ø45
ø52
5
SECTION B-B
ø8
M5
R2
R11.5
23
15
23
55
ø20
ø15
5
5
10
60°

Bài tập 182

VADUNİ
Mechanical design

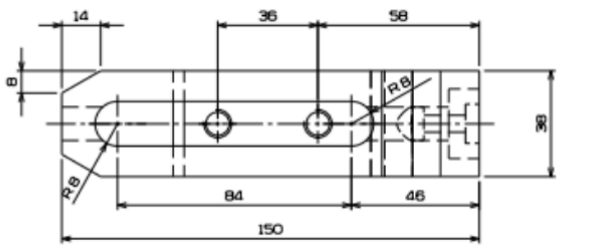


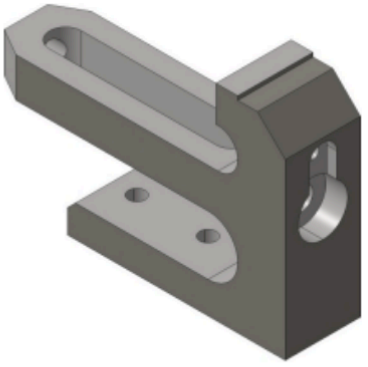
Bài tập 183

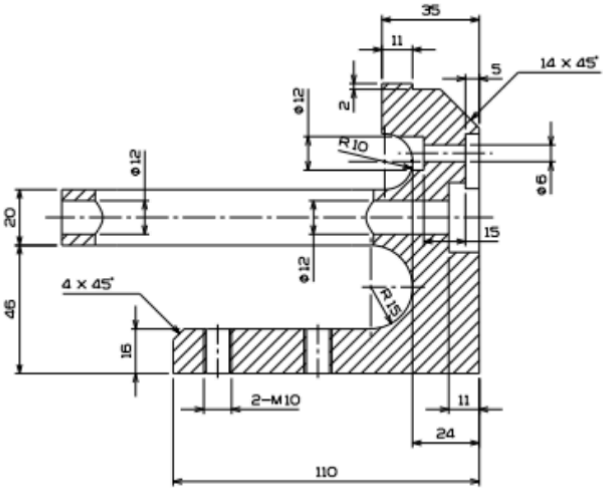

VADUNİ
Mechanical design
23.75
51.25
36.25
R12.5
35
40
50
2-Φ5
R5
4-Φ5
40
50
R5
Φ47.5
4-Φ5
Φ57.5
Φ20
5
3.75
Φ15
Φ20
28.75
50
Φ25
17.5
Φ15
Φ20
Φ20
R18.75
5

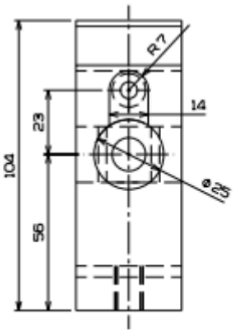
Bài tập 184

VADUNİ
Mechanical design

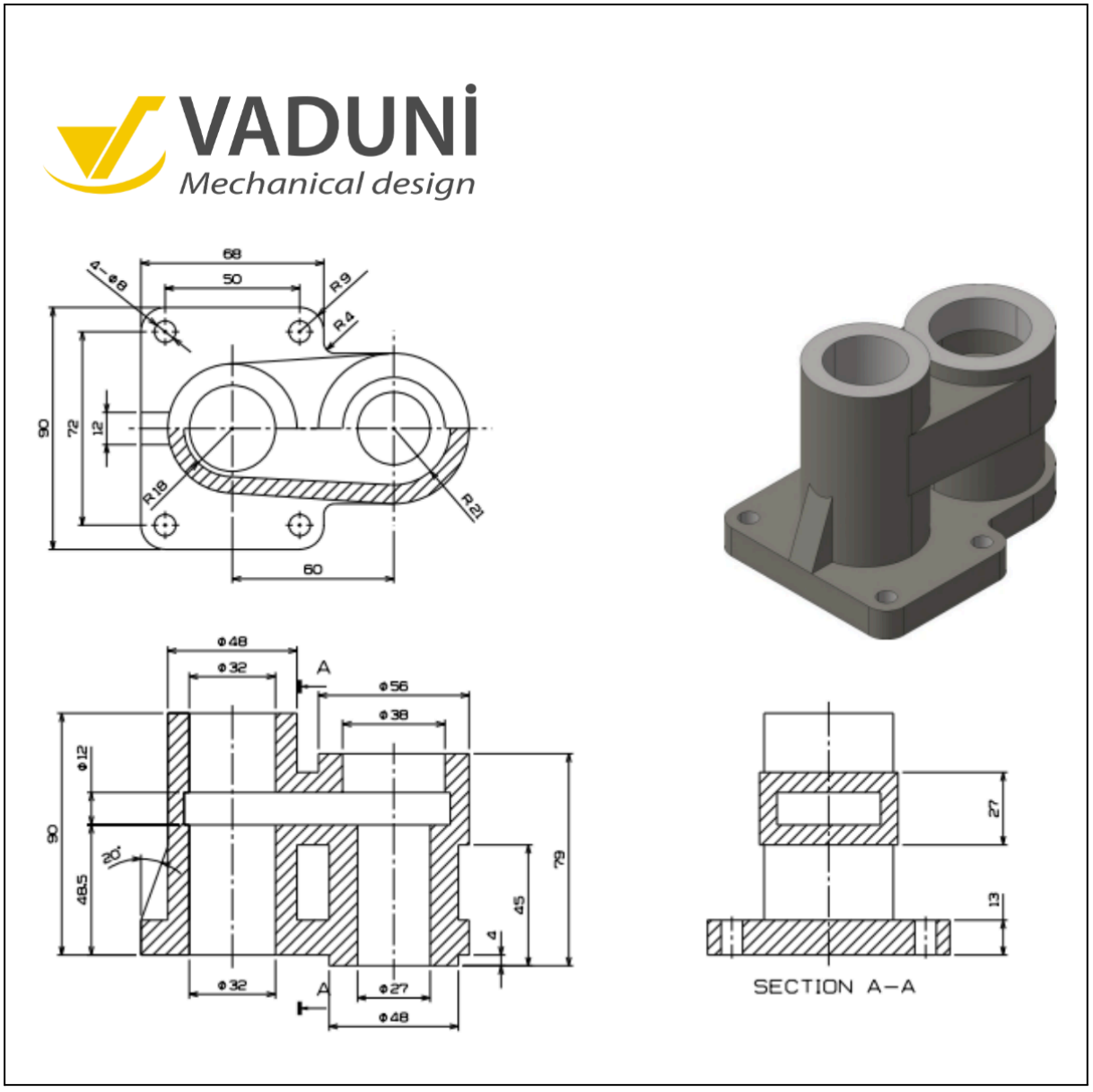








Bài tập 185

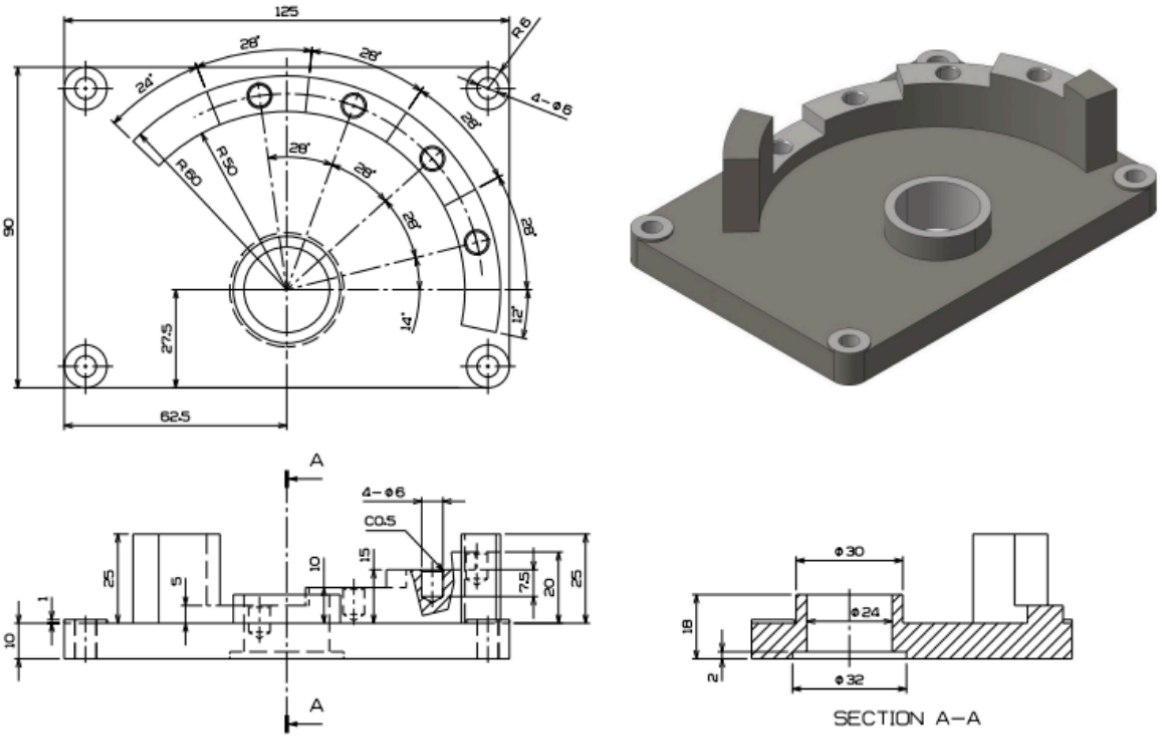

VADUNİ
Mechanical design
68
50
4-ø8
R9
R4
90
72
12
R18
R21
60
ø48
ø32
A
ø56
ø38
ø12
90
20°
48.5
79
45
4
ø32
A
ø27
ø48
27
13
SECTION A–A

Bài tập 186

VADUNI
Mechanical design
45°
φ37
4-φ4
40
32
40
32
φ20
4-φ4
R4
VIEW A
A
10
φ6
R6.25
70°
5
12.5
R50
12.5
2.5
5
φ30
φ45

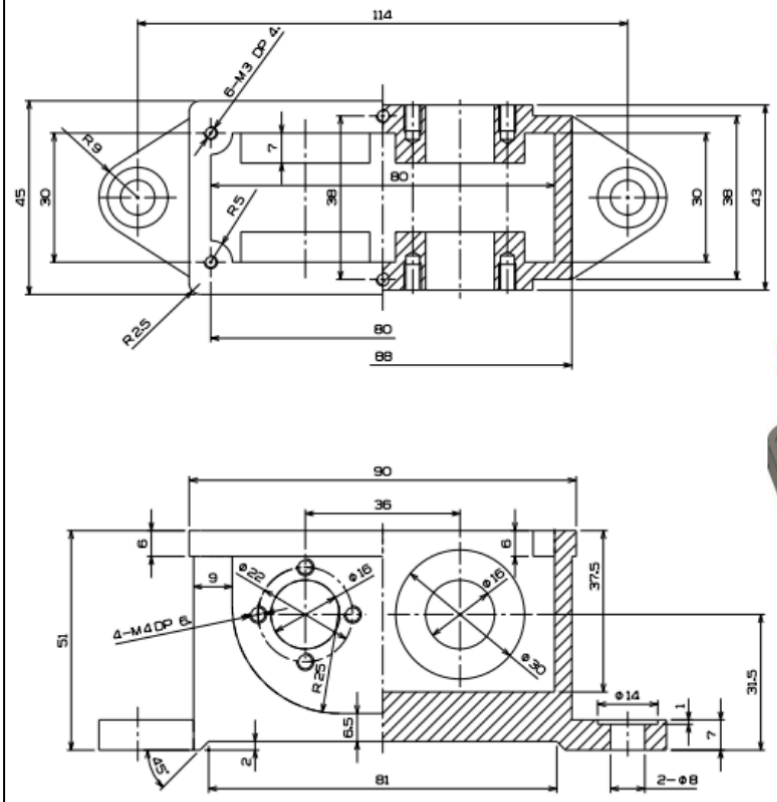
Bài tập 187

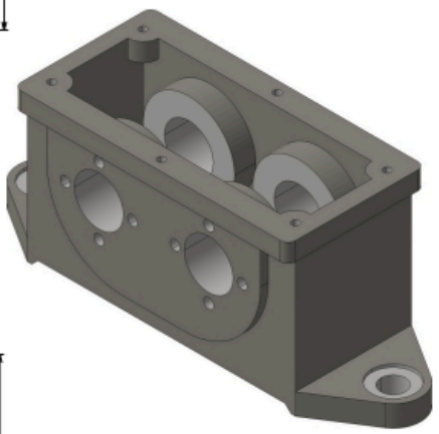
VADUNİ
Mechanical design



Bài tập 188

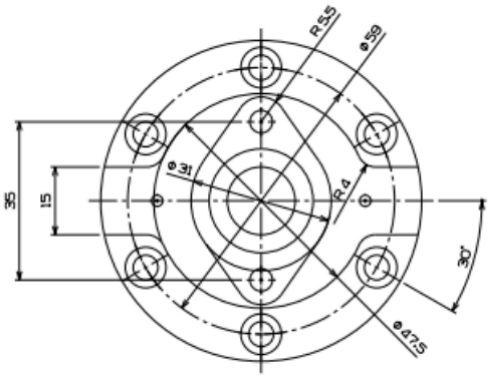
VADUNİ
Mechanical design

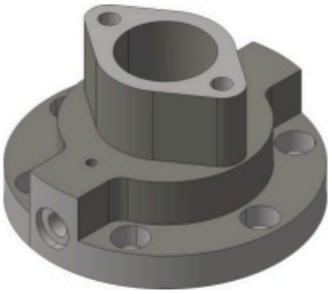


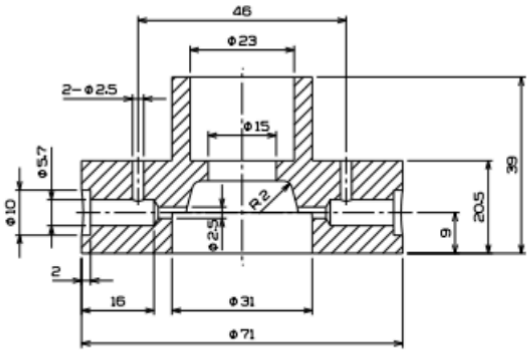


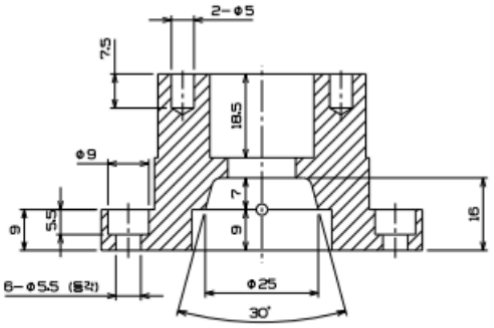
Bài tập 189

VADUNİ
Mechanical design

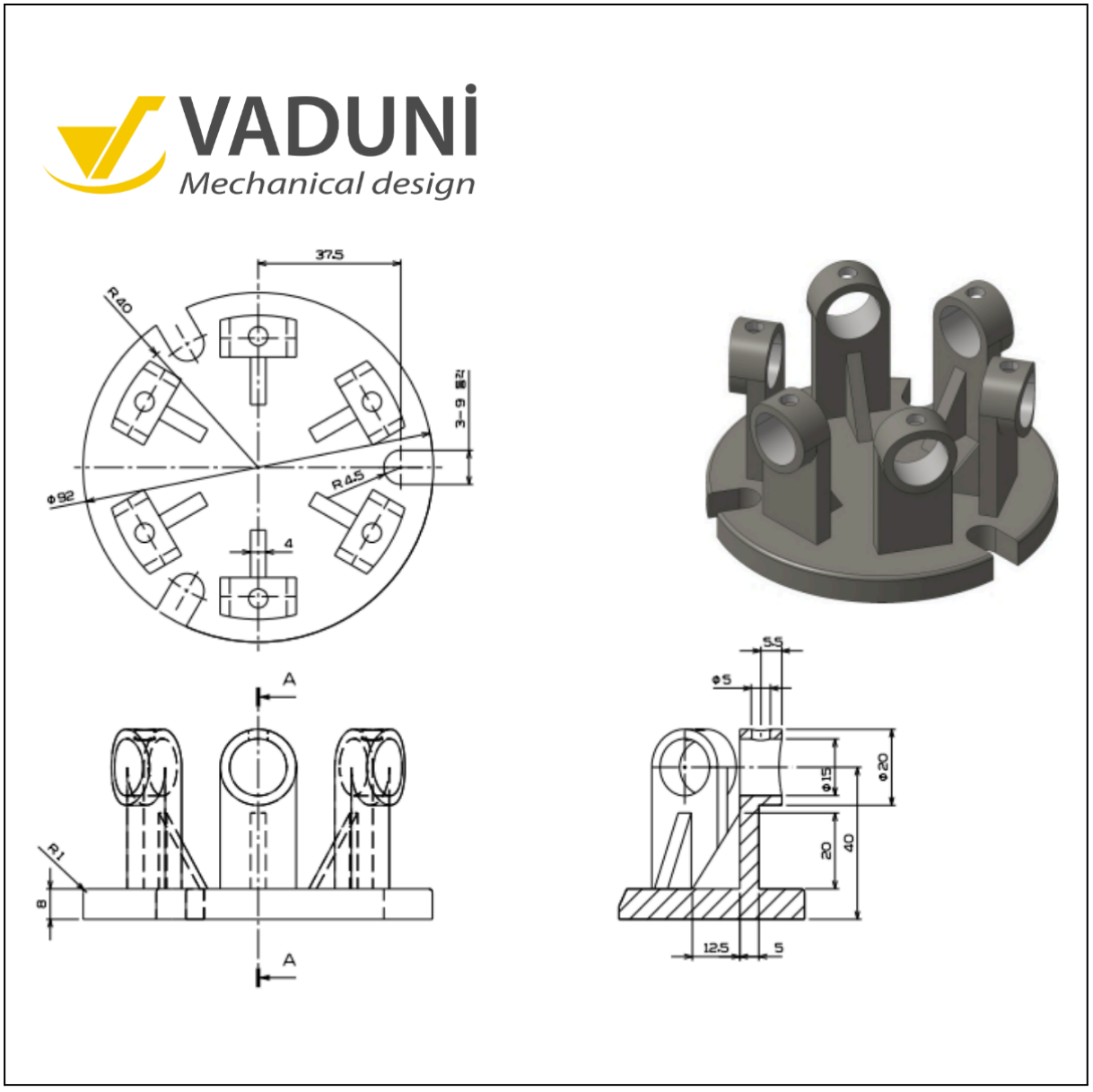






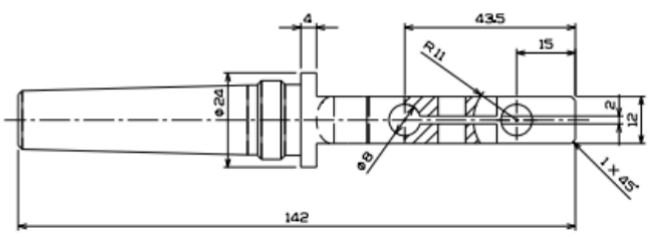


Bài tập 190

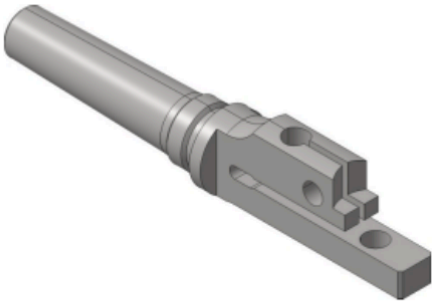

VADUNİ
Mechanical design
37.5
R40
3-9 Ø2
Φ92
R4.5
4
A
A
R1
8
5.5
Φ5
Φ15
Φ20
20
40
12.5
5

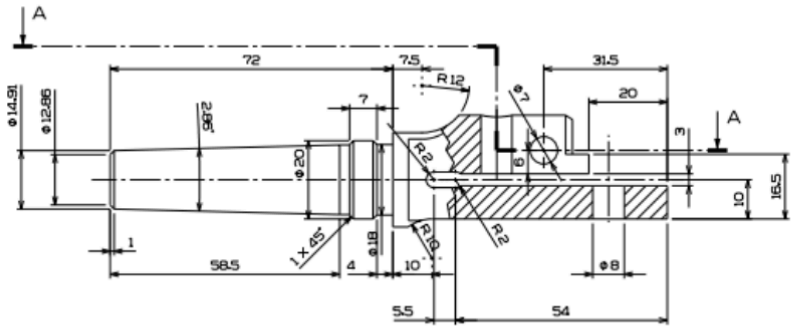
Bài tập 191

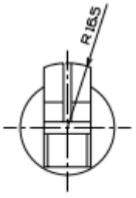
VADUNİ
Mechanical design



SECTION A–A

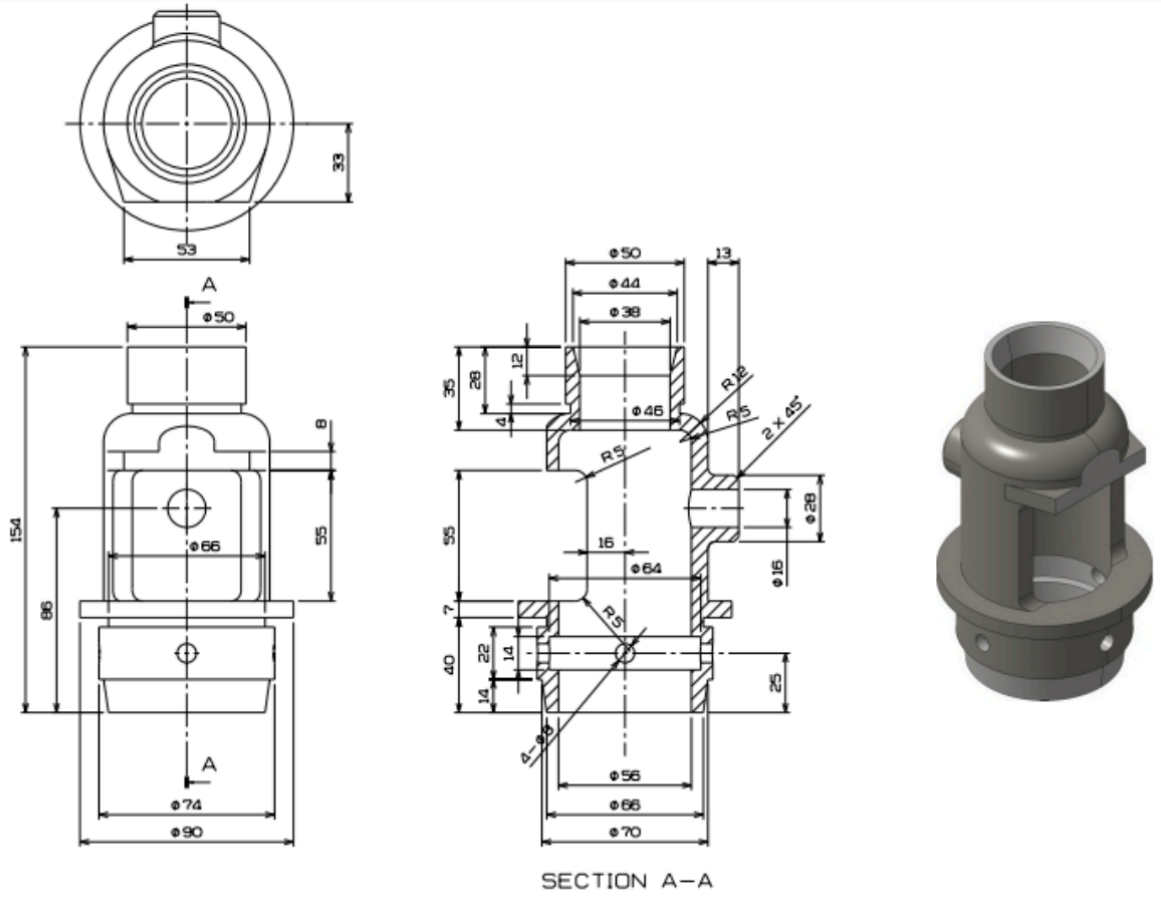






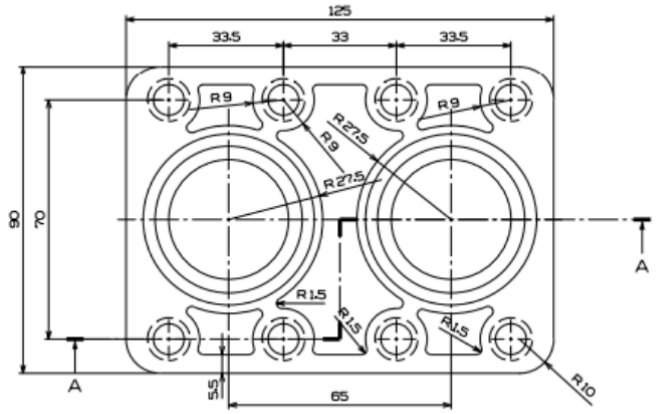
Bài tập 192

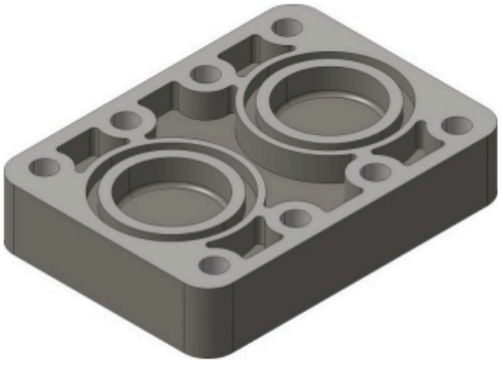
VADUNİ
Mechanical design

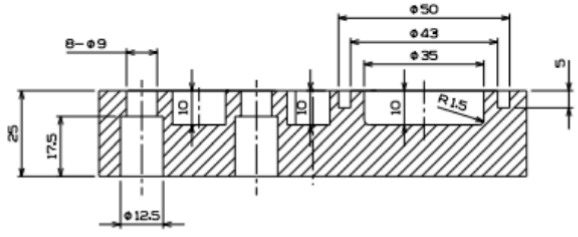


Bài tập 193

VADUNİ
Mechanical design



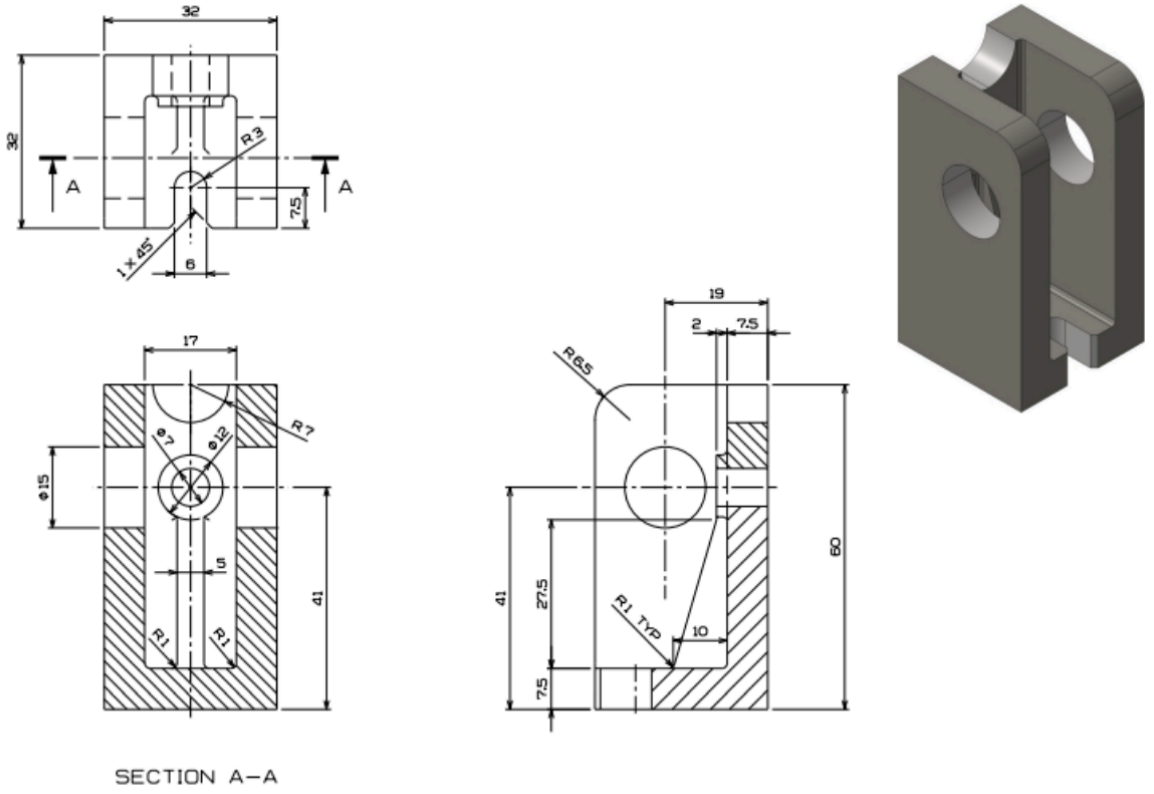




SECTION A–A

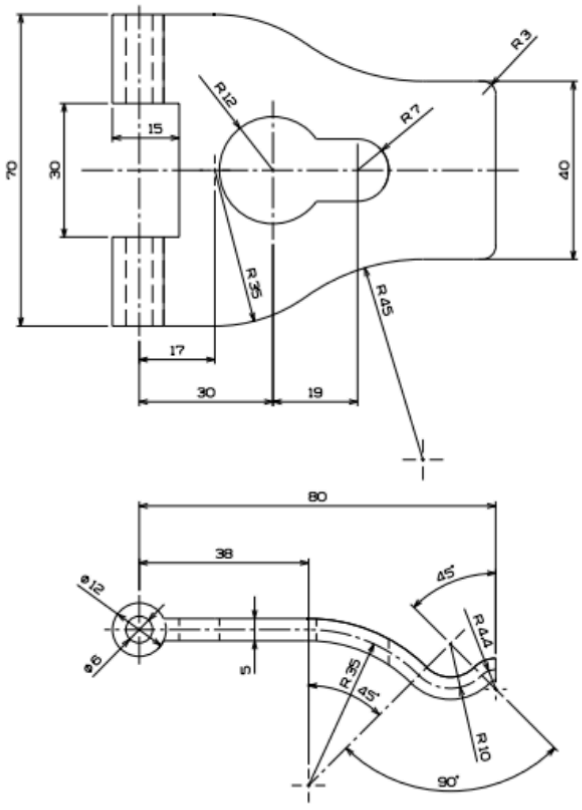
Bài tập 194

VADUNİ
Mechanical design



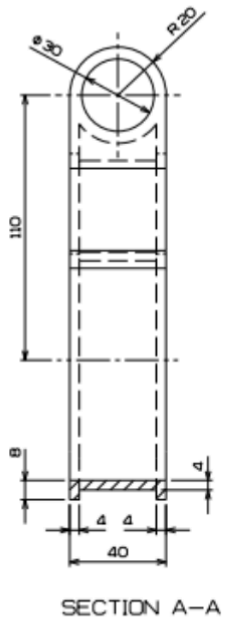
Bài tập 195

VADUNİ
Mechanical design

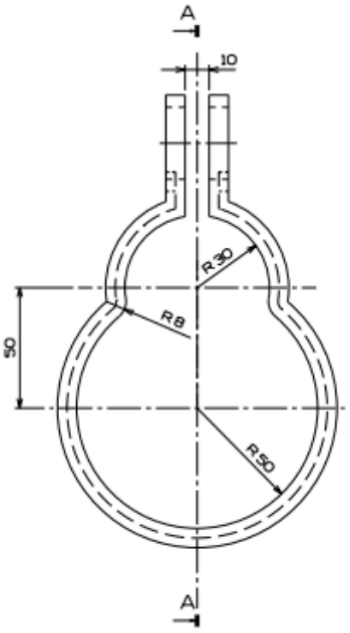


Bài tập 196

VADUNİ
Mechanical design

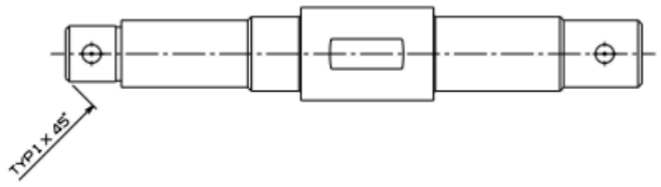


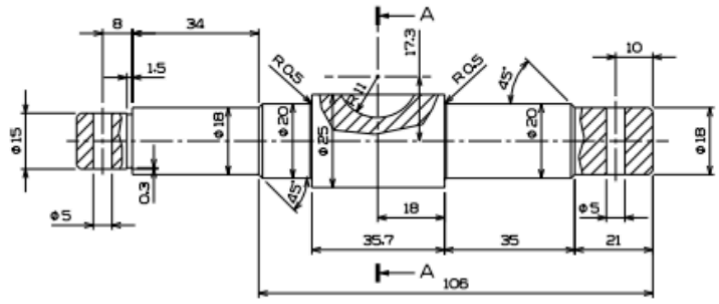
SECTION A–A

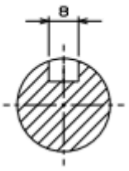


Bài tập 197

VADUNİ
Mechanical design



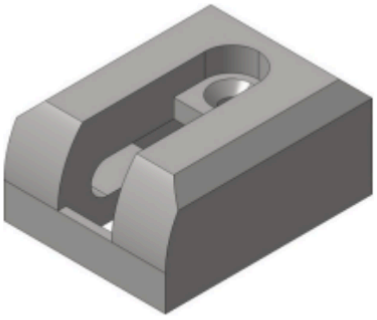


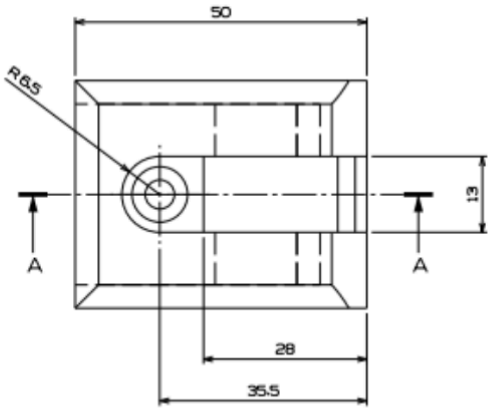


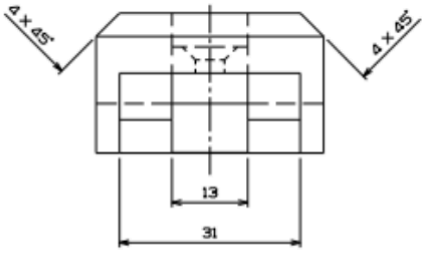
SECTION A–A

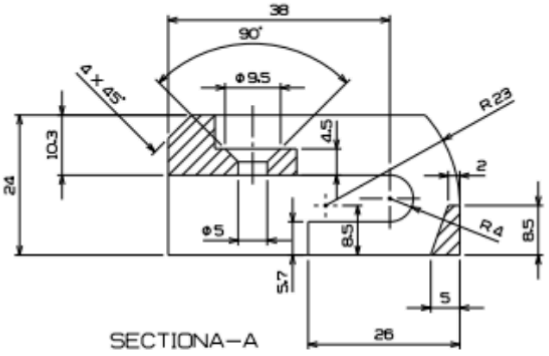
Bài tập 198

VADUNİ
Mechanical design



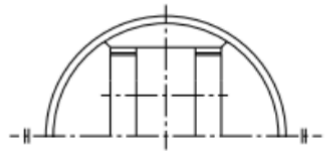


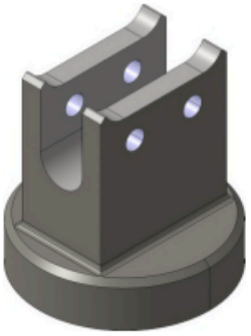


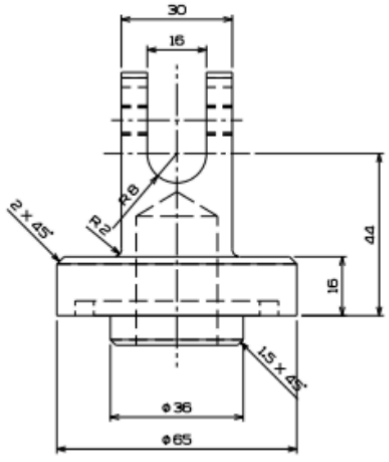


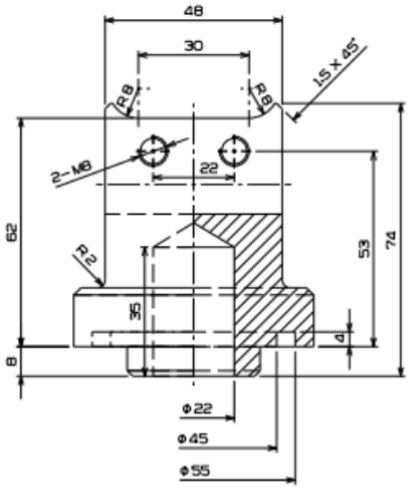
Bài tập 199

VADUNİ
Mechanical design



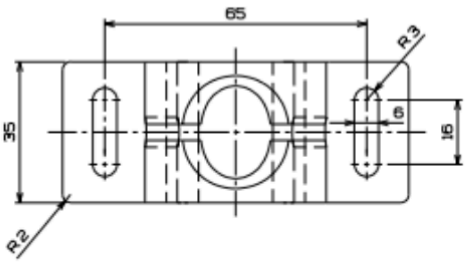


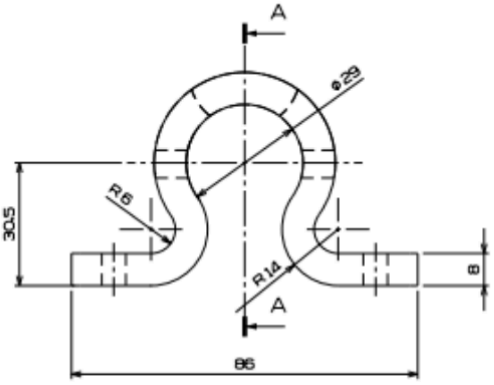


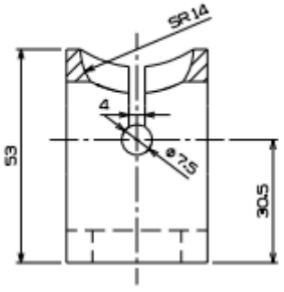


Bài tập 200

VADUNİ
Mechanical design



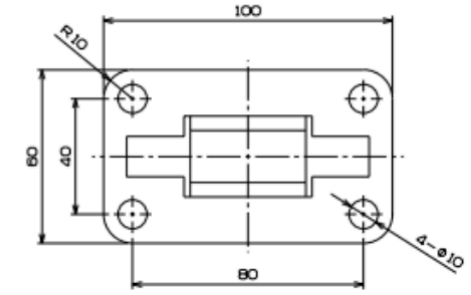


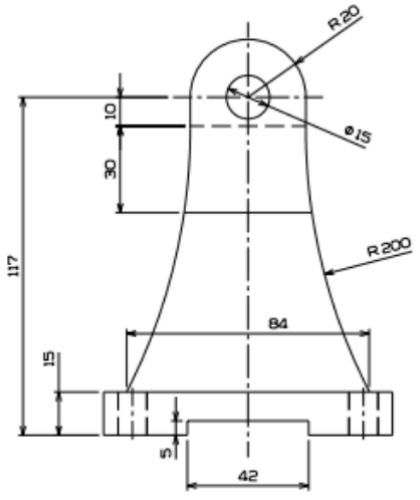


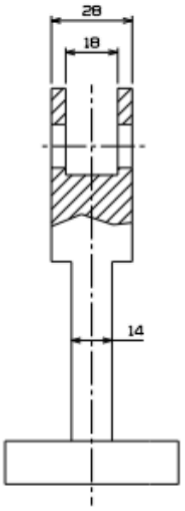
SECTION A–A

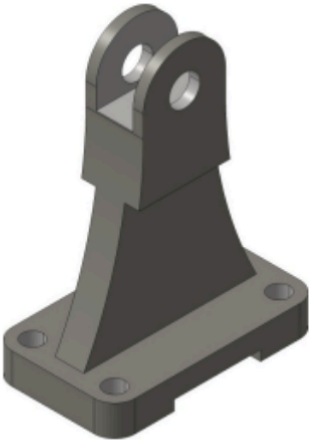
Bài tập 201

VADUNİ
Mechanical design



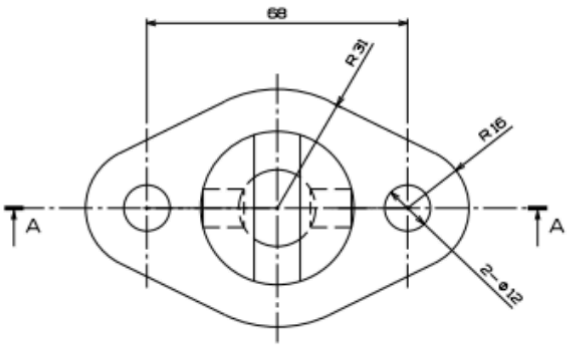


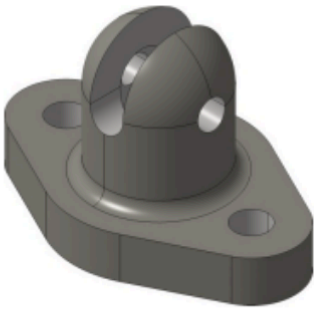


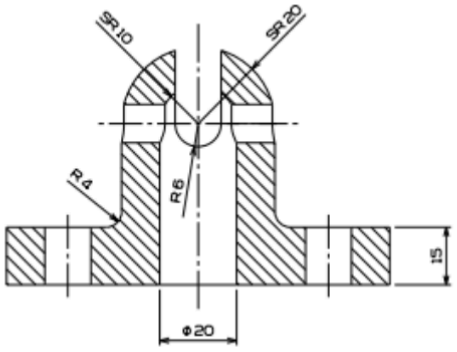


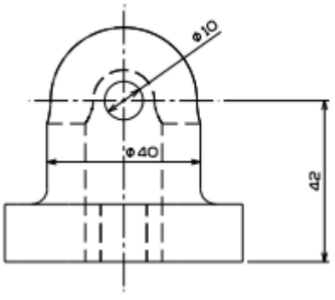
Bài tập 202

VADUNİ
Mechanical design

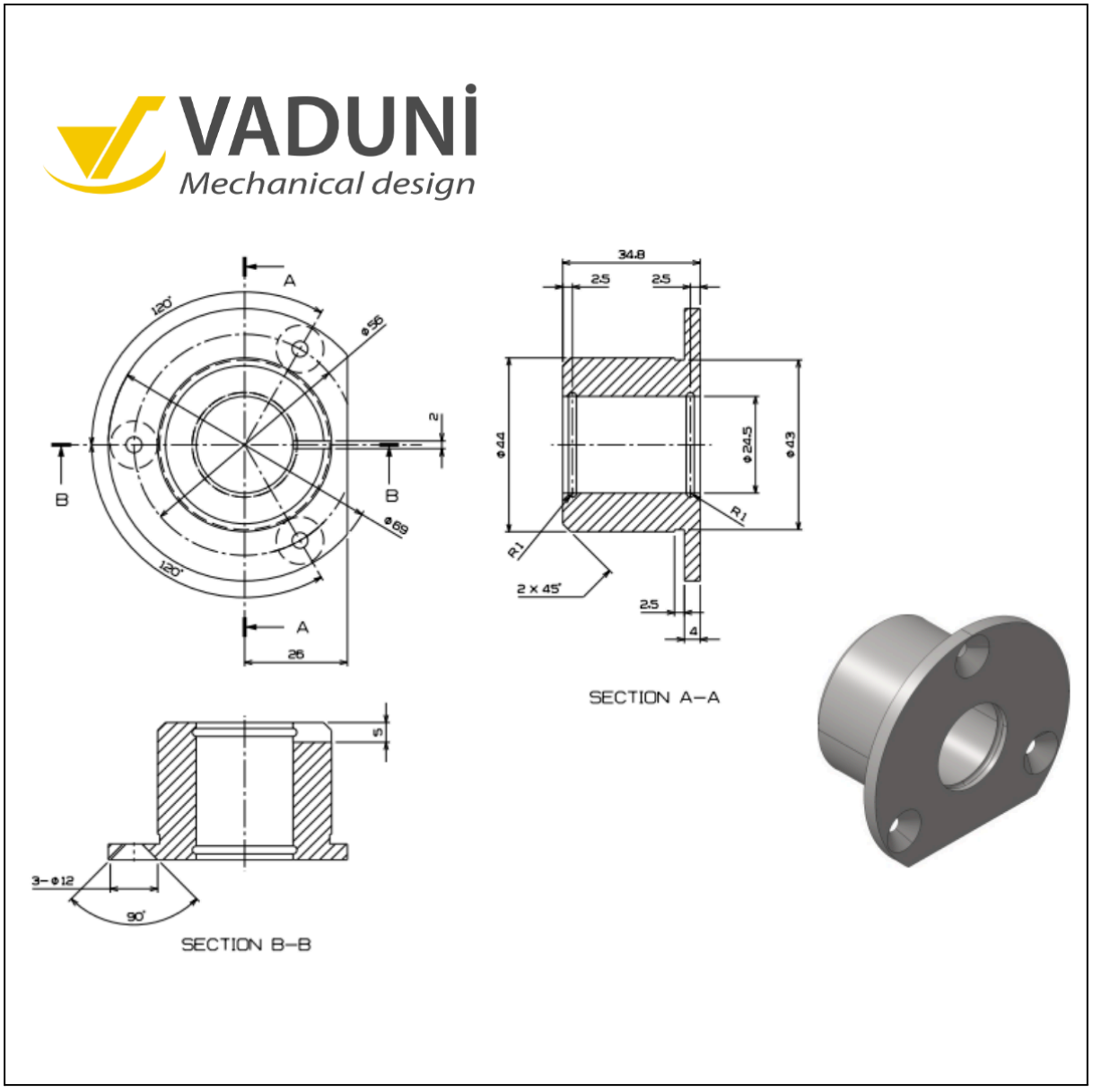






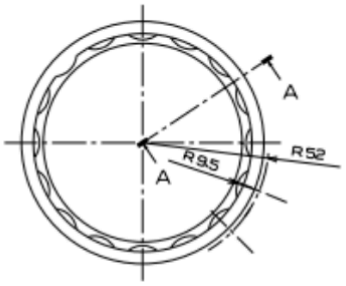


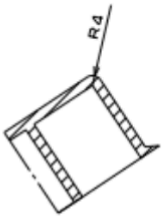
Bài tập 203


VADUNİ
Mechanical design
A
120°
ø56
2
B
B
ø69
120°
A
26
34.8
2.5
2.5
ø44
ø24.5
ø43
R1
R1
2 x 45°
2.5
4
SECTION A–A
5
3– ø12
90°
SECTION B–B

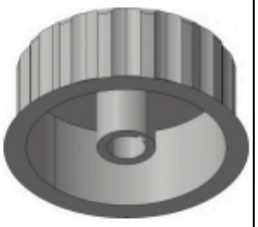
Bài tập 204

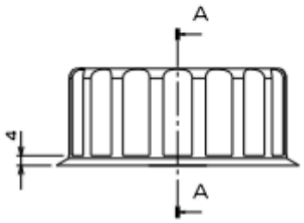
VADUNİ
Mechanical design

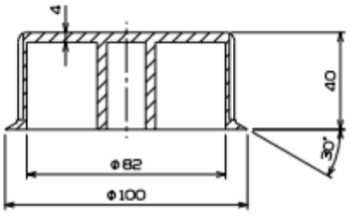




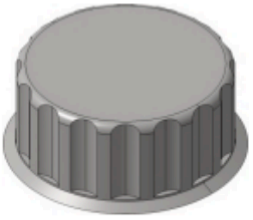
SECTION A–A

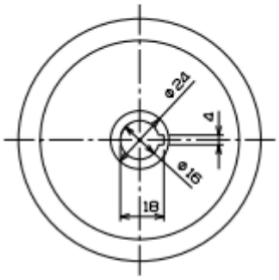






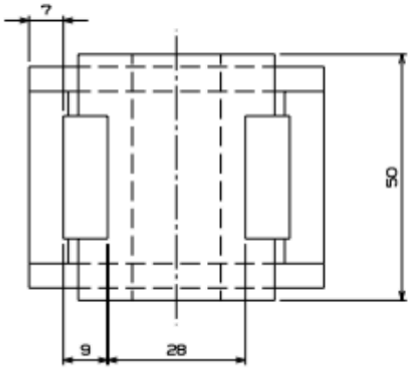
SECTION A–A

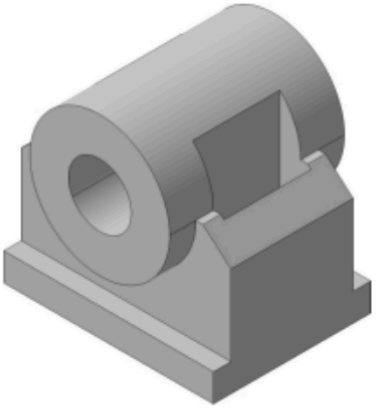


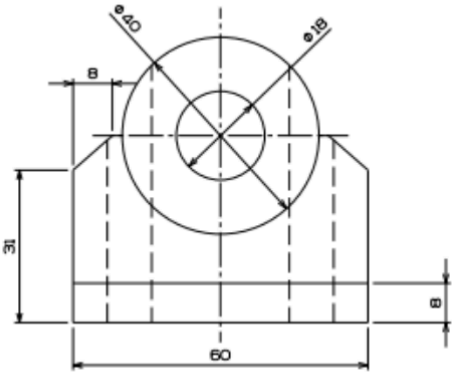


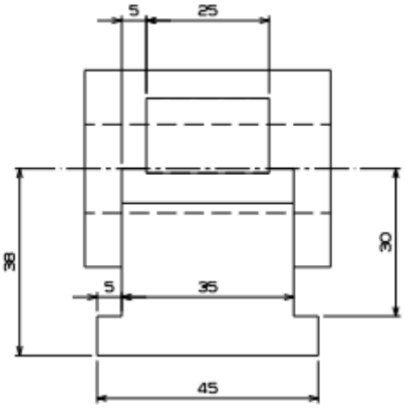
Bài tập 205

VADUNİ
Mechanical design









Bài tập 206

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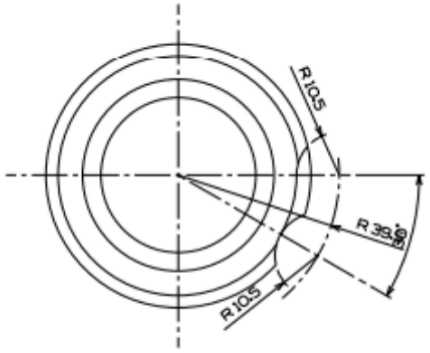
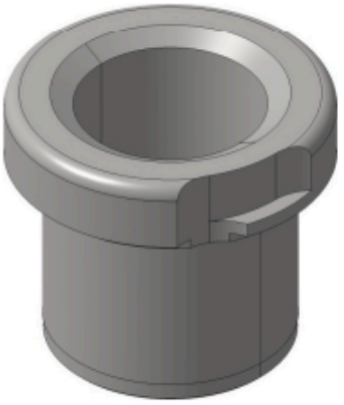
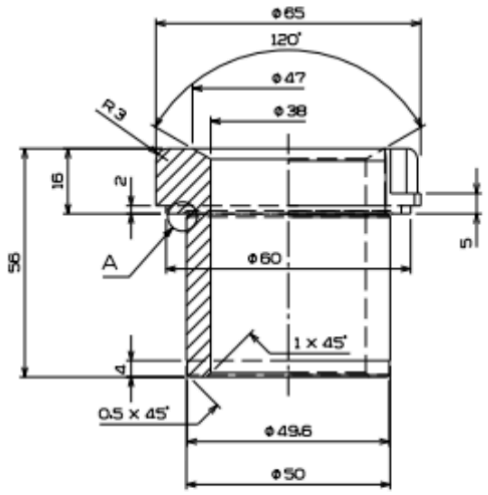
Mechanical design







DETAIL A

Bài tập 207

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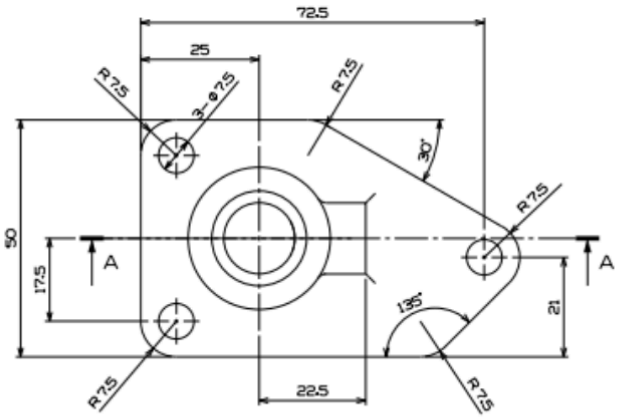
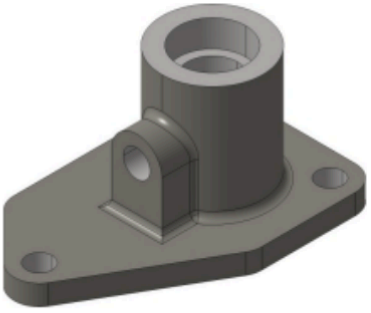
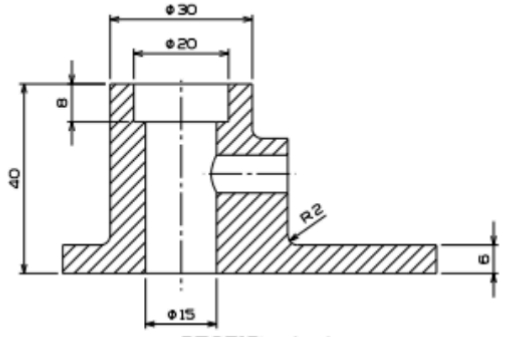
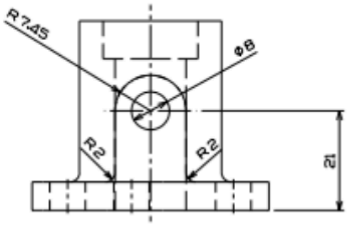
Mechanical design





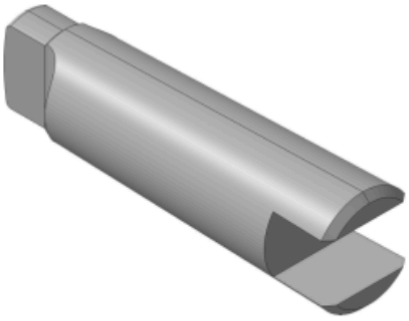


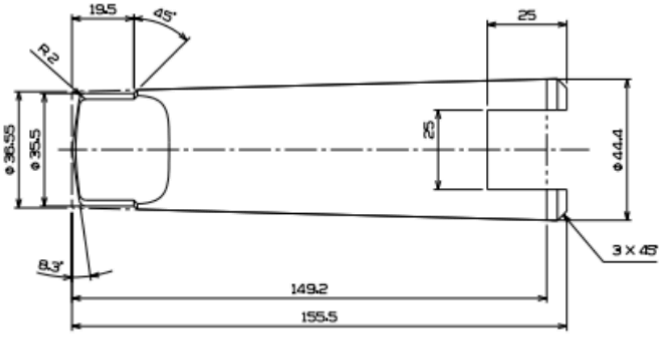
SECTION A–A

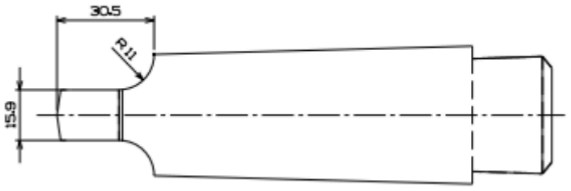


Bài tập 208

VADUNİ
Mechanical design







Bài tập 209

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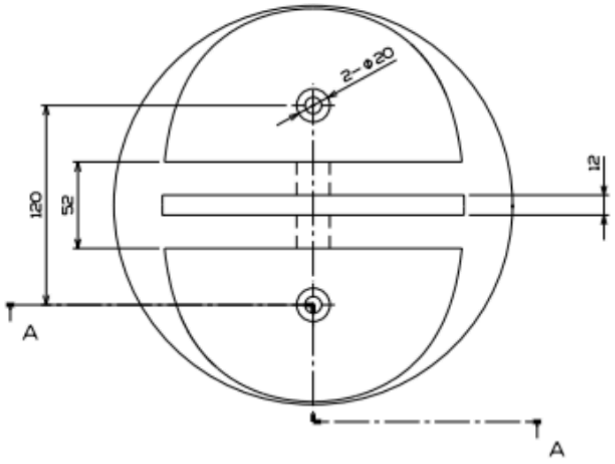
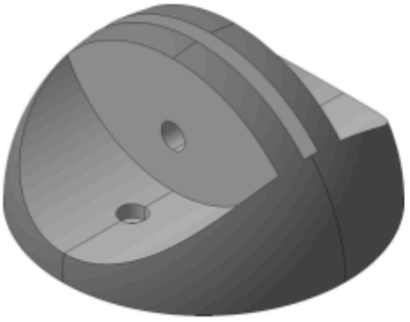
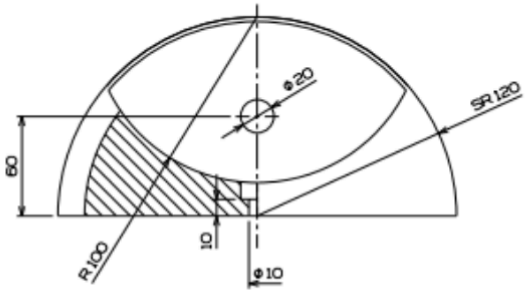
Mechanical design



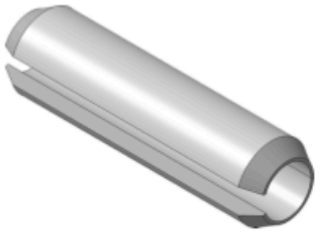


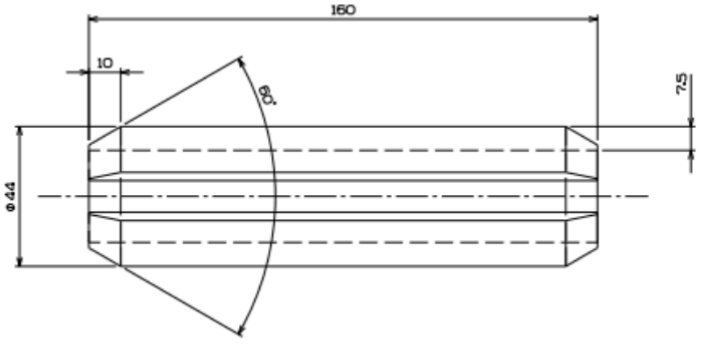


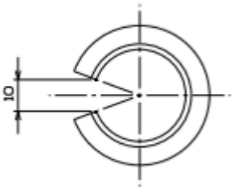
SECTION A–A

Bài tập 210

VADUNİ
Mechanical design







Bài tập 211

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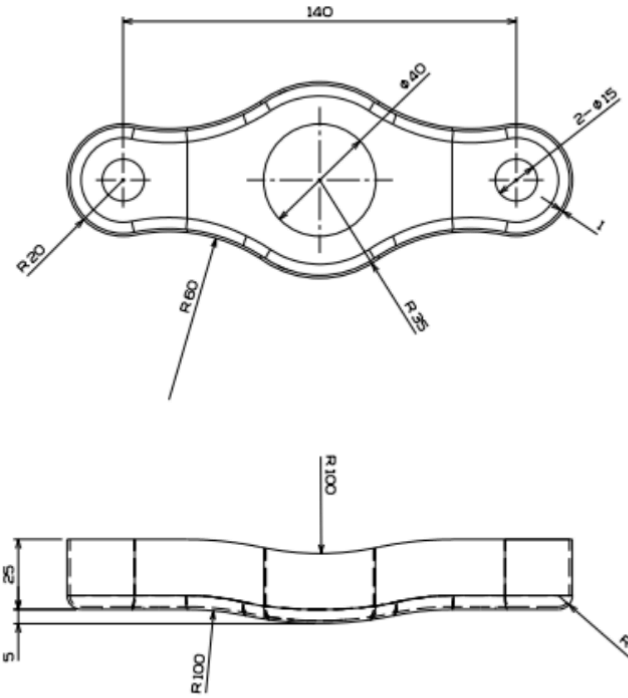
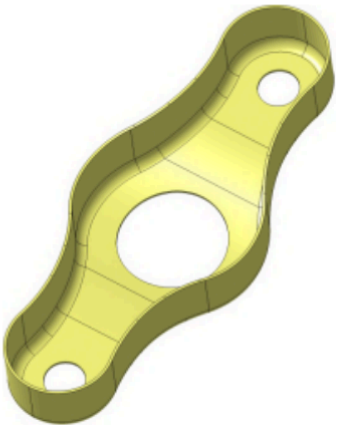
Mechanical design





Bài tập 212

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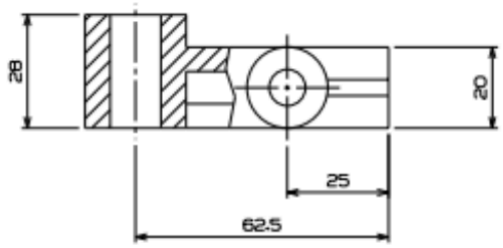
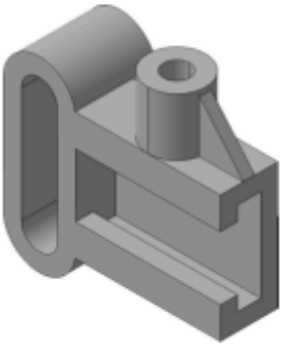
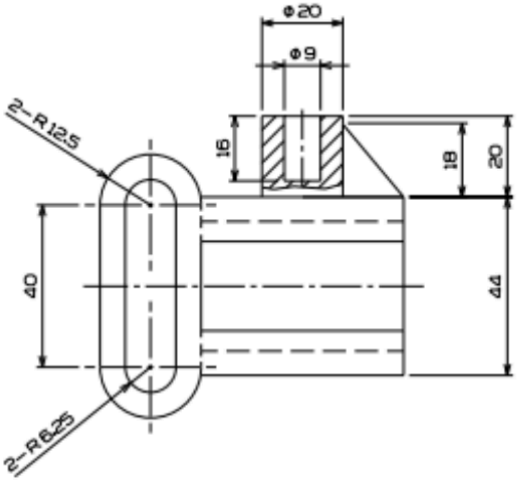
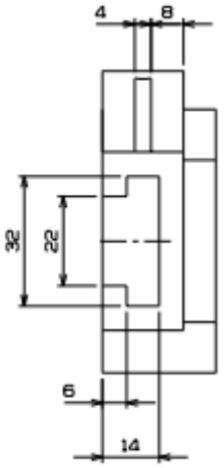
Mechanical design

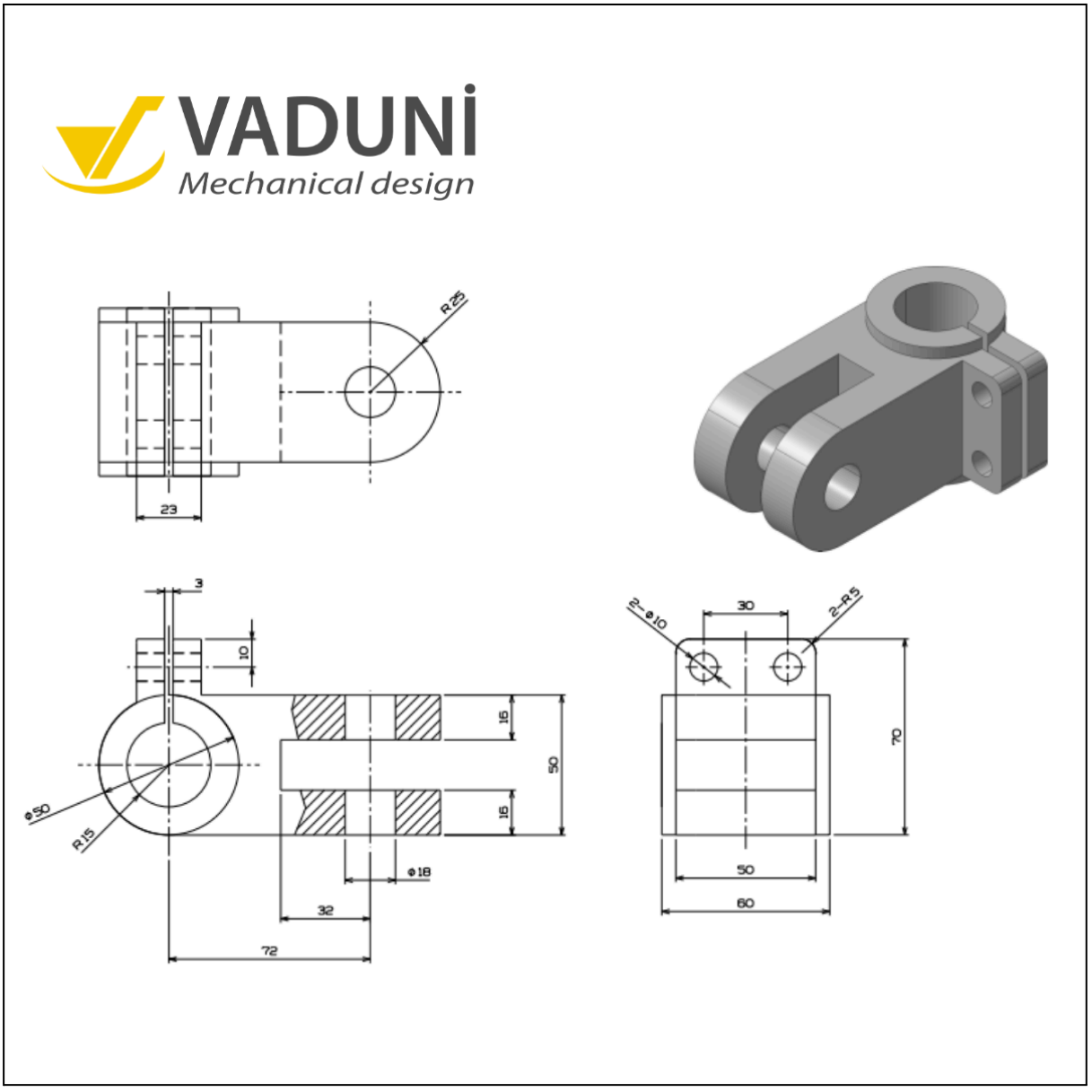








Bài tập 213


VADUNİ
Mechanical design
R25
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R15
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2-R5
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60

Bài tập 214

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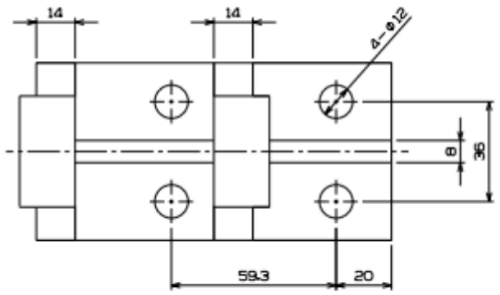
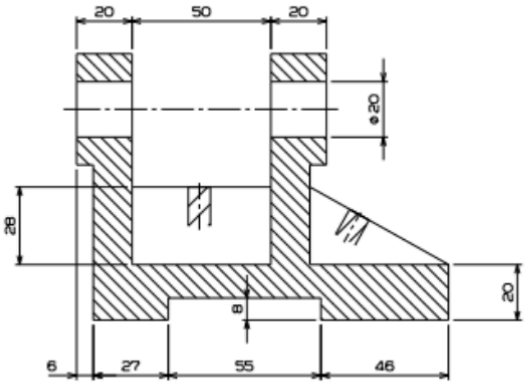
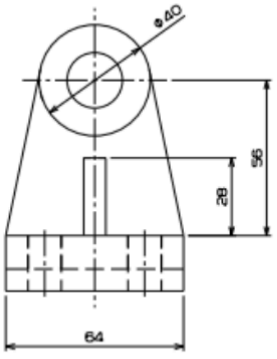
Mechanical design







Bài tập 215

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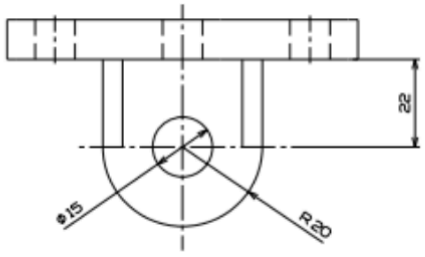
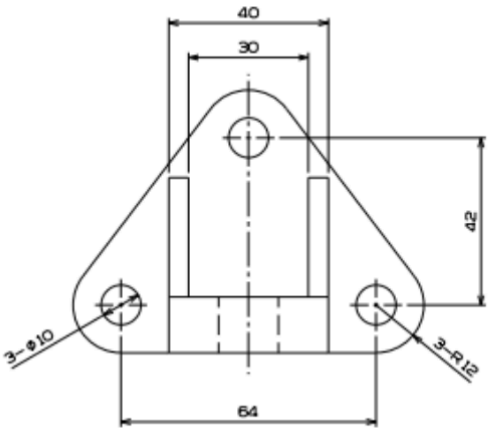
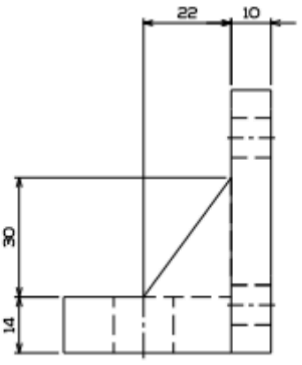
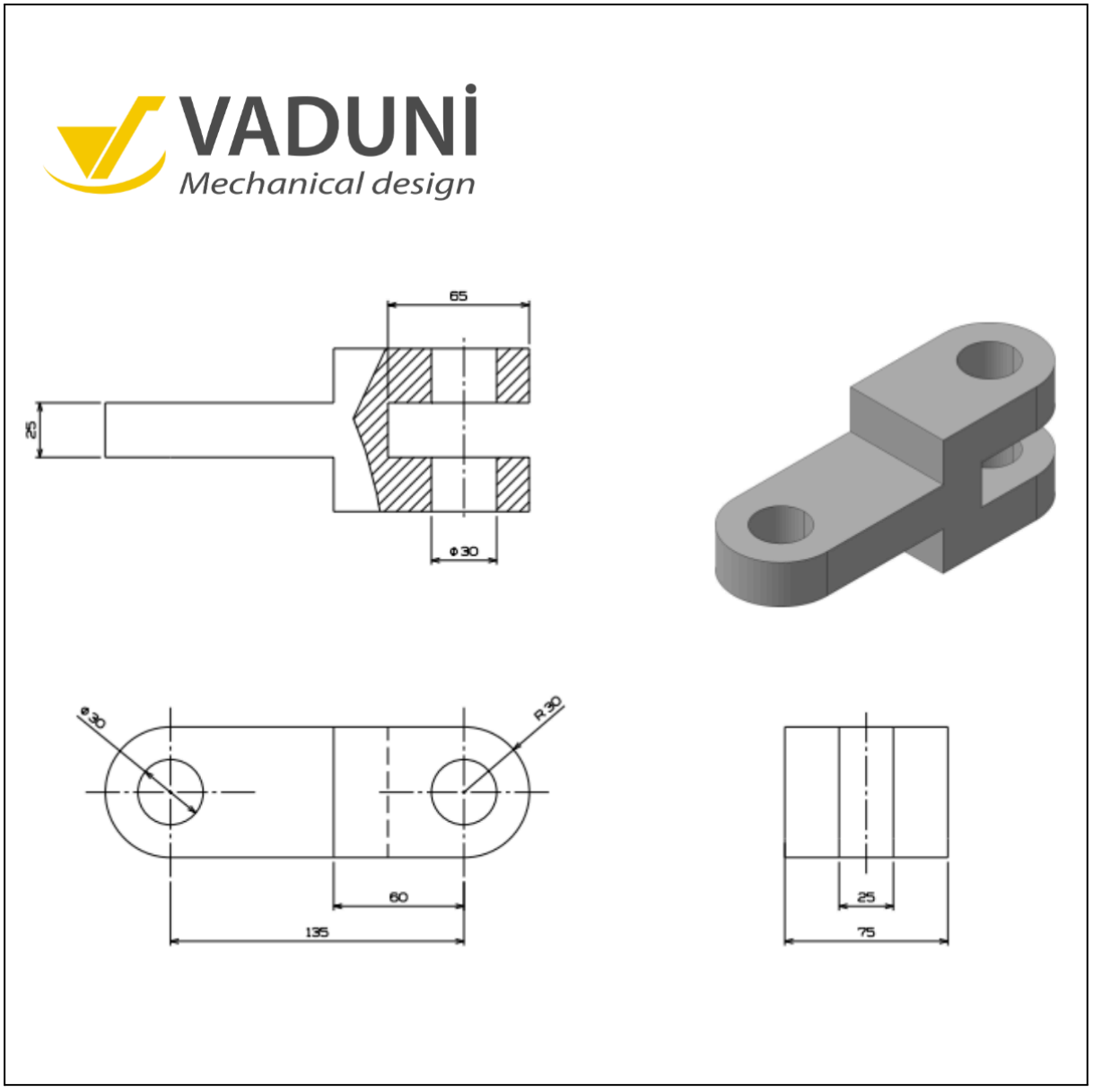
Mechanical design







Bài tập 216



Bài tập 217

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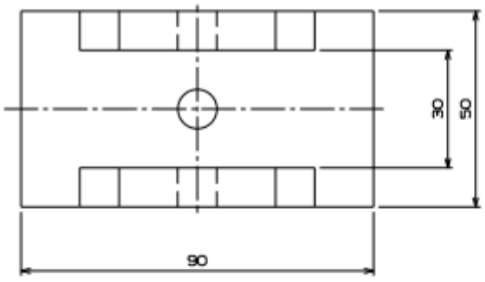
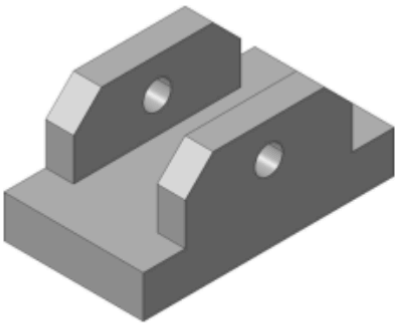
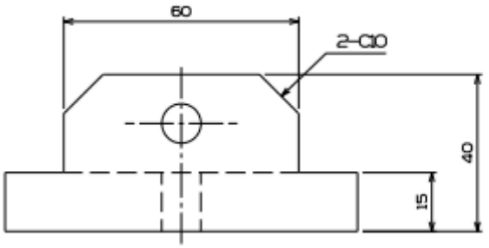
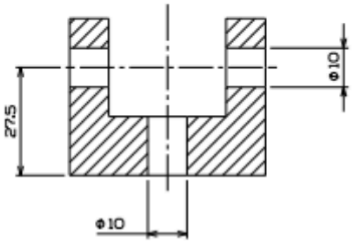
Mechanical design









Bài tập 218

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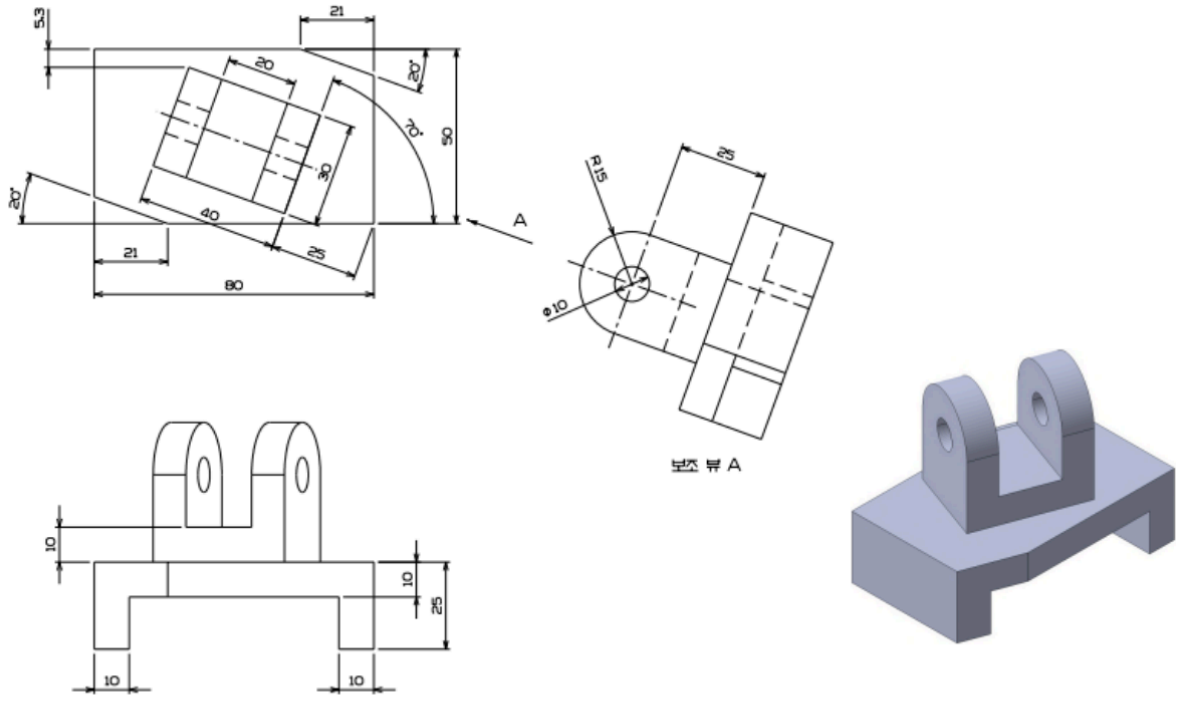
Mechanical design



Bài tập 219

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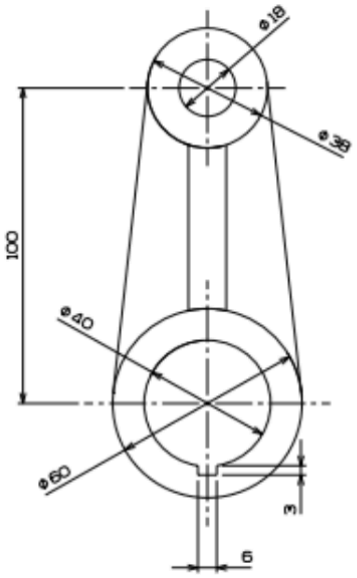
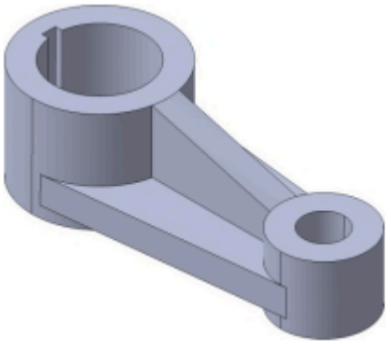
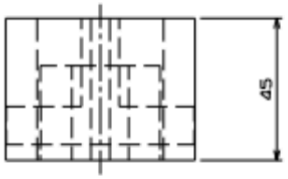
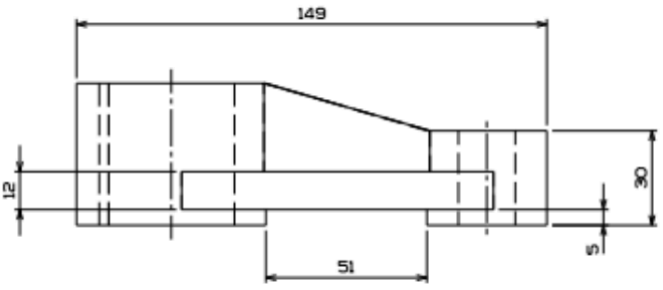
Mechanical design



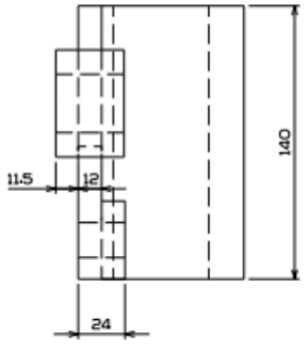


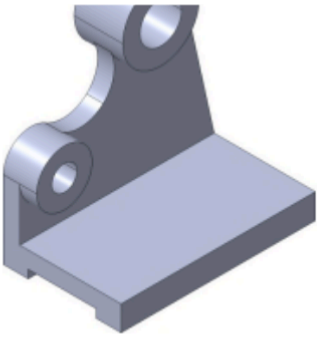


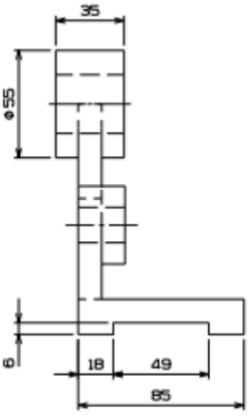


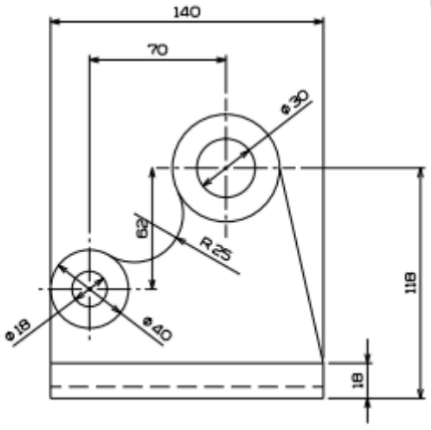
Bài tập 220

VADUNİ
Mechanical design



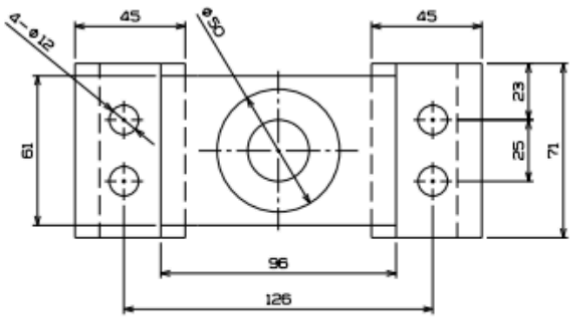


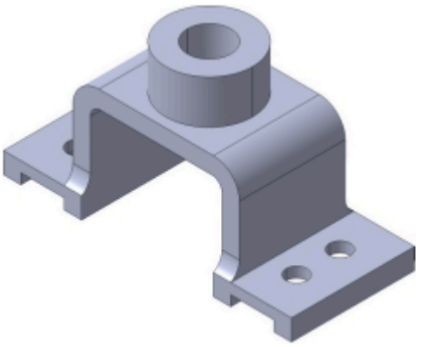


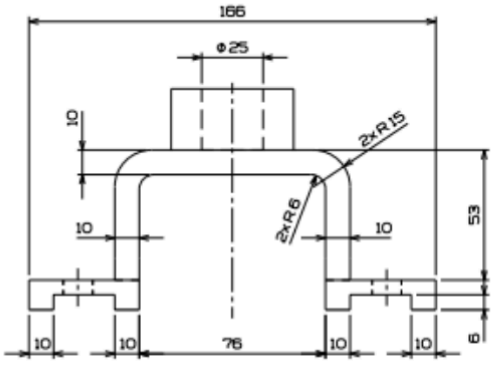


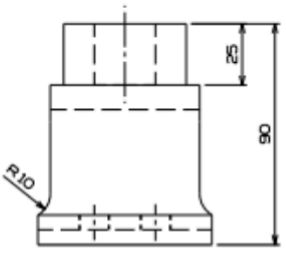
Bài tập 221

VADUNİ
Mechanical design



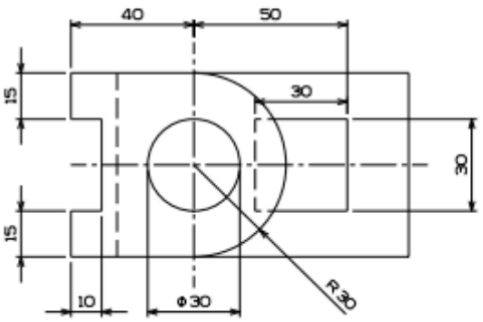


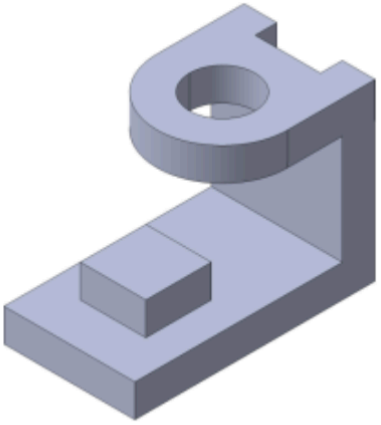


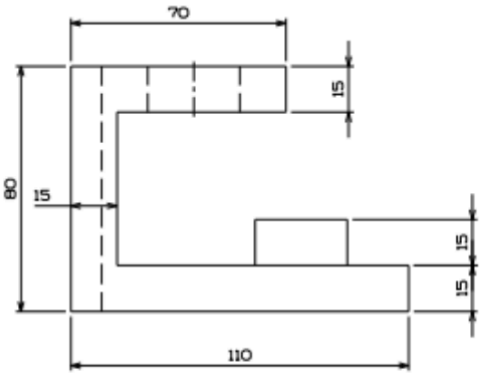


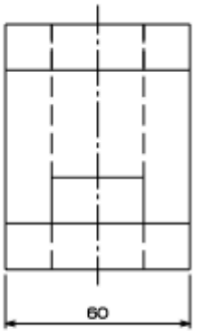
Bài tập 222

VADUNI
Mechanical design



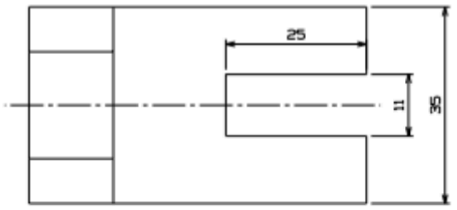


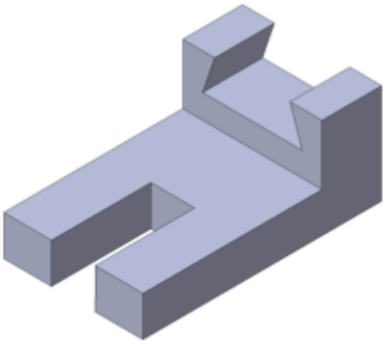


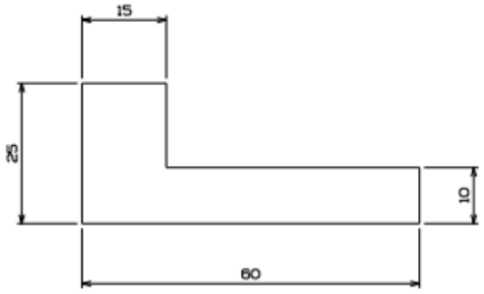


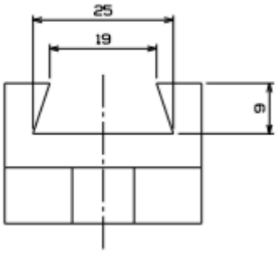
Bài tập 223

VADUNI
Mechanical design



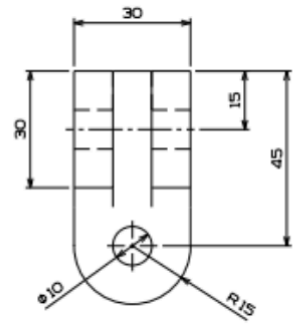


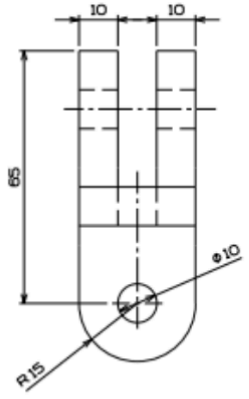


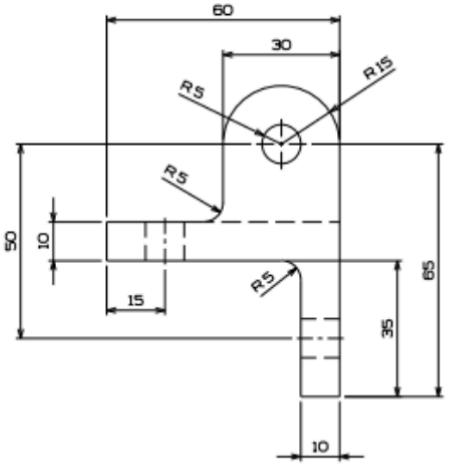


Bài tập 224

VADUNİ
Mechanical design

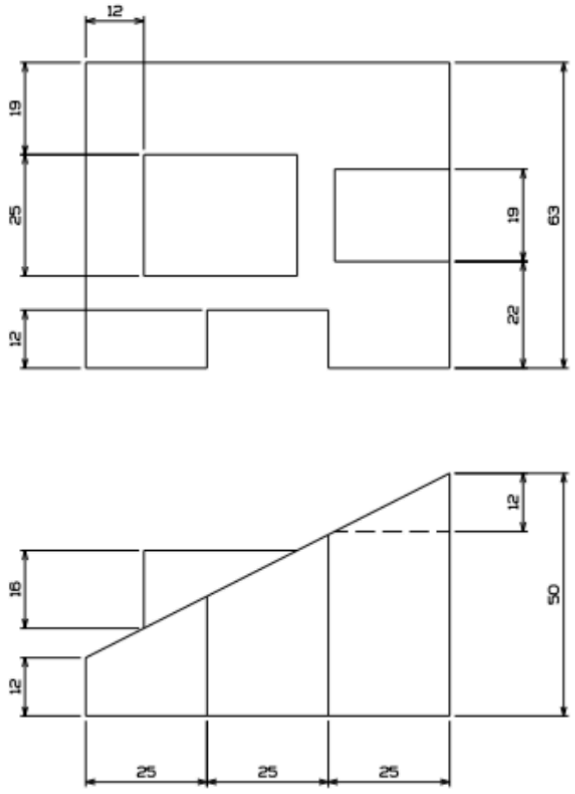






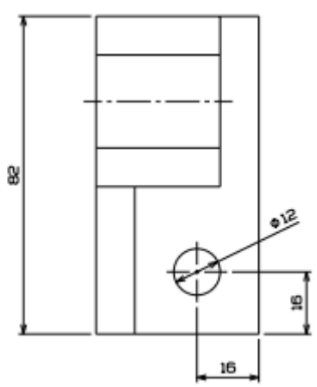
Bài tập 225

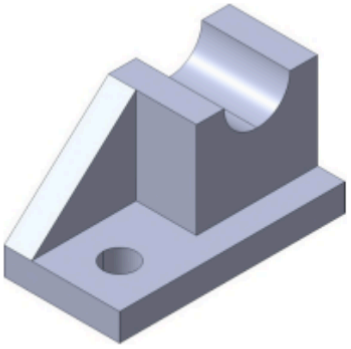
VADUNİ
Mechanical design

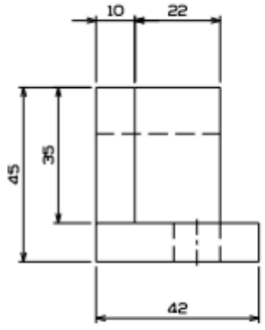


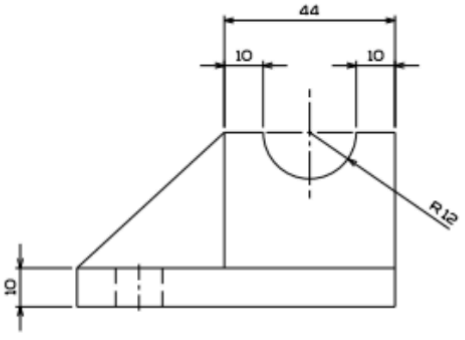
Bài tập 226

VADUNİ
Mechanical design



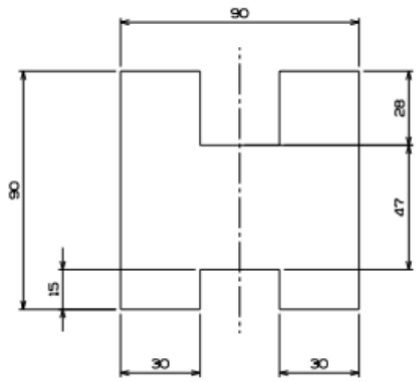


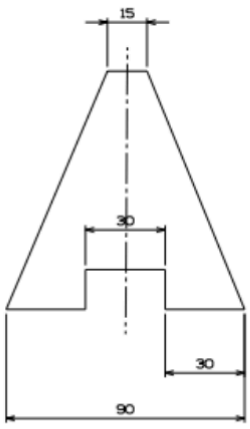




Bài tập 227

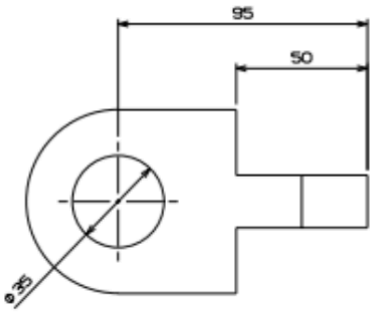
VADUNİ
Mechanical design

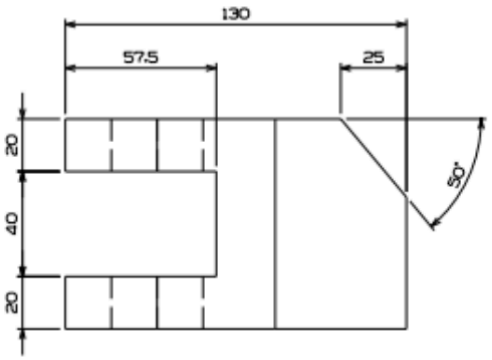


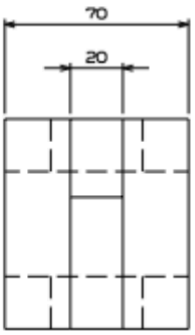


Bài tập 228

VADUNİ
Mechanical design

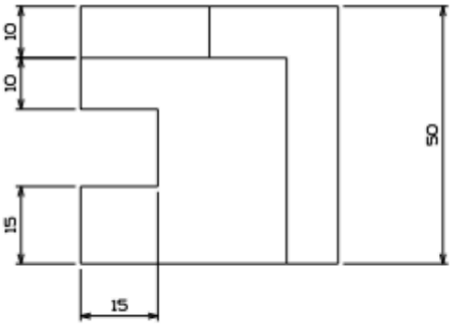


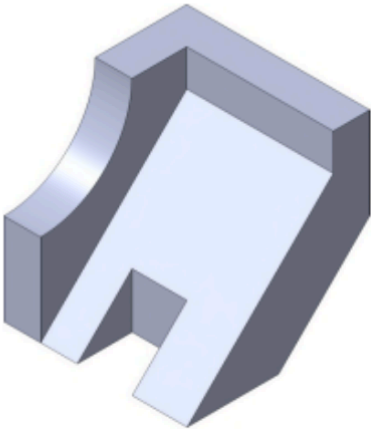


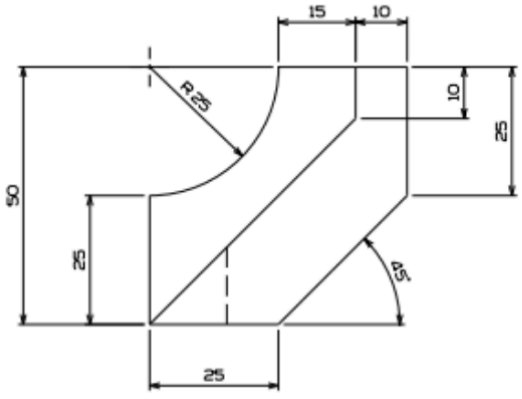


Bài tập 229

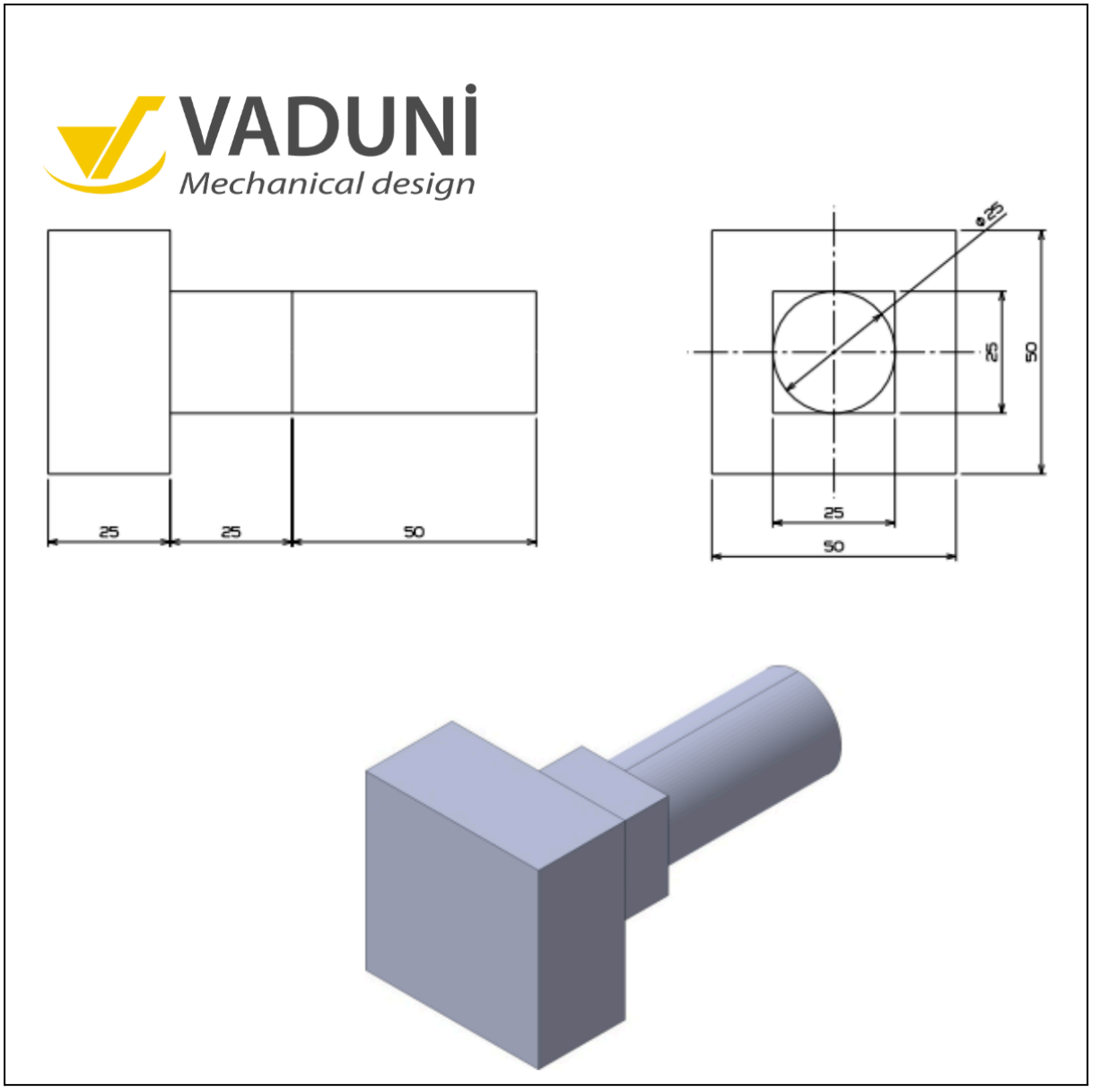
VADUNI
Mechanical design



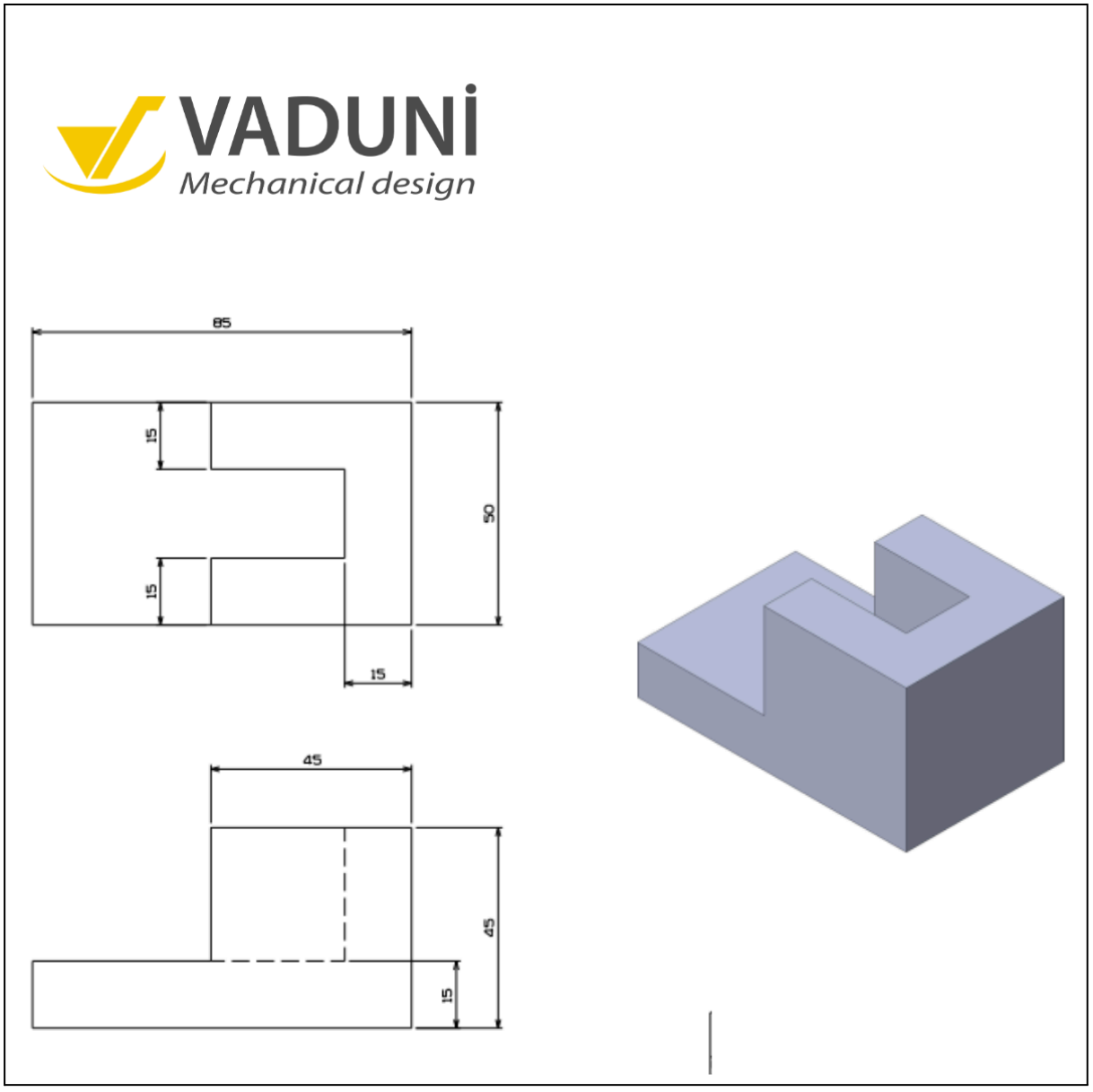




Bài tập 230

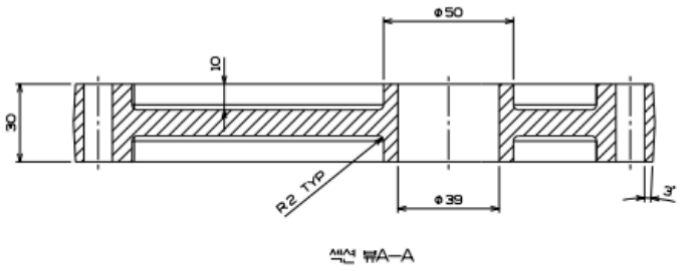


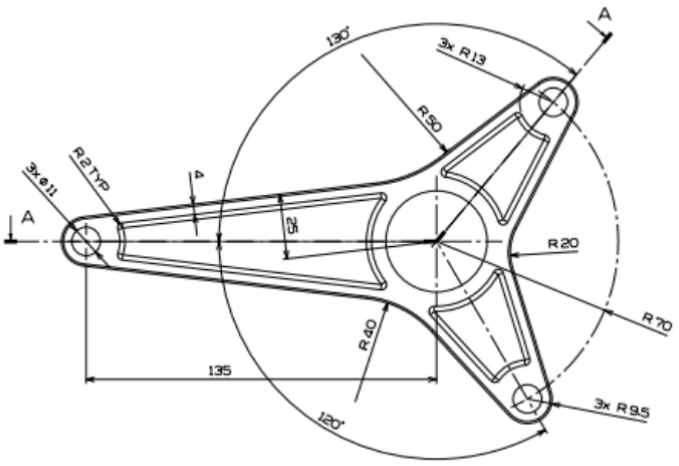
Bài tập 231

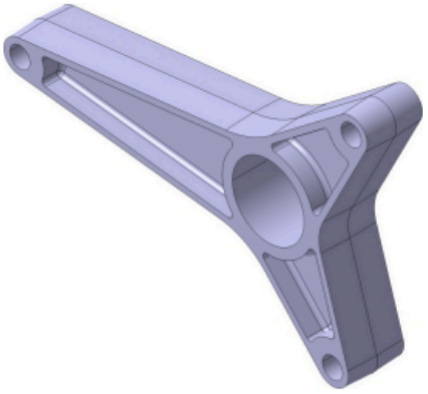


Bài tập 232

VADUNİ
Mechanical design







Bài tập 233

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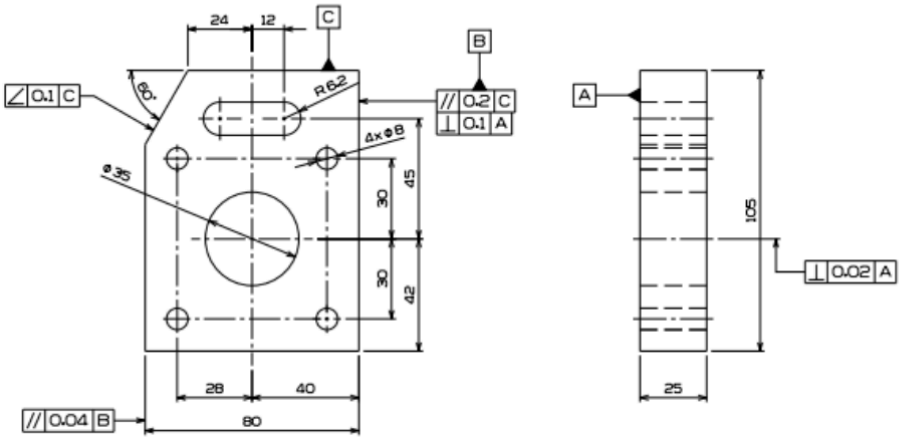
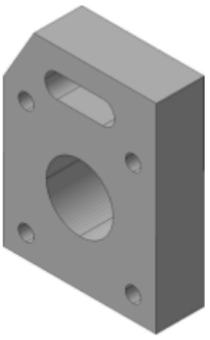
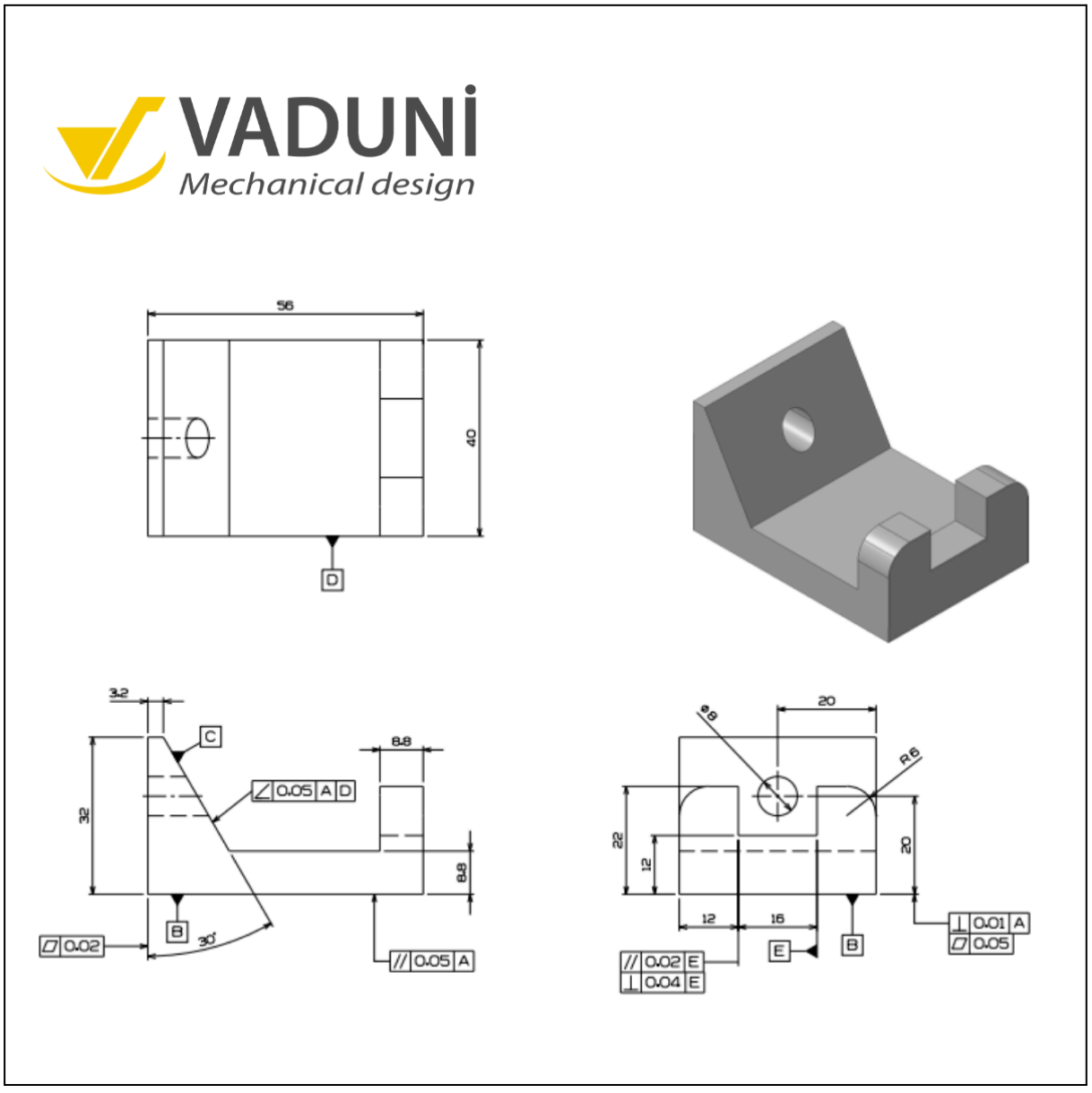
Mechanical design

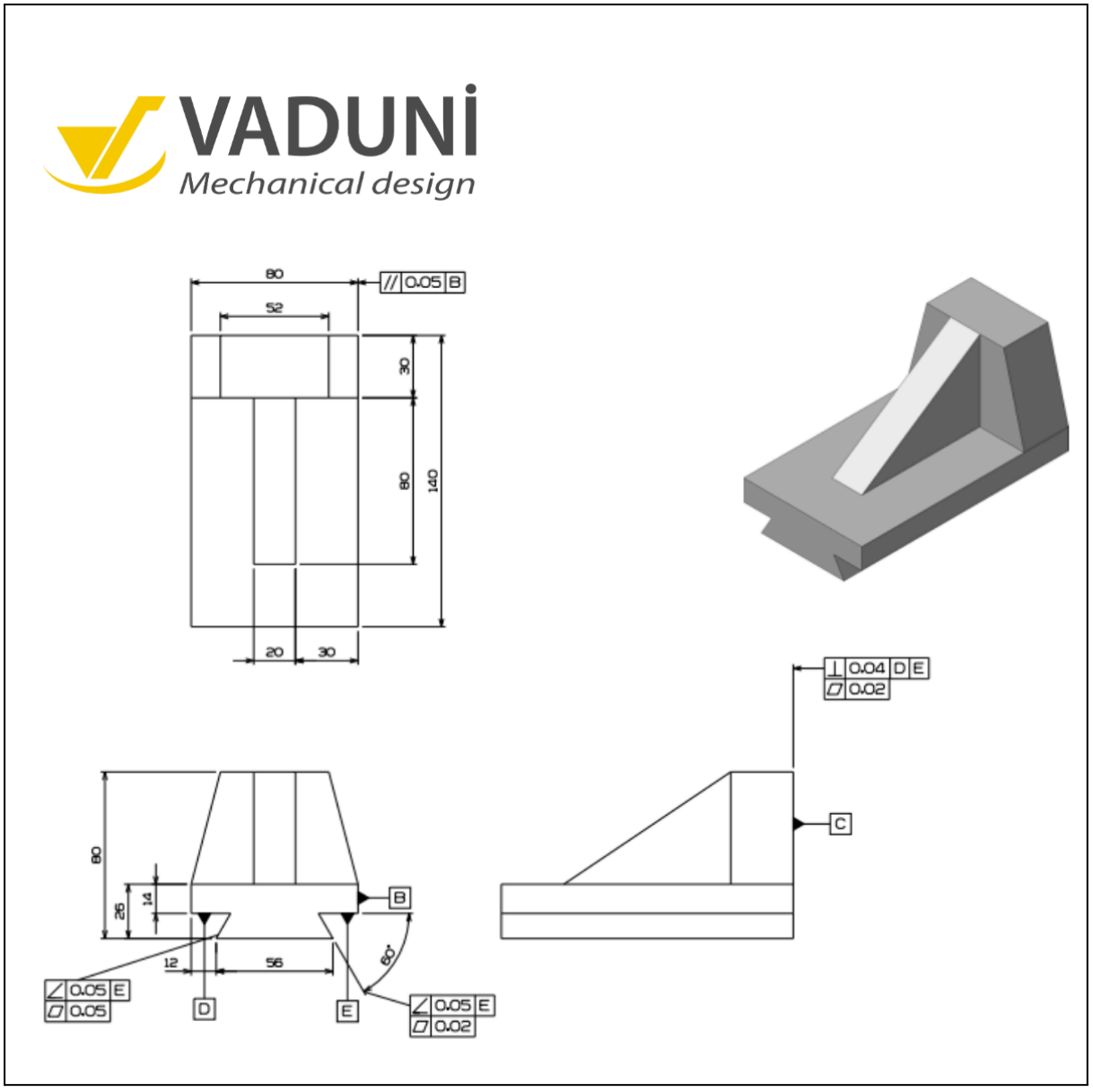




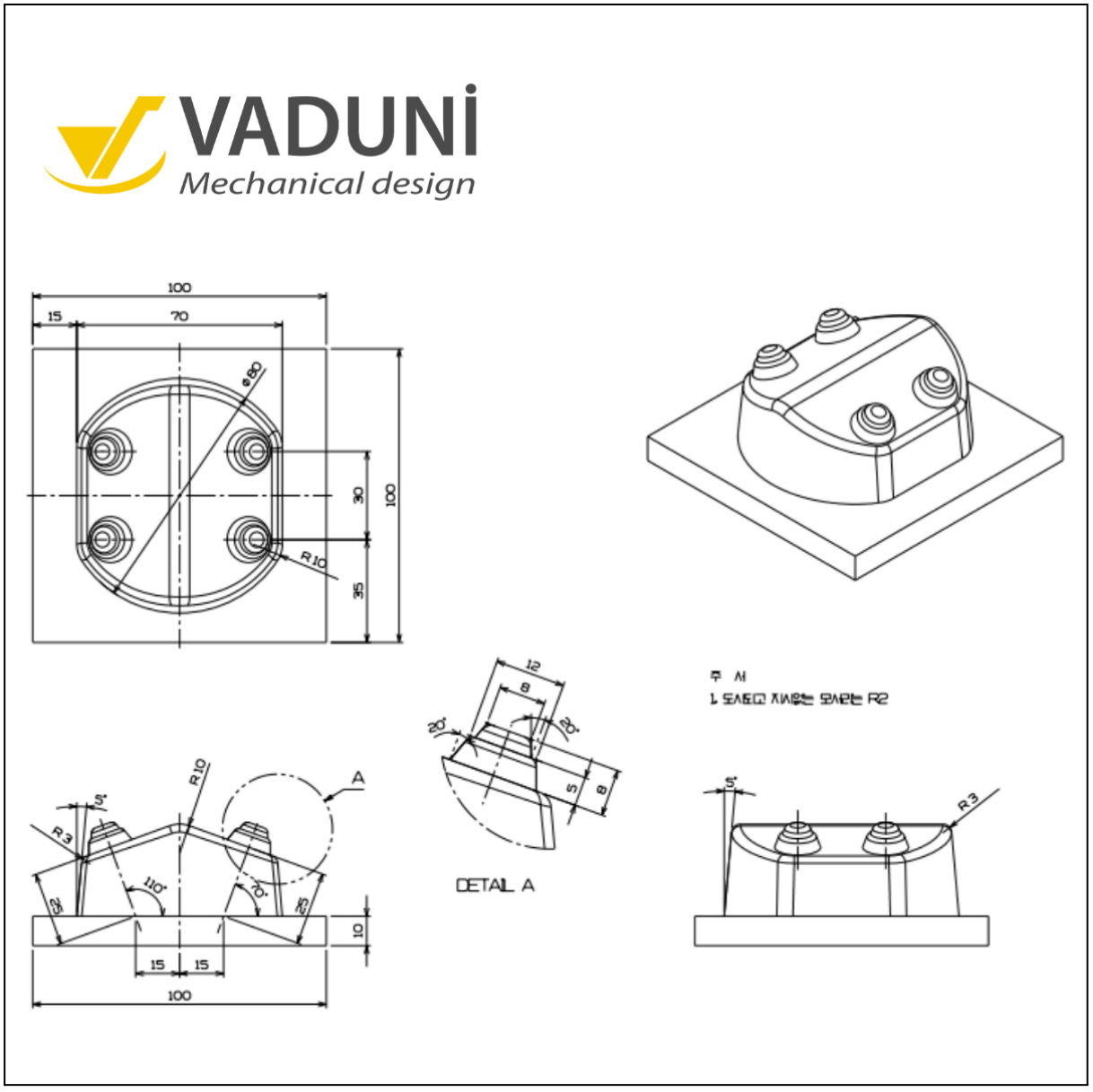
Bài tập 234


VADUNI
Mechanical design
56
40
D
3.2
C
8.8
32
0.05 A D
8.8
B
30°
0.02
0.05 A
ø8
20
R6
22
12
20
12
16
E
B
0.02 E
0.04 E
0.01 A
0.05

Bài tập 235

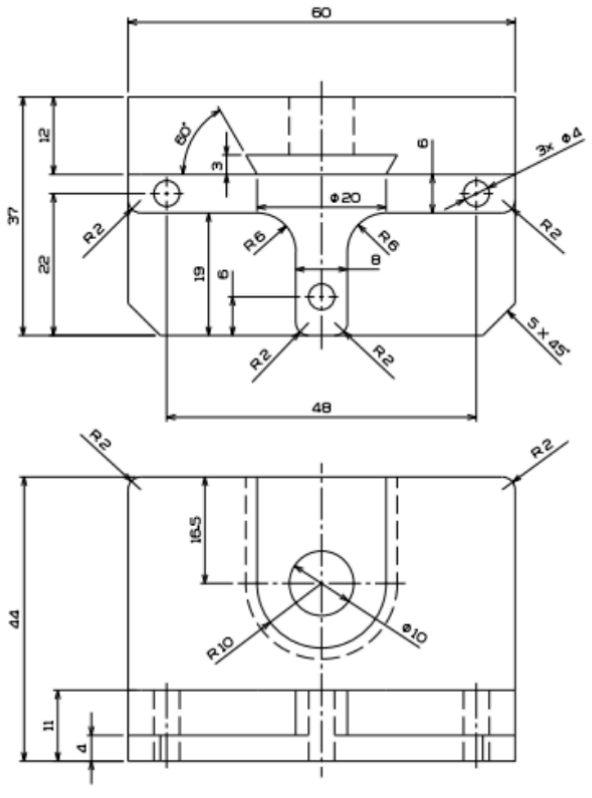

VADUNİ
Mechanical design
80
52
// 0.05 B
30
80
140
20
30
⊥ 0.04 D E
▱ 0.02
C
80
26
14
B
12
56
60°
∠ 0.05 E
▱ 0.05
D
E
∠ 0.05 E
▱ 0.02

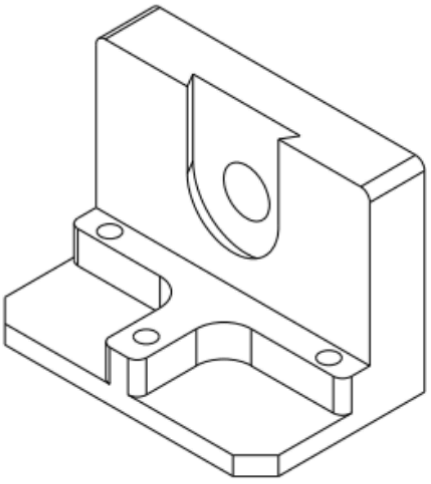
Bài tập 236


VADUNİ
Mechanical design
100
15
70
ø80
30
100
R10
35
DETAIL A
12
8
20°
5
8
R3
110°
70°
23
10
15
15
100

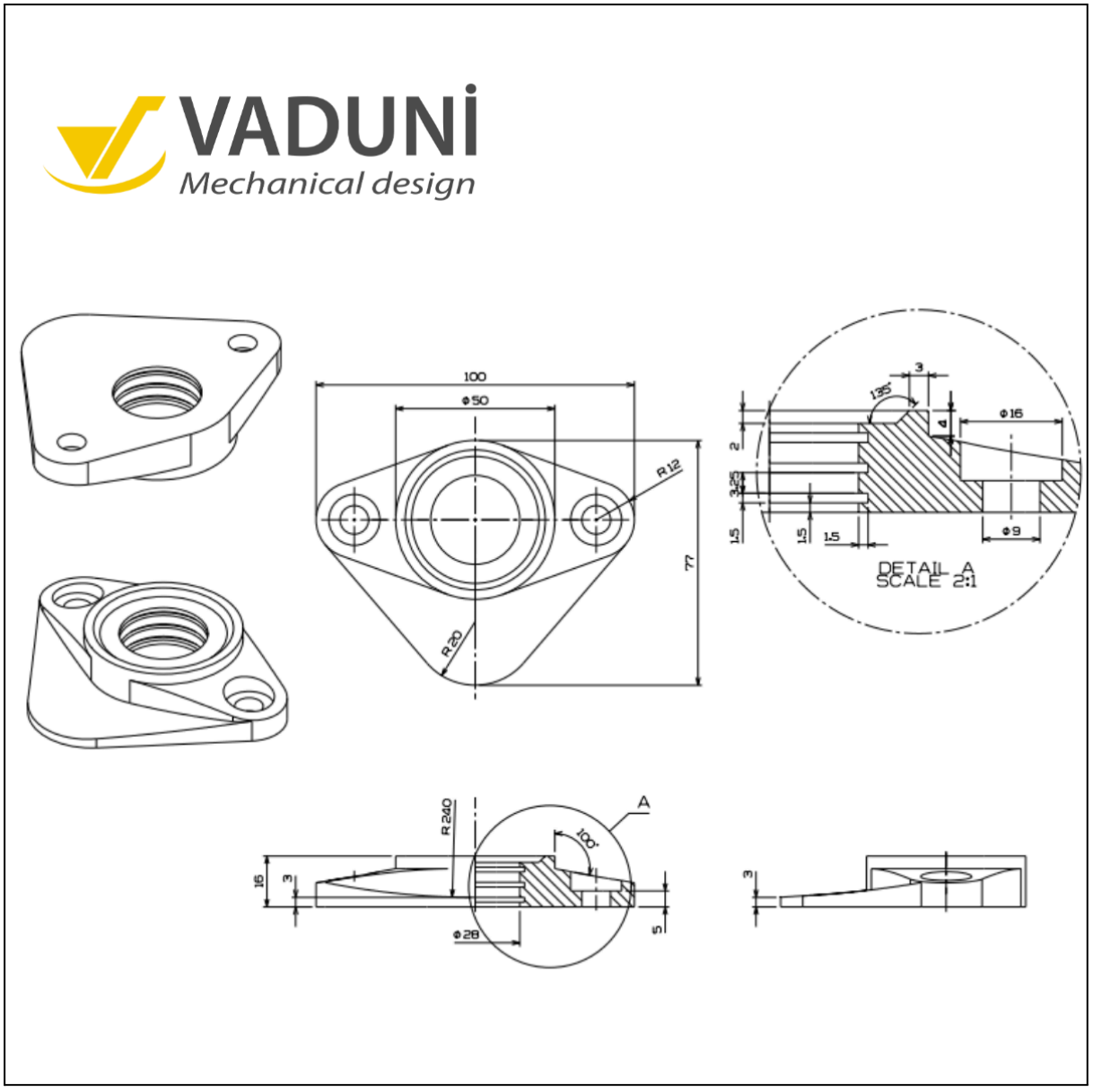
Bài tập 237

VADUNİ
Mechanical design

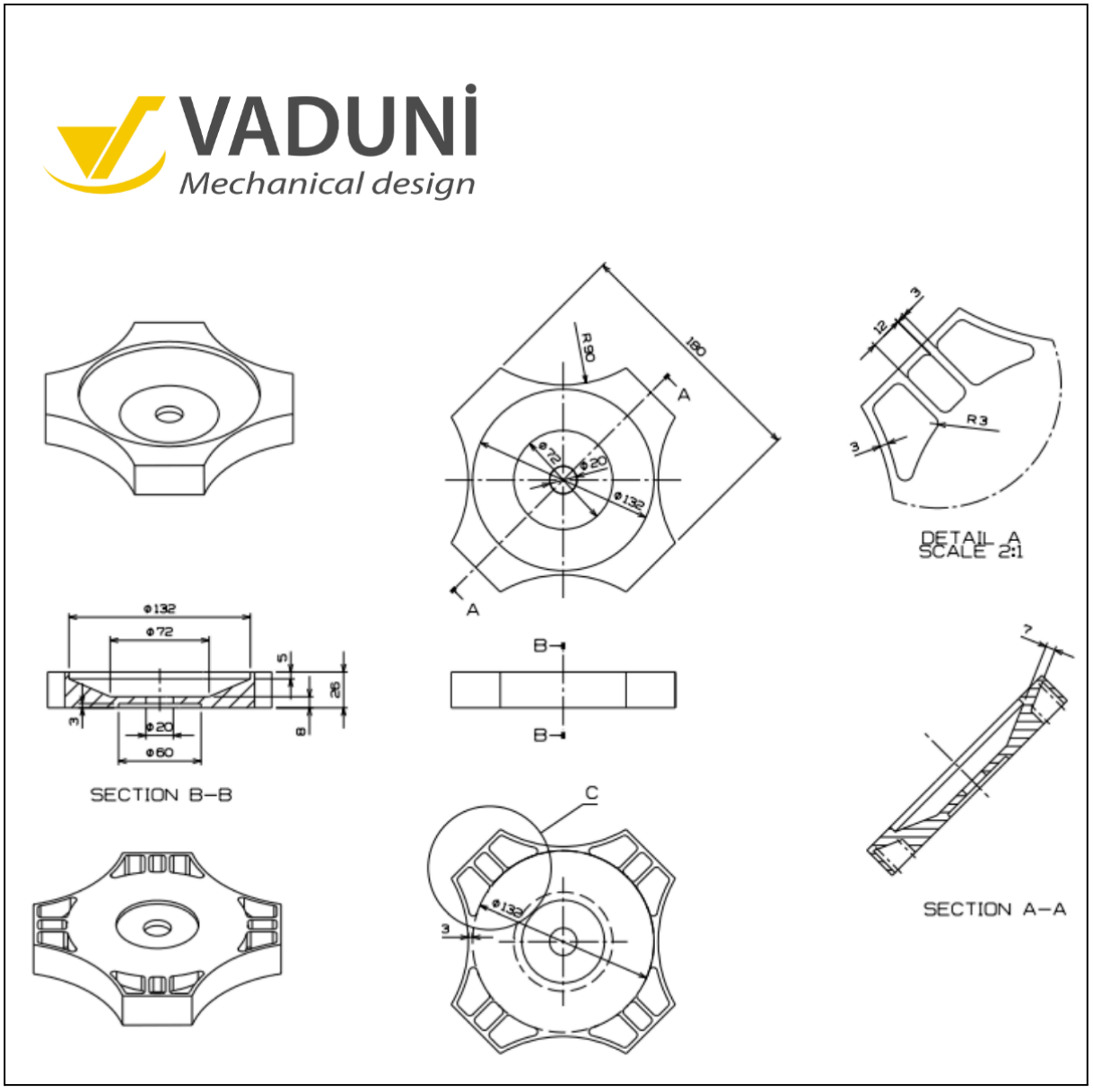




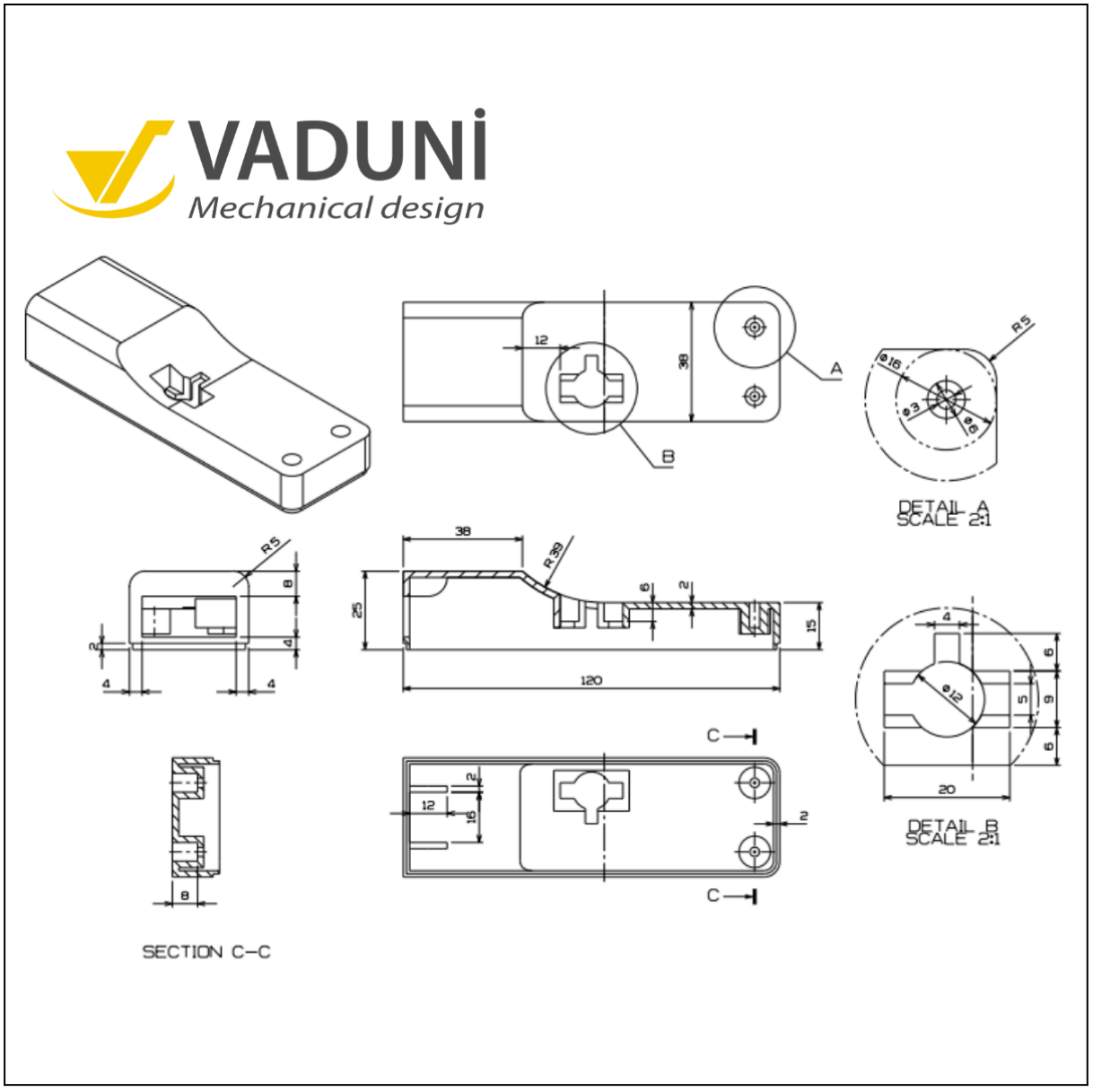
Bài tập 238


VADUNİ
Mechanical design
100
Φ50
R12
77
R20
3
135°
4
Φ16
2
3.25
1.5
1.5
1.5
Φ9
DETAIL A
SCALE 2:1
R240
A
100°
15
3
Φ28
5
3

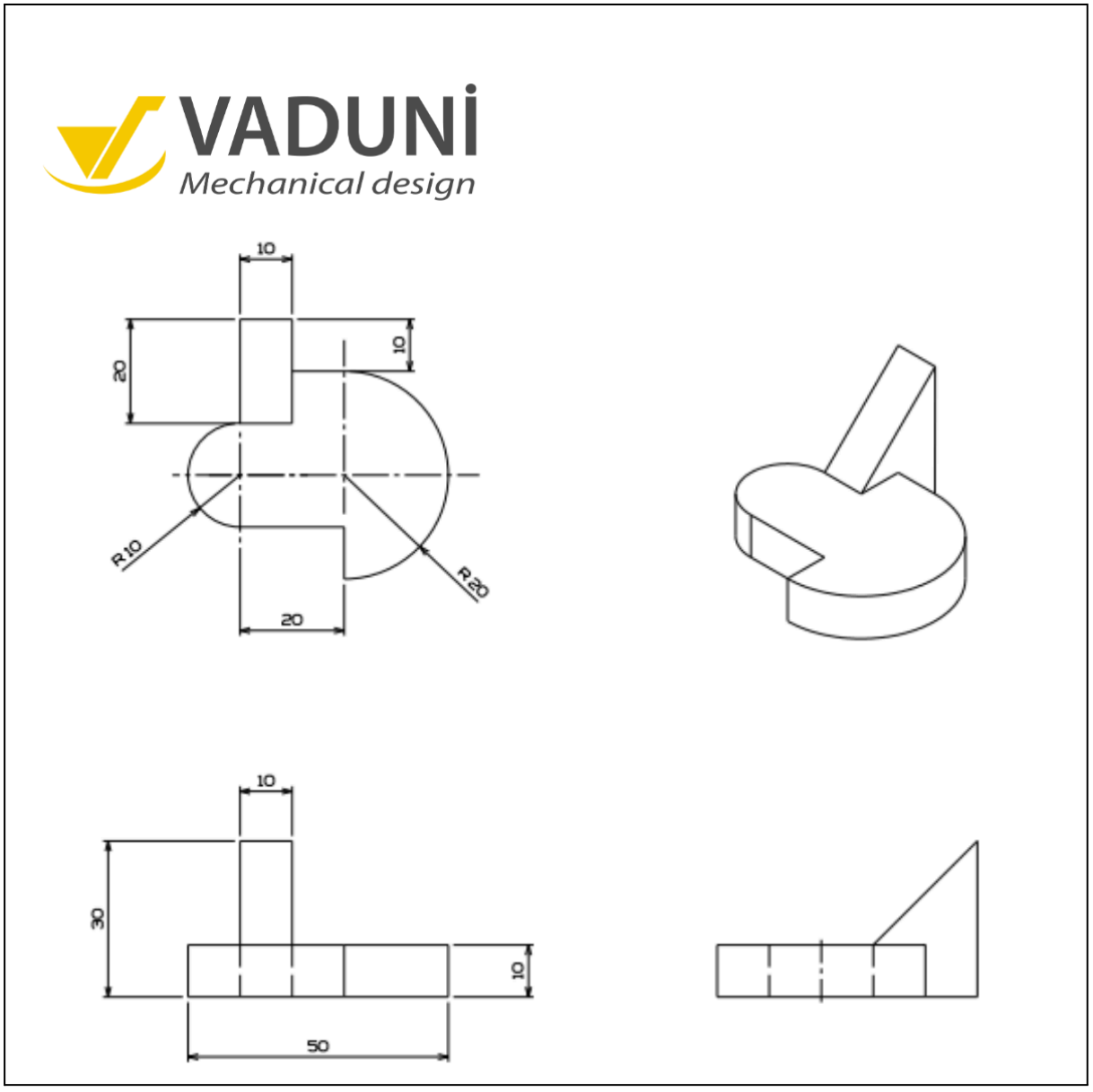
Bài tập 239


VADUNİ
Mechanical design
R90
180
A
Φ72
Φ20
Φ132
DETAIL A
SCALE 2:1
12
3
R3
Φ132
Φ72
Φ20
Φ60
5
20
3
8
SECTION B–B
B
B
C
Φ132
3
7
SECTION A–A

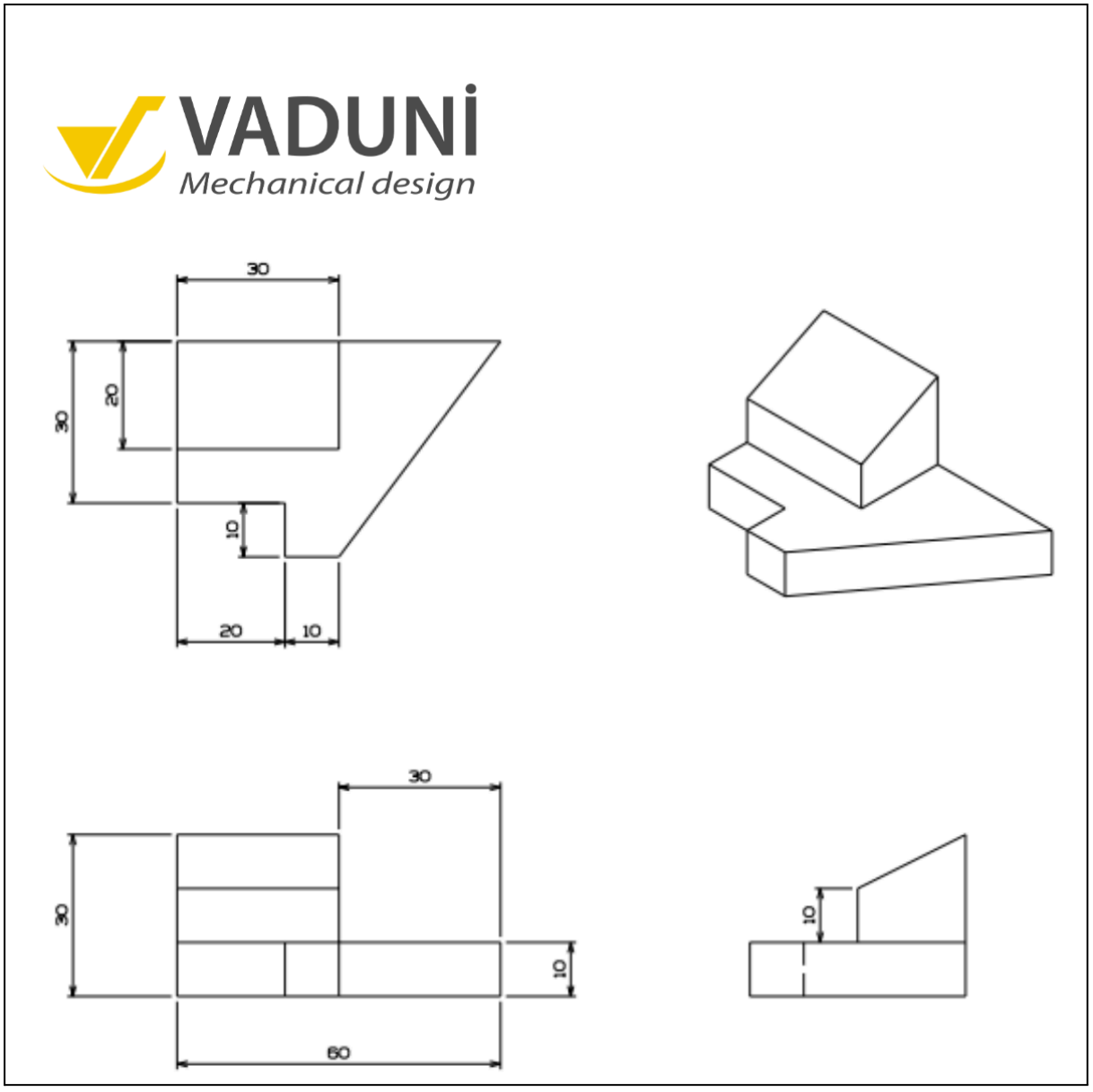
Bài tập 240


VADUNİ
Mechanical design
12
38
A
B
R5
ø16
ø3
ø6
DETAIL A
SCALE 2:1
38
R39
6
2
25
15
120
R5
8
2
4
4
4
C
C
12
2
16
2
8
SECTION C–C
4
ø12
6
5
9
6
20
DETAIL B
SCALE 2:1

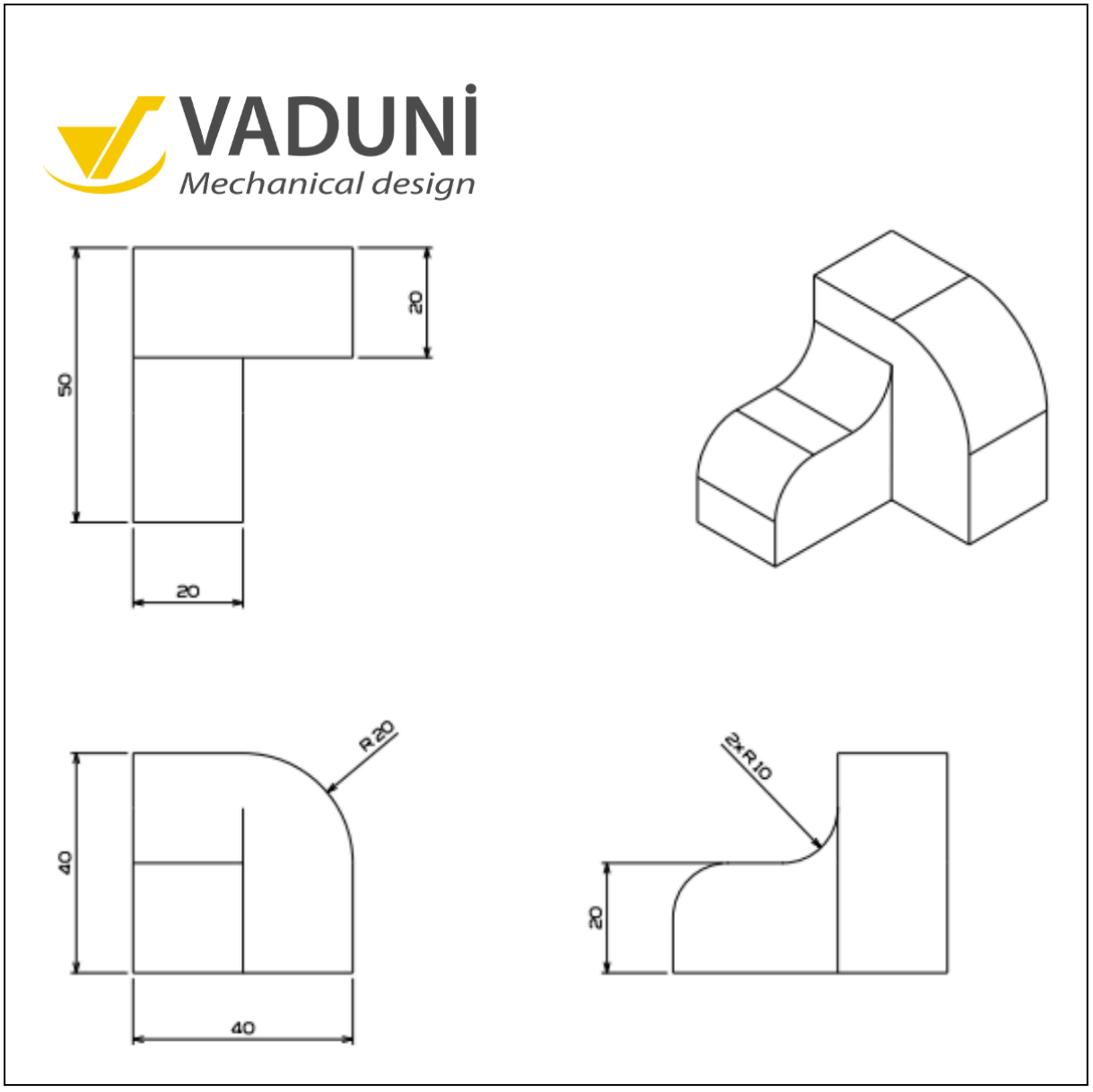
Bài tập 241



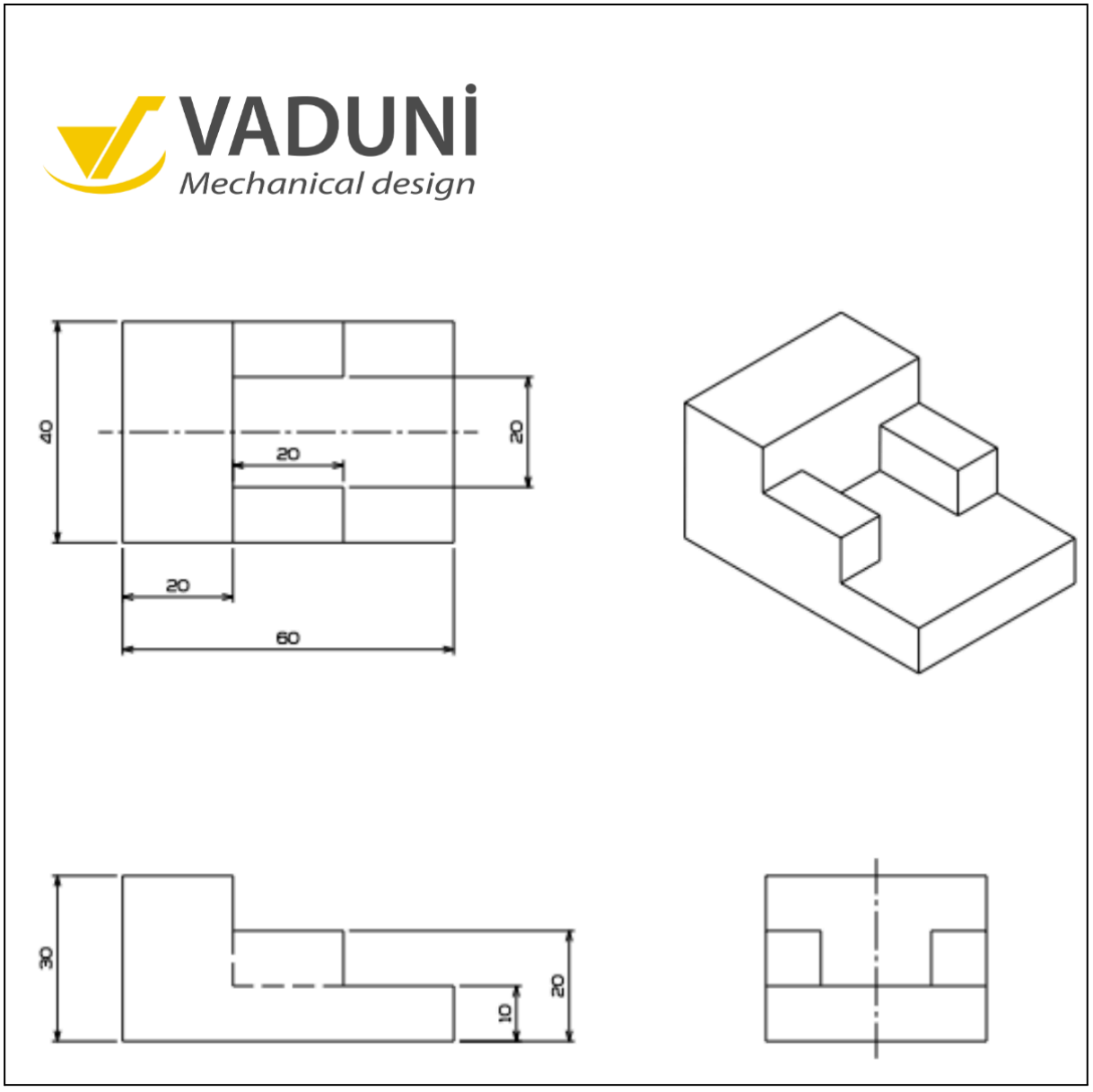
Bài tập 242



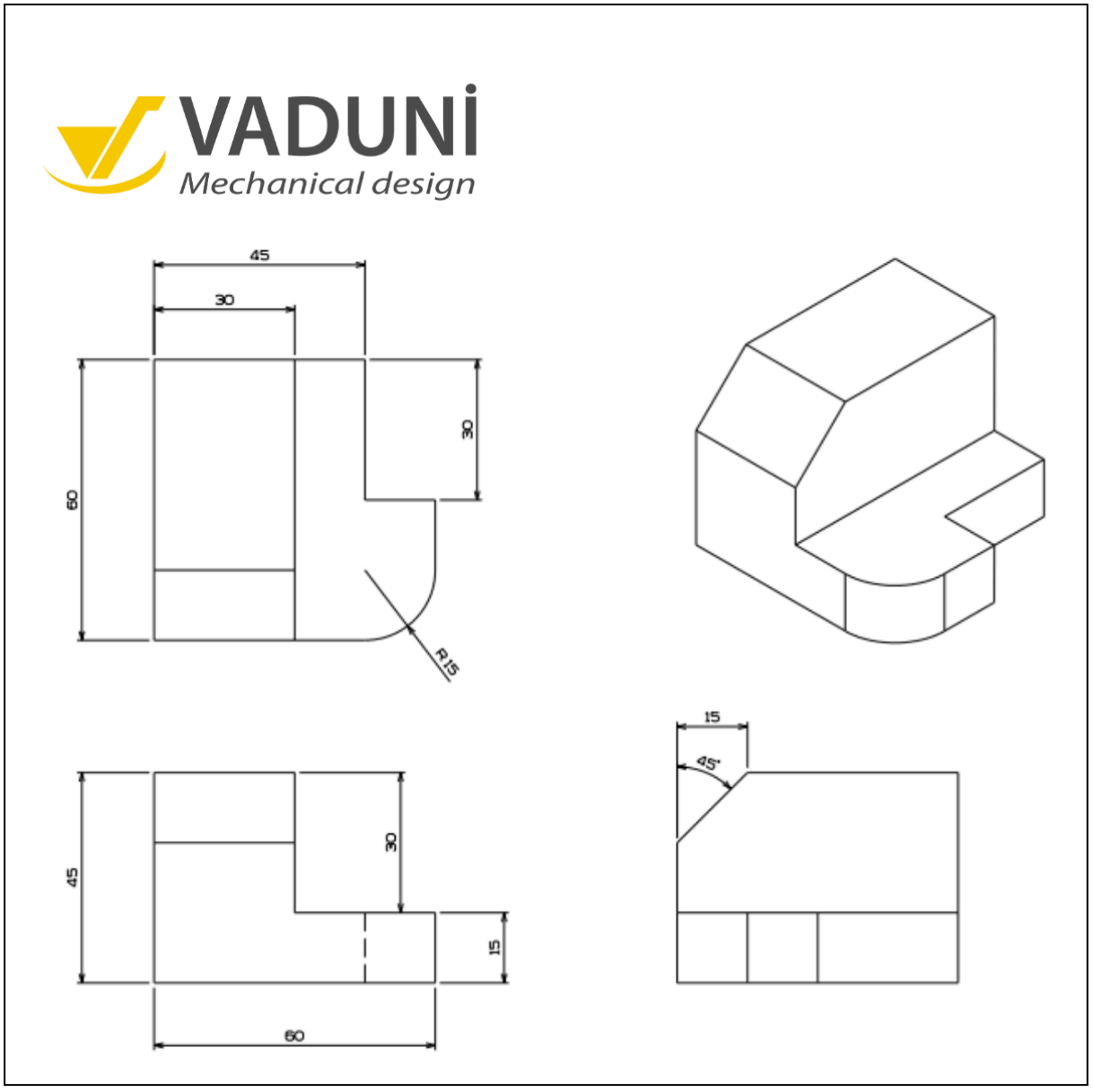
Bài tập 243



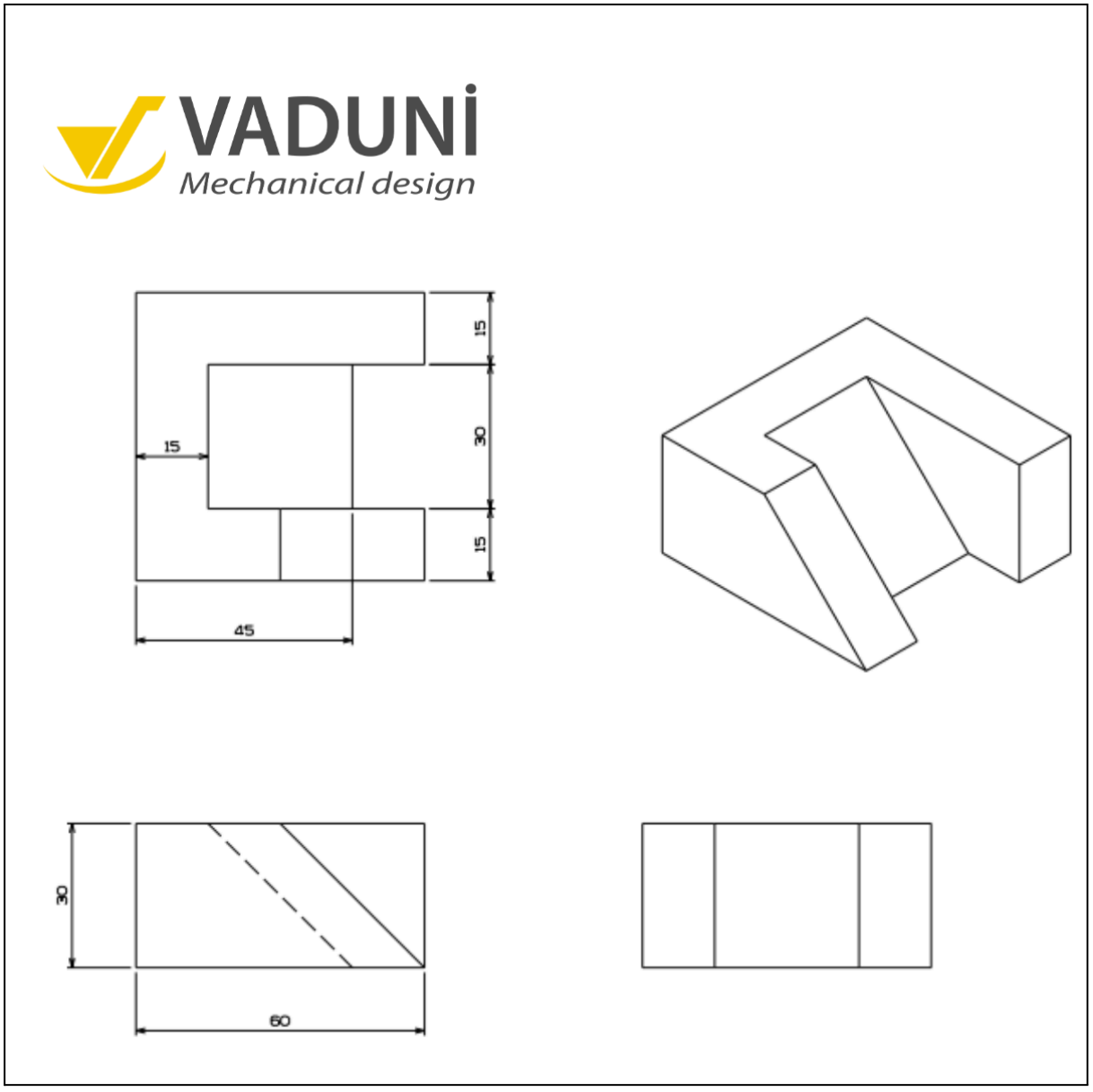
Bài tập 244



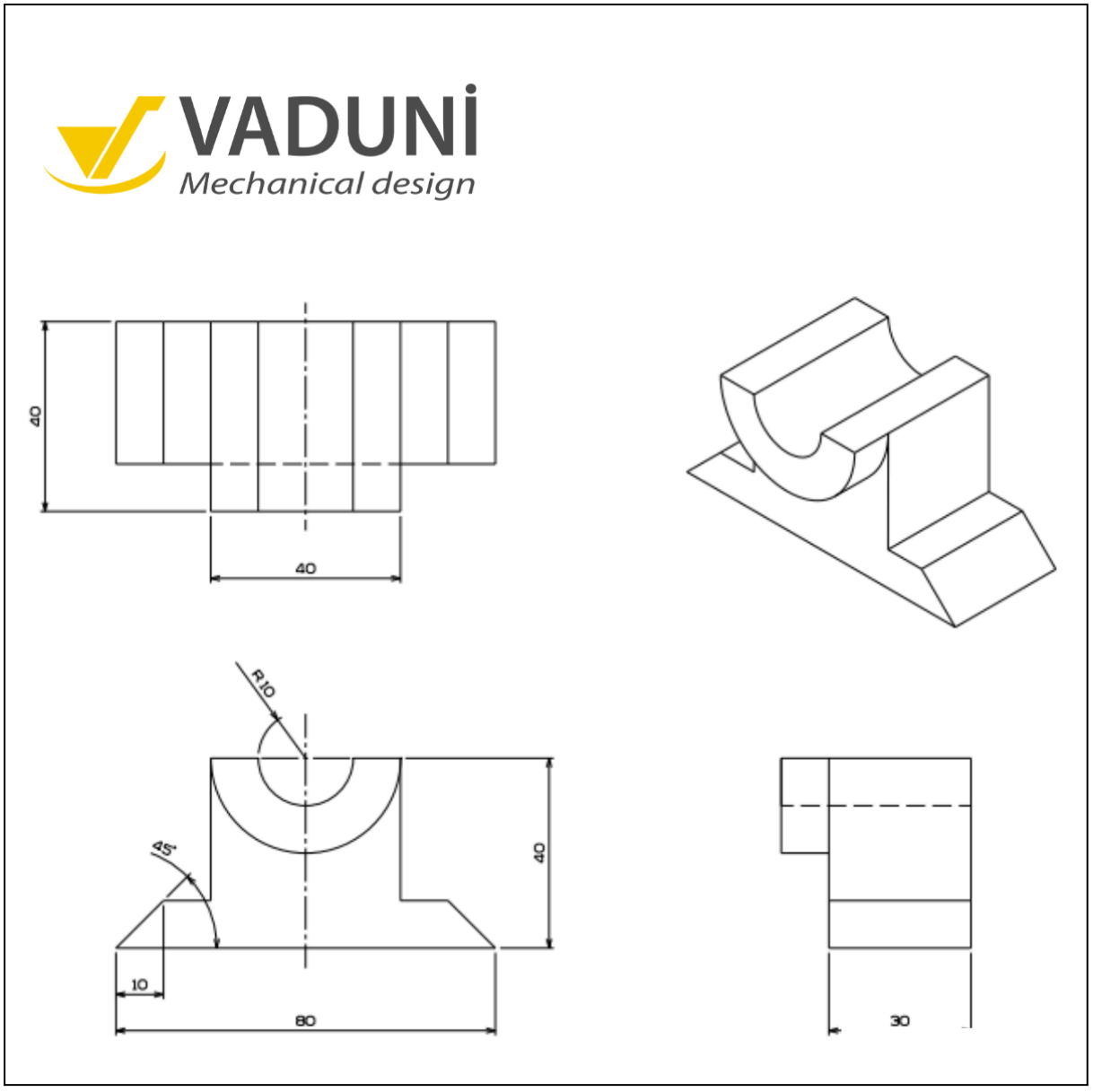
Bài tập 245



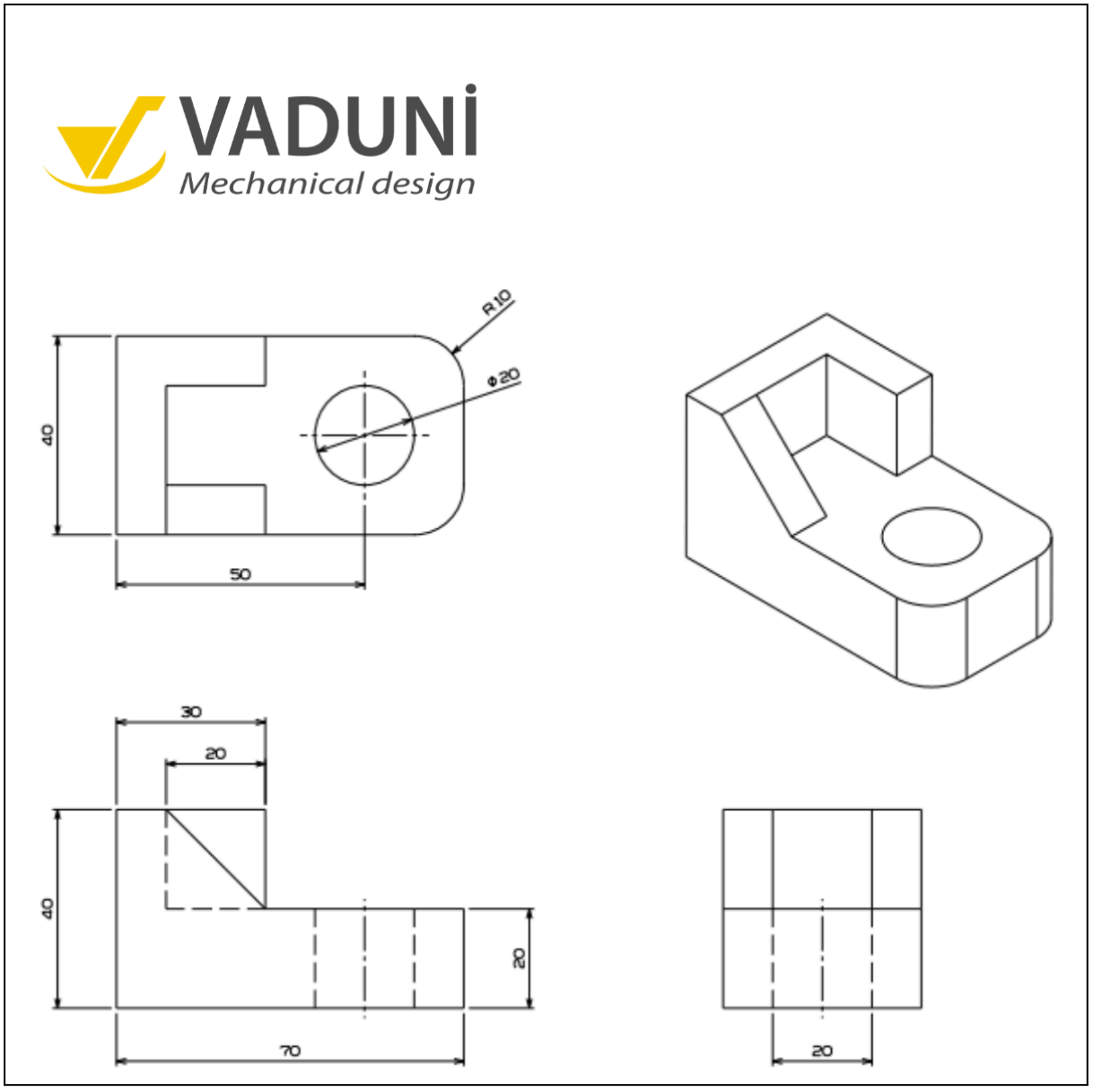
Bài tập 246



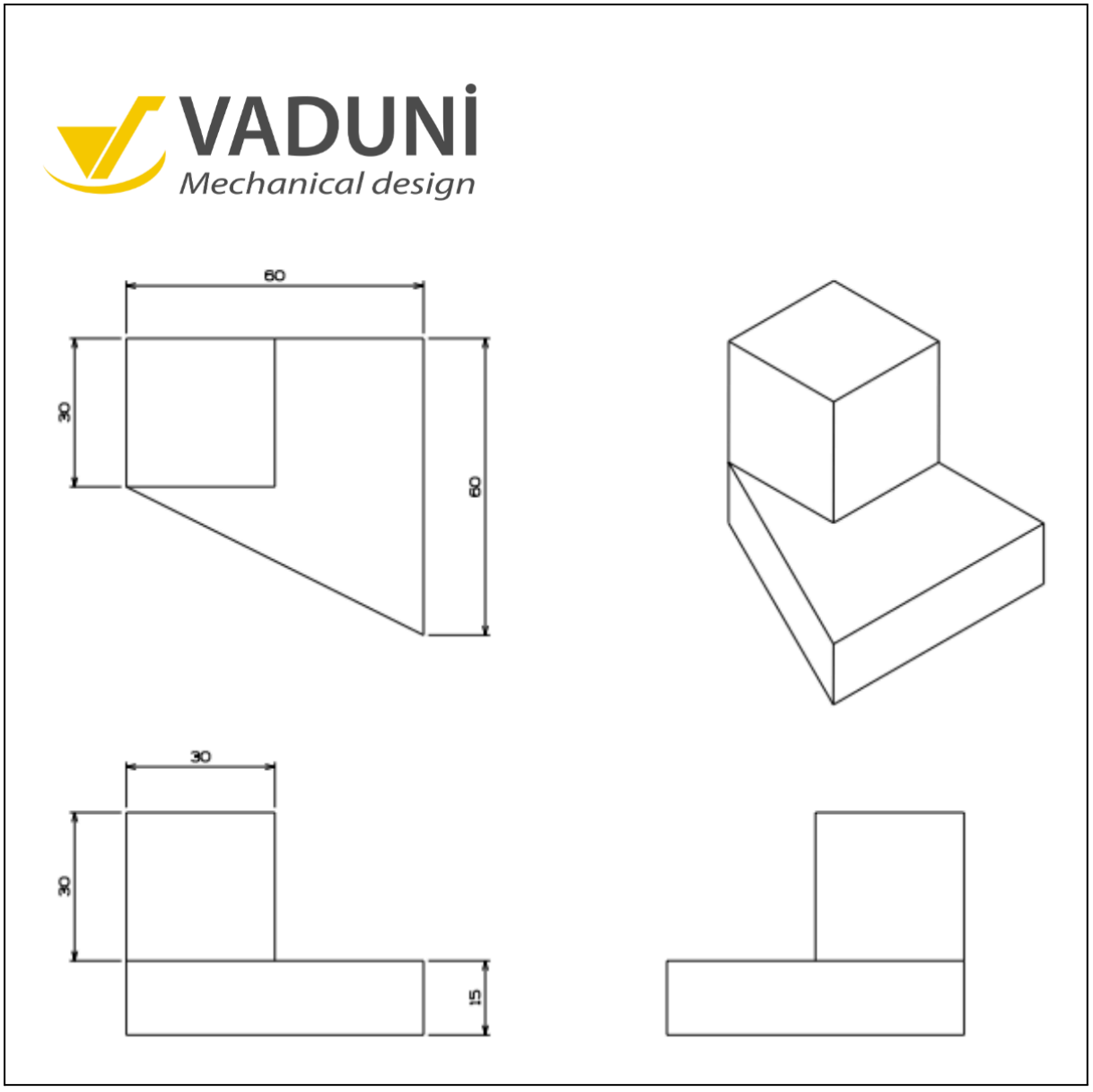
Bài tập 247



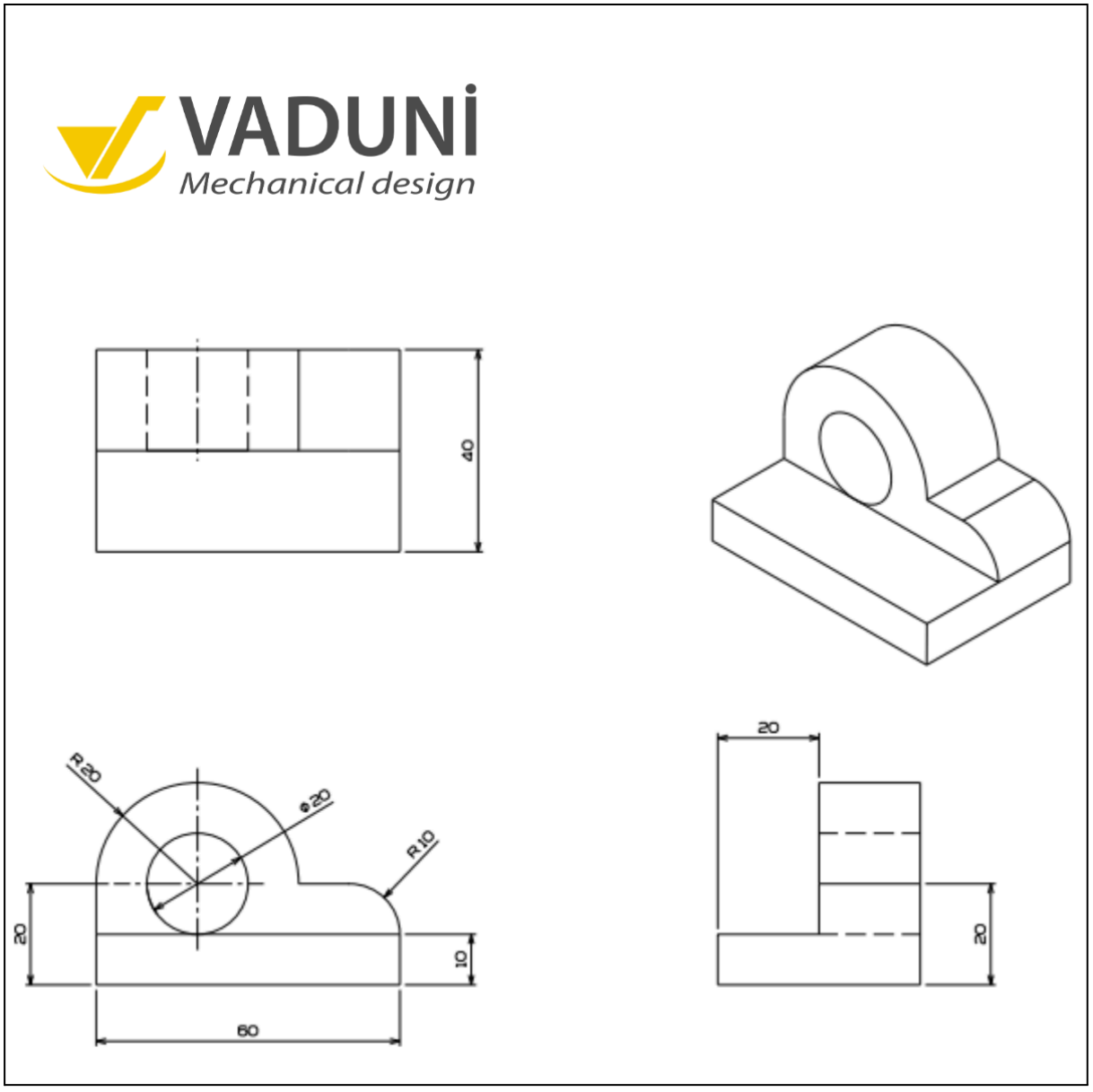
Bài tập 248



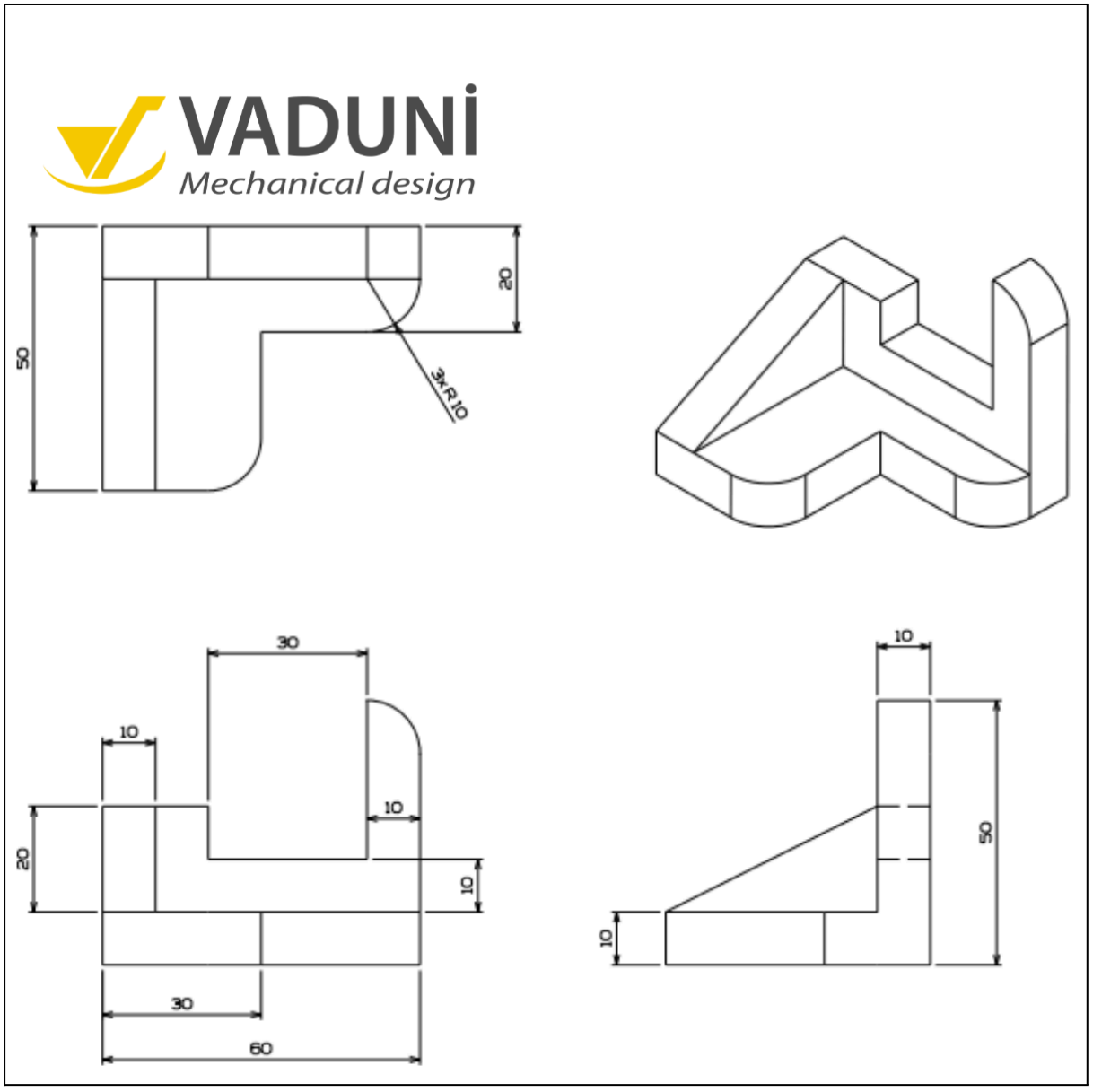
Bài tập 249



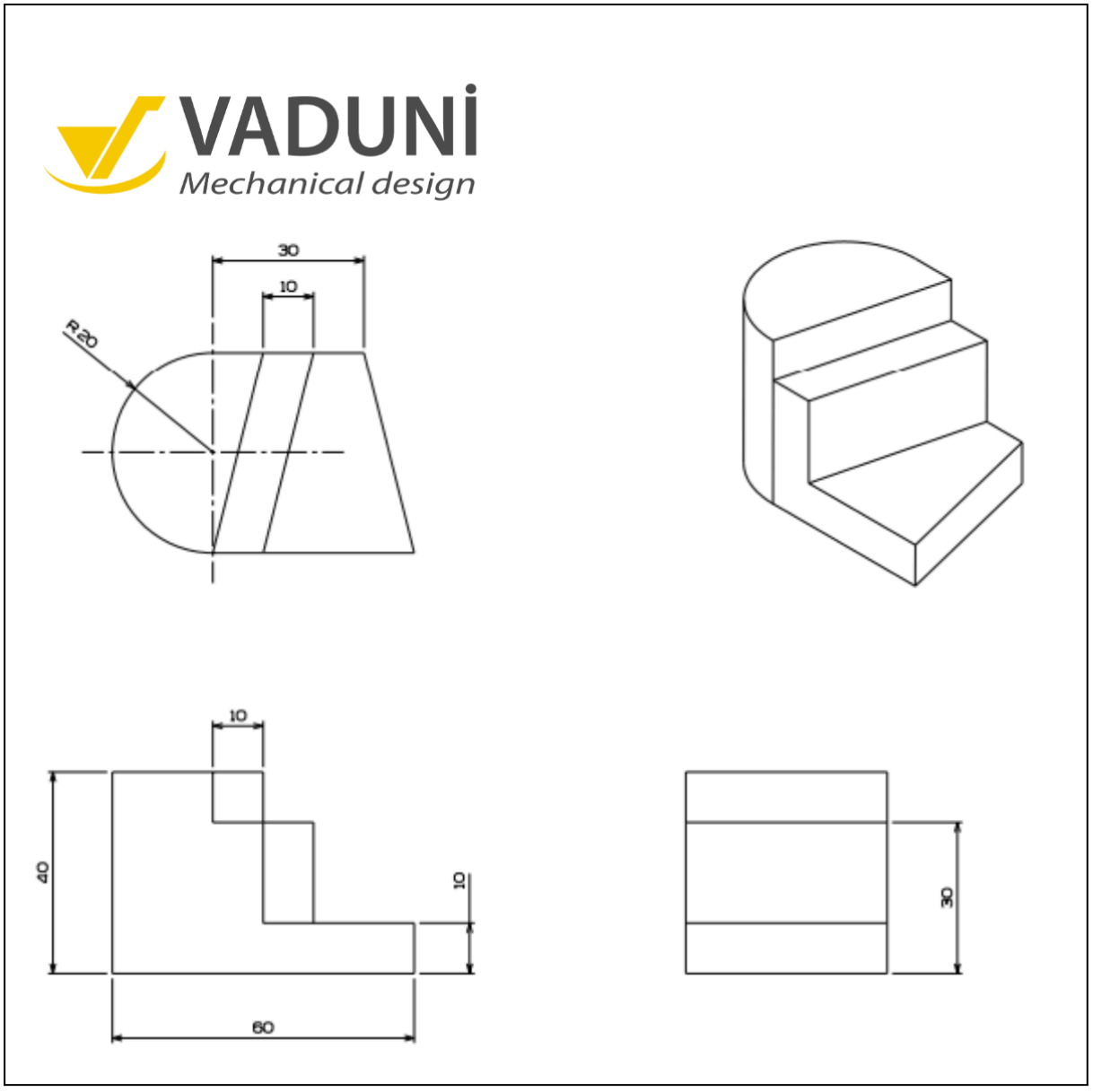
Bài tập 250



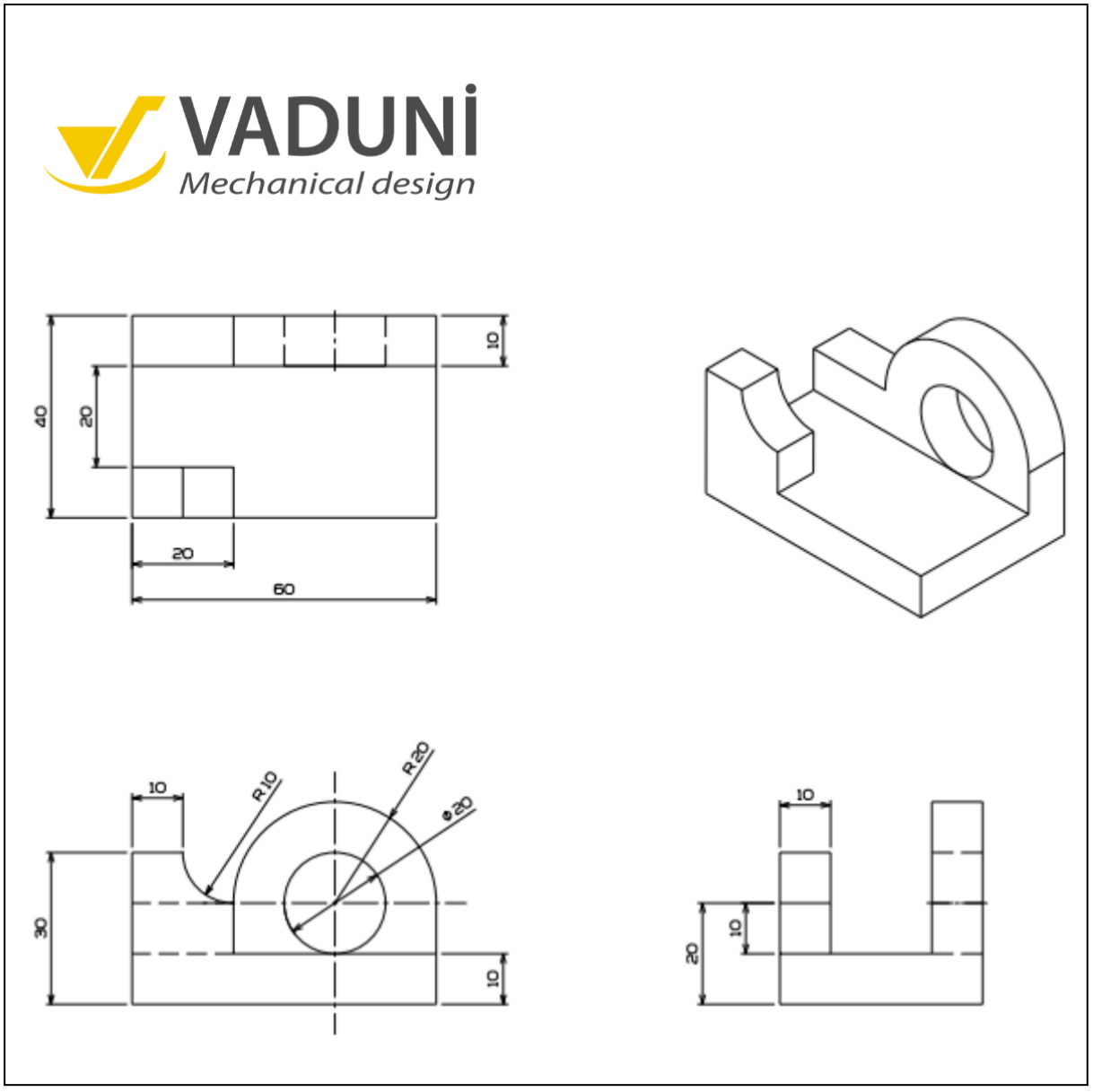
Bài tập 251


VADUNİ
Mechanical design
50
20
3xR10
30
10
10
20
10
30
60
10
10
50
10

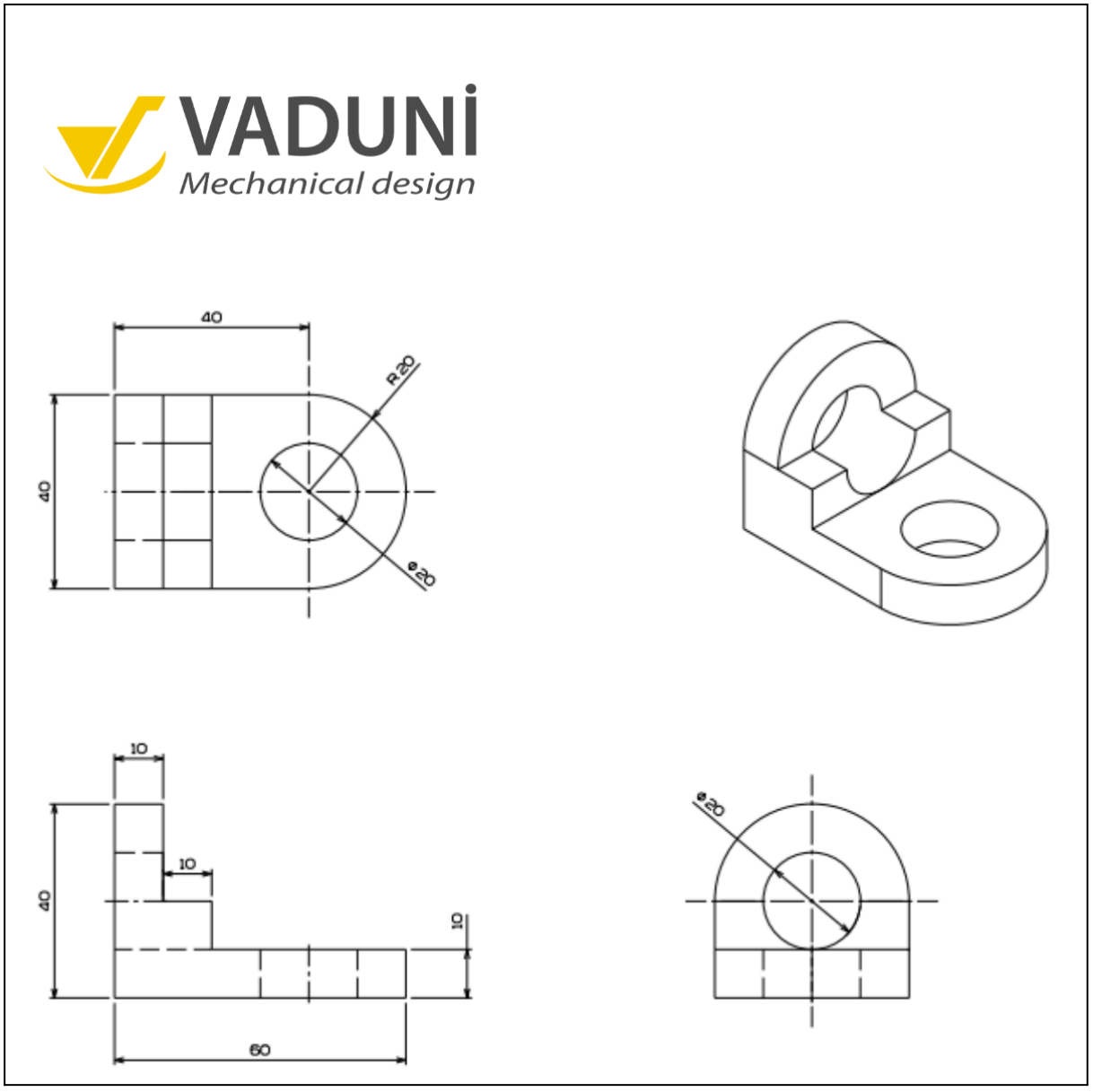
Bài tập 252



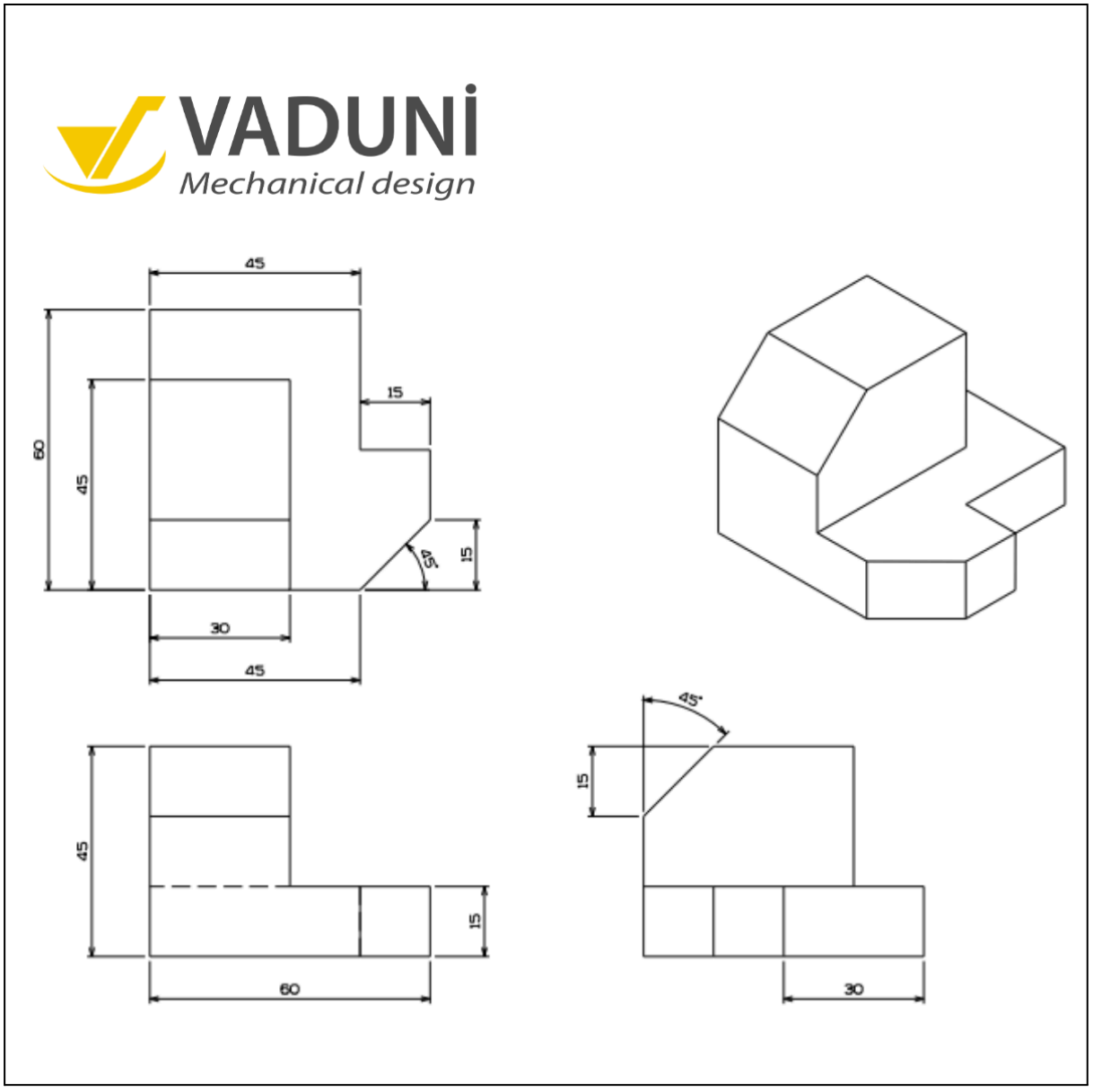
Bài tập 253


VADUNI
Mechanical design
40
20
10
20
60
10
R10
R20
ø20
30
10
10
20
10

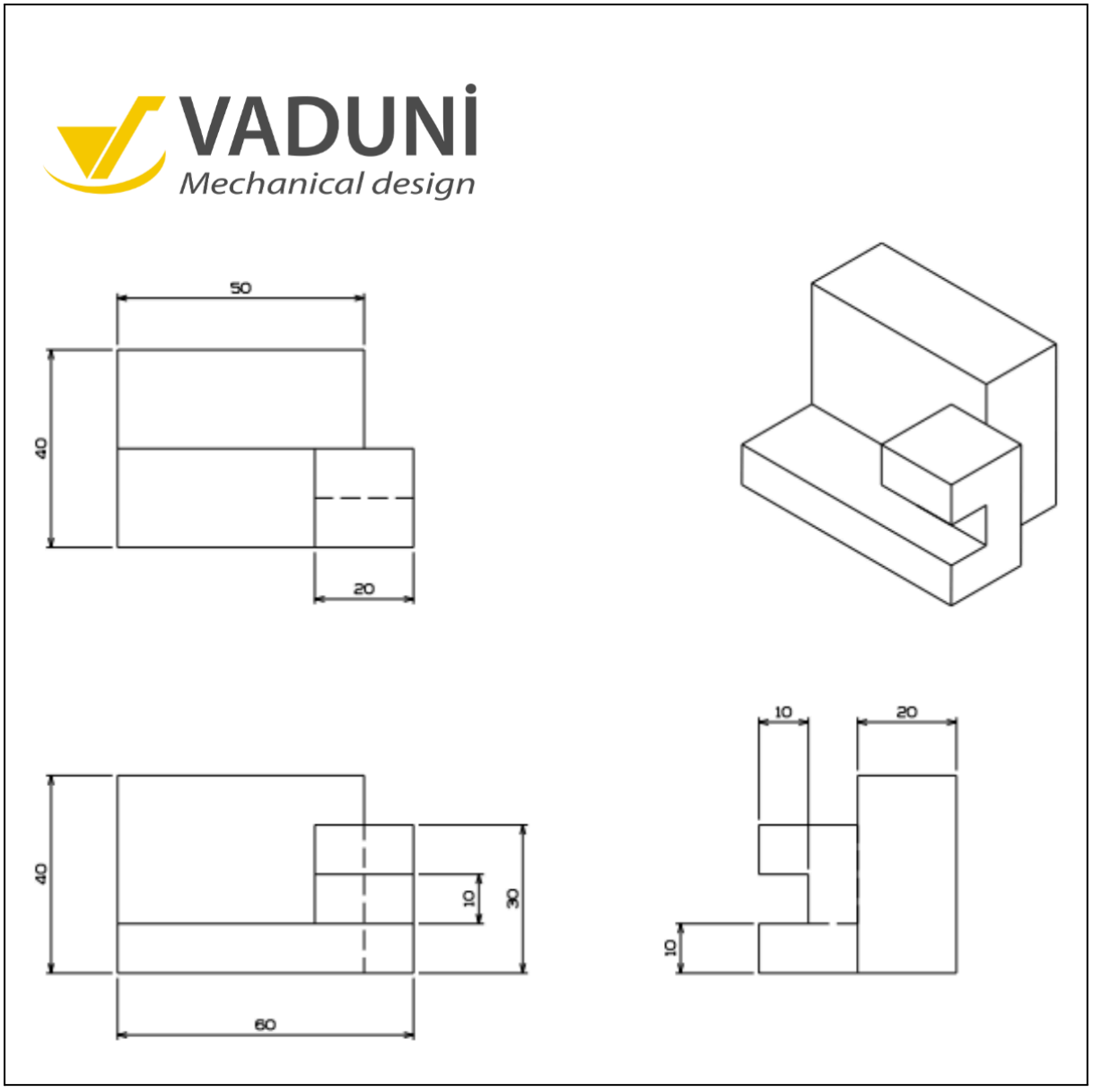
Bài tập 254



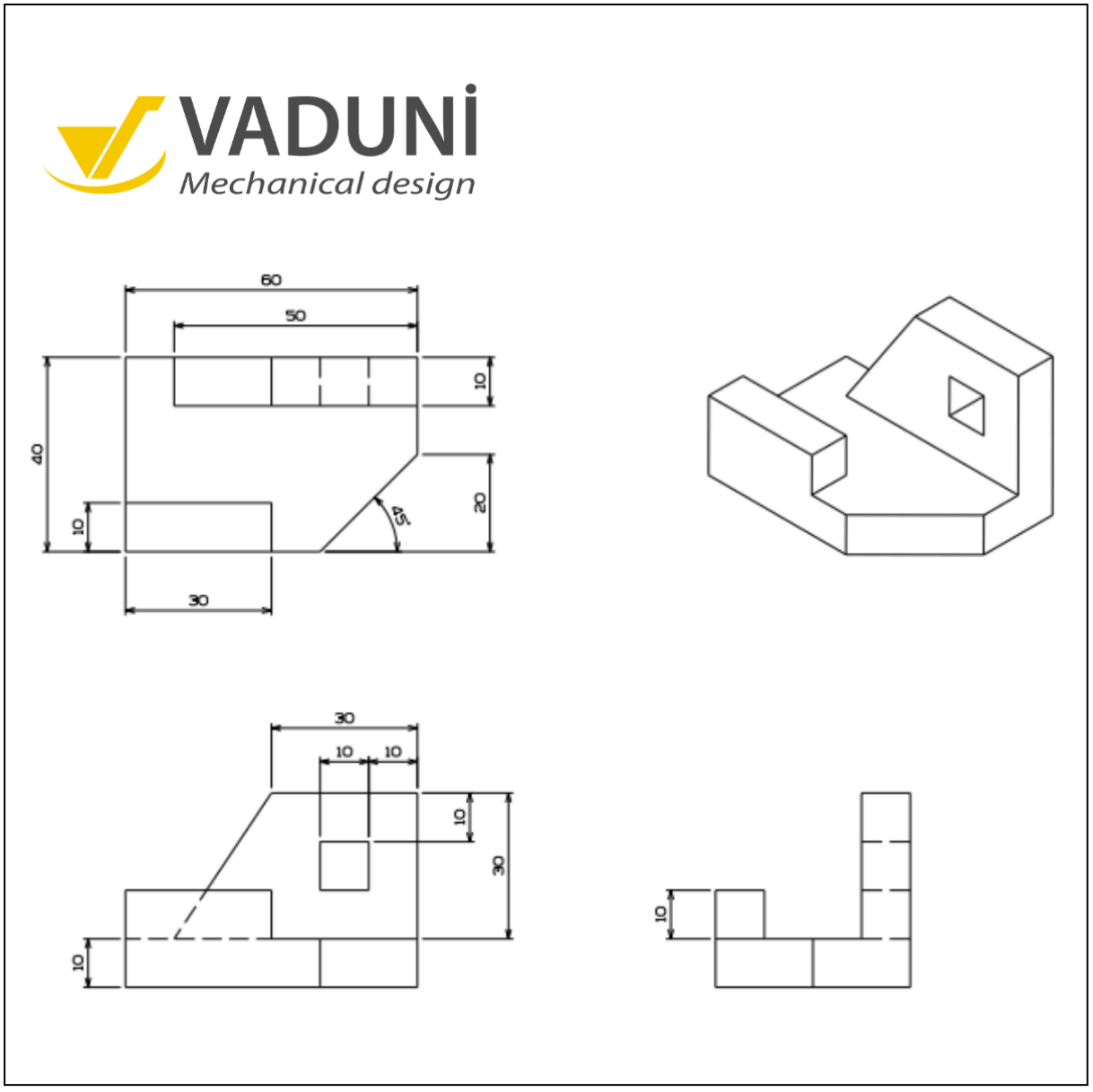
Bài tập 255


VADUNİ
Mechanical design
45
15
60
45
45°
15
30
45
45
15
60
45°
15
30

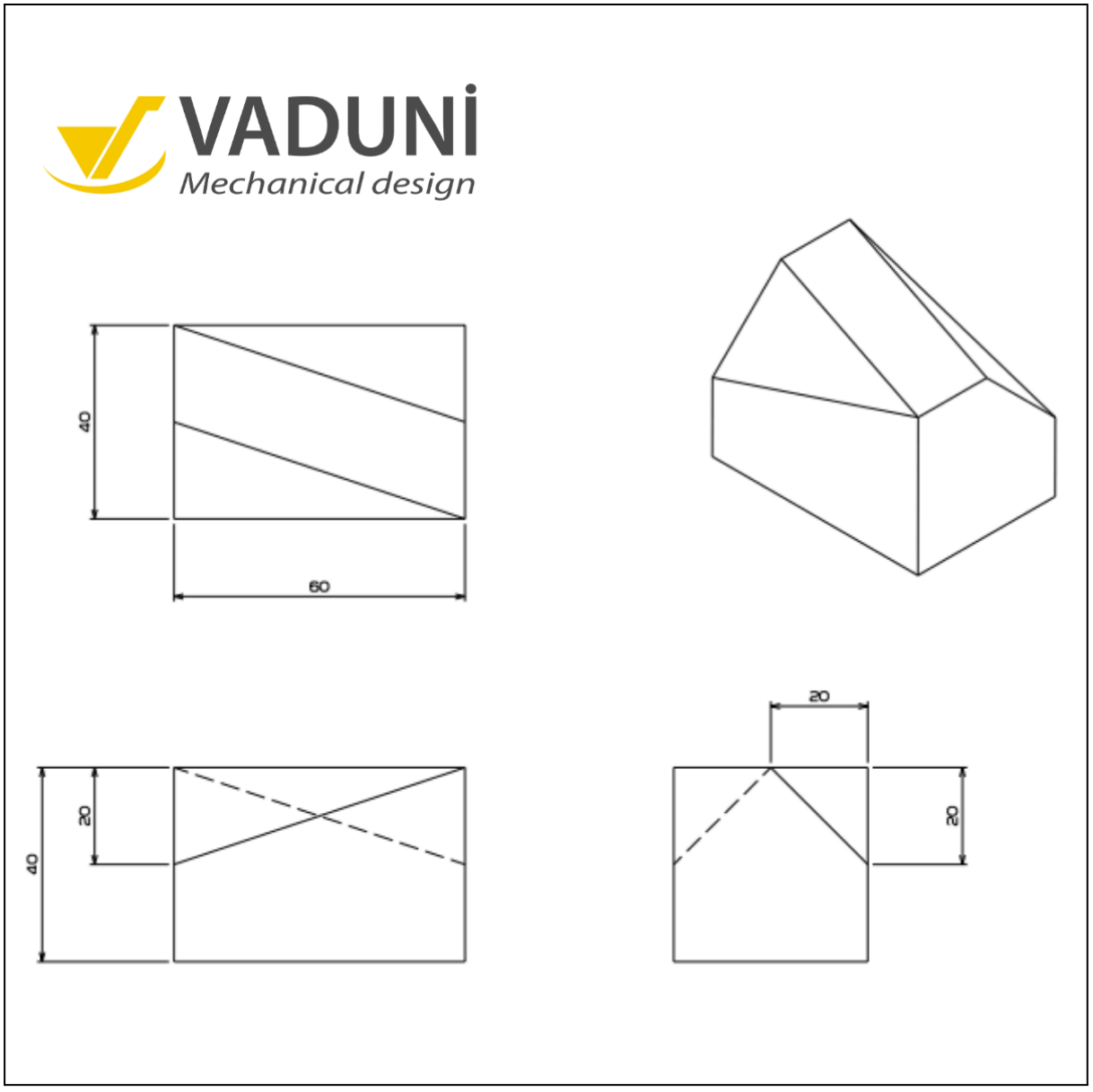
Bài tập 256



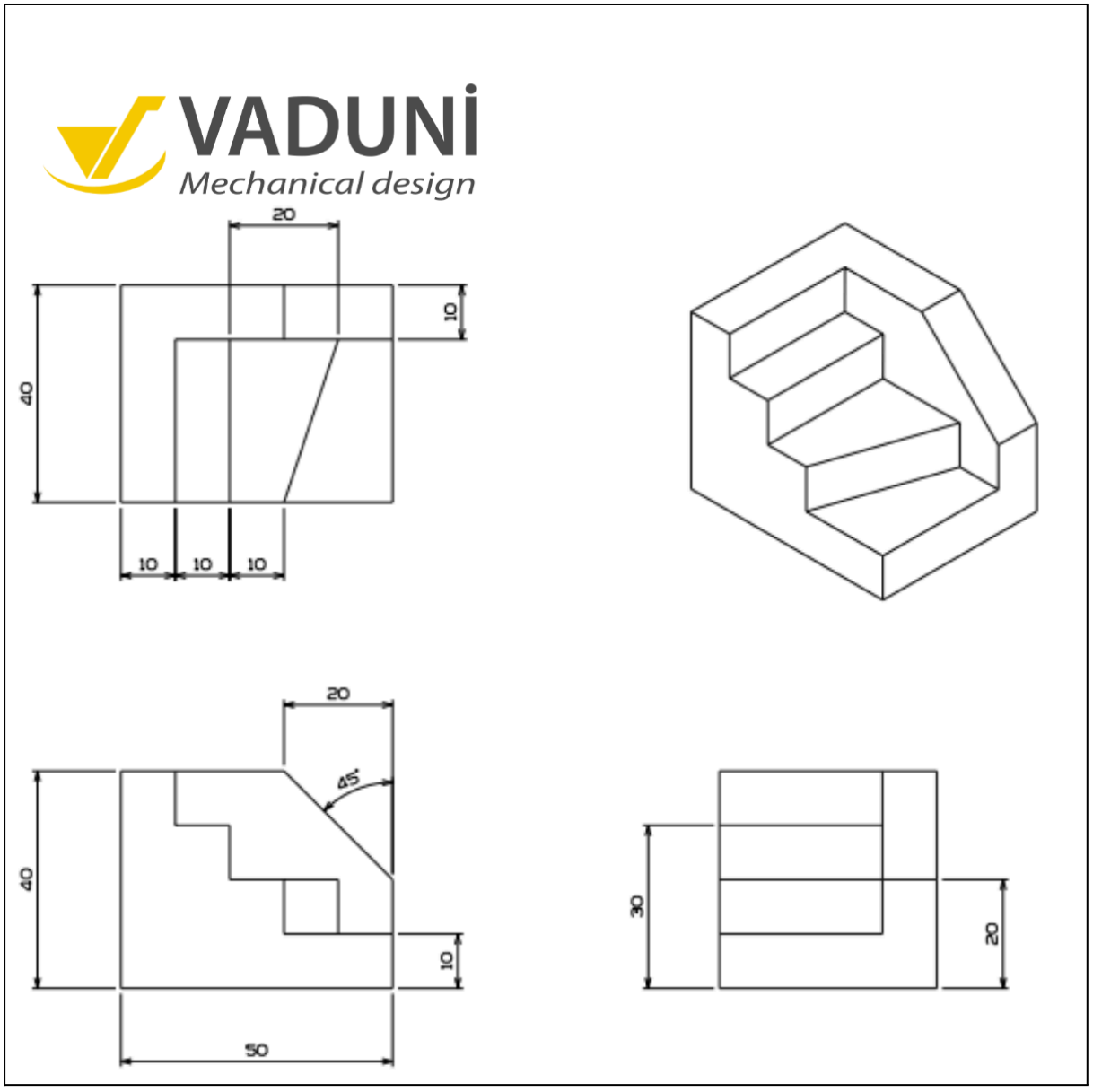
Bài tập 257


VADUNİ
Mechanical design
60
50
10
40
20
10
45
30
30
10
10
10
30
10
10

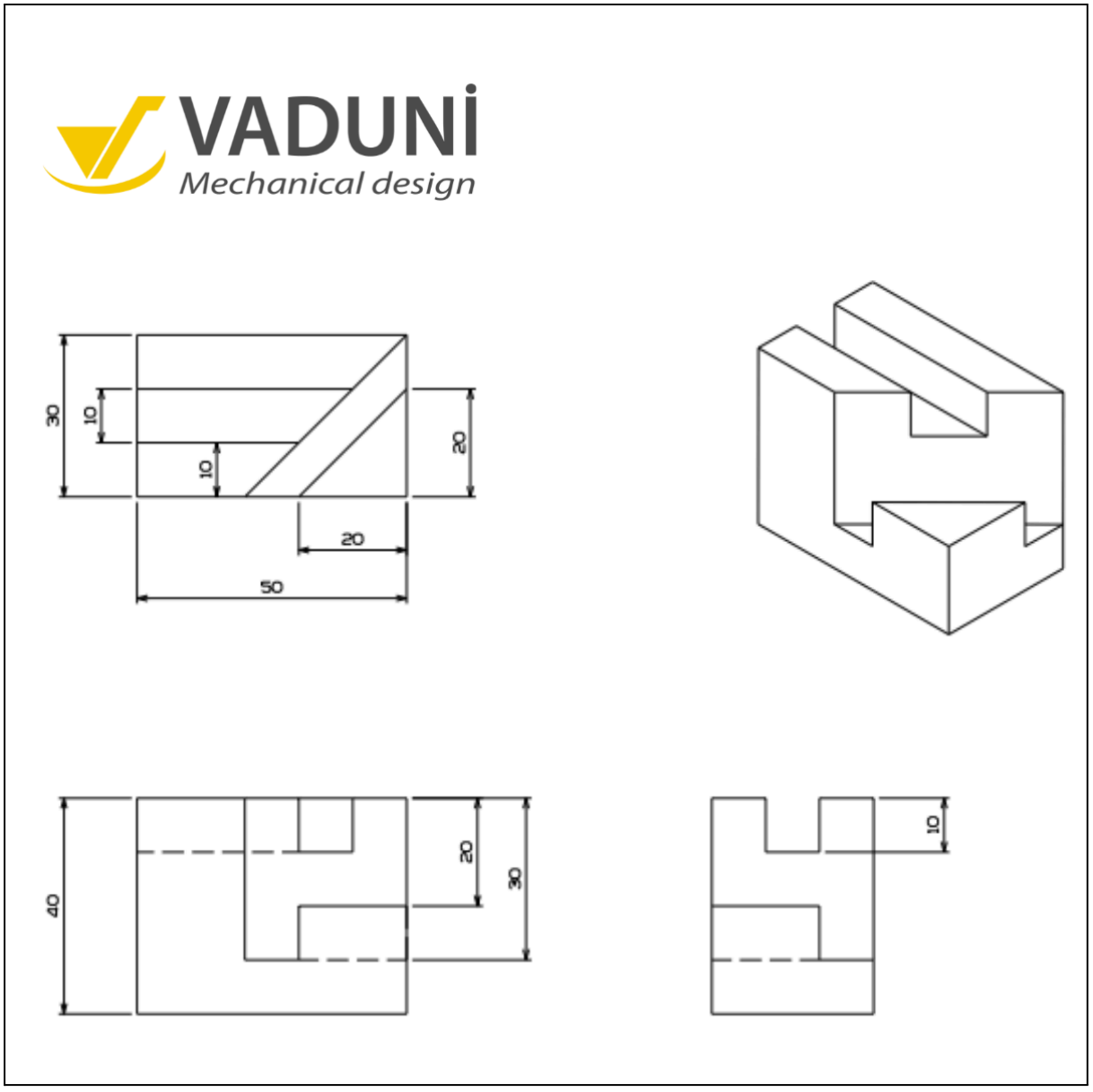
Bài tập 258



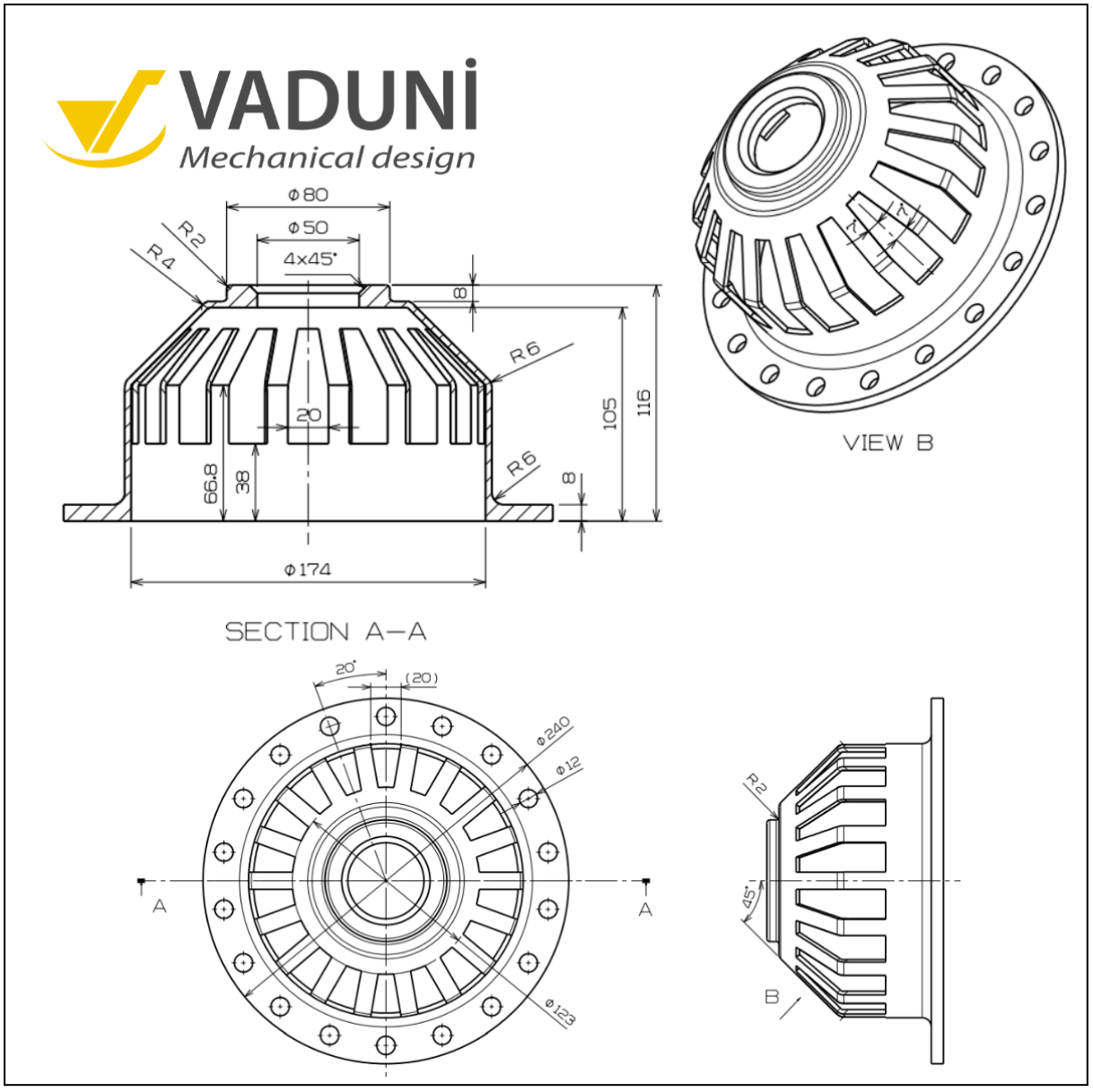
Bài tập 259



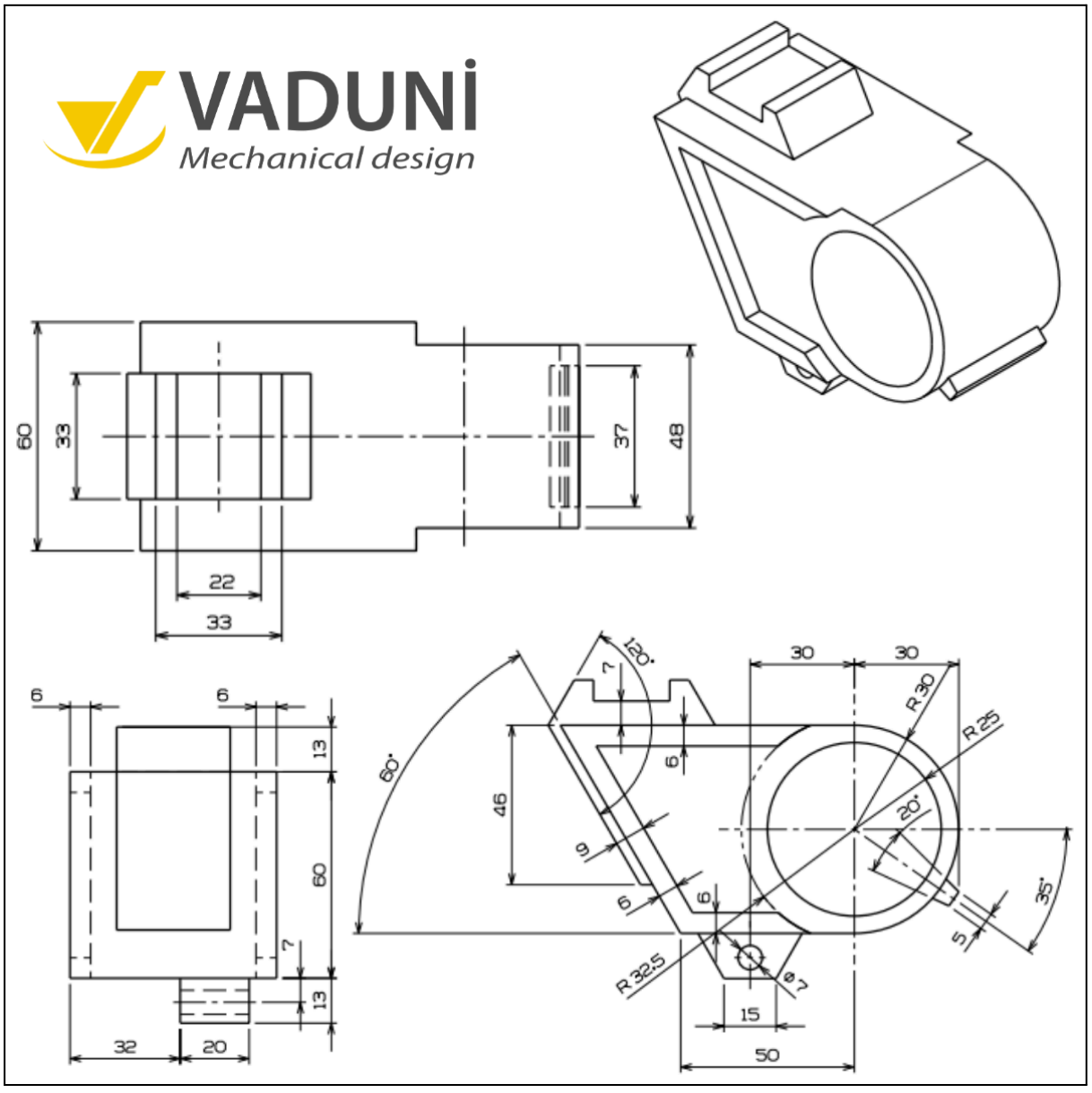
Bài tập 260



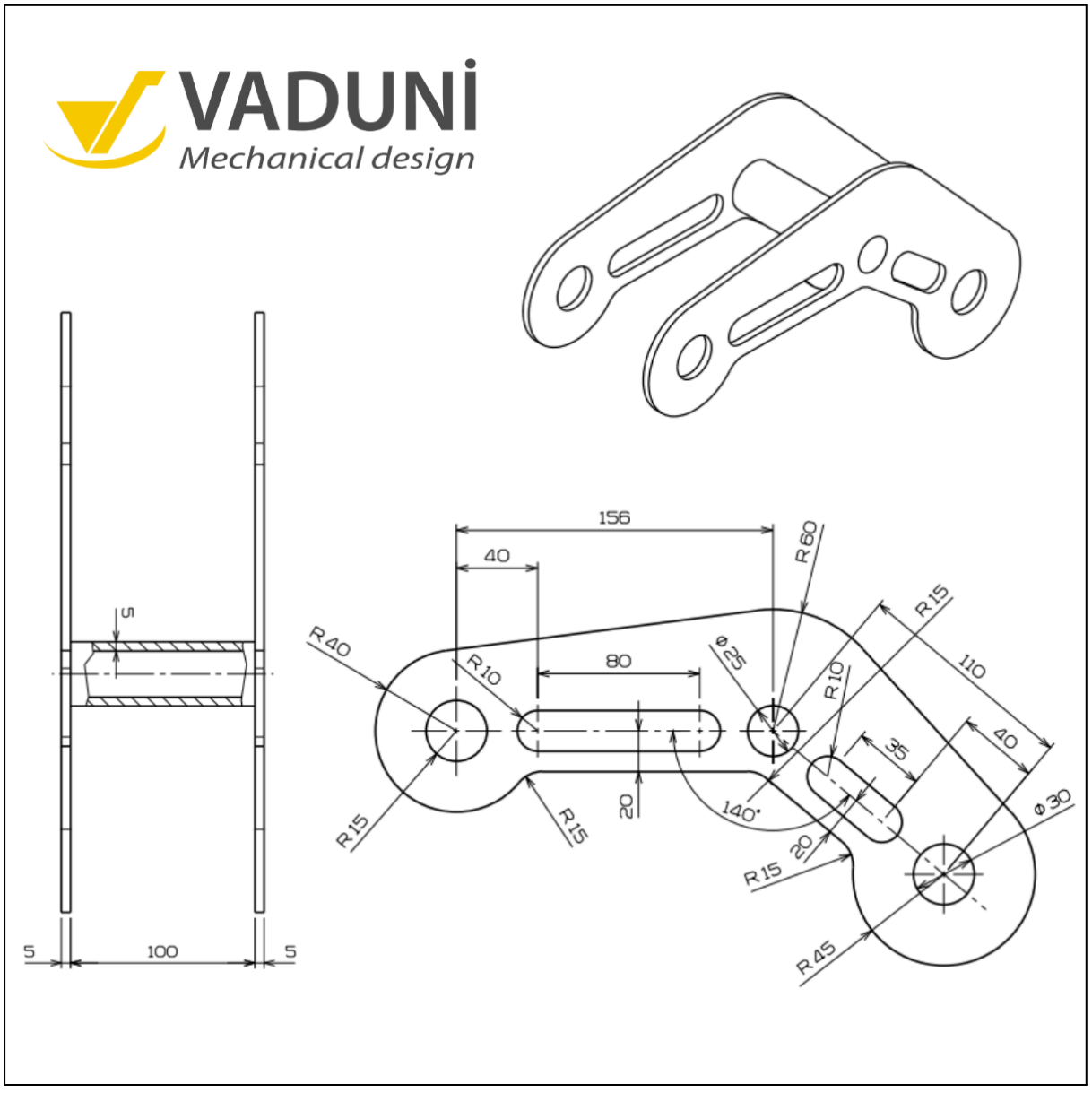
Bài tập 261


VADUNİ
Mechanical design
Φ80
Φ50
4x45°
R2
R4
8
R6
105
116
20
66.8
38
R6
8
Φ174
SECTION A–A
VIEW B
20°
(20)
Φ240
Φ12
A
A
R2
45°
B
Φ123

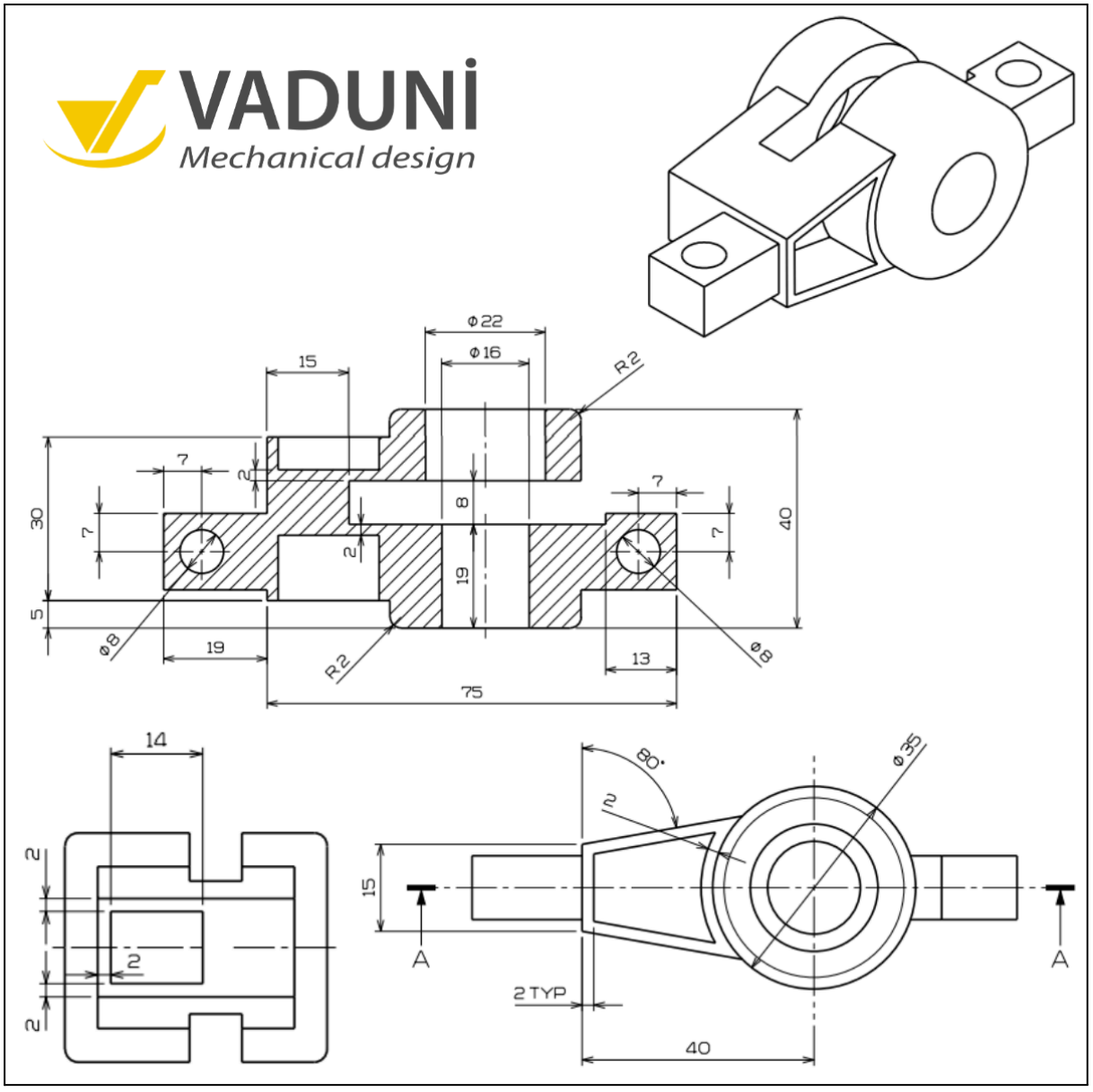
Bài tập 262


VADUNİ
Mechanical design
60
33
37
48
22
33
6
6
13
60
7
13
32
20
120°
7
6
30
30
R30
R25
60°
46
9
6
6
20°
35°
5
R32,5
Ø7
15
50

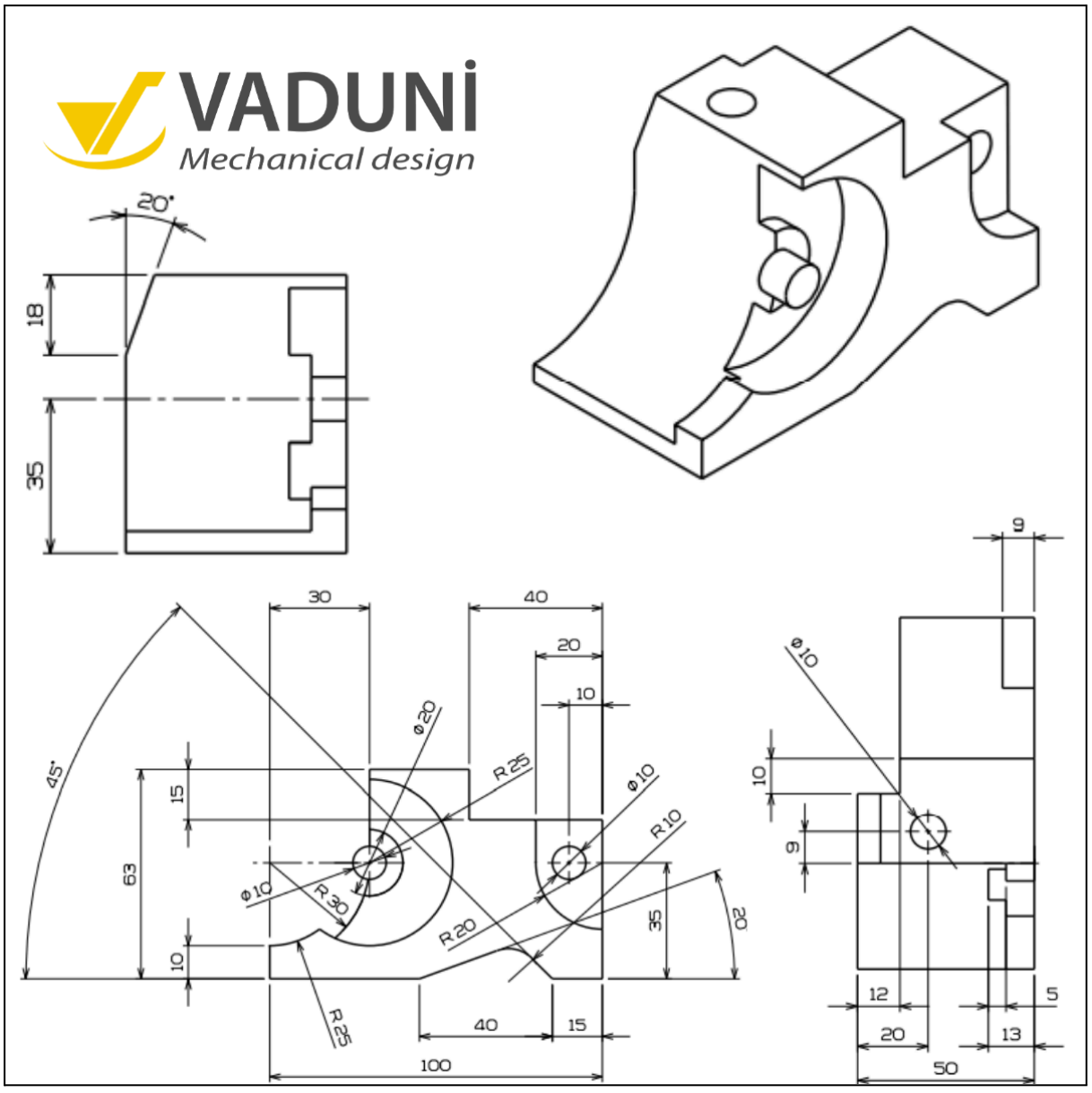
Bài tập 263


VADUNI
Mechanical design
5
5
100
5
156
40
R60
R40
R10
80
ø25
R15
110
R10
35
40
ø30
R15
R15
20
140°
20
R15
R45

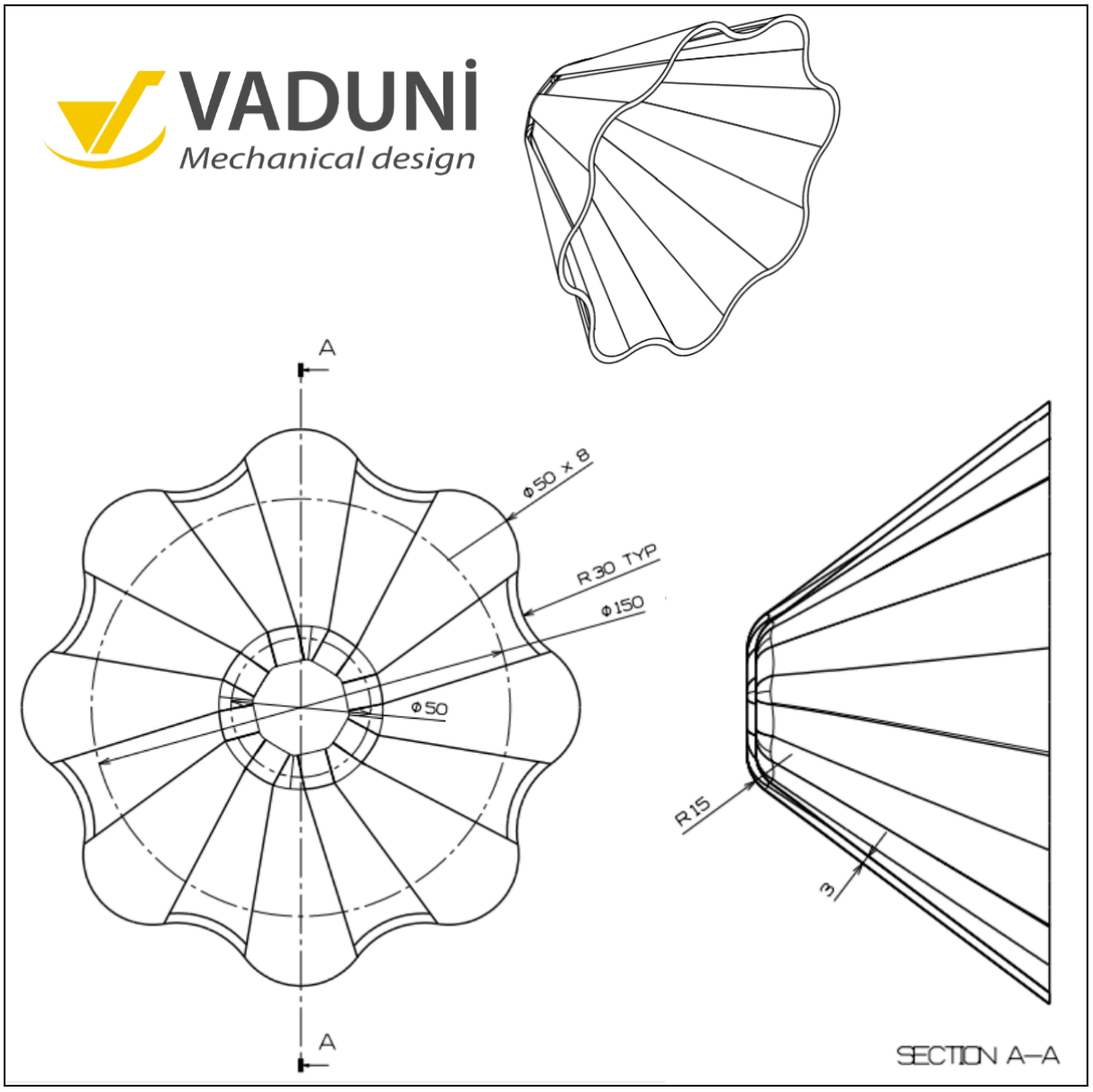
Bài tập 264


VADUNİ
Mechanical design
Φ22
Φ16
15
R2
7
2
30
7
8
19
2
5
Φ8
19
R2
75
13
Φ8
40
14
2
2
2
80°
Φ35
15
A
2 TYP
40
A

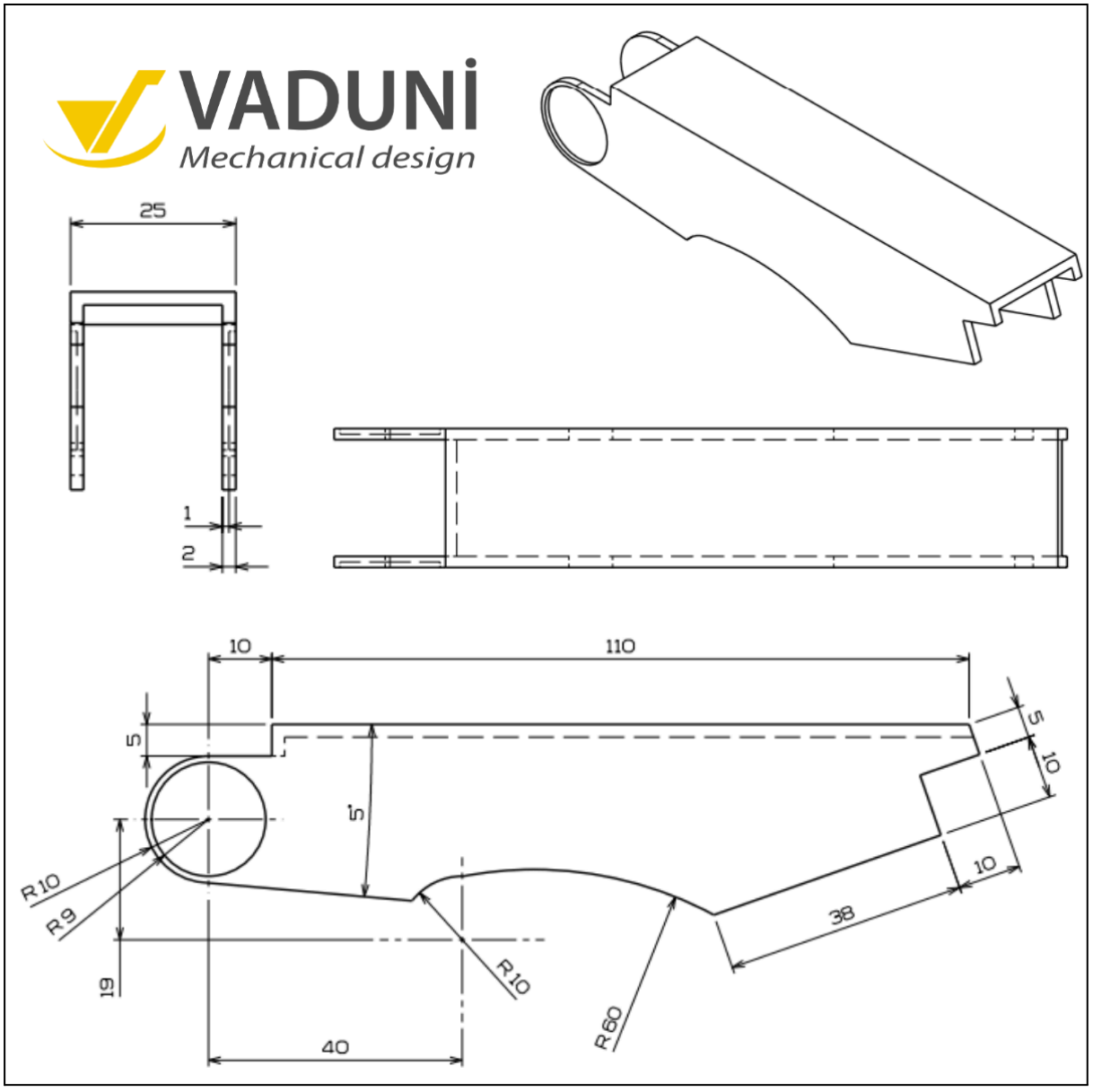
Bài tập 265


VADUNİ
Mechanical design
20°
18
35
30
40
20
10
ø20
R25
ø10
R10
45°
15
63
ø10
R30
R20
35
20
10
R25
40
15
100
9
ø10
10
9
12
5
20
13
50

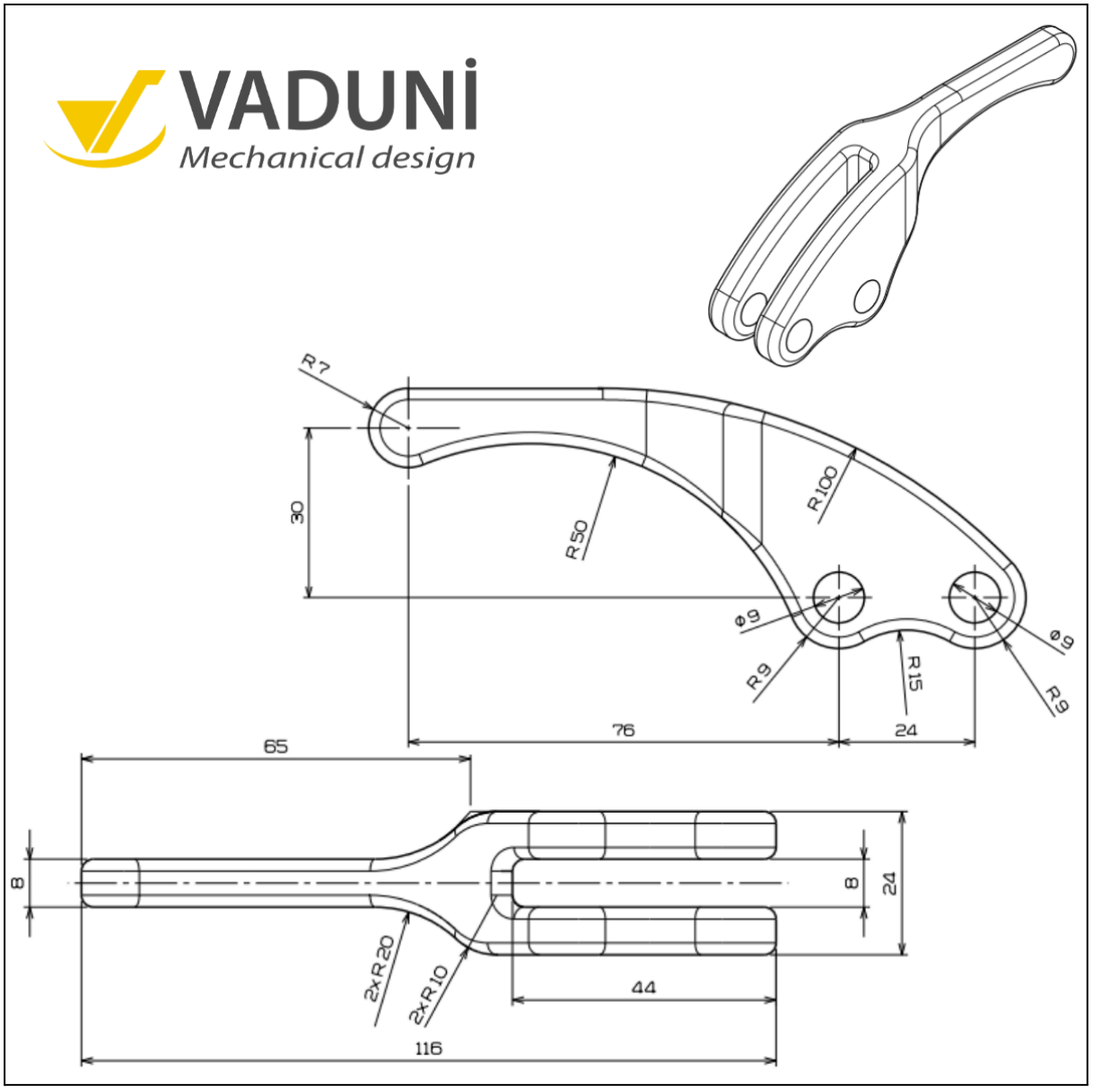
Bài tập 266


VADUNİ
Mechanical design
A
Φ50 x 8
R30 TYP
Φ150
Φ50
A
R15
3
SECTION A–A

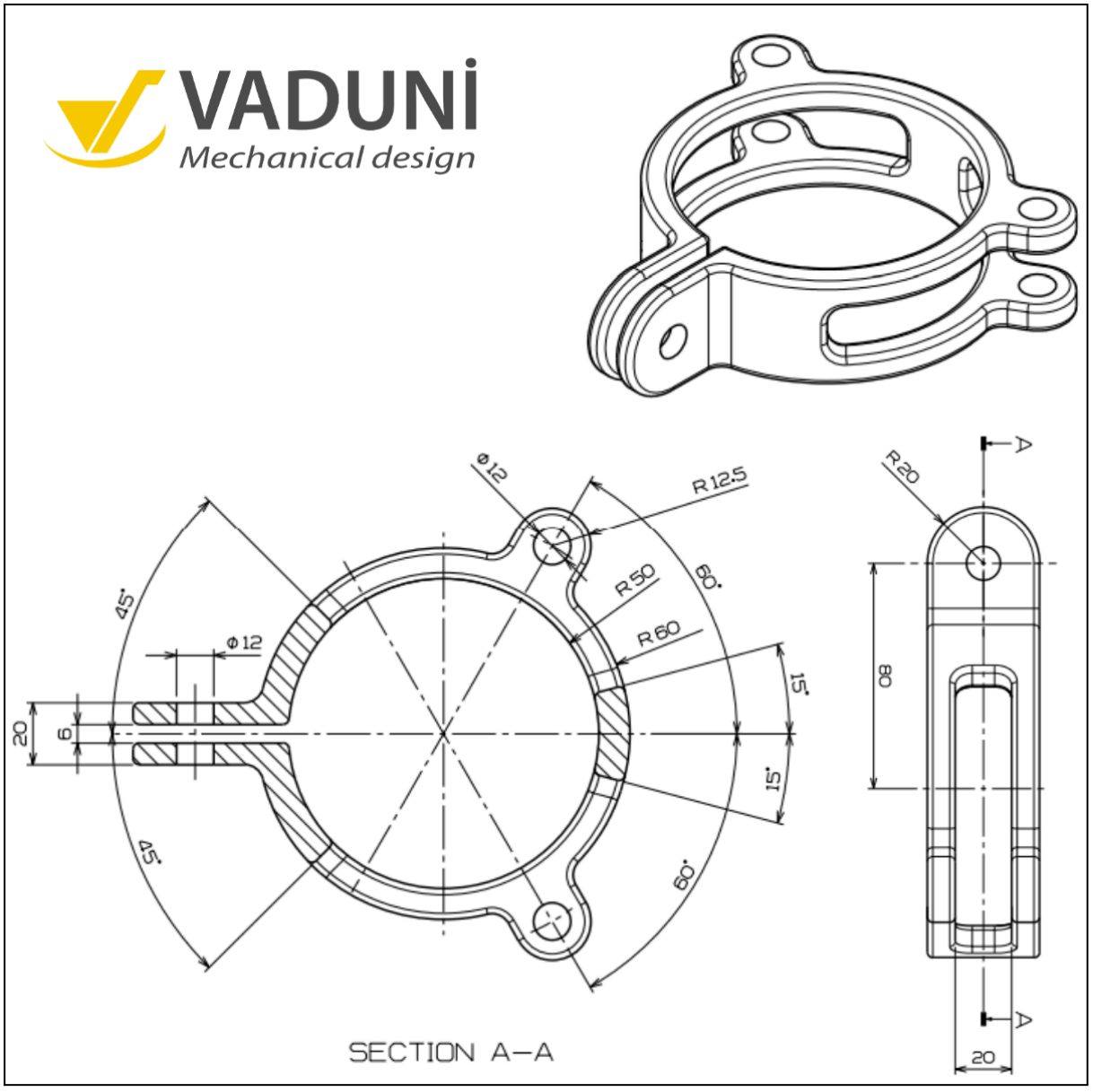
Bài tập 267


VADUNİ
Mechanical design
25
1
2
10
110
5
5
10
5
10
R10
R9
19
R10
R60
38
40

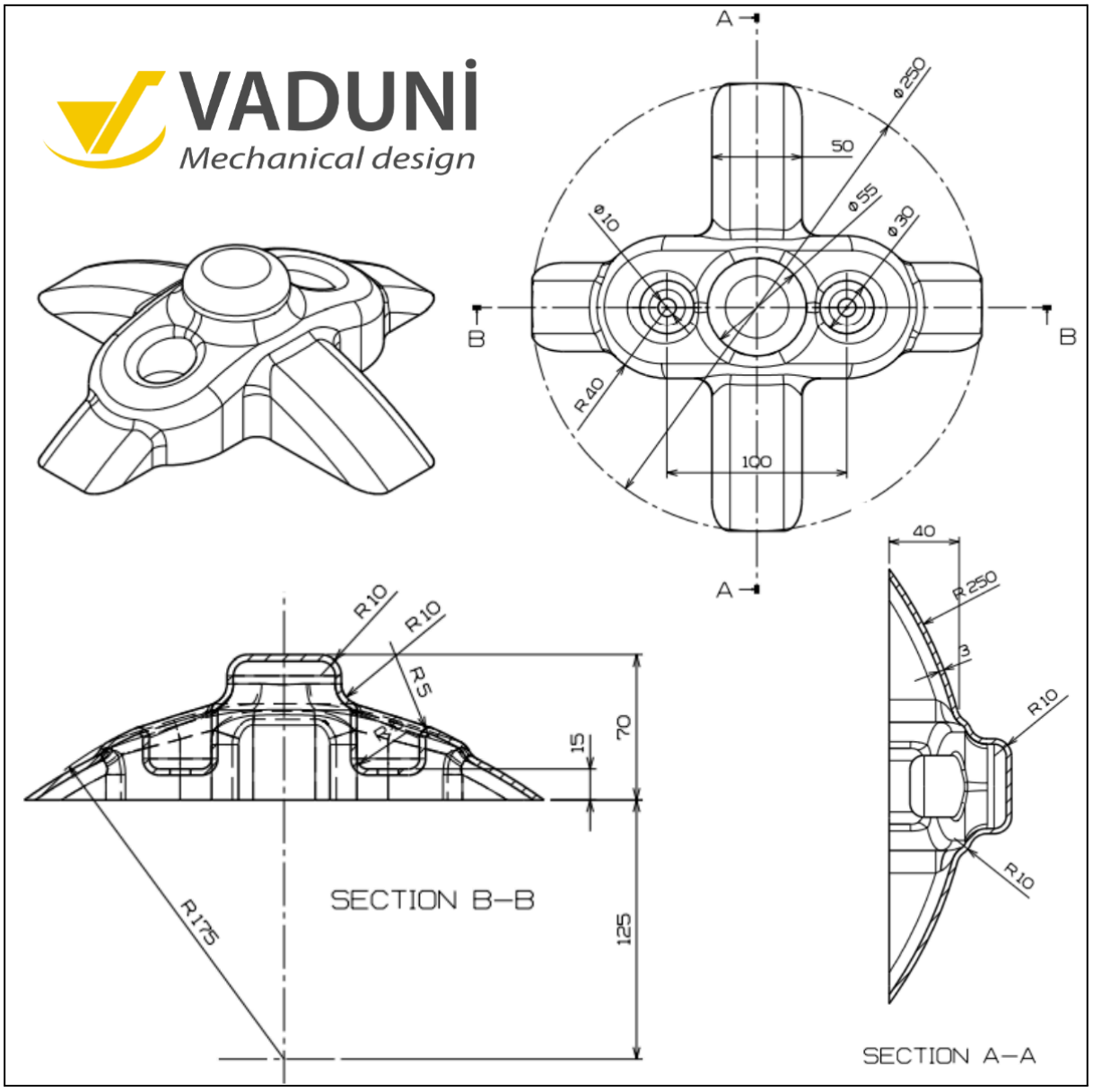
Bài tập 268


VADUNİ
Mechanical design
R7
30
R50
R100
ø9
R9
R15
ø9
R9
76
24
65
8
8
24
2xR20
2xR10
44
116

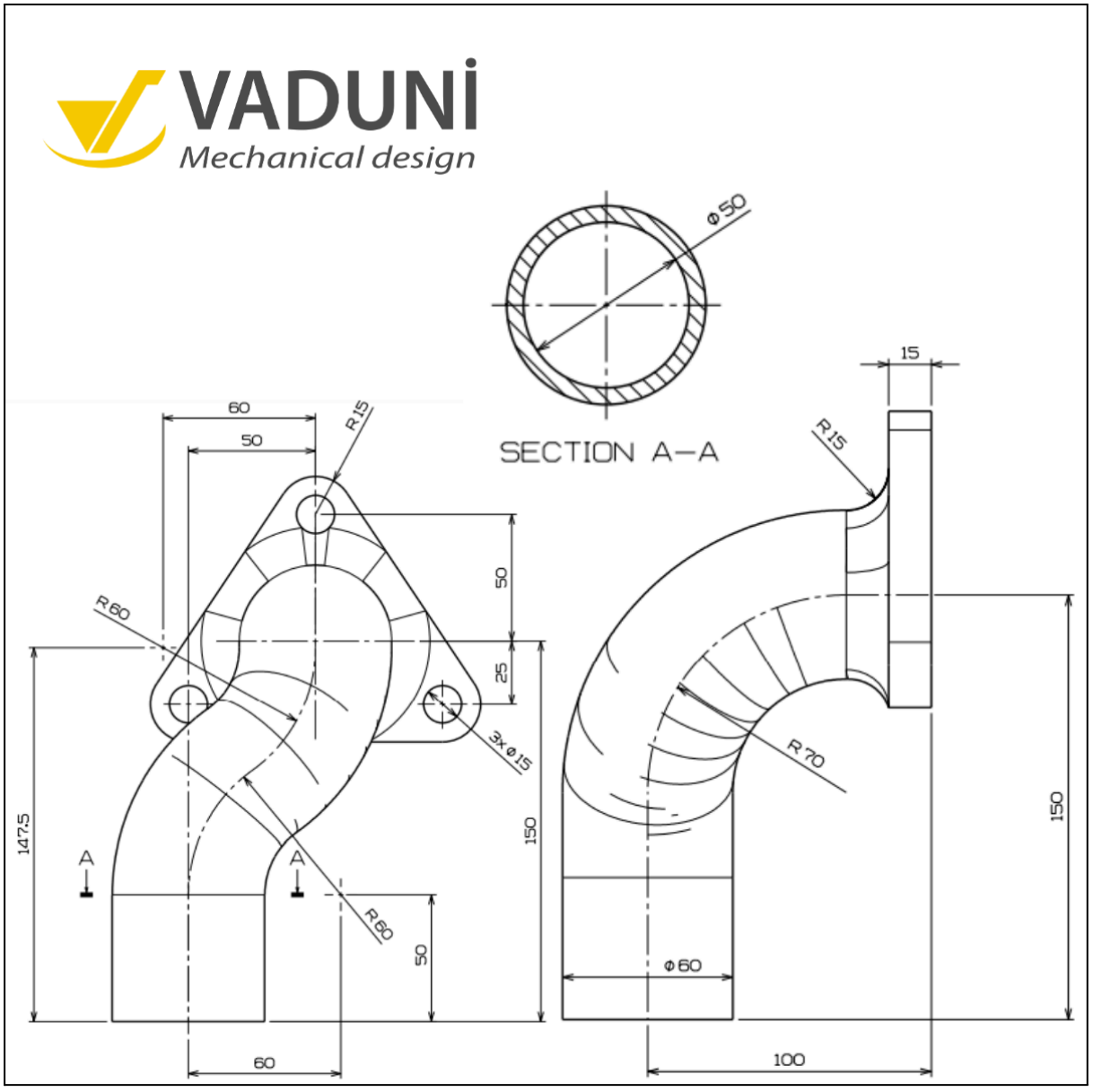
Bài tập 269


VADUNI
Mechanical design
Φ12
R12.5
R50
R60
80°
45°
Φ12
20
6
15
15
45°
60°
SECTION A–A
R20
A
80
A
20

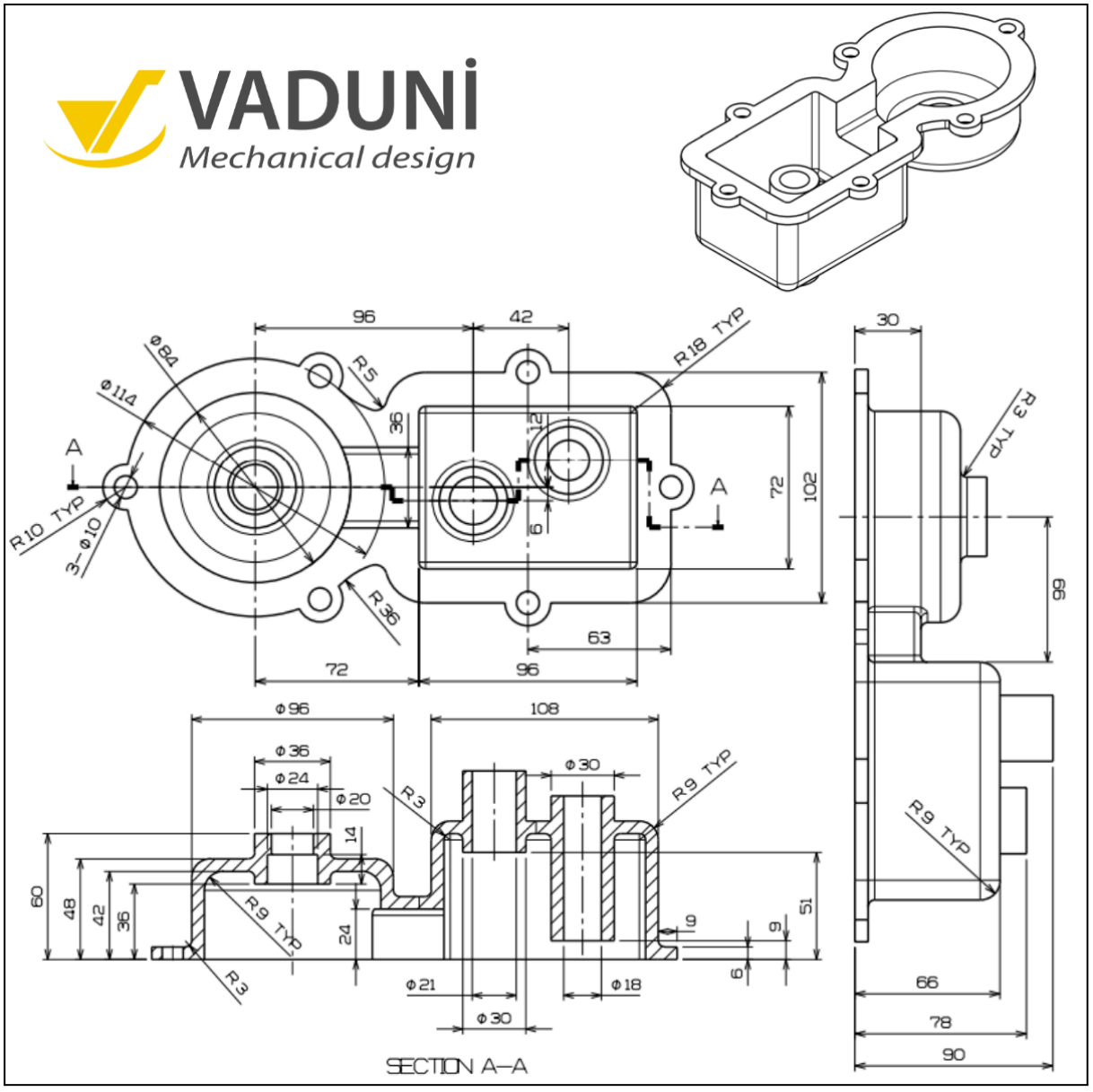
Bài tập 270


VADUNİ
Mechanical design
A
B
B
A
ø250
50
ø55
ø30
ø10
R40
100
R10
R10
R5
15
70
125
R175
SECTION B–B
40
R250
3
R10
R10
SECTION A–A

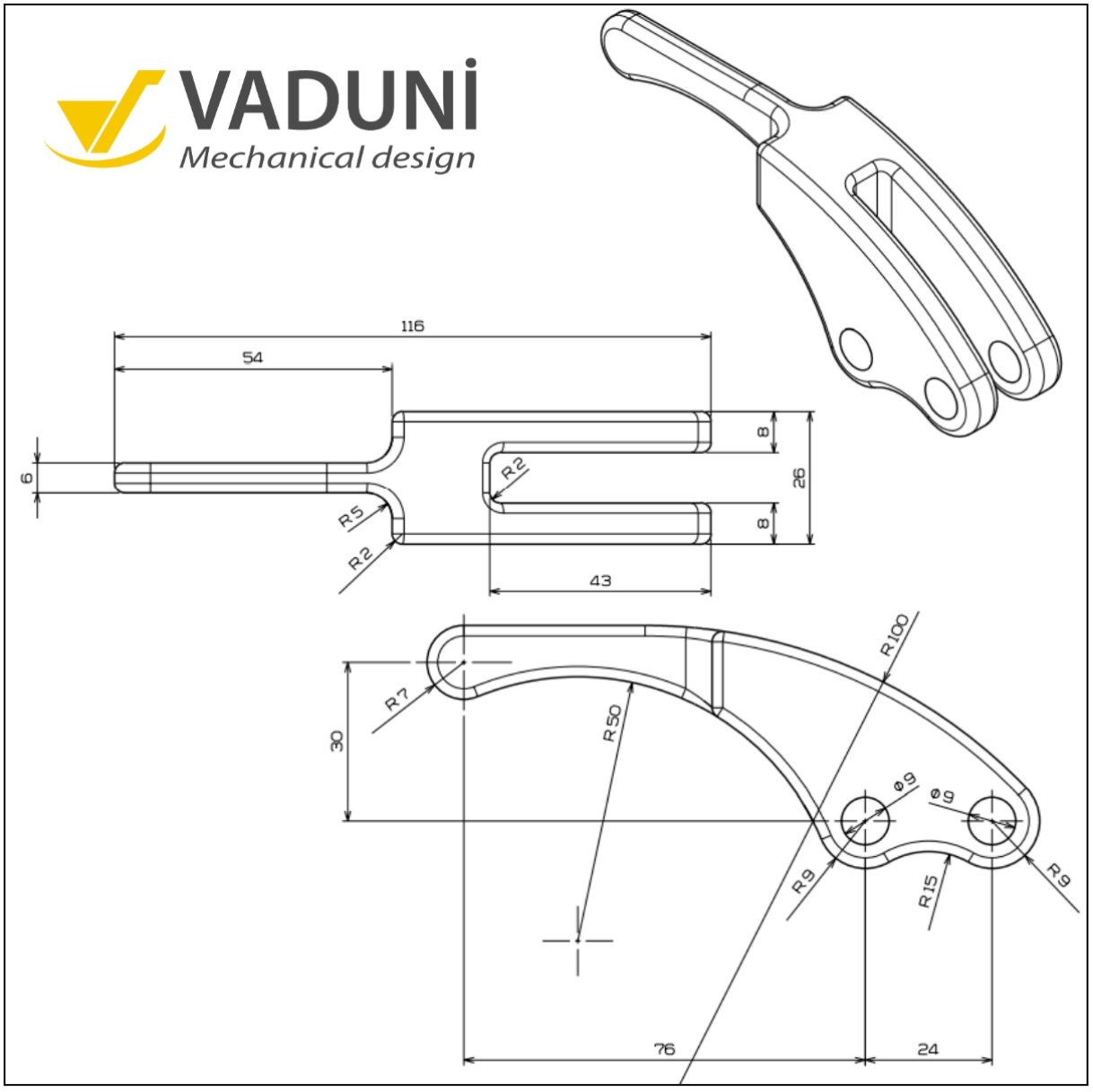
Bài tập 271


VADUNİ
Mechanical design
ø50
SECTION A–A
60
50
R15
R60
50
25
3xø15
150
147.5
A
A
R60
50
60
15
R15
R70
150
ø60
100

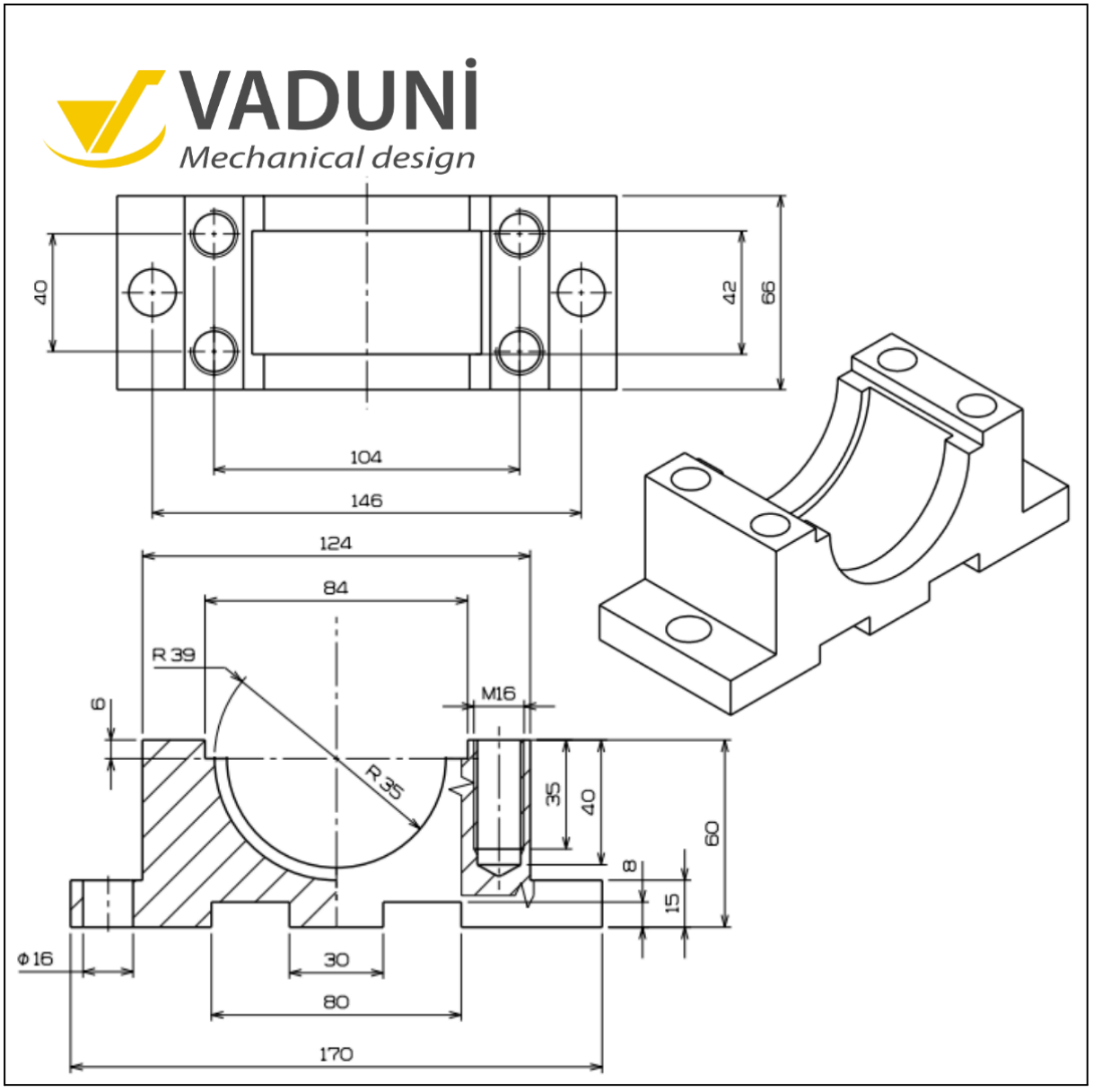
Bài tập 272


VADUNİ
Mechanical design
96
42
R18 TYP
30
Φ84
Φ114
R5
36
12
A
A
72
102
R10 TYP
3-Φ10
6
R36
63
72
96
R3 TYP
99
Φ96
108
Φ36
Φ24
Φ20
Φ30
R3
R9 TYP
14
60
48
42
36
R9 TYP
24
9
9
51
R3
6
Φ21
Φ18
Φ30
66
78
90
SECTION A–A

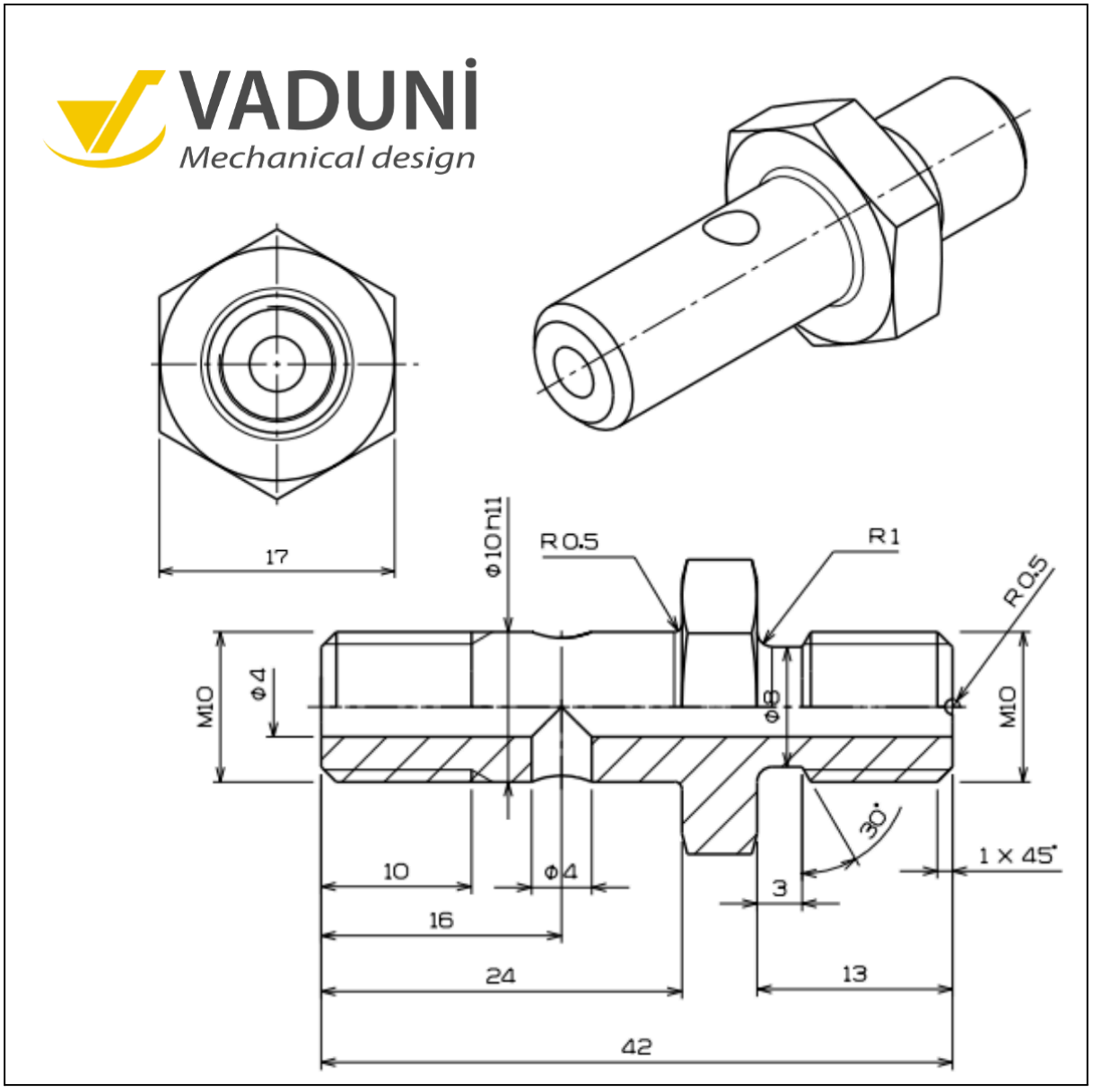
Bài tập 273


VADUNI
Mechanical design
116
54
6
8
8
26
R2
R5
R2
43
30
R7
R50
R100
ø9
ø9
R9
R15
R9
76
24

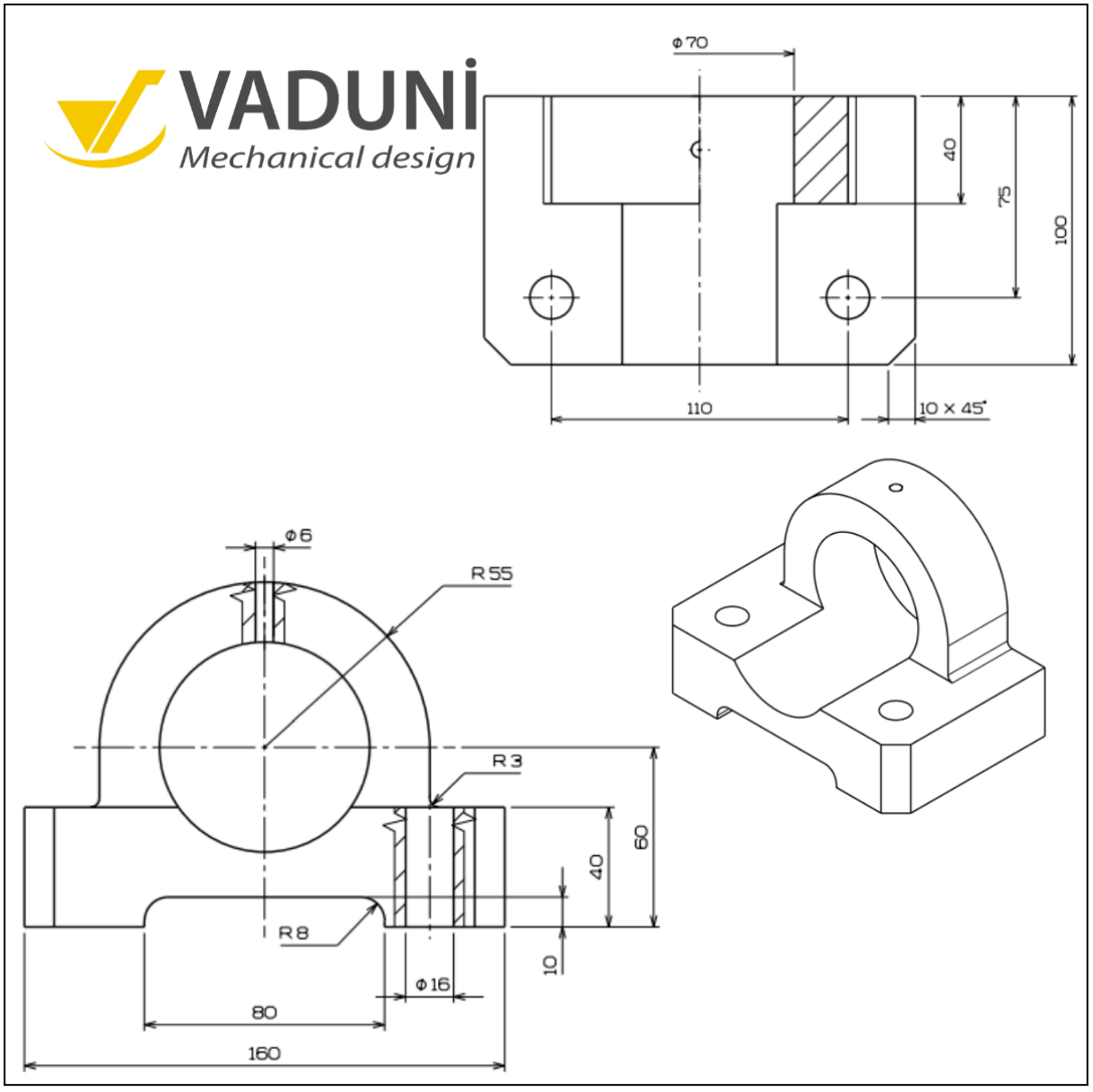
Bài tập 274


VADUNİ
Mechanical design
40
42
66
104
146
124
84
R 39
M16
6
R 35
35
40
60
8
15
Φ 16
30
80
170

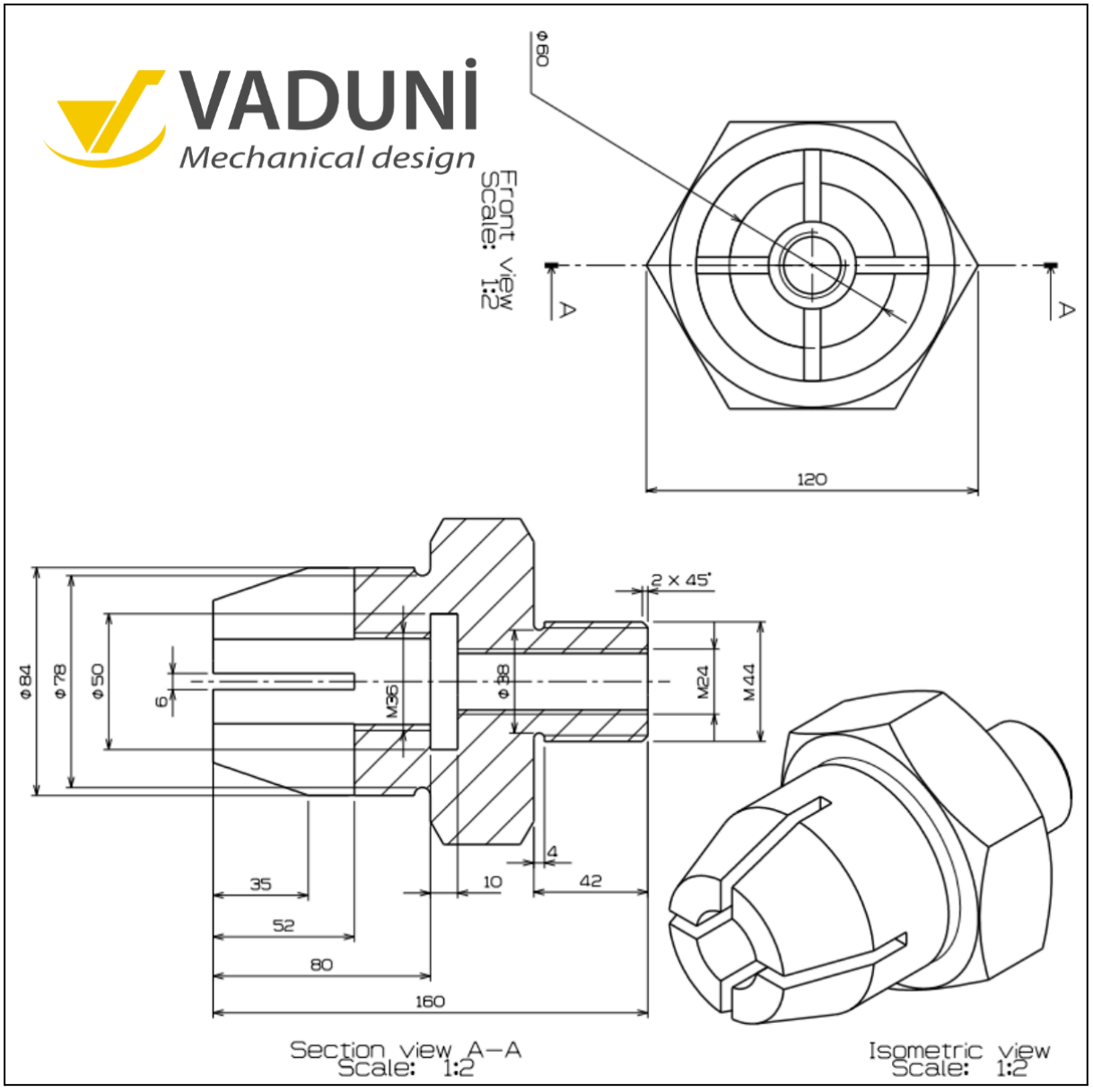
Bài tập 275


VADUNİ
Mechanical design
17
Φ10h11
R0.5
R1
R0.5
M10
Φ4
Φ8
M10
30°
1 × 45°
10
Φ4
3
16
24
13
42

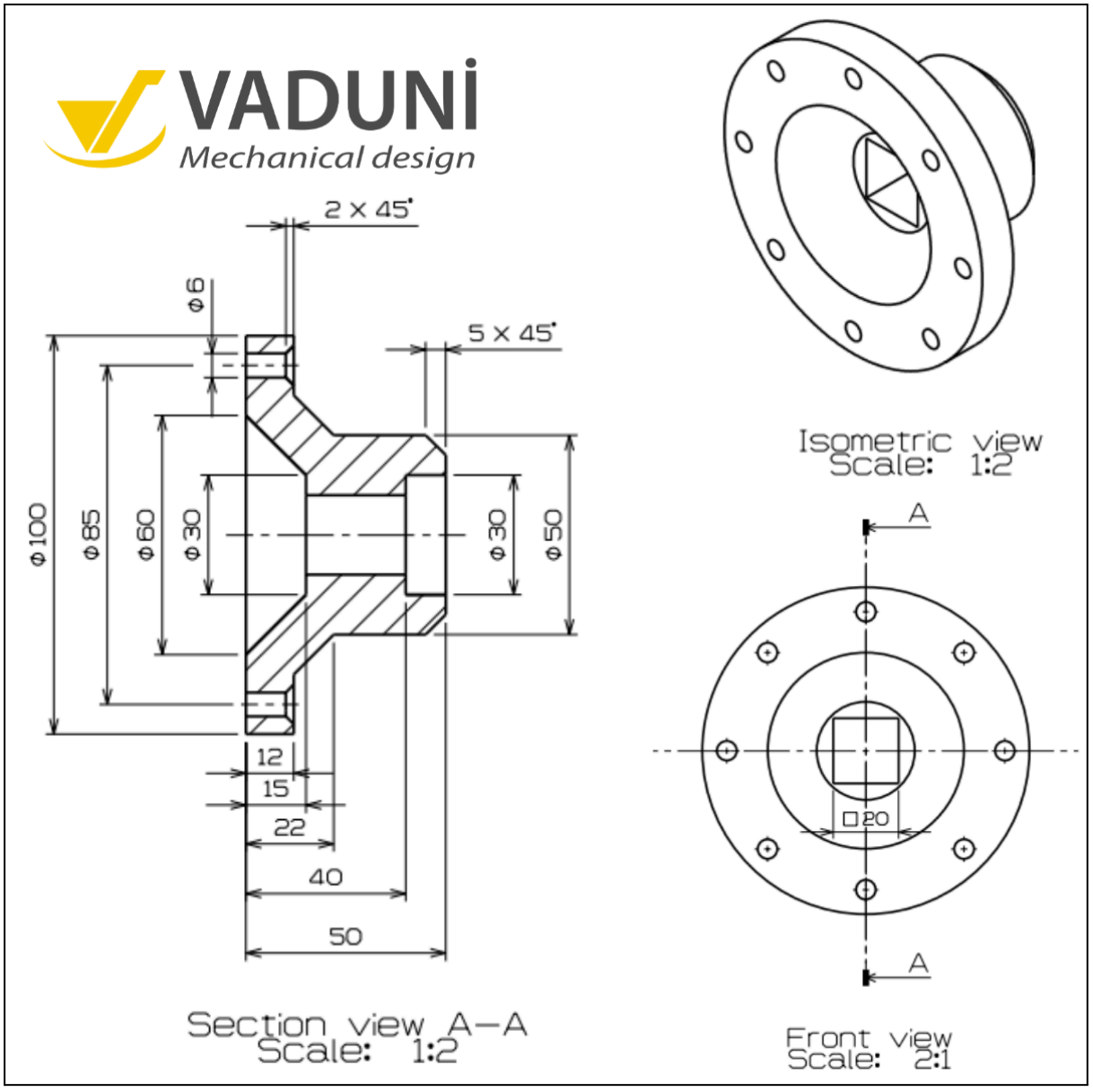
Bài tập 276


VADUNI
Mechanical design
ϕ70
40
75
100
110
10 x 45°
ϕ6
R55
R3
60
40
R8
10
ϕ16
80
160

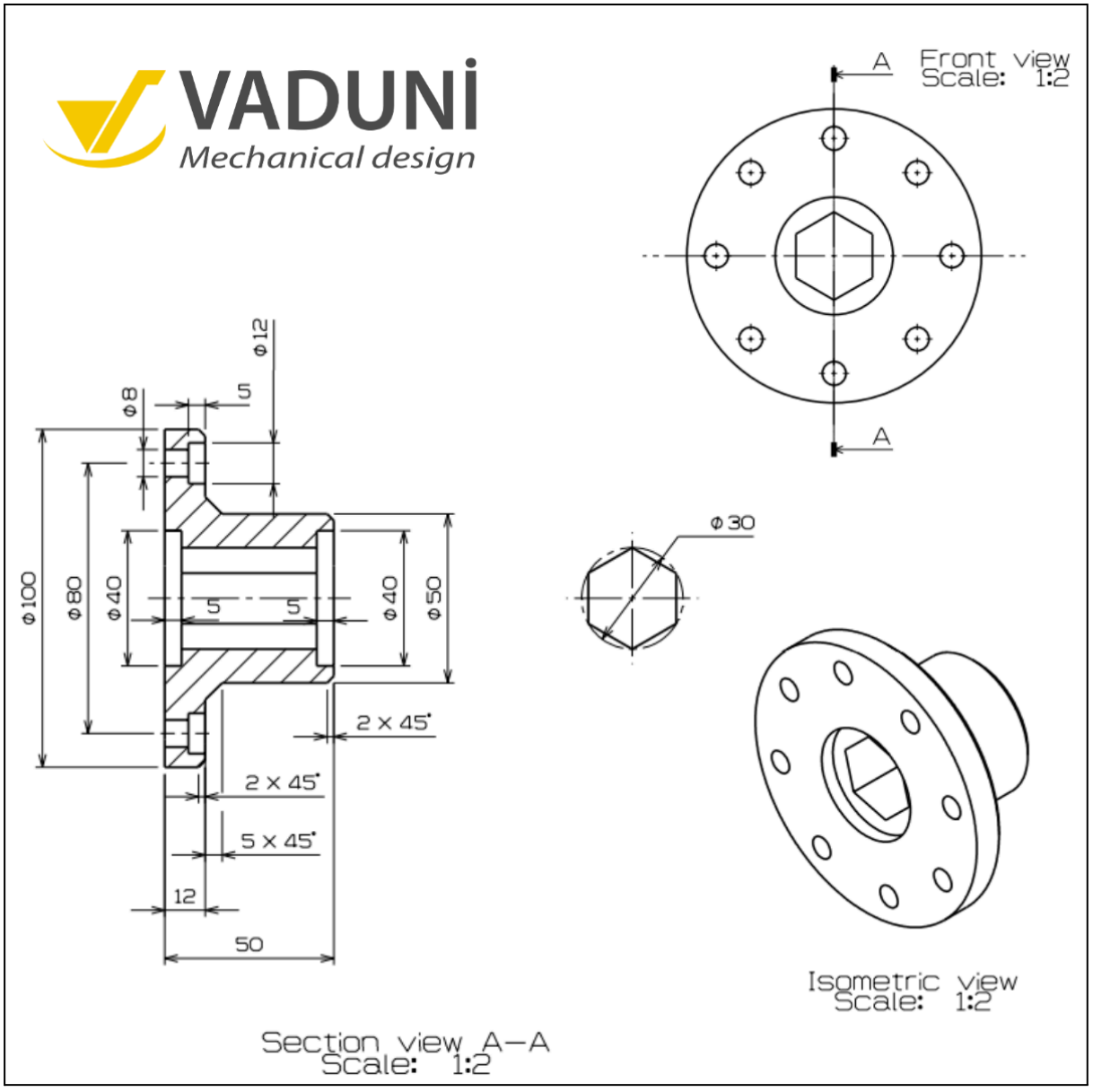
Bài tập 277


VADUNİ
Mechanical design
Front view
Scale: 1:2
Φ80
A
A
120
2 x 45°
Φ84
Φ78
Φ50
6
M36
Φ88
M24
M44
4
35
52
80
160
10
42
Section view A–A
Scale: 1:2
Isometric view
Scale: 1:2

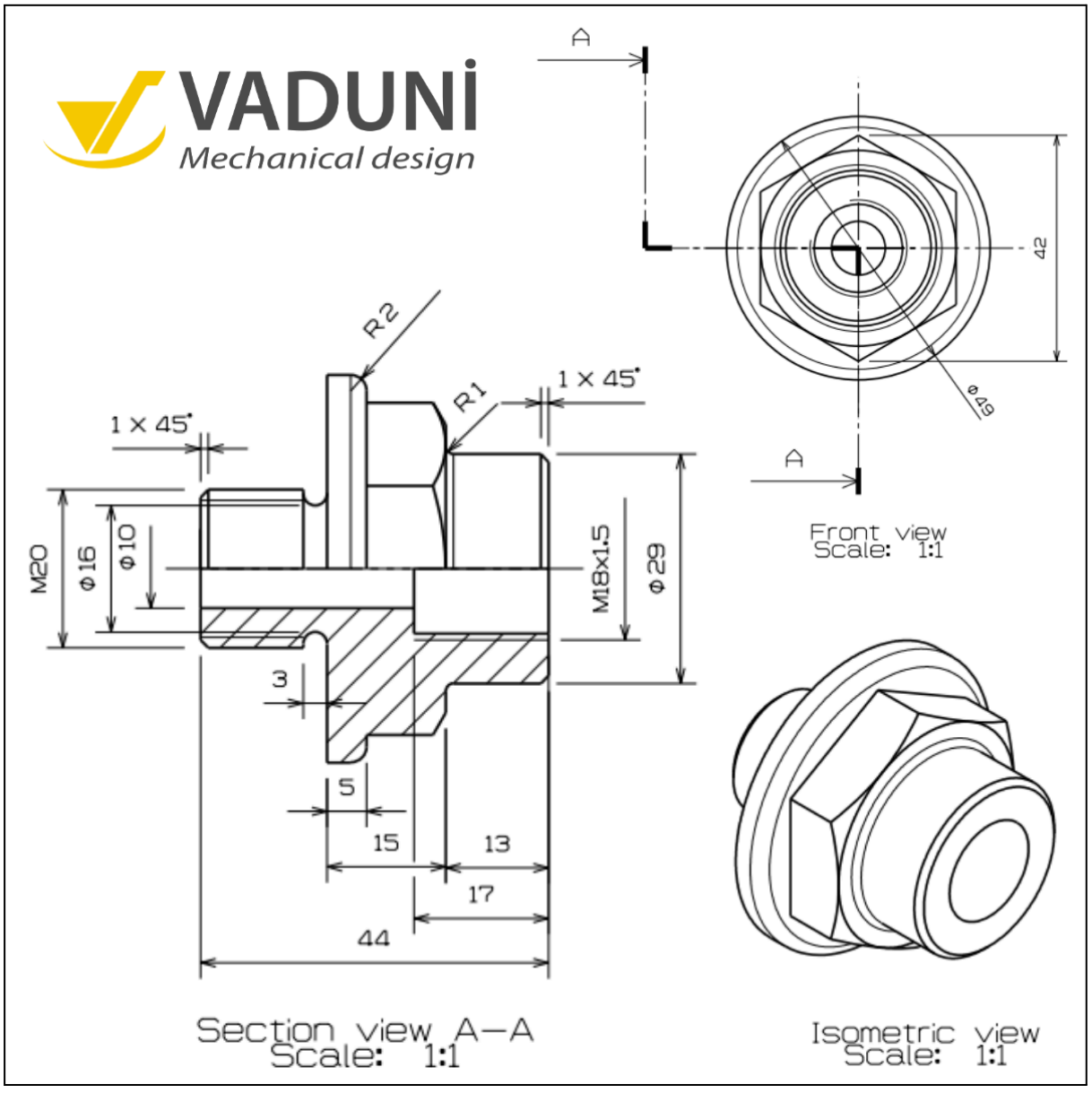
Bài tập 278


VADUNİ
Mechanical design
2 x 45°
φ6
5 x 45°
φ100
φ85
φ60
φ30
φ30
φ50
12
15
22
40
50
Section view A–A
Scale: 1:2
Isometric view
Scale: 1:2
A
□20
A
Front view
Scale: 2:1

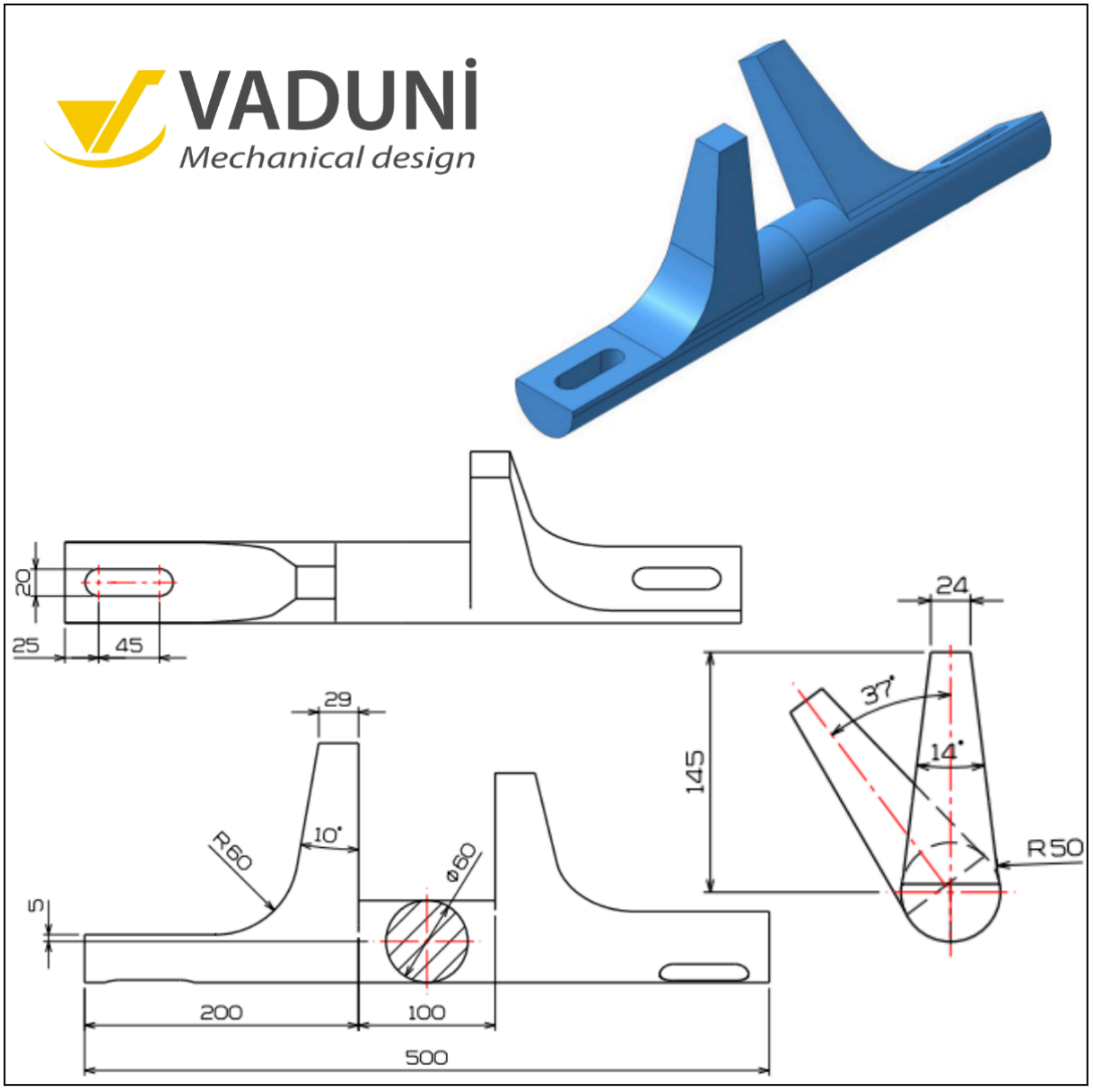
Bài tập 279


VADUNİ
Mechanical design
A
Front view
Scale: 1:2
A
Φ12
Φ8
5
Φ100
Φ80
Φ40
5
5
Φ40
Φ50
2 x 45°
2 x 45°
5 x 45°
12
50
Φ30
Isometric view
Scale: 1:2
Section view A–A
Scale: 1:2

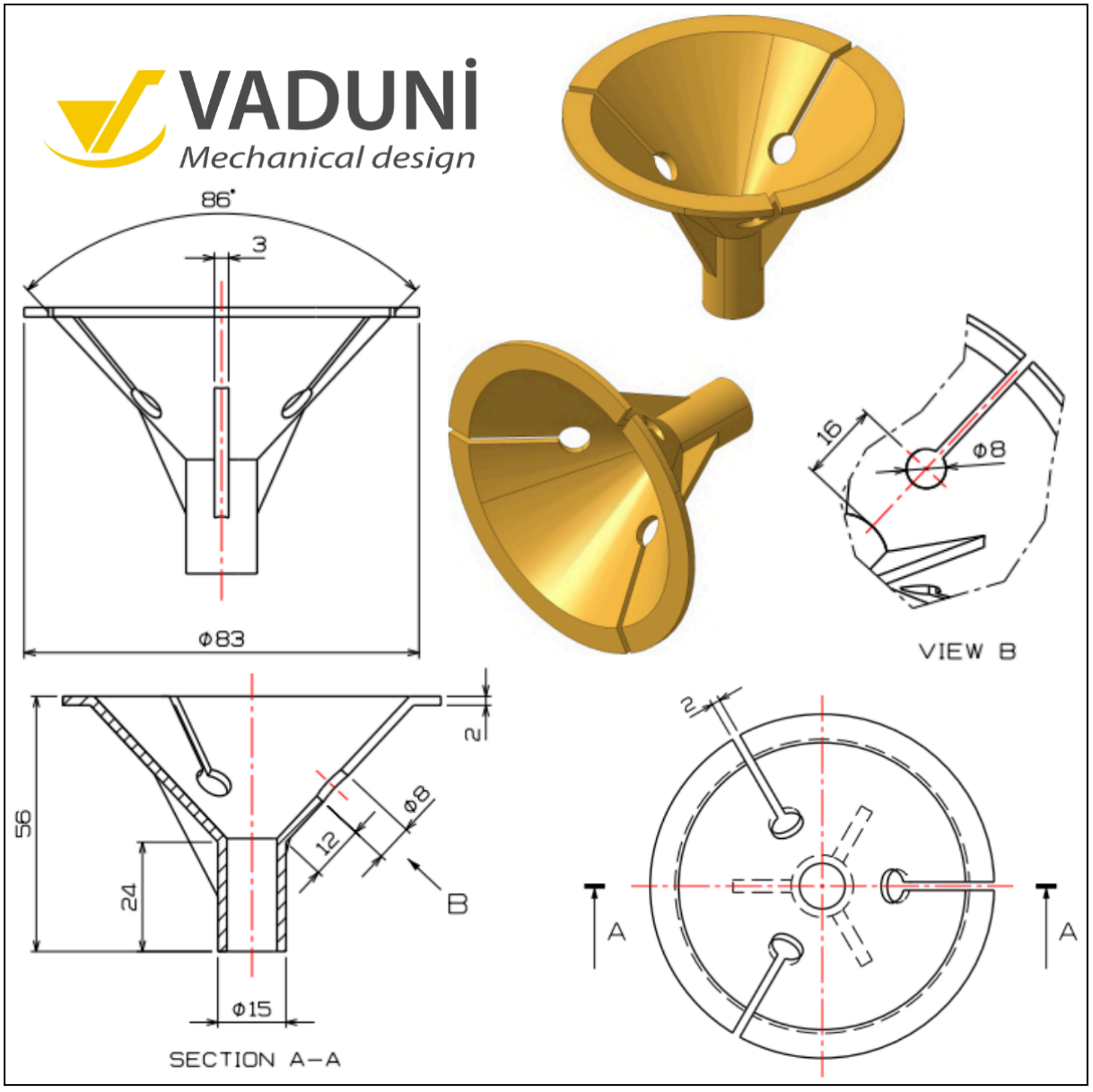
Bài tập 280


VADUNİ
Mechanical design
A
42
ø49
A
Front view
Scale: 1:1
R2
R1
1 × 45°
1 × 45°
M20
Φ16
Φ10
M18x1.5
Φ29
3
5
15
13
17
44
Section view A–A
Scale: 1:1
Isometric view
Scale: 1:1

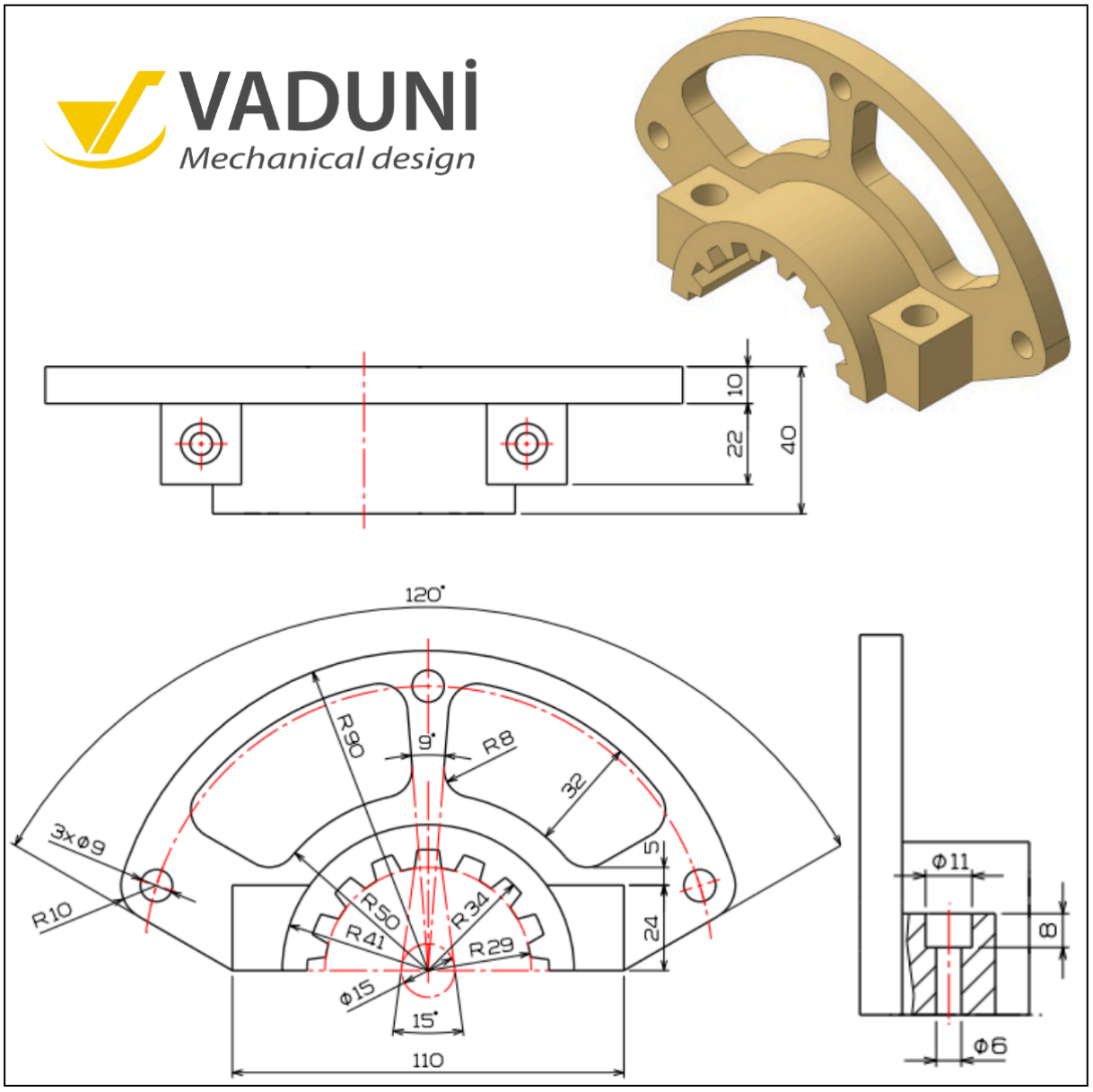
Bài tập 281


VADUNI
Mechanical design
20
25
45
29
R60
10°
ø60
5
200
100
500
24
37°
14°
145
R50

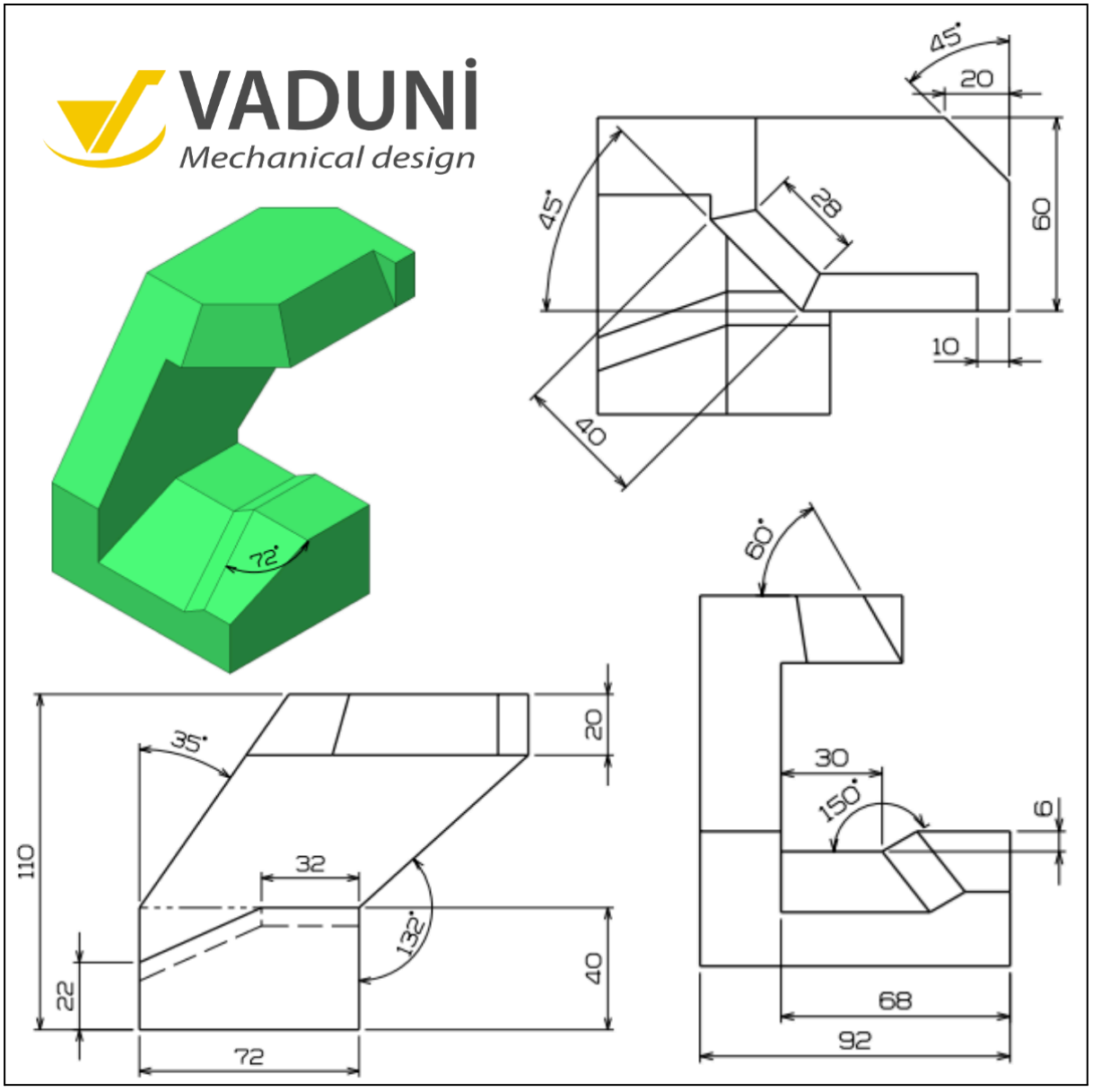
Bài tập 282


VADUNI
Mechanical design
86°
3
Φ83
16
Φ8
VIEW B
2
56
24
12
Φ8
B
Φ15
SECTION A–A
A
A

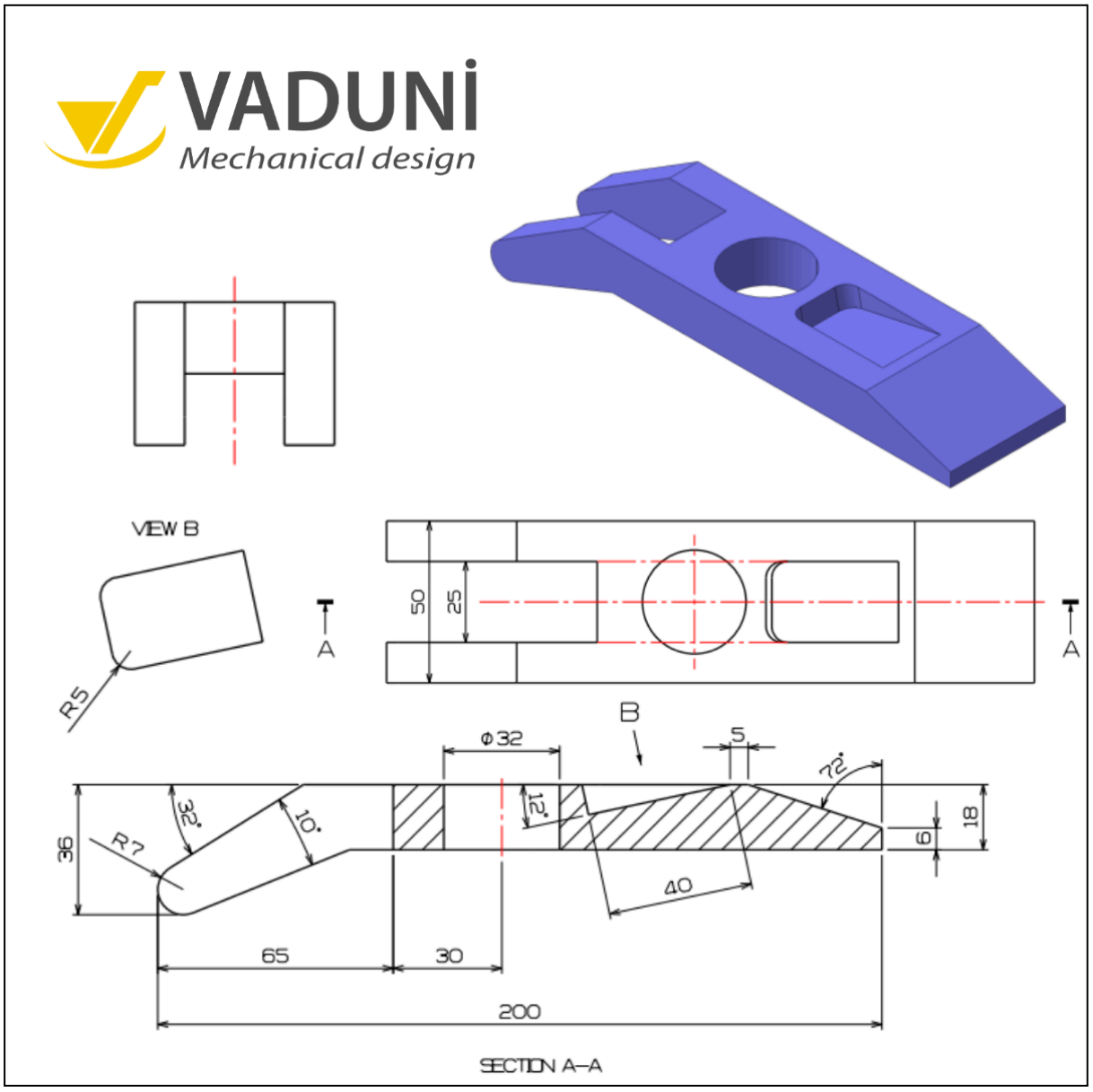
Bài tập 283


VADUNİ
Mechanical design
10
22
40
120°
R90
9°
R8
32
5
3xØ9
R10
R50
R41
R34
R29
24
Ø15
15°
110
Ø11
8
Ø6

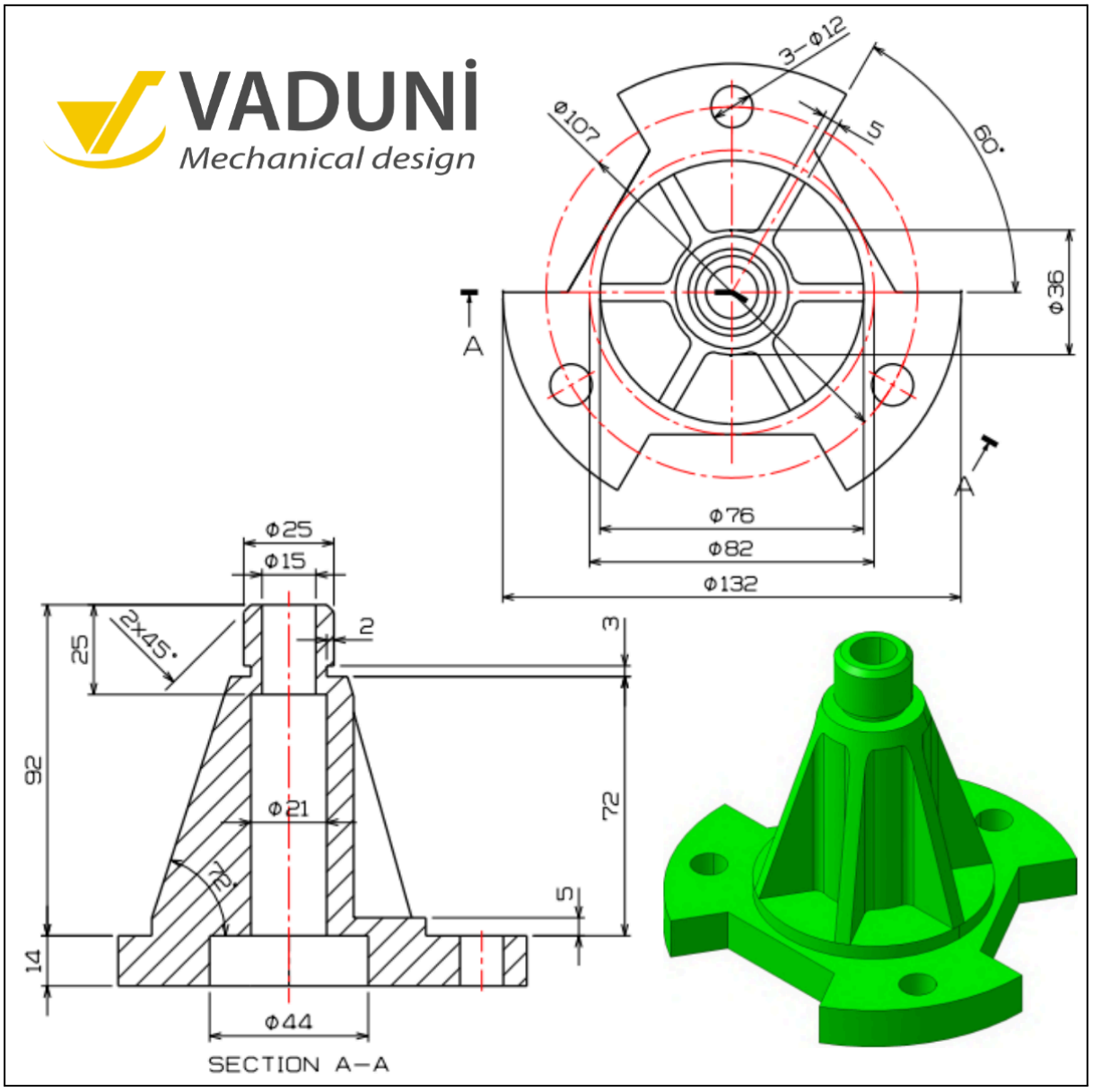
Bài tập 284


VADUNİ
Mechanical design
45°
20
45°
28
60
10
40
72°
60°
30
150°
6
68
92
35°
20
110
32
132°
40
22
72

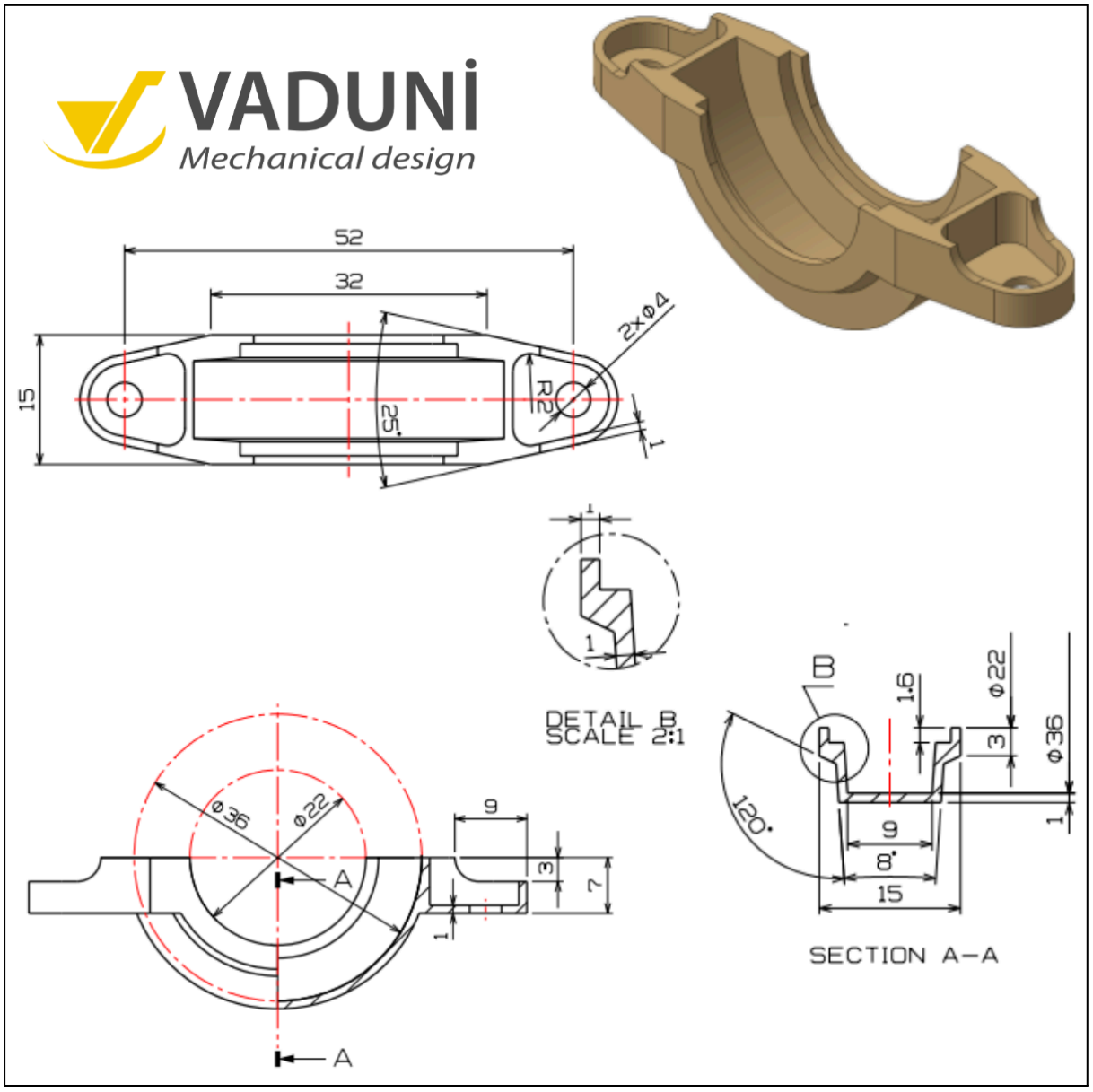
Bài tập 285


VADUNİ
Mechanical design
VIEW B
R5
A
50
25
A
B
Φ32
5
72°
12°
32°
10°
R7
36
18
6
40
65
30
200
SECTION A–A

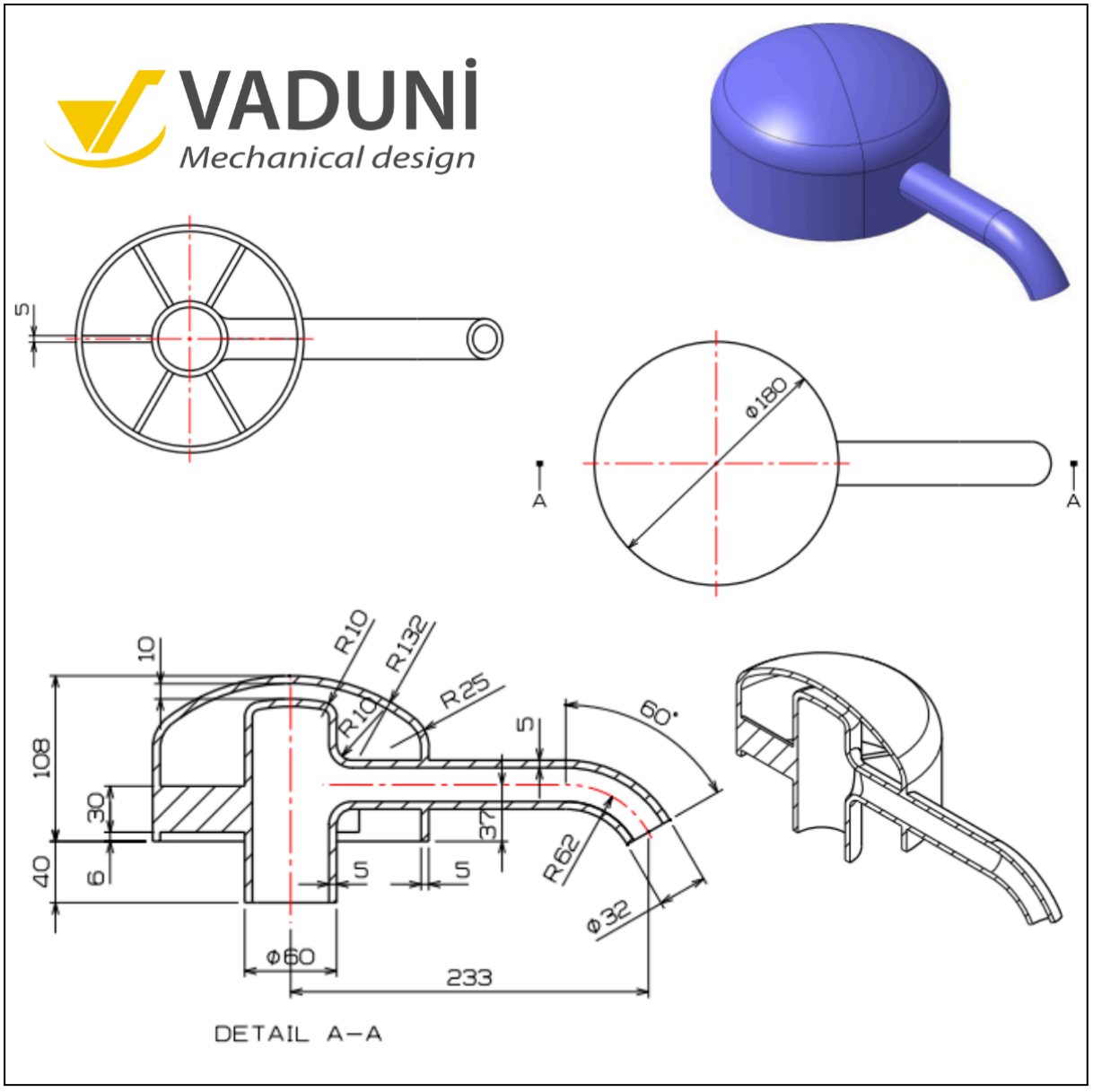
Bài tập 286


VADUNI
Mechanical design
3-Φ12
Φ107
5
60°
Φ36
A
A
Φ76
Φ82
Φ132
Φ25
Φ15
2x45°
25
2
3
92
72
Φ21
45°
5
14
Φ44
SECTION A-A

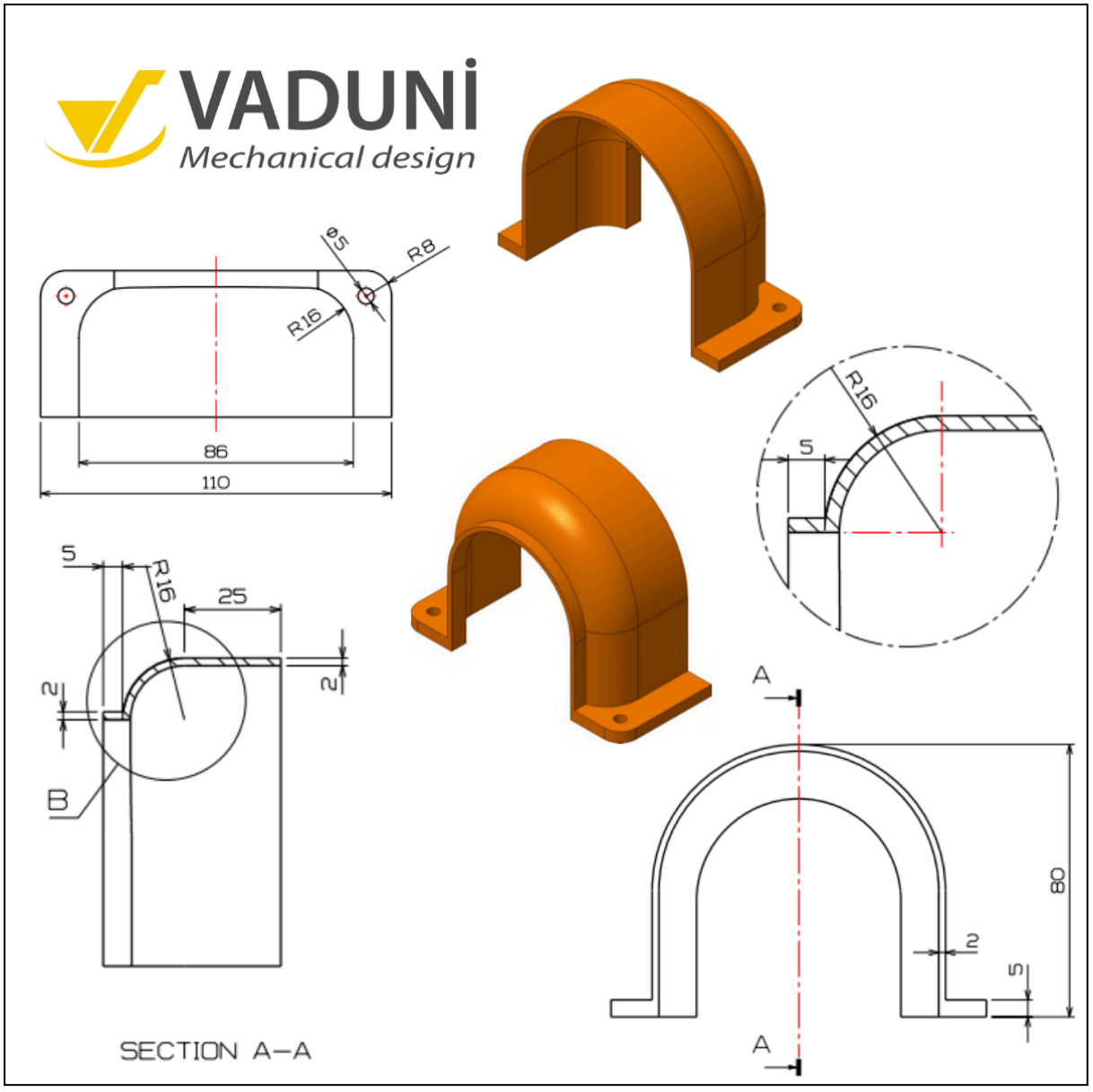
Bài tập 287


VADUNİ
Mechanical design
52
32
2xΦ4
15
R2
25°
1
1
1
DETAIL B
SCALE 2:1
B
1.6
Φ22
3
Φ36
120°
9
8
15
1
SECTION A–A
Φ36
Φ22
9
3
7
1
A
A

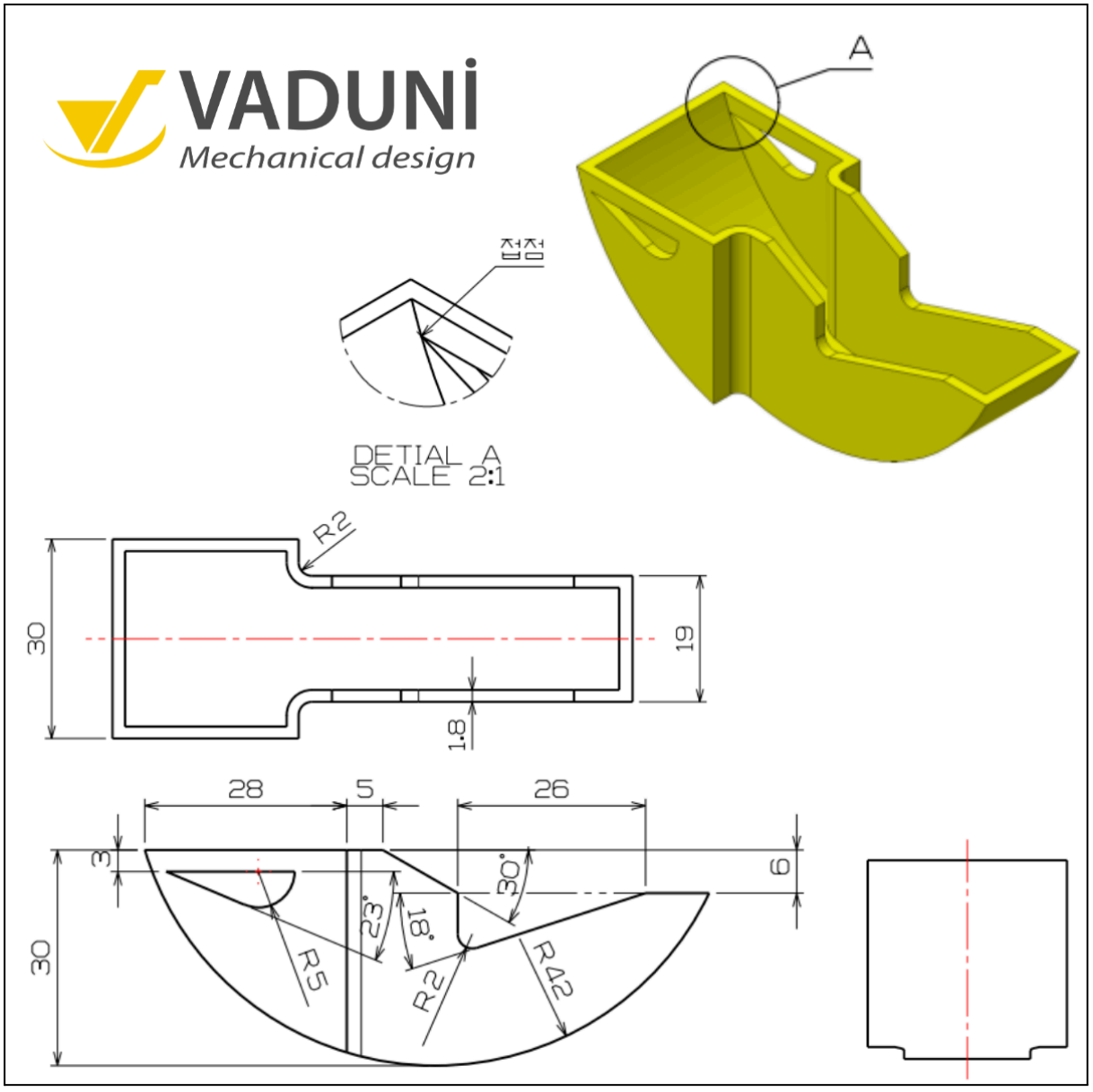
Bài tập 288


VADUNİ
Mechanical design
5
ø180
A
A
10
R10
R132
R25
R10
5
60°
108
30
6
40
37
5
5
R62
ø32
ø60
233
DETAIL A–A

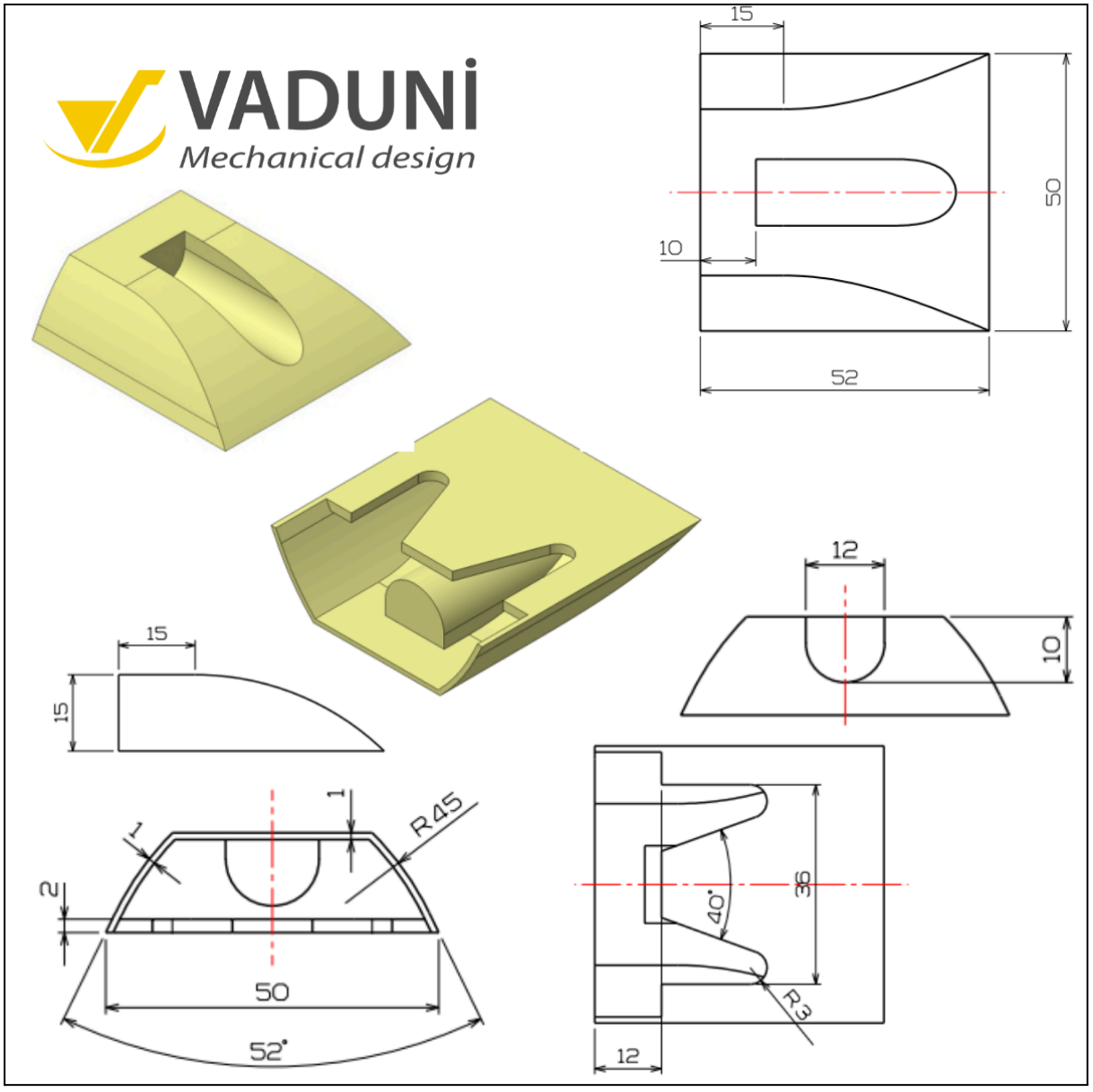
Bài tập 289


VADUNİ
Mechanical design
ø5
R8
R16
86
110
5
R16
25
2
2
B
R16
5
A
A
80
2
5
SECTION A–A

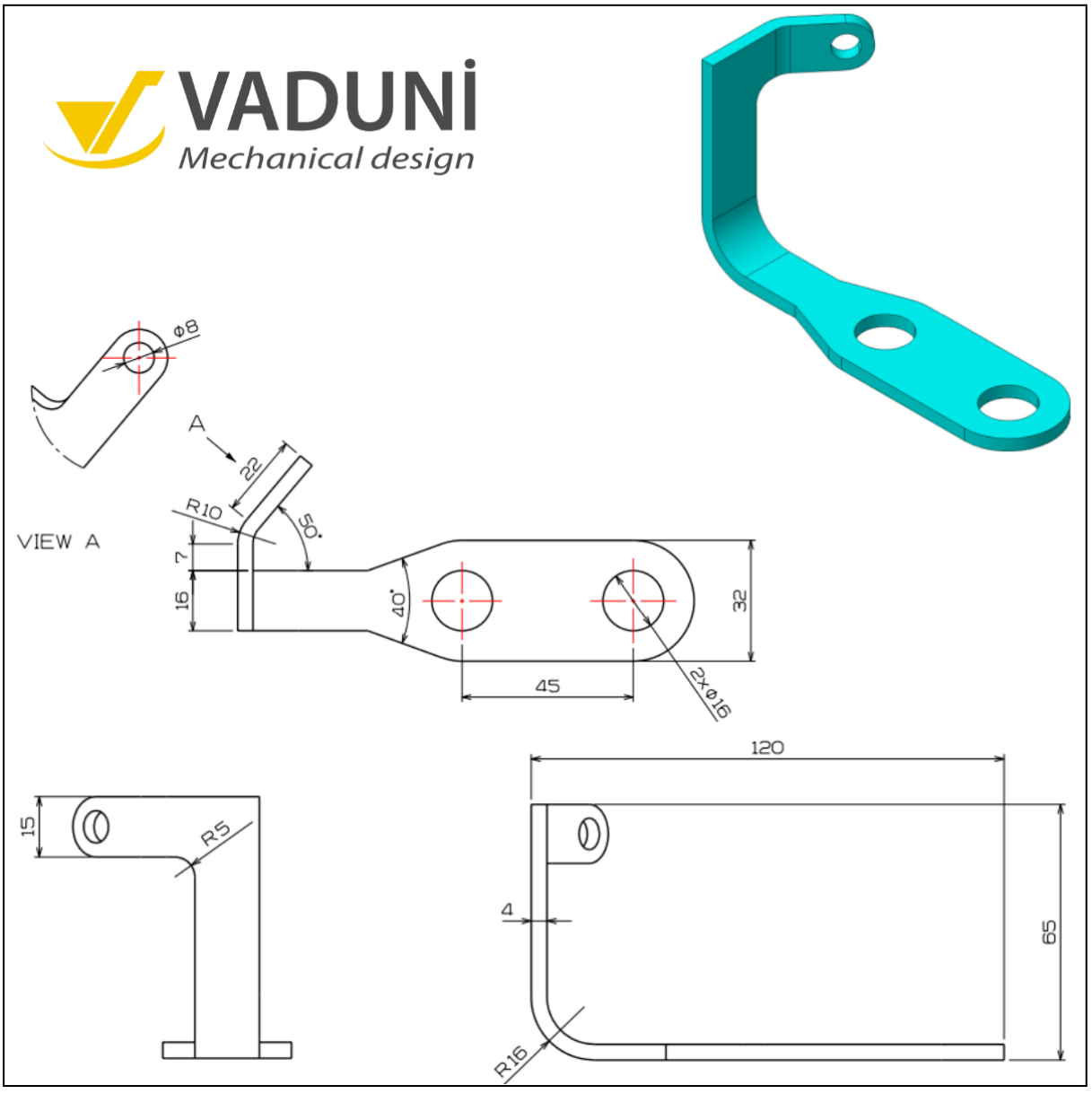
Bài tập 290


VADUNİ
Mechanical design
A
DETIAL A
SCALE 2:1
R2
30
19
1.8
28
5
26
3
6
30
23°
18°
30°
R5
R2
R42

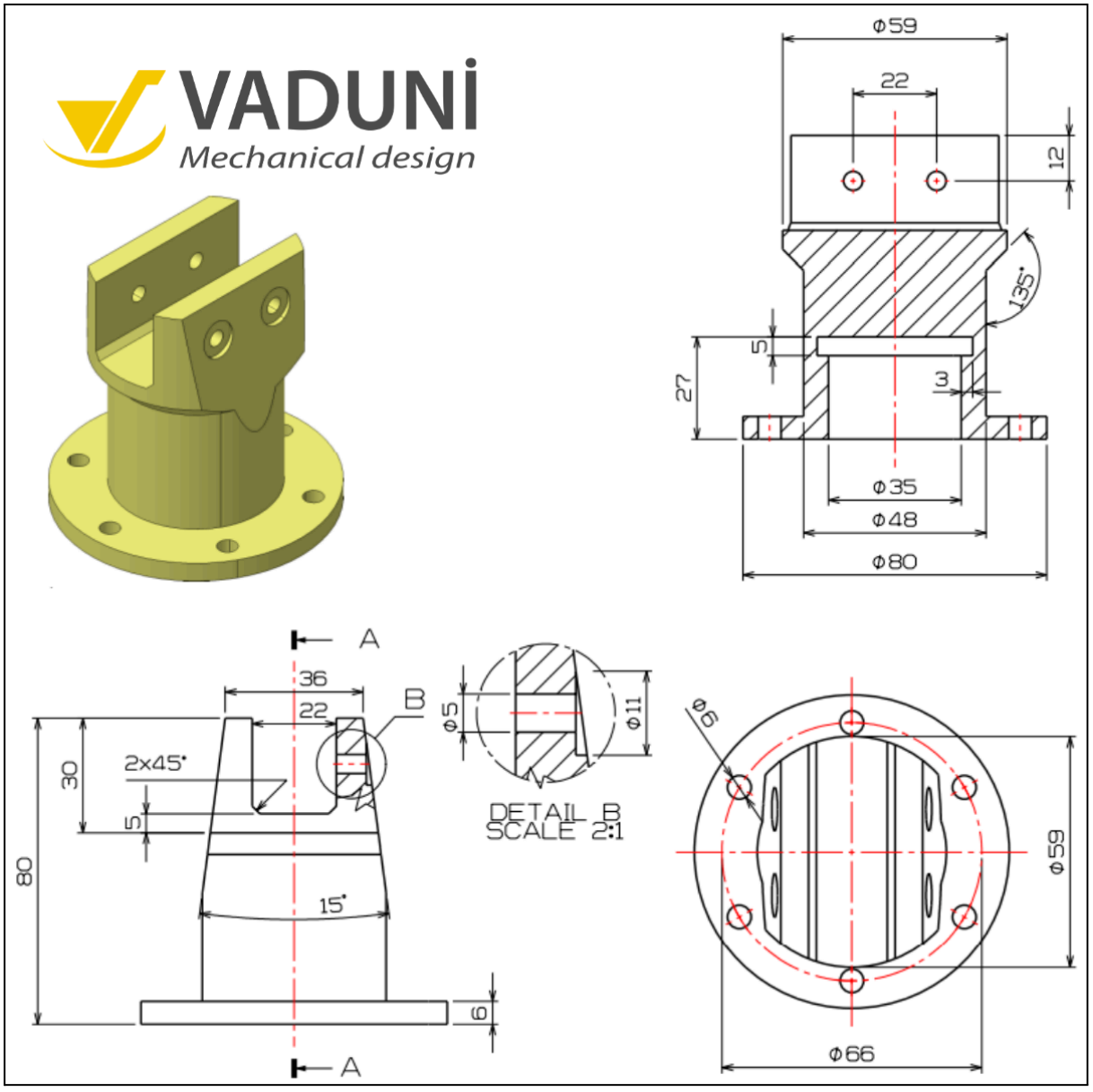
Bài tập 291


VADUNİ
Mechanical design
15
50
10
52
12
10
15
15
1
1
R45
2
50
52°
40°
36
R3
12

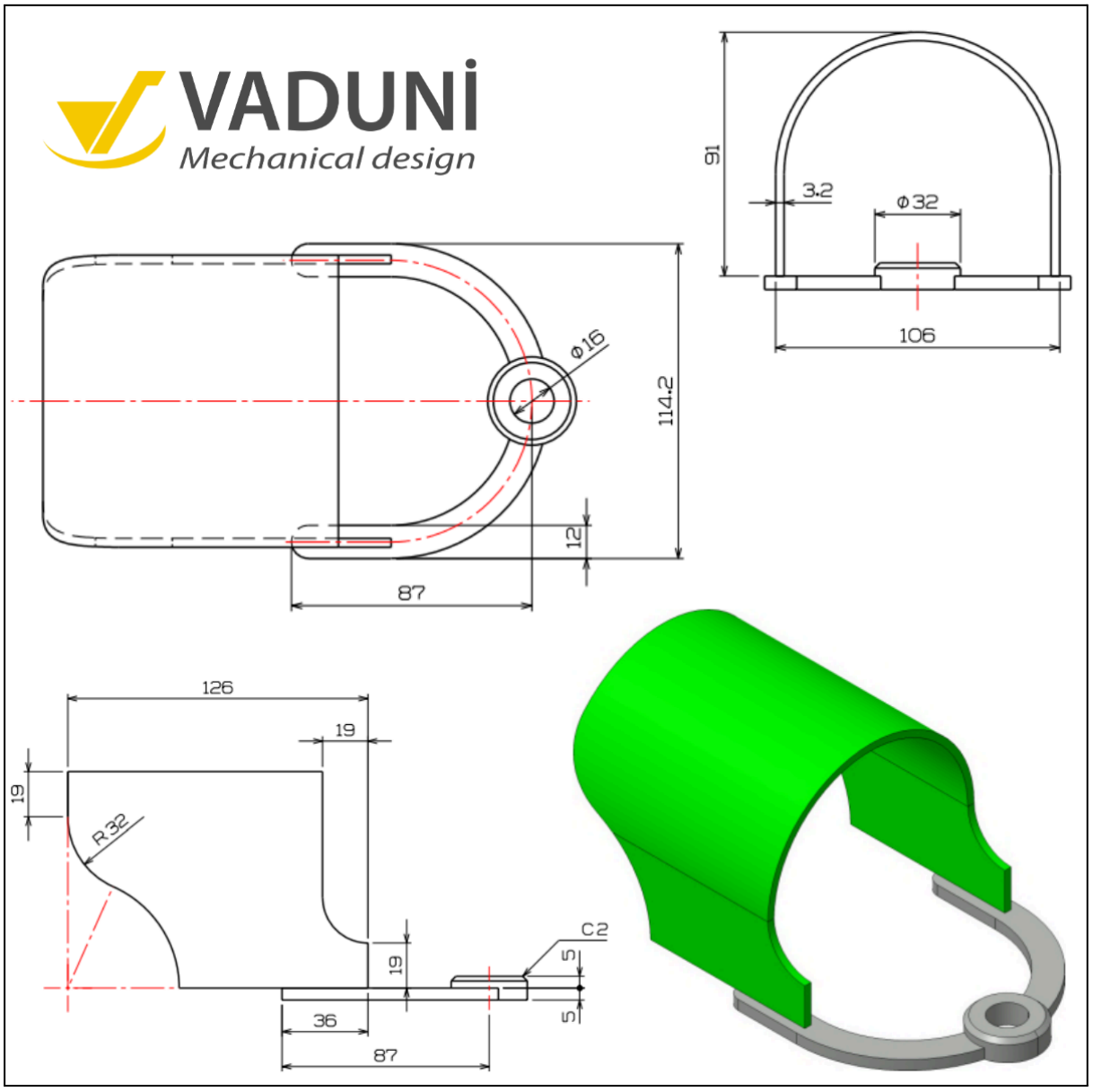
Bài tập 292


VADUNI
Mechanical design
Φ8
A
22
R10
50°
VIEW A
7
16
40°
32
45
2xΦ16
120
15
R5
4
65
R16

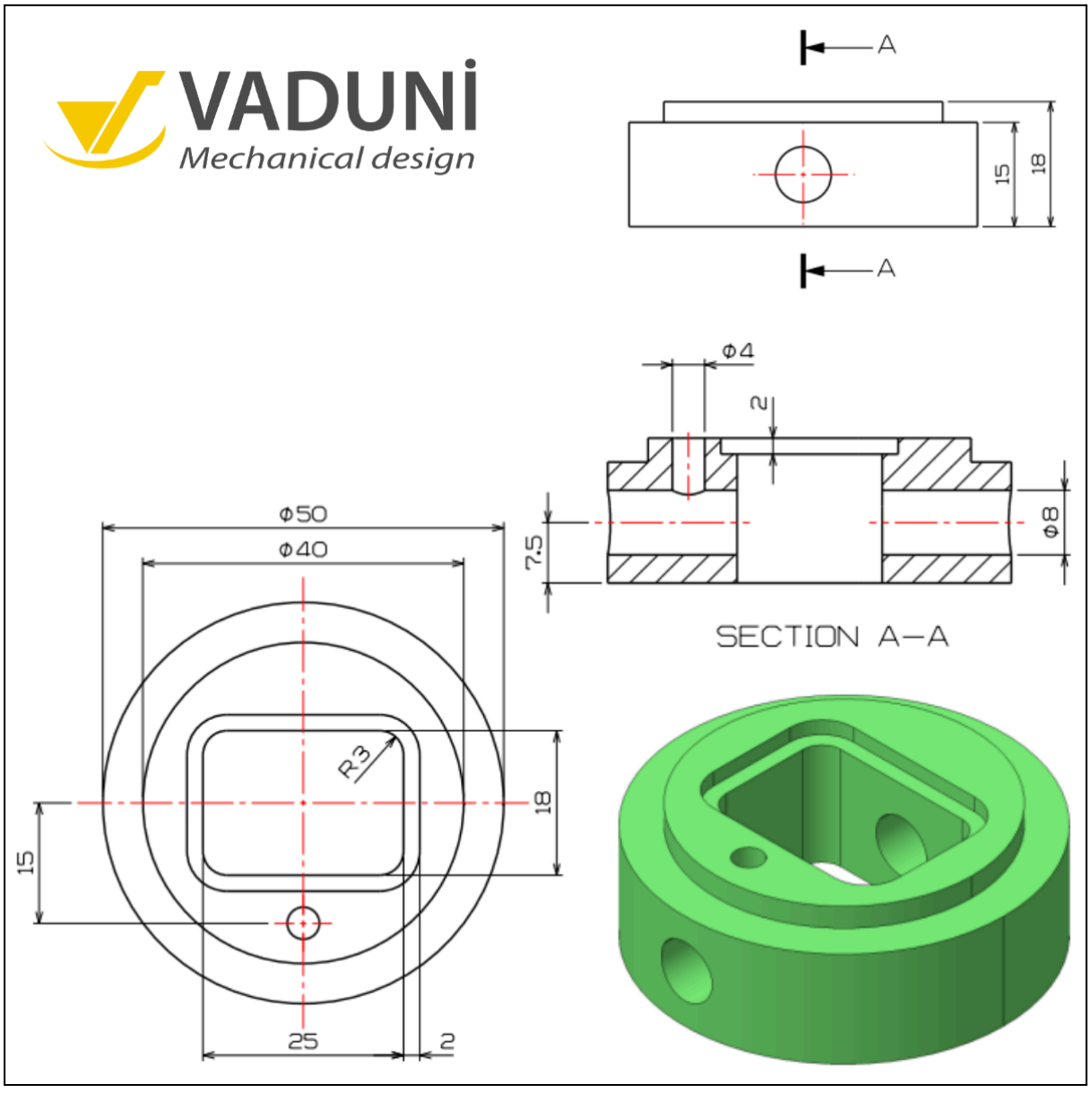
Bài tập 293


VADUNİ
Mechanical design
Φ59
22
12
135°
5
27
3
Φ35
Φ48
Φ80
A
36
22
B
30
2x45°
5
80
15°
6
A
Φ5
Φ11
DETAIL B
SCALE 2:1
Φ6
Φ59
Φ66

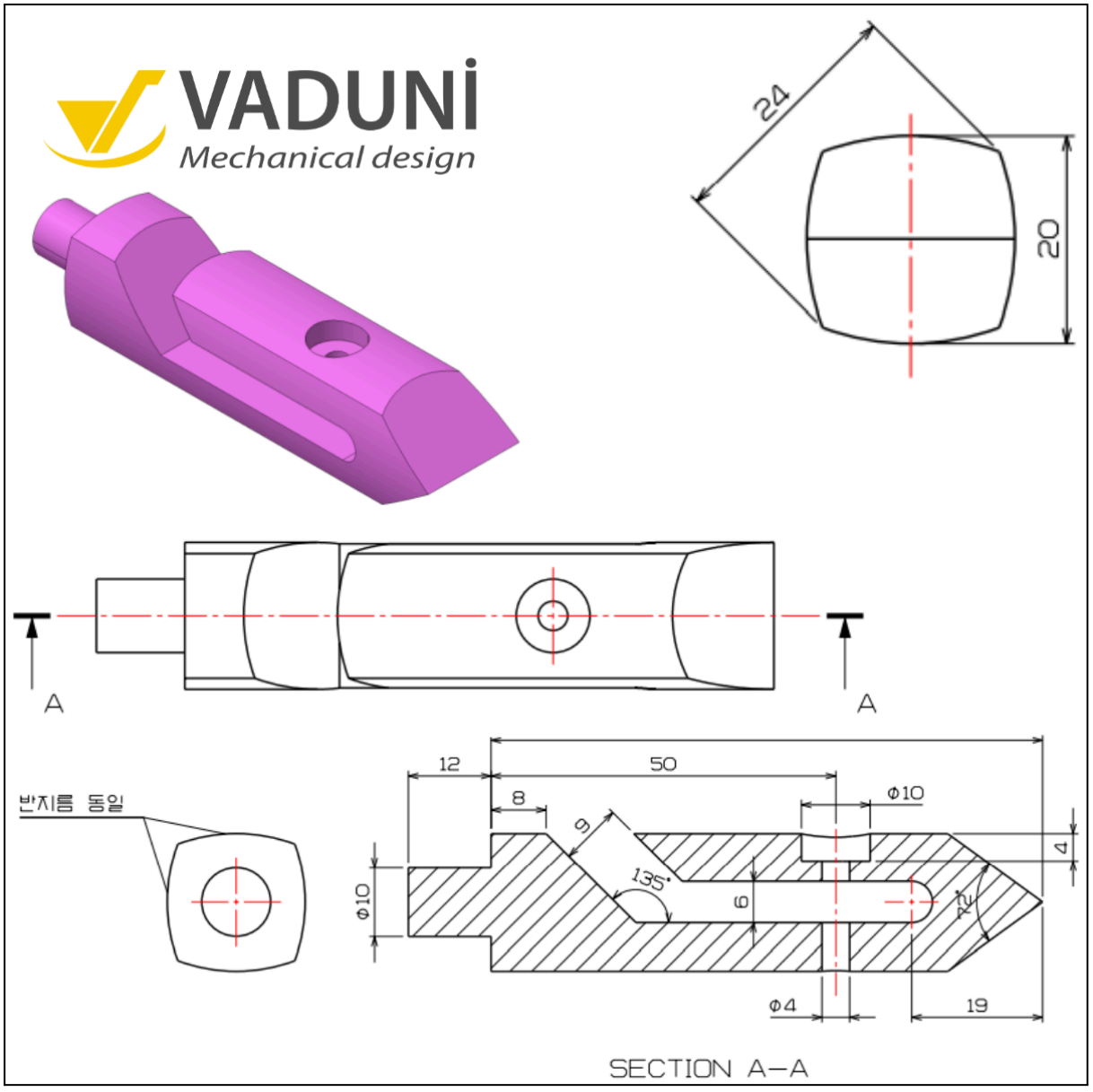
Bài tập 294


VADUNİ
Mechanical design
91
3.2
Φ32
106
Φ16
114.2
12
87
126
19
19
R32
19
C2
5
5
36
87

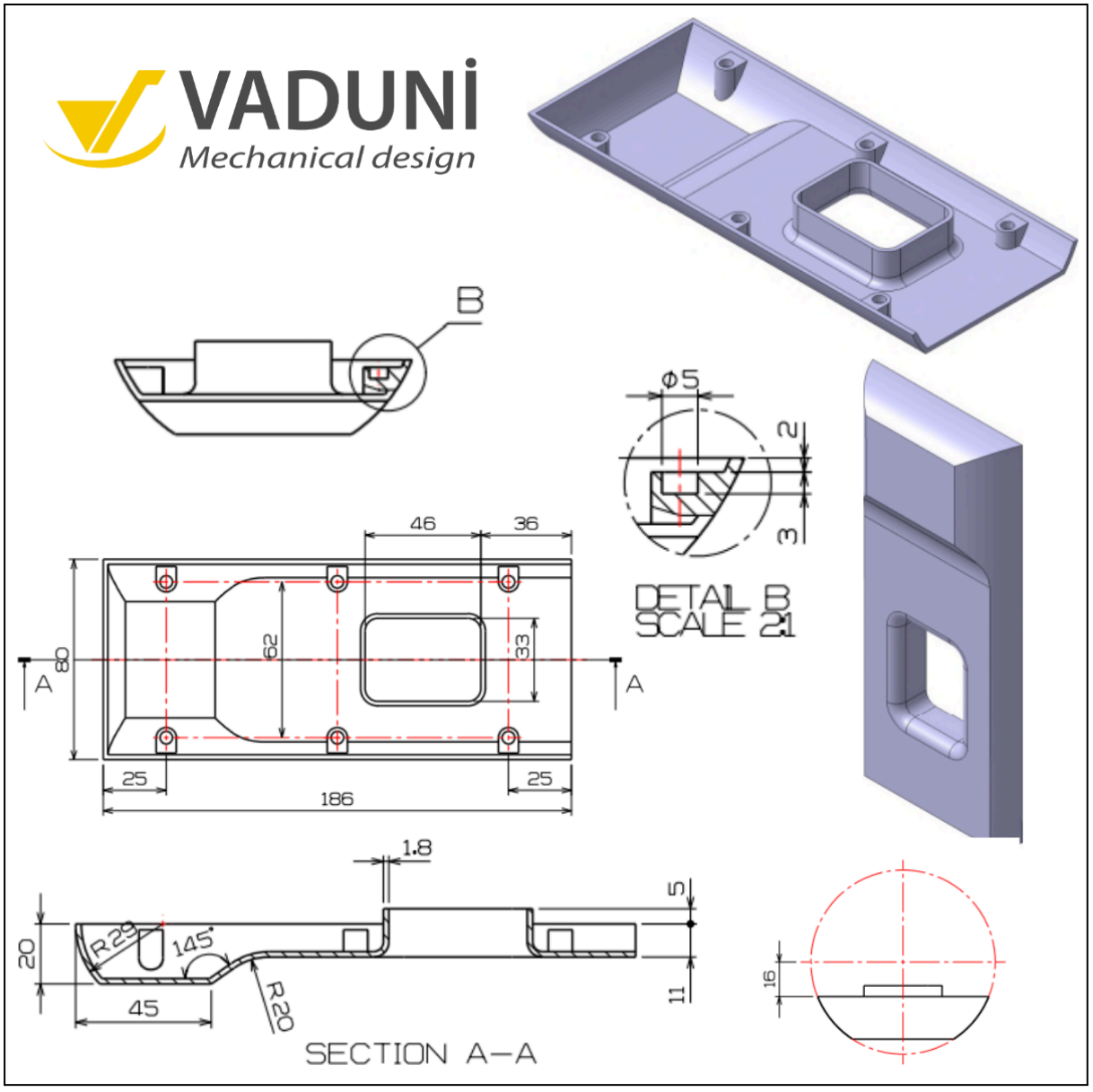
Bài tập 295


VADUNI
Mechanical design
A
A
15
18
Φ4
2
Φ50
Φ40
7.5
Φ8
SECTION A–A
R3
18
15
25
2

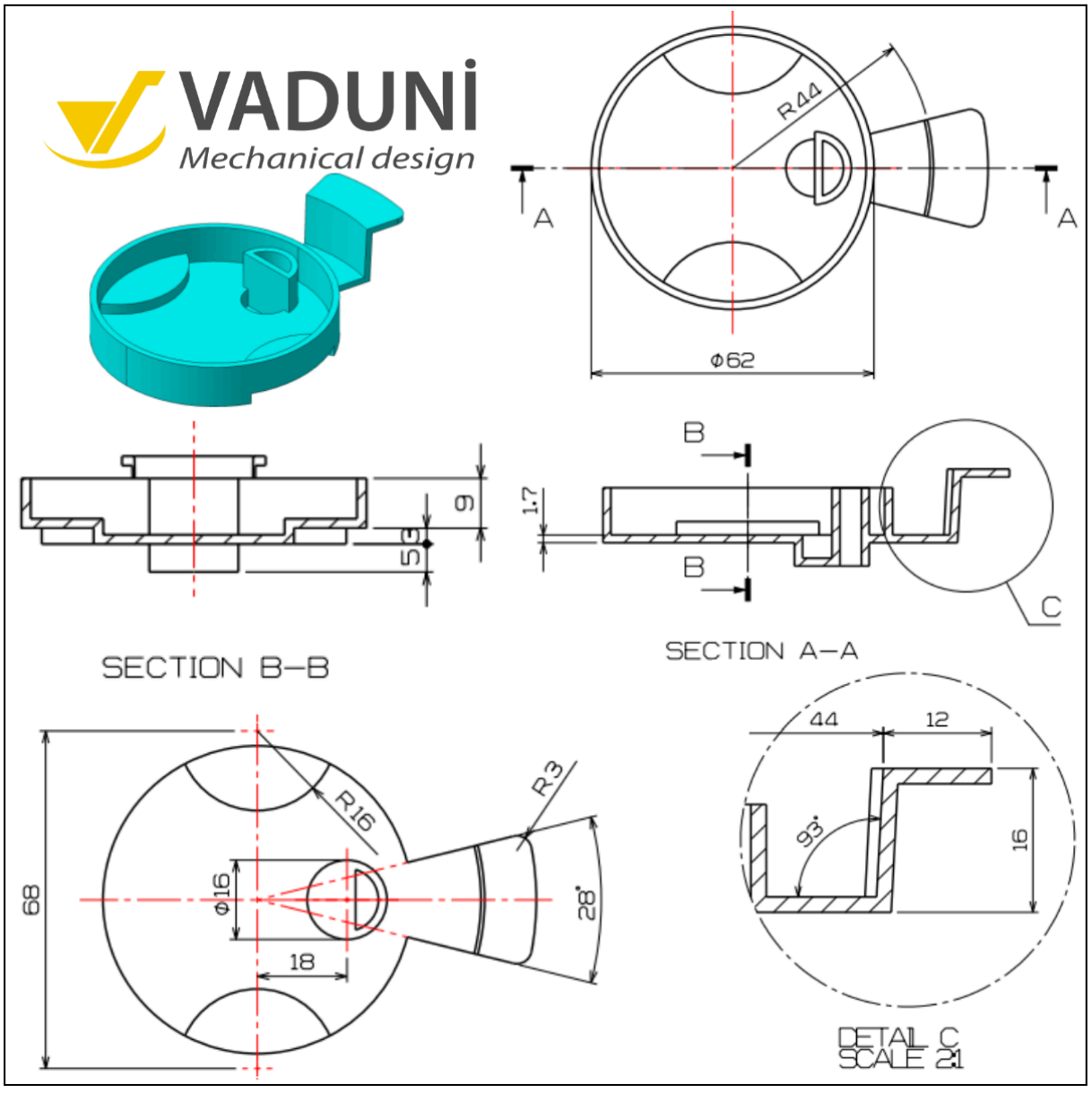
Bài tập 296


VADUNİ
Mechanical design
24
20
A
A
반지름 동일
12
50
8
9
Φ10
135°
Φ10
6
4
R2
Φ4
19
SECTION A–A

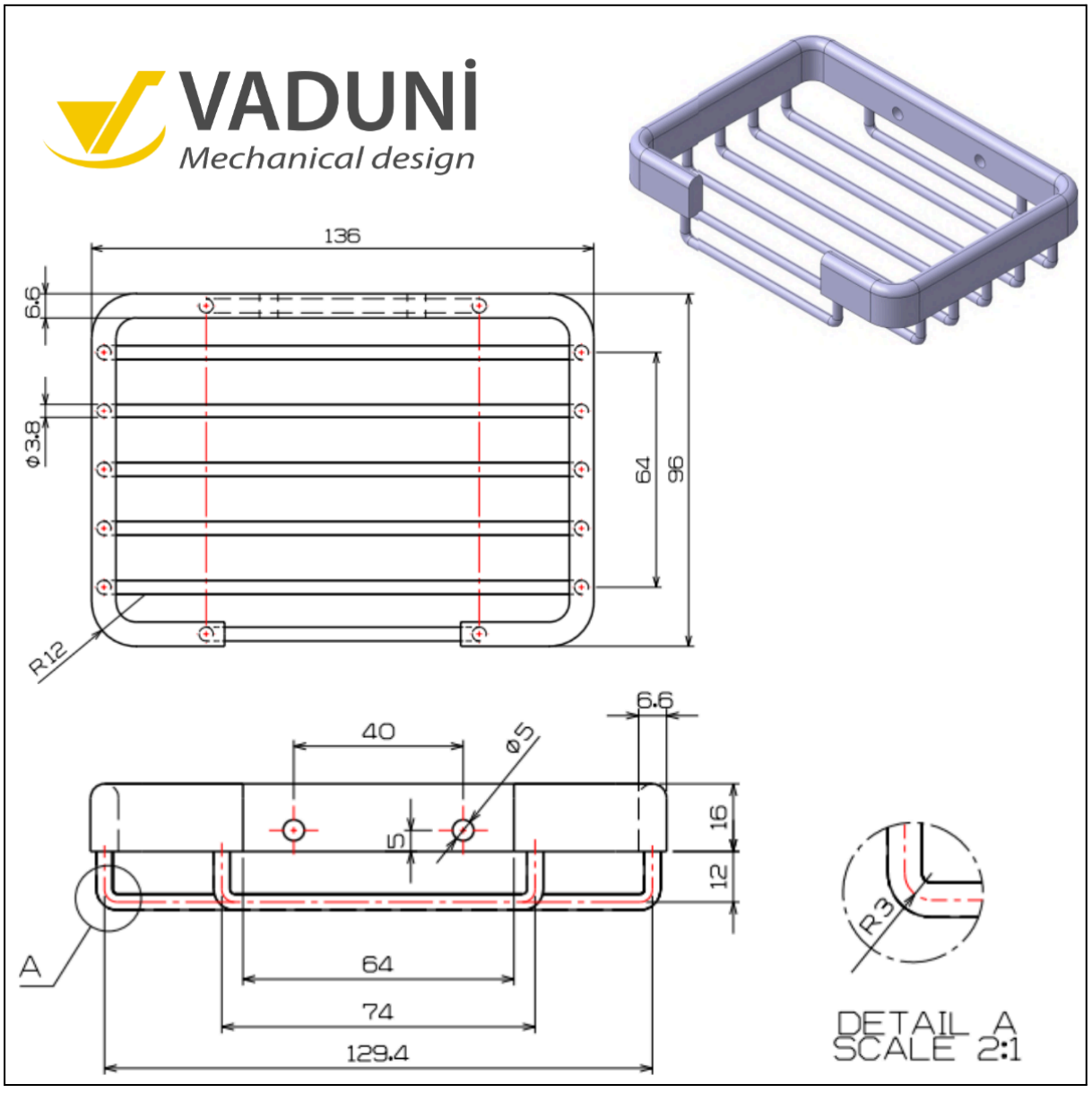
Bài tập 297


VADUNİ
Mechanical design
B
ϕ5
2
3
DETAIL B
SCALE 2:1
46
36
62
33
80
A
A
25
25
186
1.8
5
20
R29
145°
R20
45
11
16
SECTION A–A

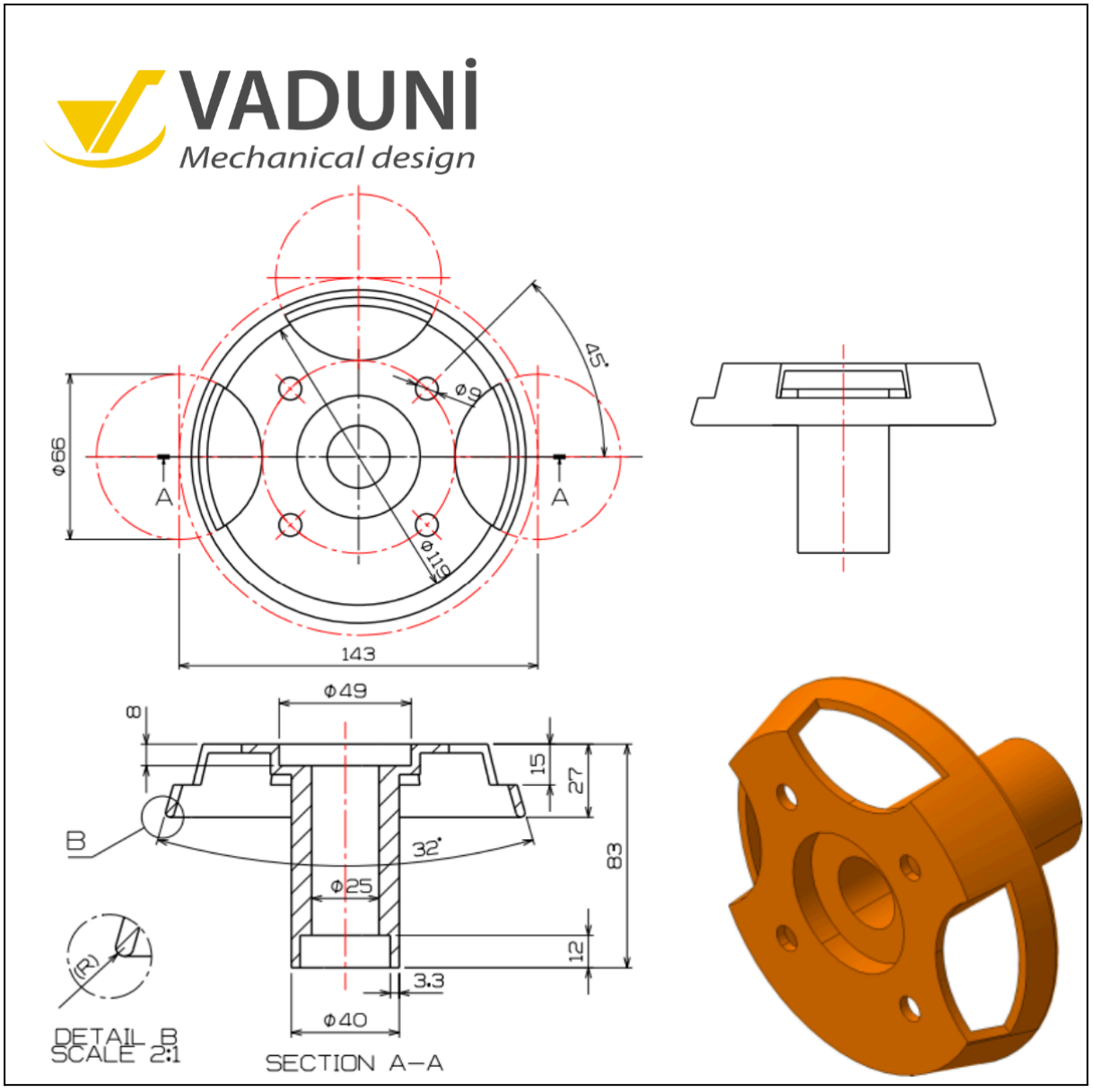
Bài tập 298


VADUNİ
Mechanical design
R44
A
A
Φ62
B
B
1.7
9
5.6
C
SECTION B–B
SECTION A–A
R16
R3
68
Φ16
18
28°
44
12
93°
16
DETAIL C
SCALE 2:1

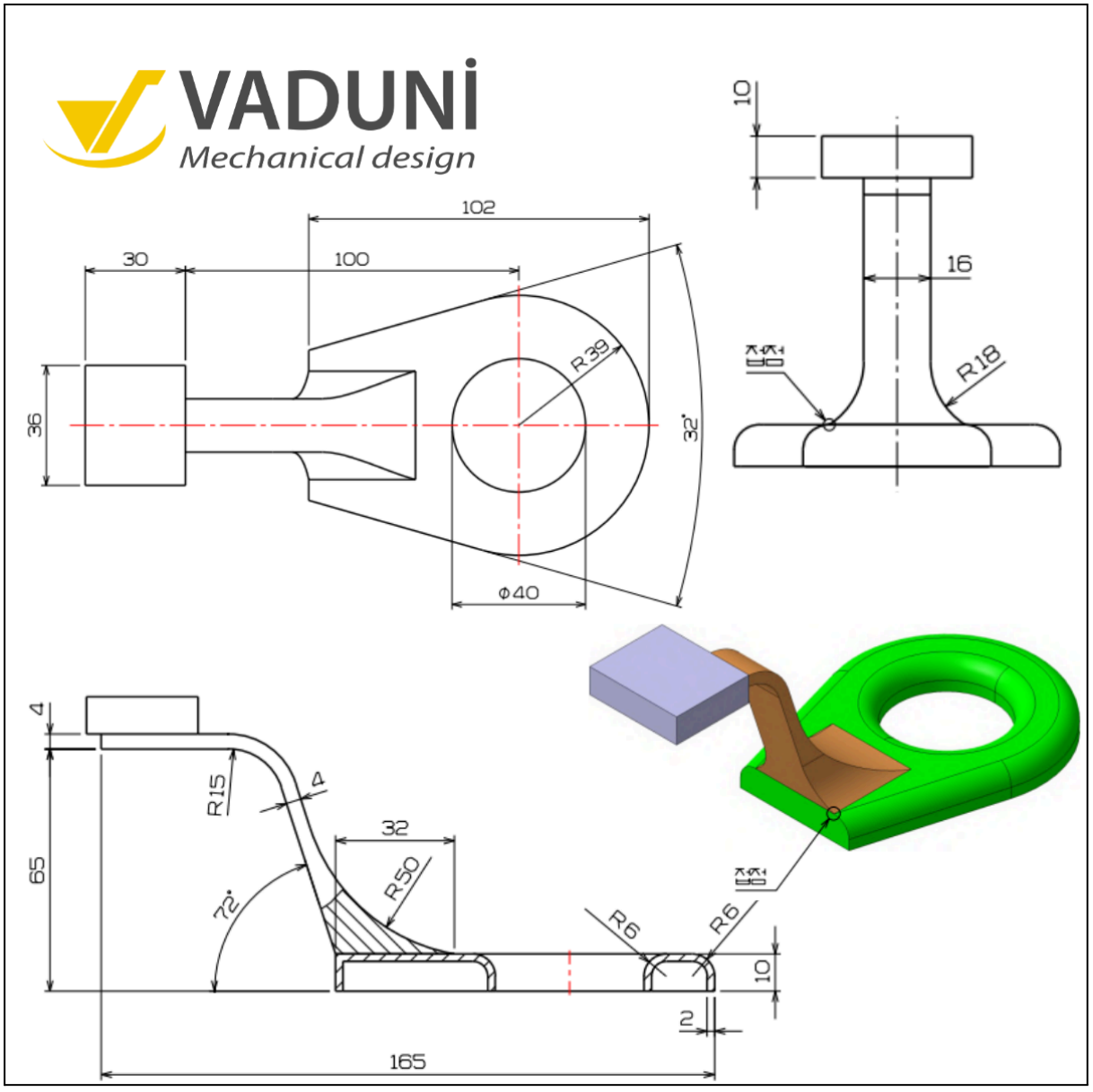
Bài tập 299


VADUNİ
Mechanical design
136
6.6
Φ3.8
64
96
R12
6.6
40
Ø5
5
16
12
A
64
74
129.4
R3
DETAIL A
SCALE 2:1

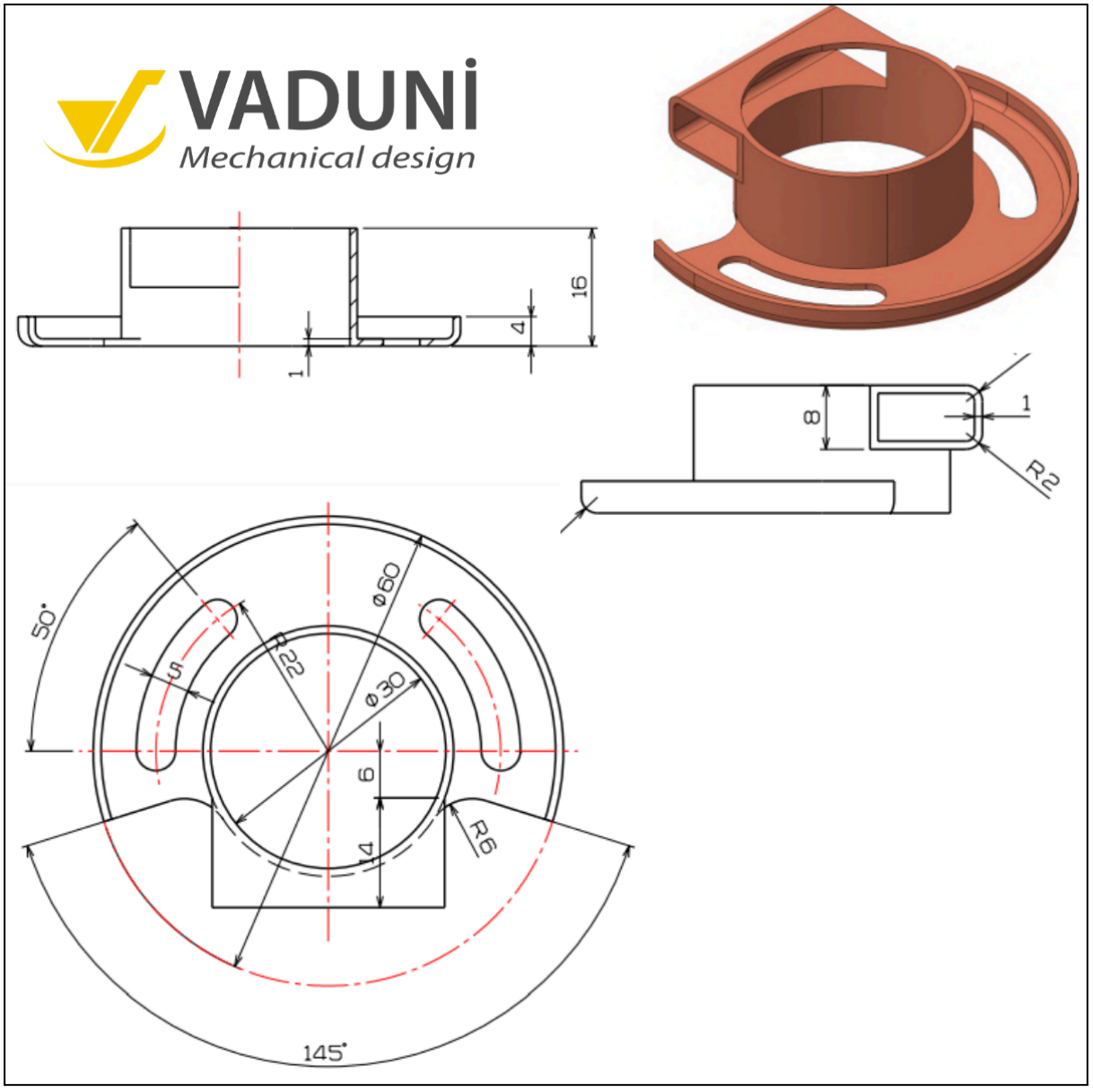
Bài tập 300


VADUNİ
Mechanical design
45°
Φ9
Φ66
A
A
Φ119
143
Φ49
8
15
27
83
B
32°
Φ25
12
3.3
Φ40
DETAIL B
SCALE 2:1
SECTION A–A

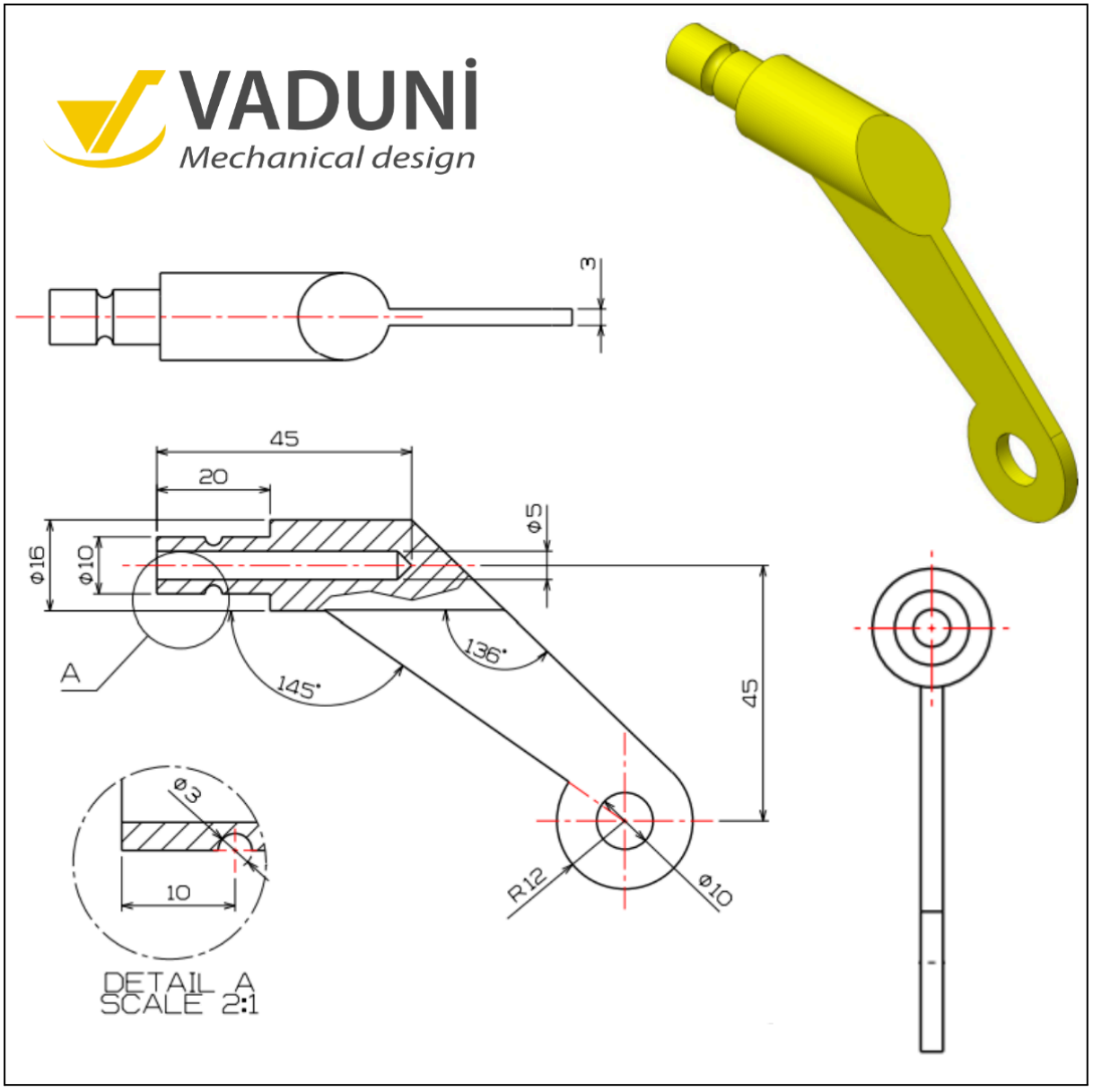
Bài tập 301


VADUNİ
Mechanical design
102
30
100
R39
36
32°
ϕ40
10
16
R18
4
R15
4
32
R50
65
72°
R6
R6
10
2
165

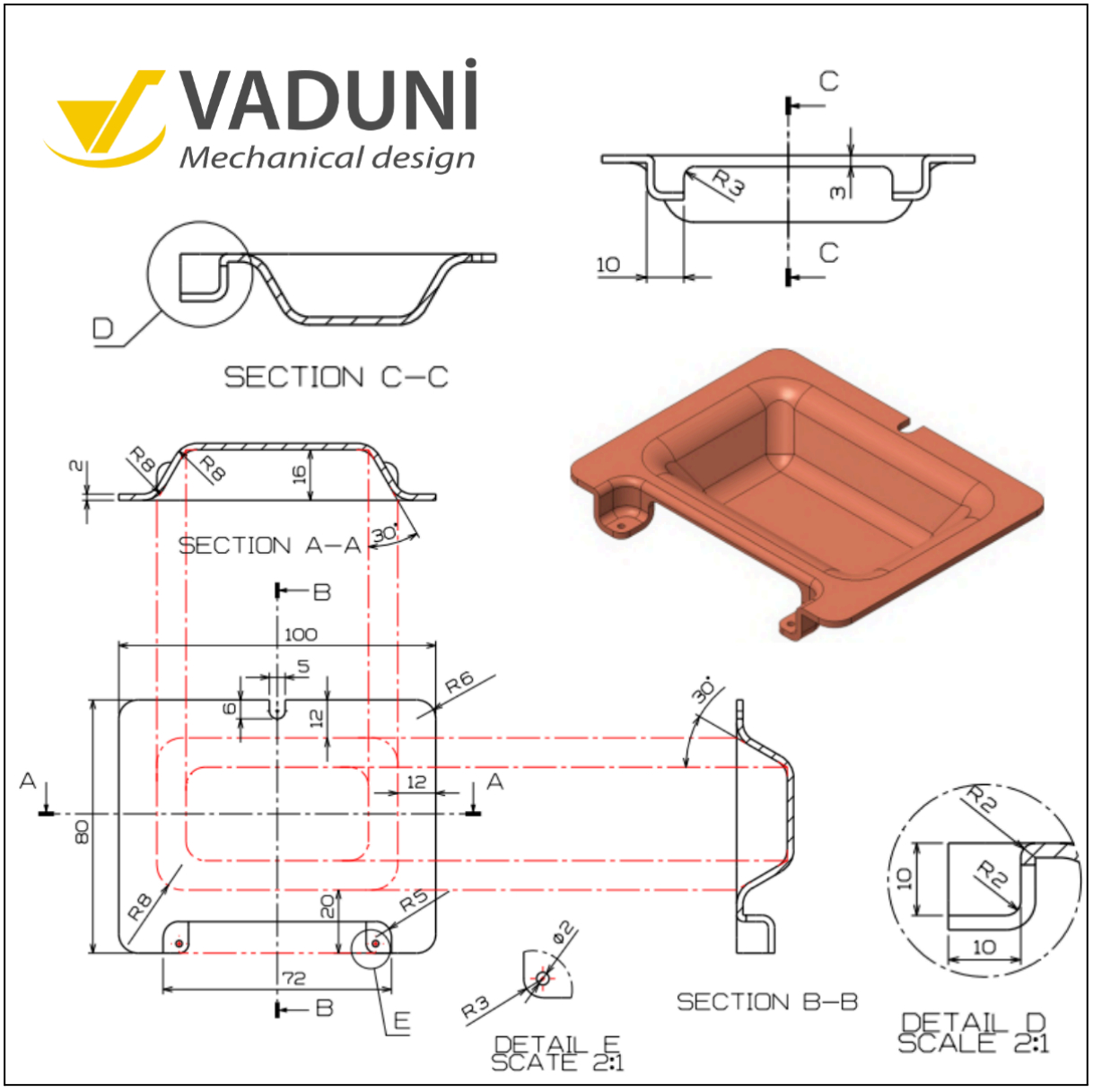
Bài tập 302



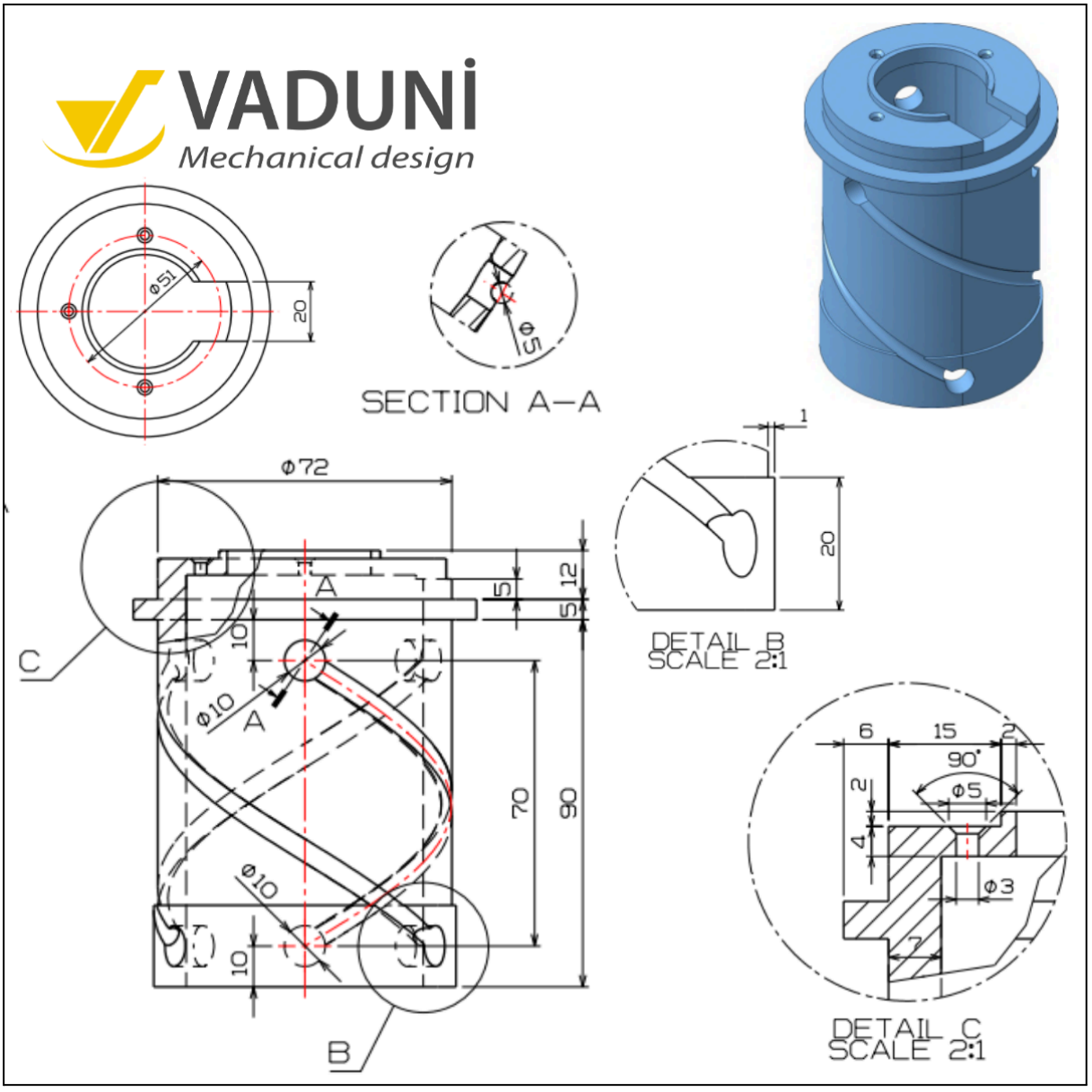
Bài tập 303


VADUNİ
Mechanical design
3
45
20
ϕ5
ϕ16
ϕ10
A
145°
136°
45
ϕ3
10
DETAIL A
SCALE 2:1
R12
ϕ10

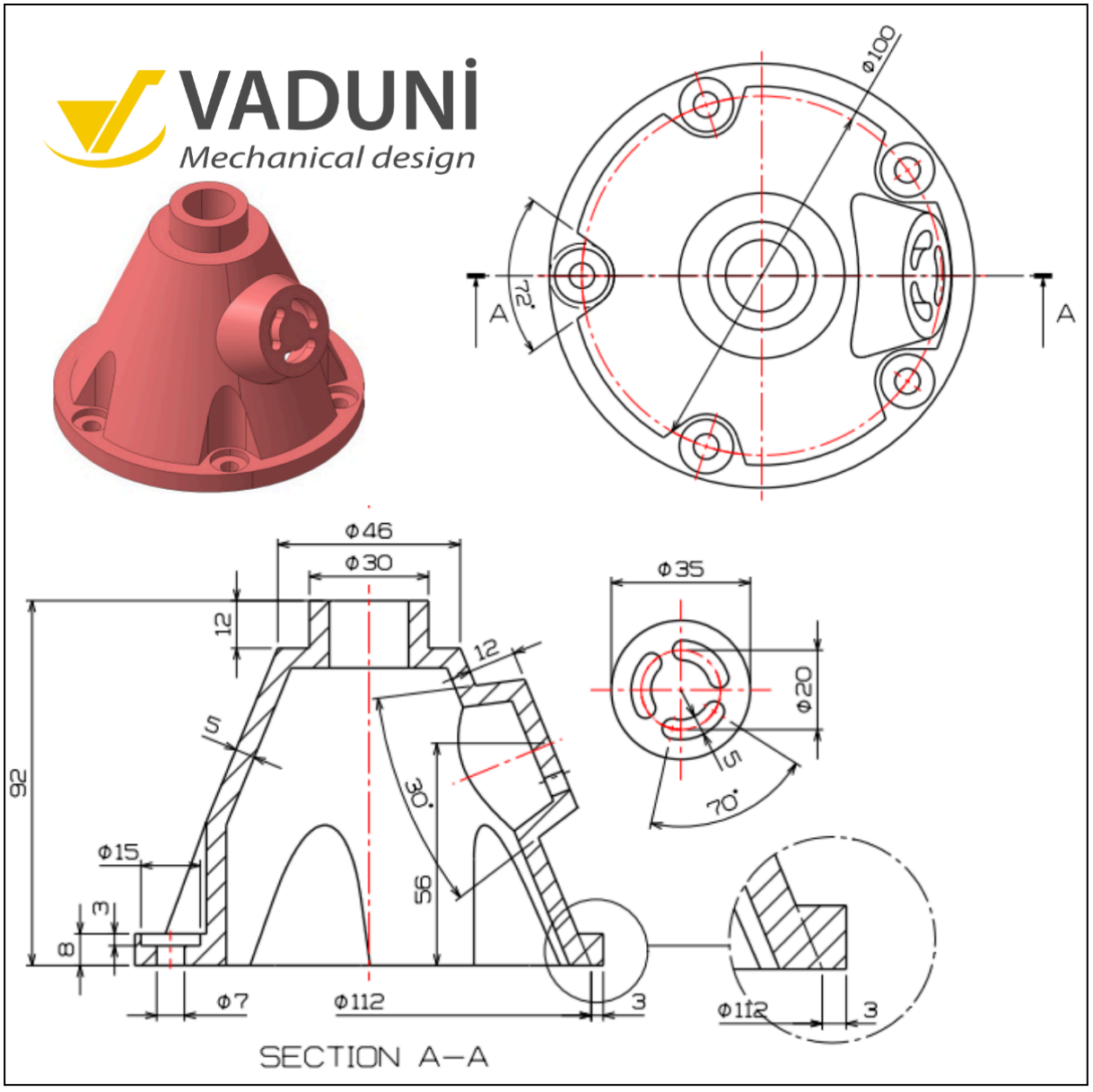
Bài tập 304


VADUNI
Mechanical design
C
R3
3
10
C
D
SECTION C–C
2
R8
R8
16
SECTION A–A
30°
B
100
5
6
12
R6
A
A
12
80
R8
20
R5
72
B
E
R3
ø2
DETAIL E
SCATE 2:1
30°
SECTION B–B
R2
R2
10
10
DETAIL D
SCALE 2:1

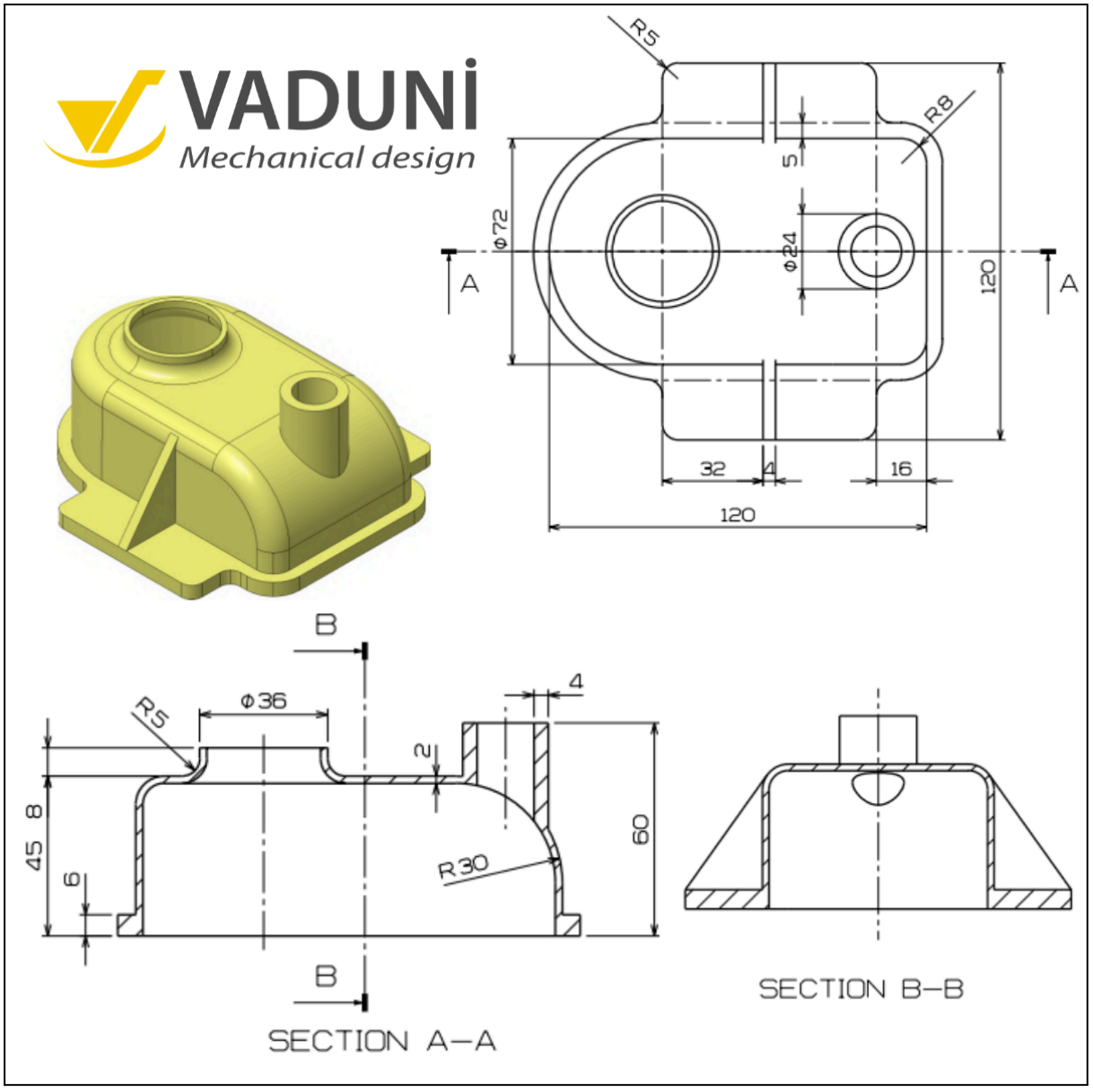
Bài tập 305


VADUNİ
Mechanical design
ø51
20
ø5
SECTION A–A
ø72
A
5
12
10
ø10
70
90
C
B
1
20
DETAIL B
SCALE 2:1
6
15
2
90°
ø5
2
4
ø3
7
DETAIL C
SCALE 2:1

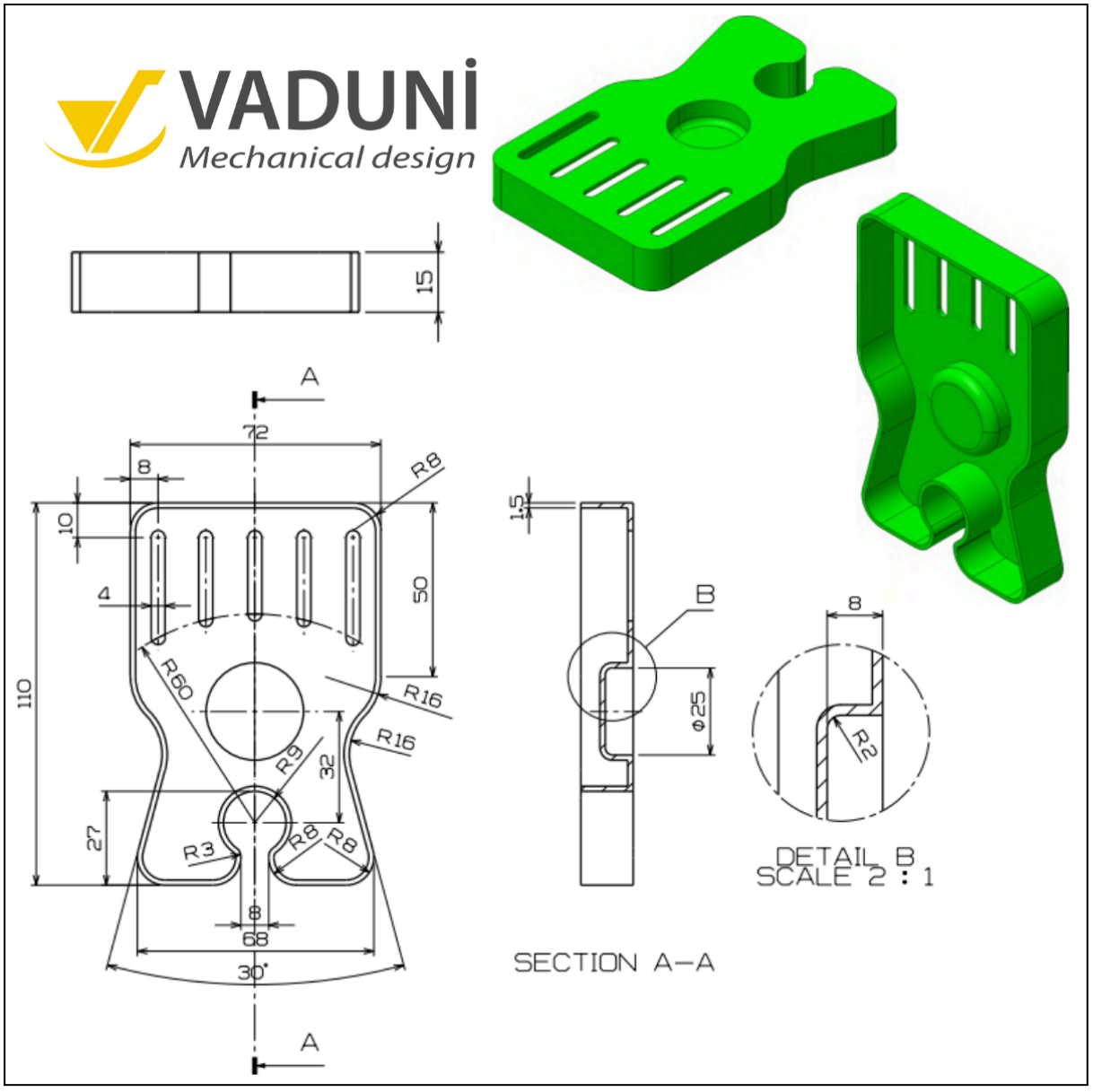
Bài tập 306


VADUNİ
Mechanical design
φ100
72°
A
A
φ46
φ30
φ35
12
12
φ20
5
5
92
30°
70°
φ15
3
8
56
φ7
φ112
3
φ112
3
SECTION A–A

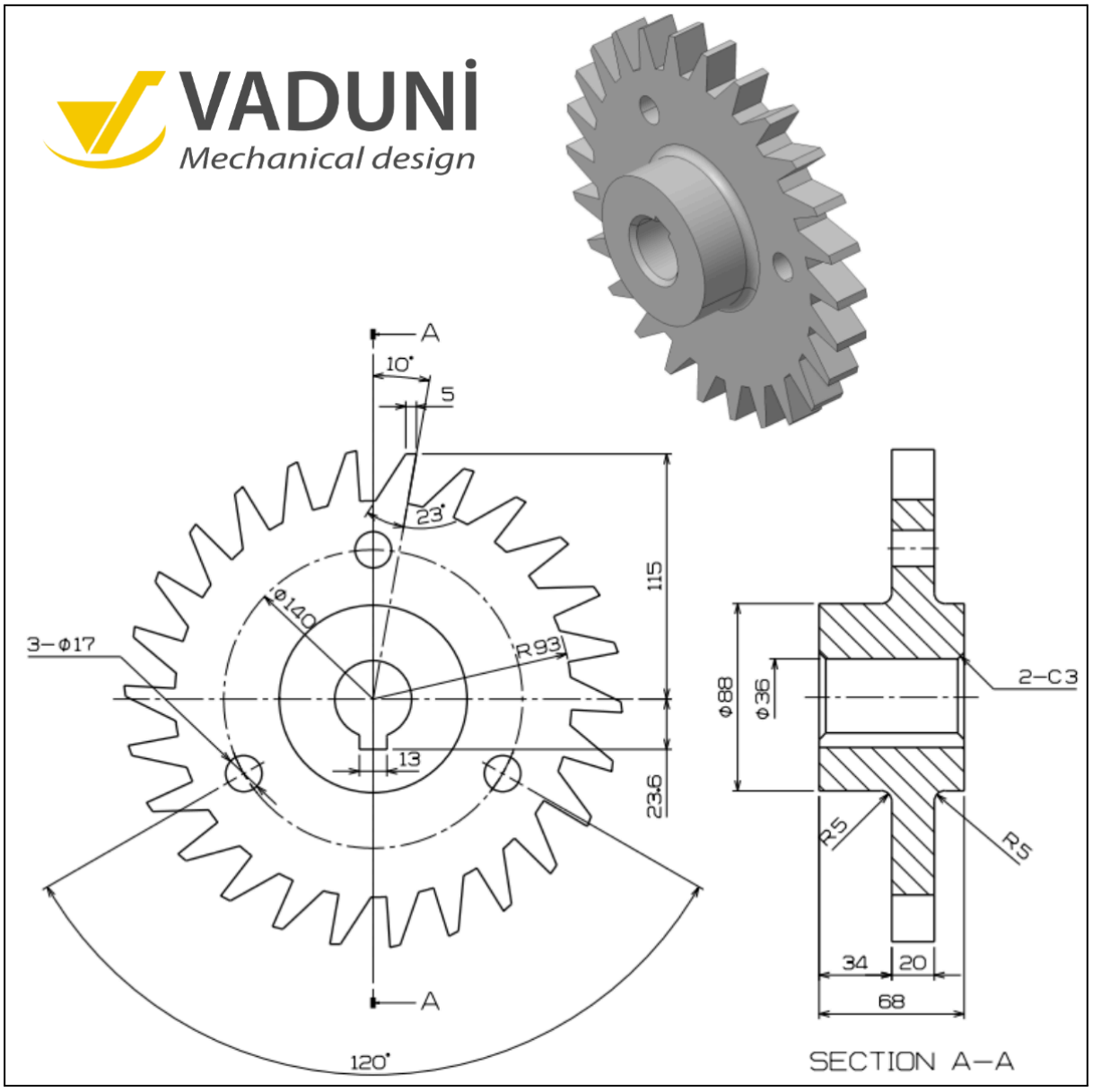
Bài tập 307


VADUNİ
Mechanical design
R5
R8
5
ϕ72
ϕ24
A
A
120
32
4
16
120
B
R5
ϕ36
4
2
8
45
6
R30
60
B
SECTION A–A
SECTION B–B

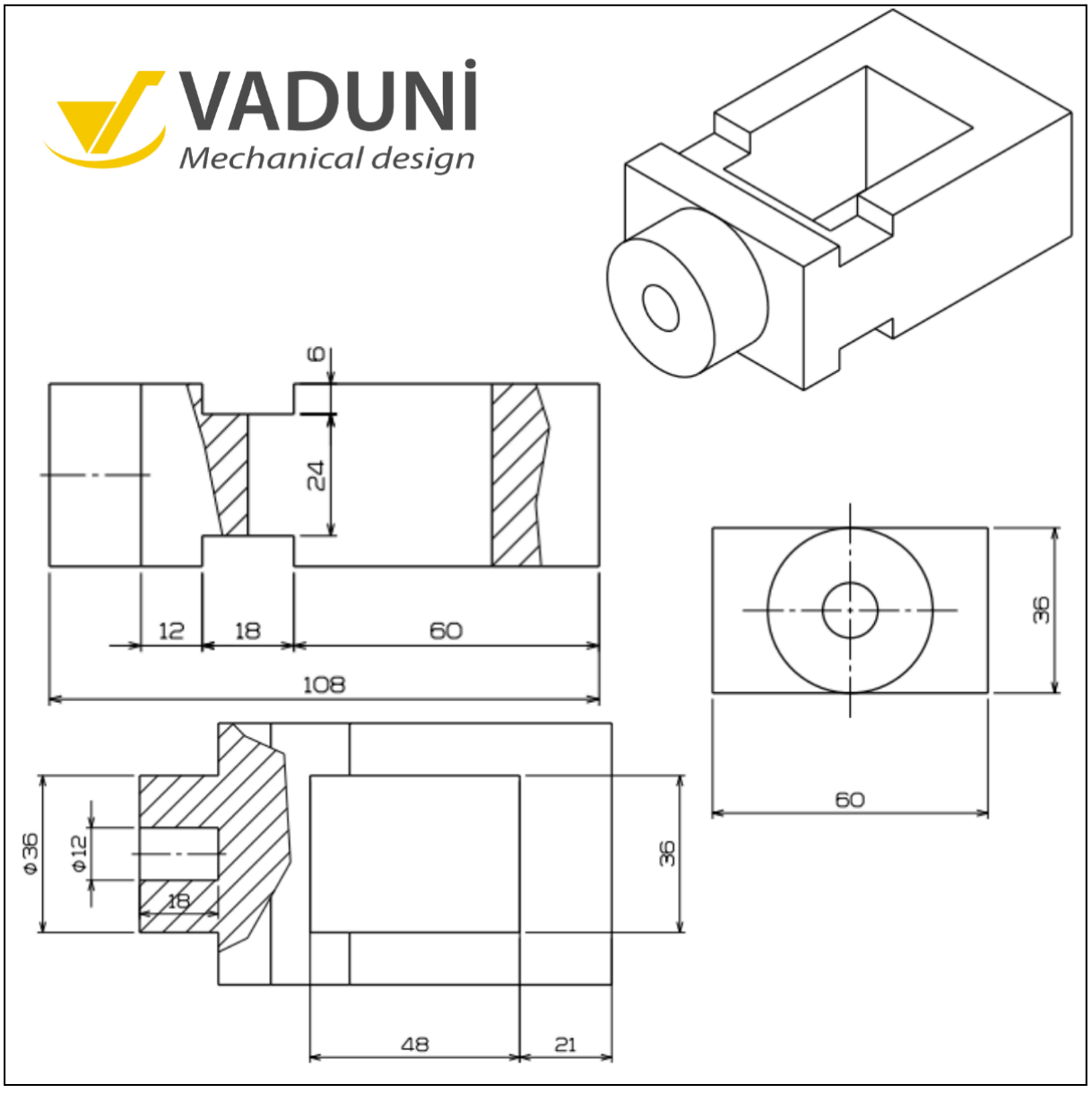
Bài tập 308


VADUNİ
Mechanical design
15
A
72
8
R8
10
4
50
110
R60
R16
R16
R9
32
27
R3
R8
R8
8
68
30°
A
1.5
B
Φ25
SECTION A–A
8
R2
DETAIL B
SCALE 2 : 1

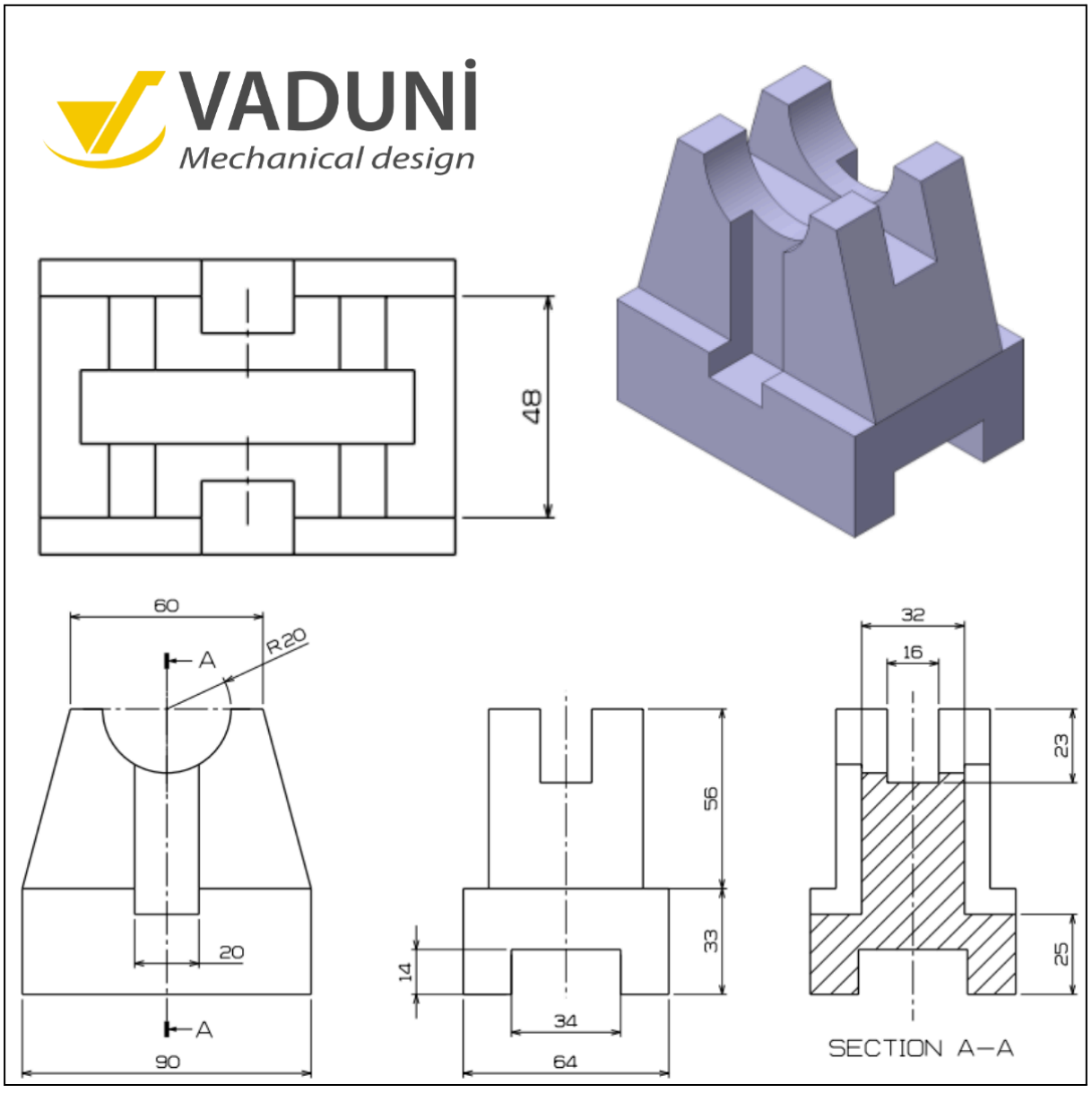
Bài tập 309


VADUNI
Mechanical design
A
10°
5
23°
115
Φ140
R93
3–Φ17
13
23.6
A
120°
Φ88
Φ36
2–C3
R5
R5
34
20
68
SECTION A–A

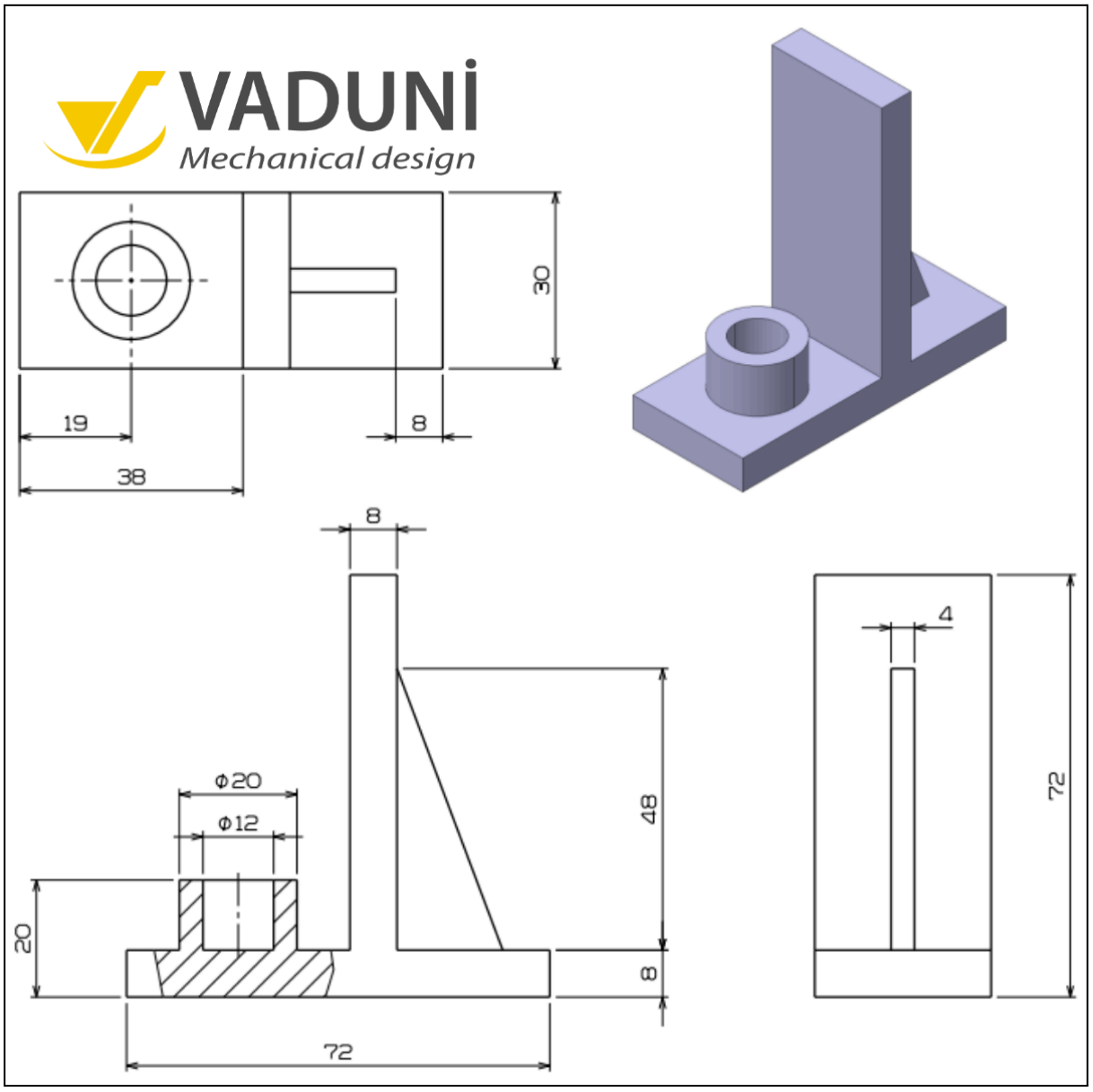
Bài tập 310


VADUNİ
Mechanical design
6
24
12
18
60
108
36
60
Φ36
Φ12
18
36
48
21

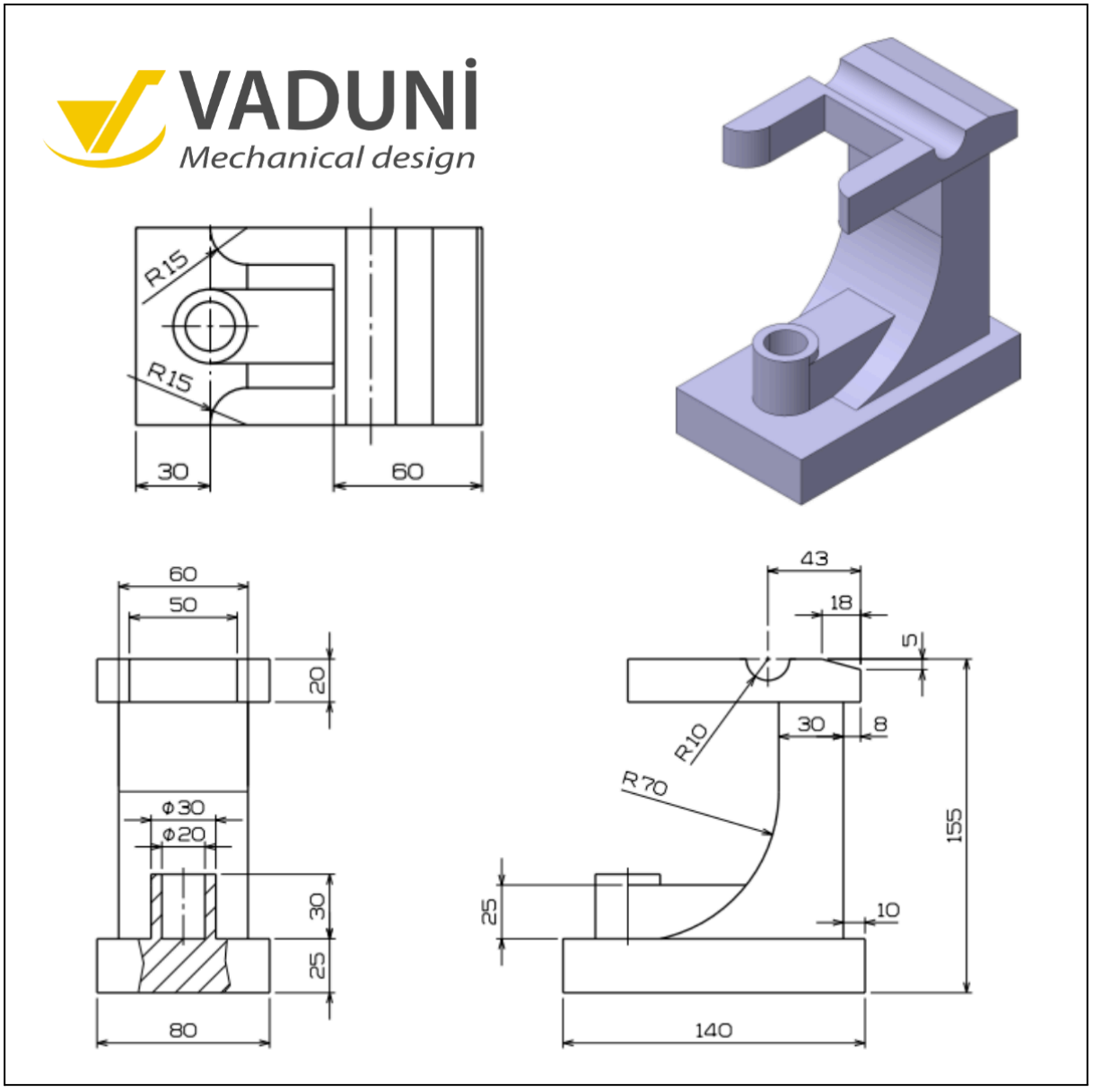
Bài tập 311


VADUNI
Mechanical design
48
60
R20
A
20
A
90
56
33
14
34
64
32
16
23
25
SECTION A–A

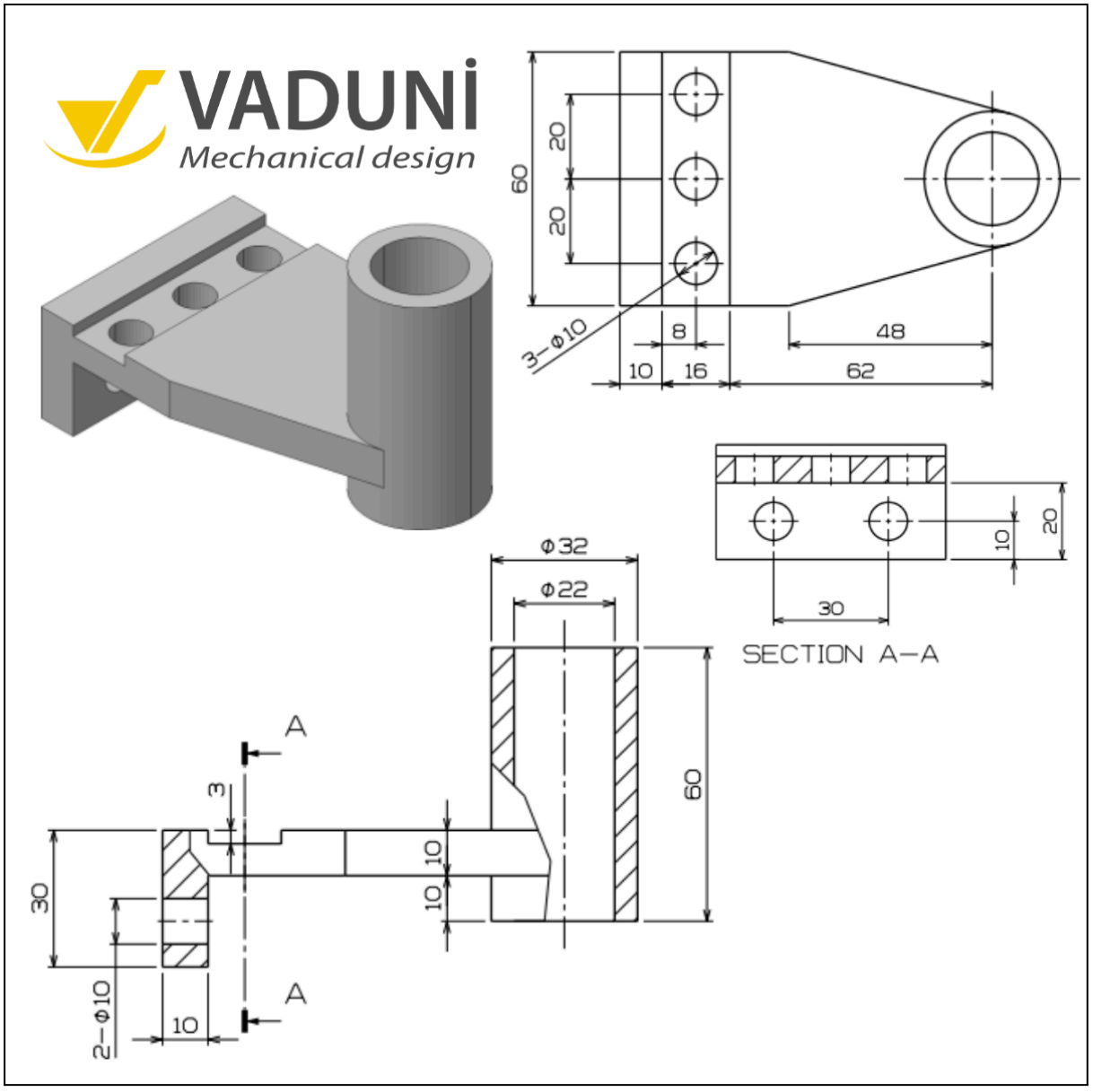
Bài tập 312



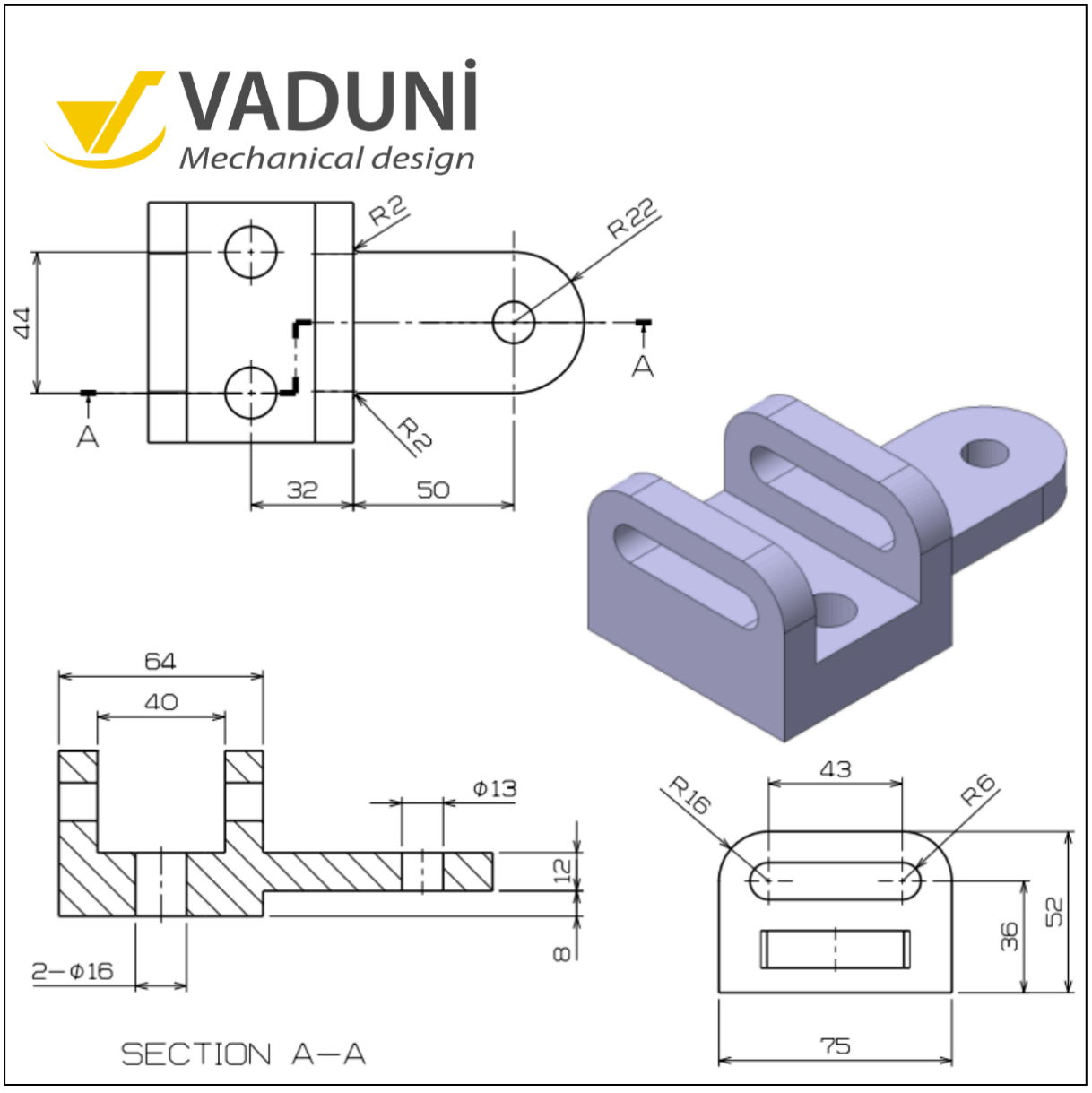
Bài tập 313


VADUNI
Mechanical design
R15
R15
30
60
60
50
20
Φ30
Φ20
30
25
80
43
18
5
R10
30
8
R70
155
25
10
140

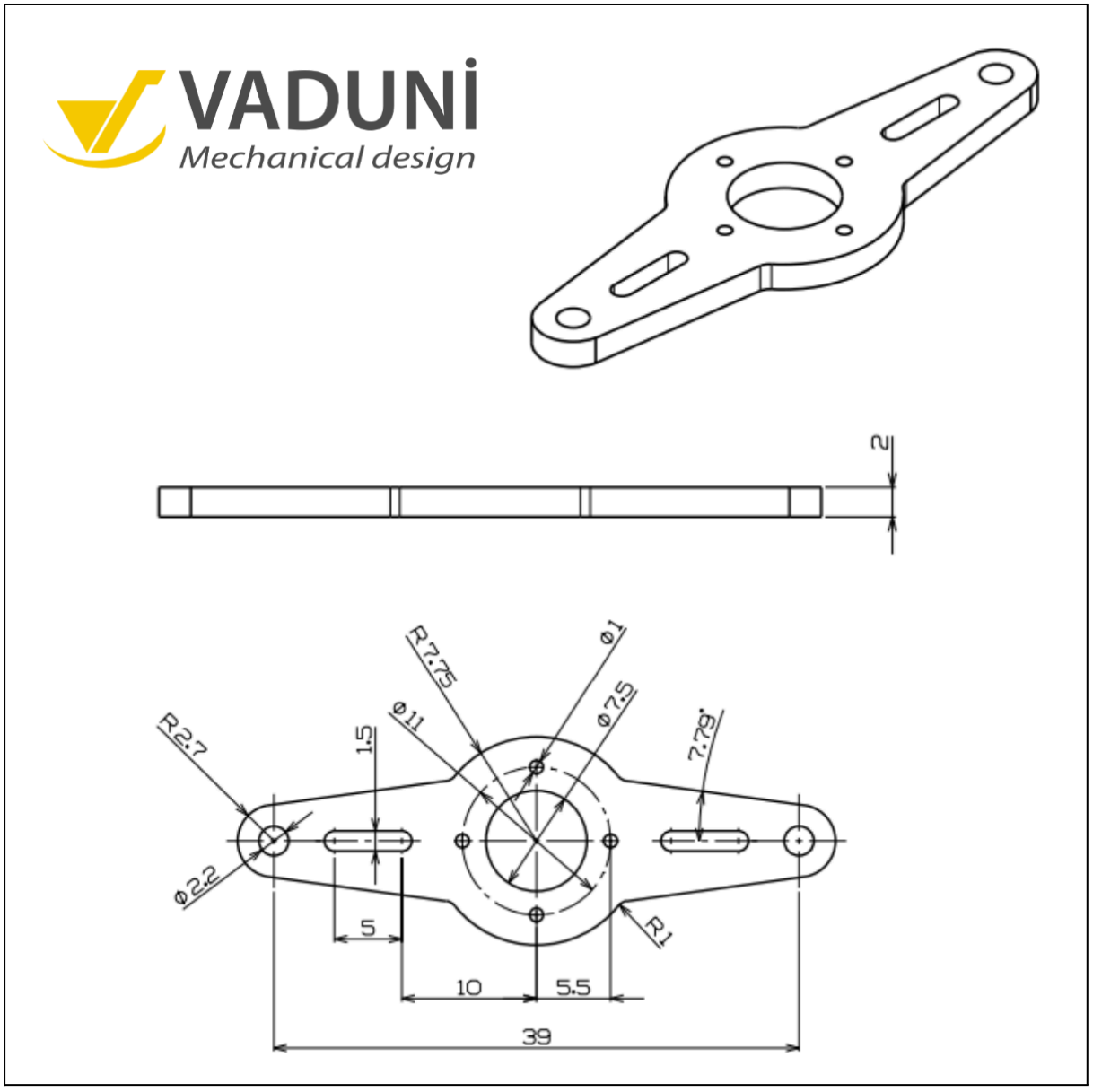
Bài tập 314


VADUNİ
Mechanical design
60
20
20
3-Φ10
8
10
16
48
62
Φ32
Φ22
60
10
10
30
A
3
30
2-Φ10
10
A
10
20
30
SECTION A-A

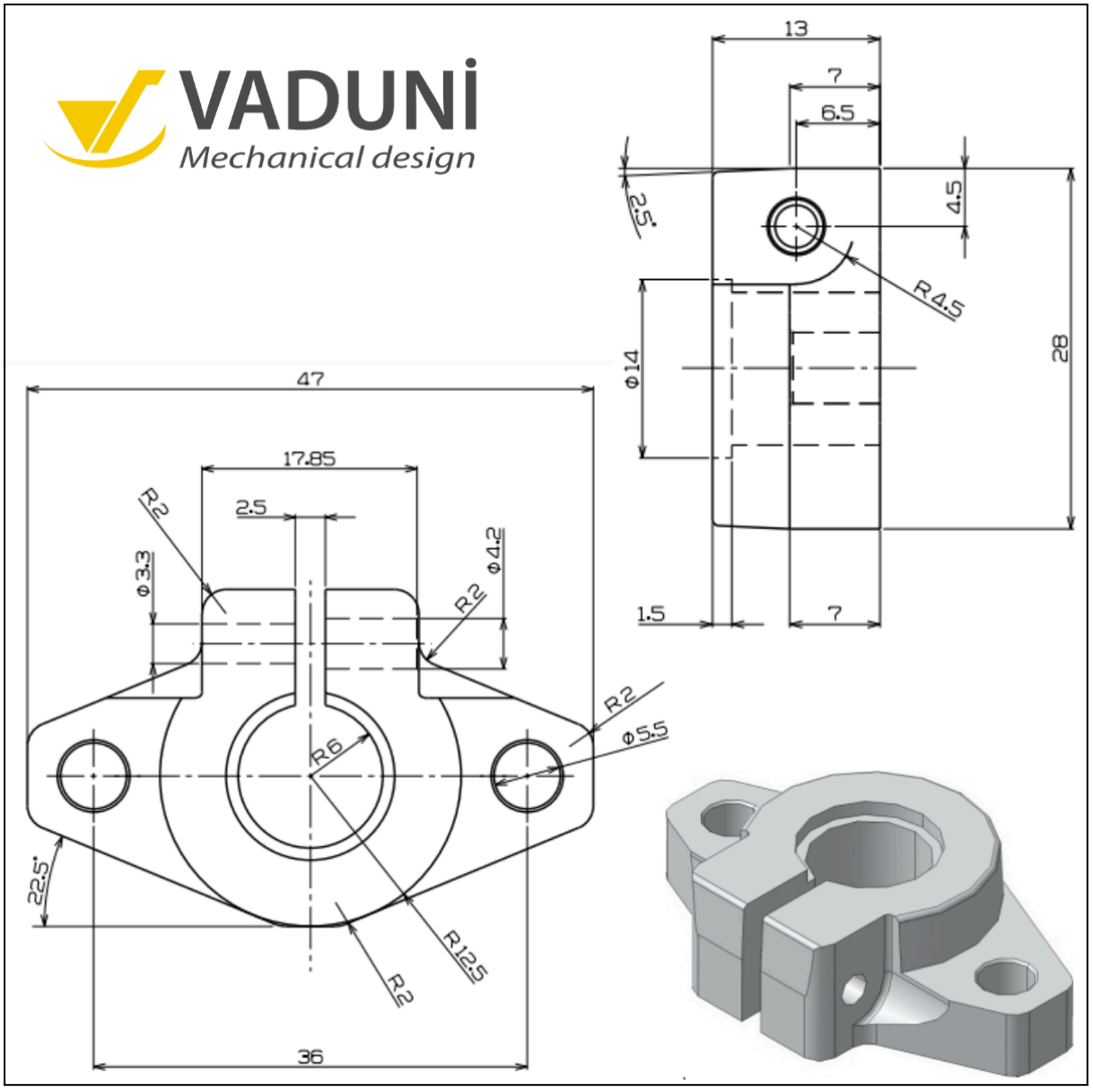
Bài tập 315


VADUNI
Mechanical design
R2
R22
44
A
A
R2
32
50
64
40
Φ13
12
8
2−Φ16
SECTION A−A
43
R16
R6
36
52
75

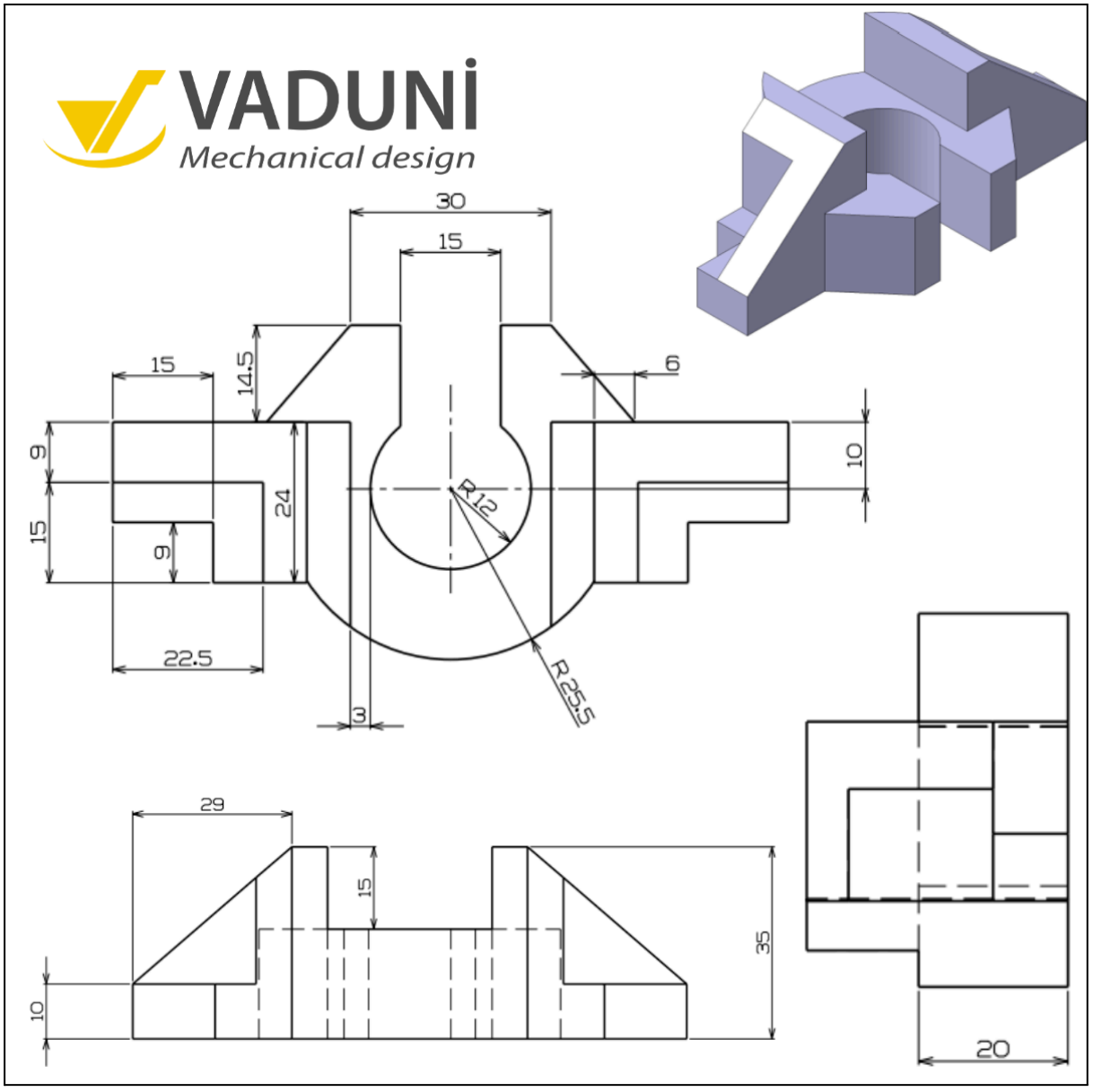
Bài tập 316


VADUNİ
Mechanical design
2
R7.75
Ø1
Ø7.5
7.79
R2.7
1.5
Ø11
Ø2.2
5
10
5.5
R1
39

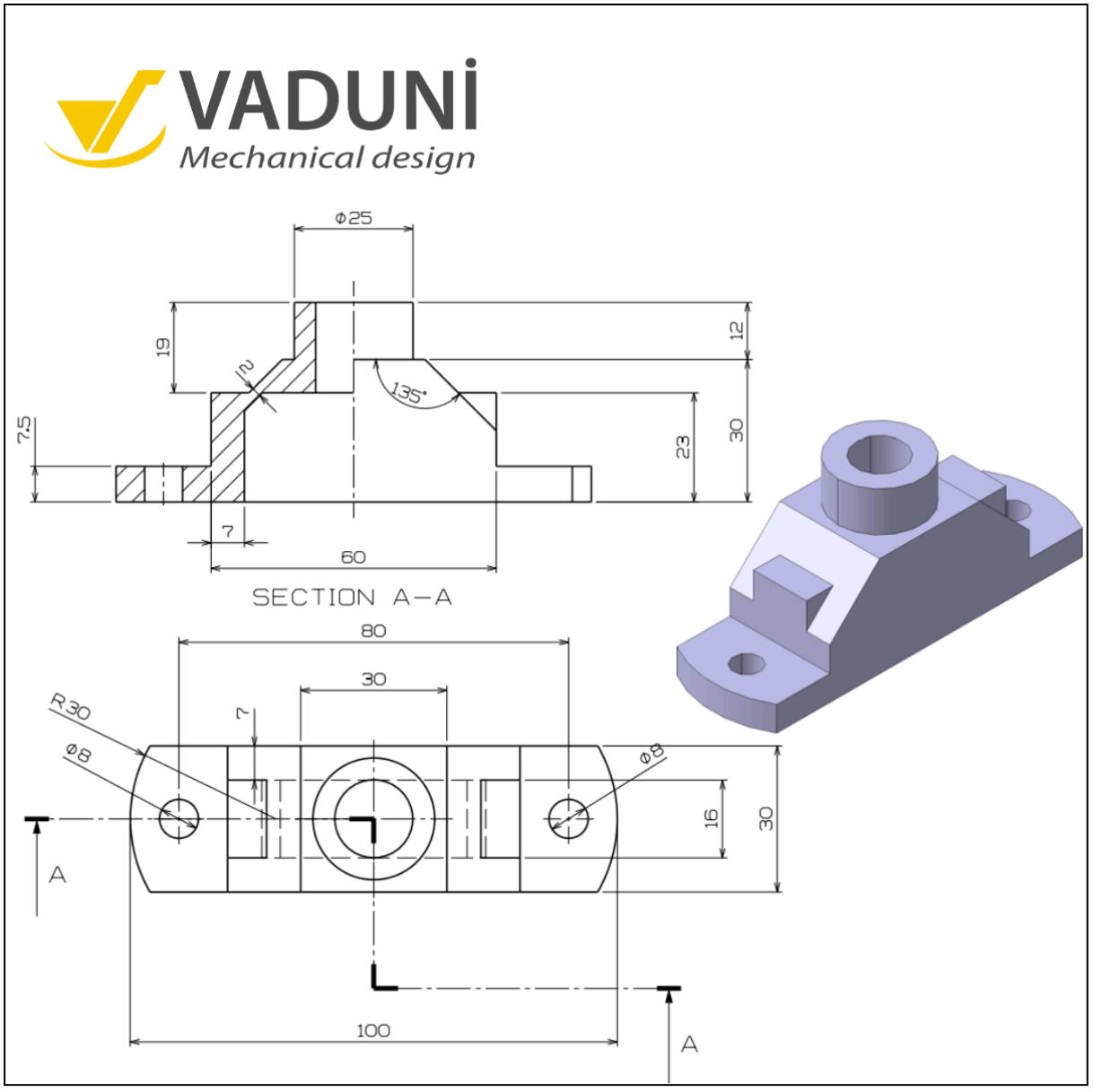
Bài tập 317


VADUNİ
Mechanical design
13
7
6.5
2.5
4.5
R4.5
Φ14
28
1.5
7
47
17.85
2.5
R2
Φ3.3
Φ4.2
R2
R2
Φ5.5
R6
22.5°
R12.5
R2
36

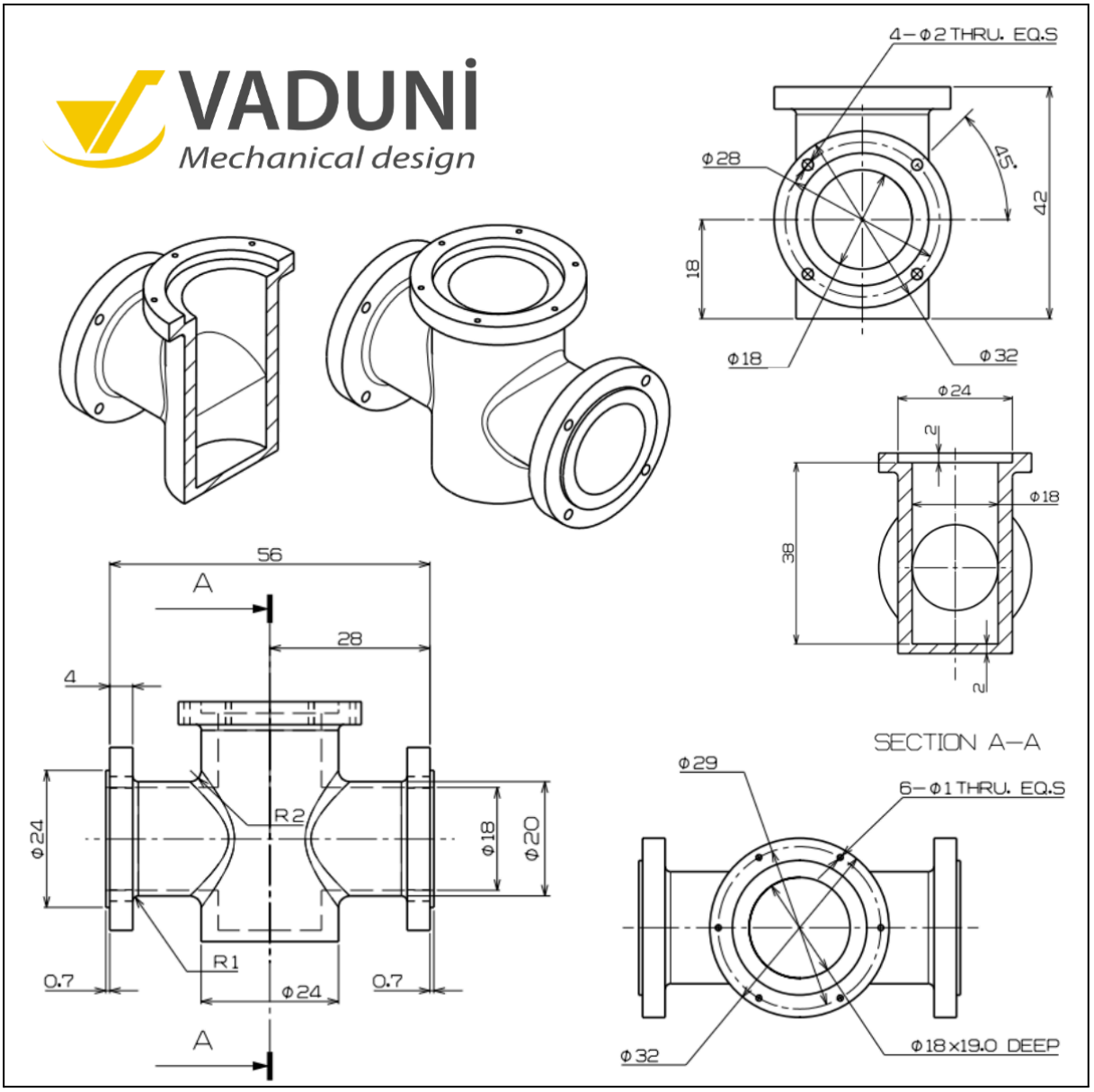
Bài tập 318


VADUNİ
Mechanical design
30
15
15
14.5
6
9
15
9
24
10
R12
22.5
3
R25.5
29
15
10
35
20

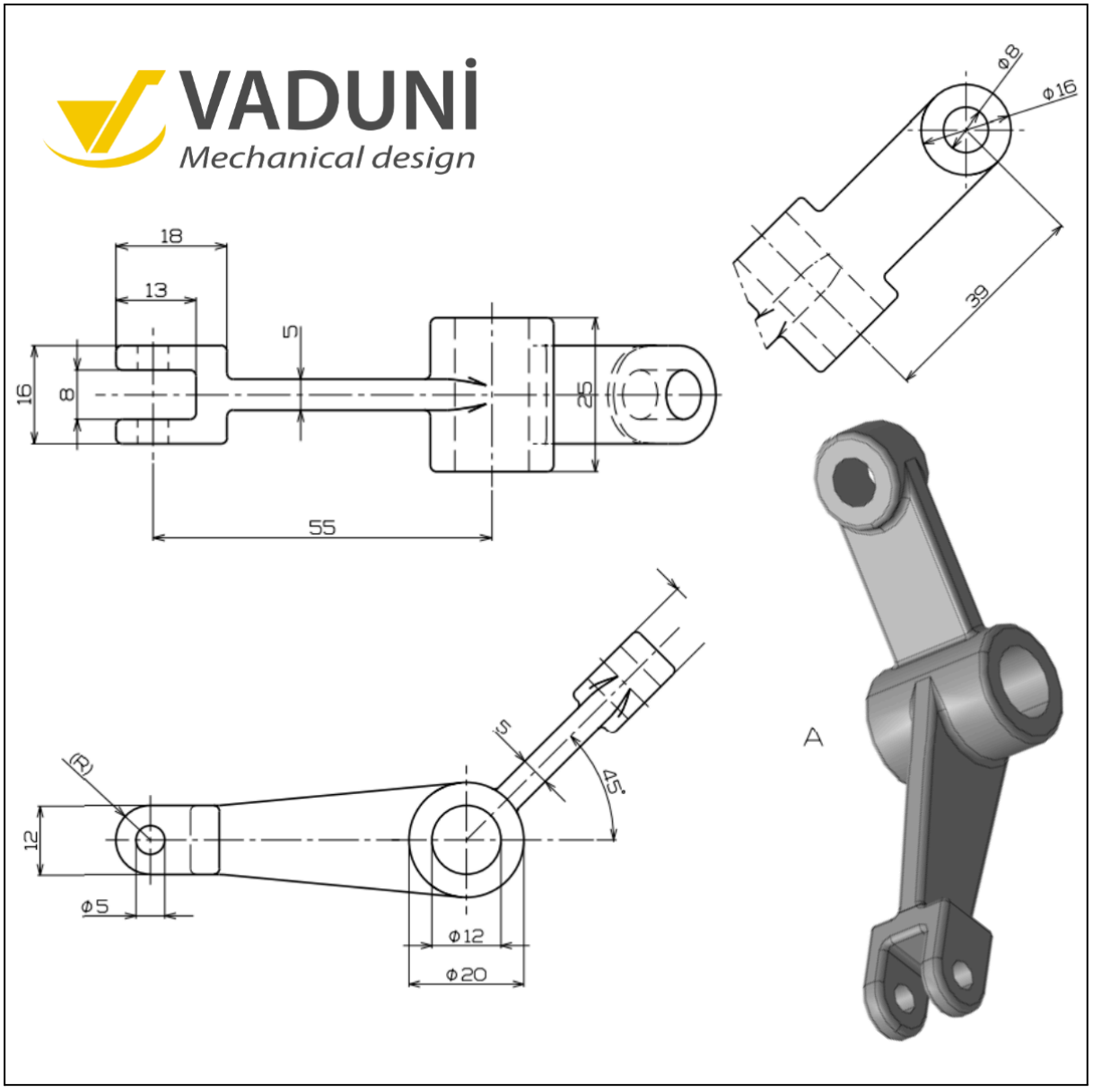
Bài tập 319


VADUNI
Mechanical design
Φ25
19
12
135°
7.5
23
30
7
60
SECTION A–A
80
30
R30
Ø8
Ø8
7
16
30
A
100
A

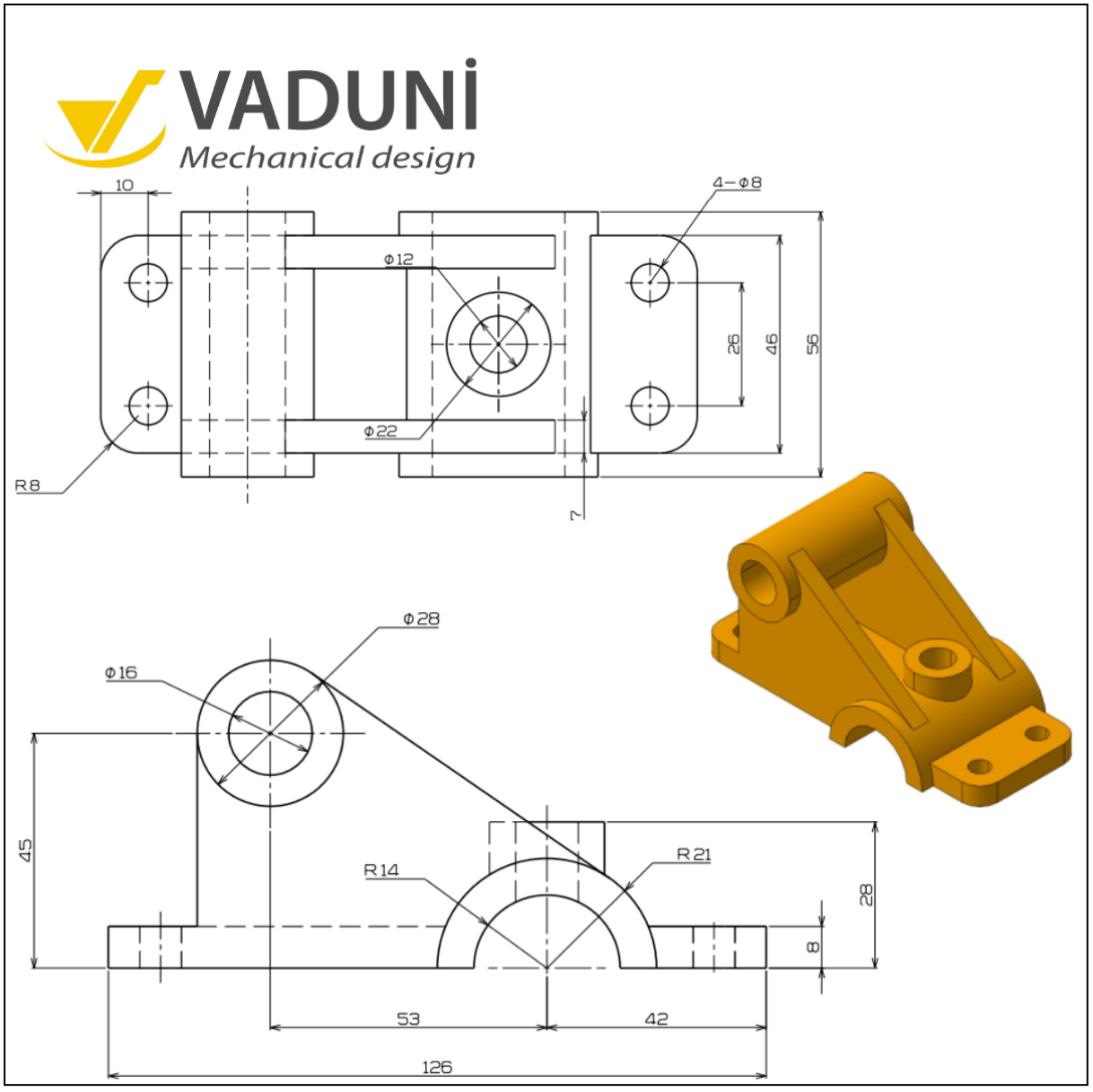
Bài tập 320


VADUNI
Mechanical design
4-Φ2 THRU. EQ.S
Φ28
45°
42
18
Φ18
Φ32
Φ24
2
Φ18
38
2
56
A
28
4
Φ24
R2
Φ18
Φ20
R1
0.7
Φ24
0.7
A
SECTION A-A
Φ29
6-Φ1 THRU. EQ.S
Φ32
Φ18×19.0 DEEP

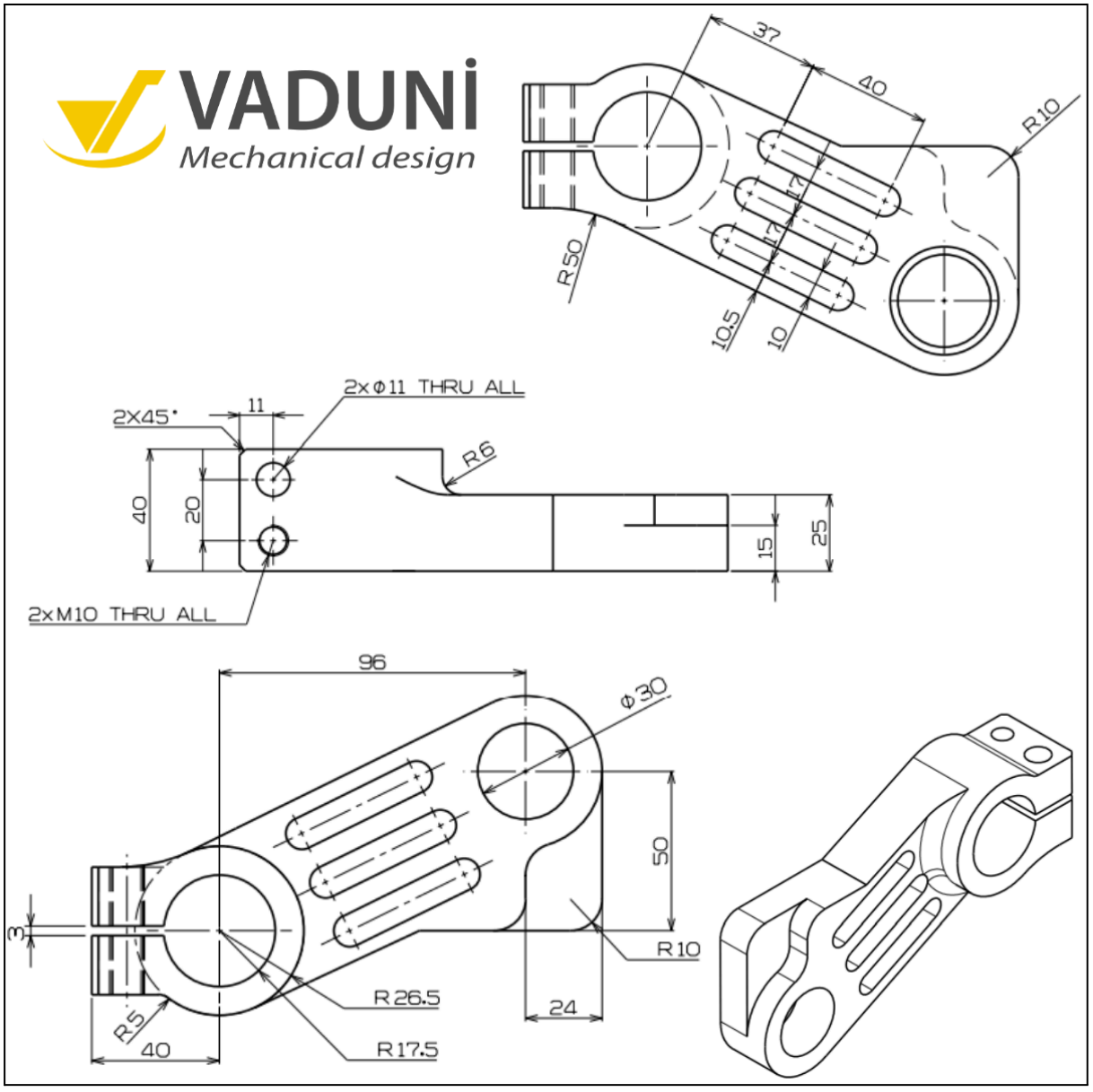
Bài tập 321


VADUNİ
Mechanical design
18
13
5
16
8
25
55
ϕ8
ϕ16
39
A
(R)
12
ϕ5
5
45°
ϕ12
ϕ20

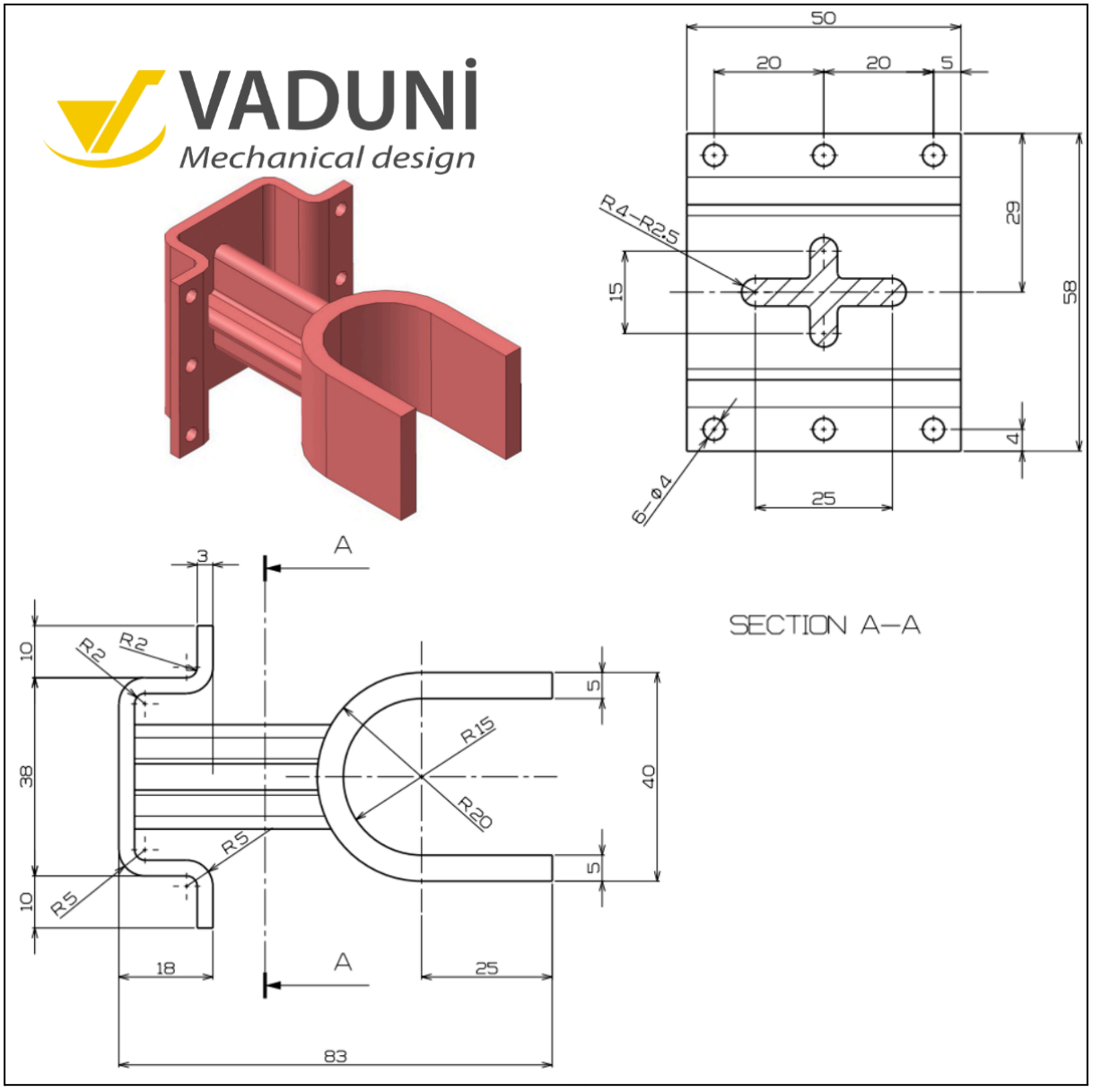
Bài tập 322


VADUNI
Mechanical design
10
4−Φ8
Φ12
26
46
56
Φ22
R8
7
Φ28
Φ16
45
R14
R21
28
8
53
42
126

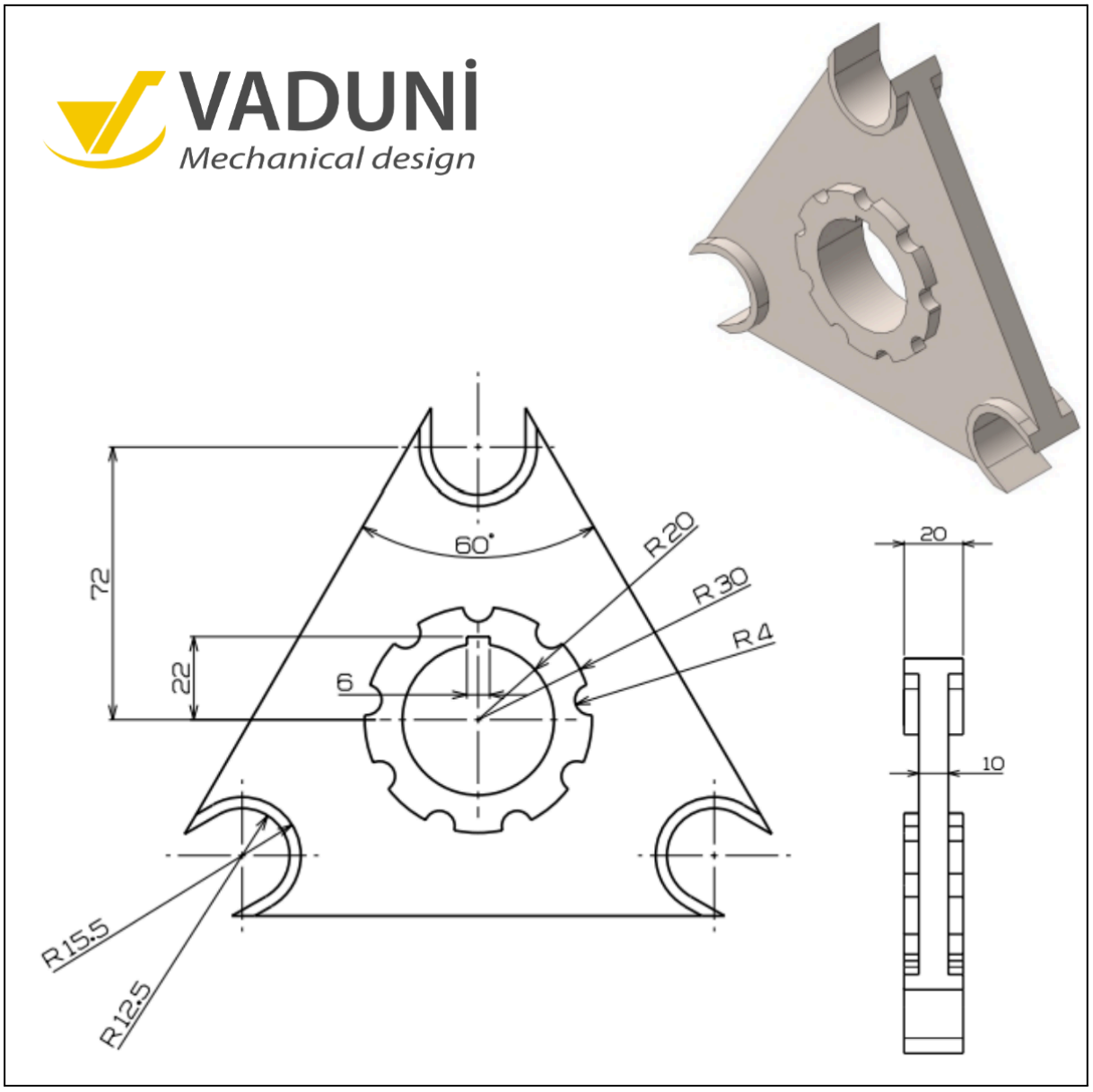
Bài tập 323


VADUNI
Mechanical design
37
40
R10
R50
10.5
10
2X45°
11
2xΦ11 THRU ALL
R6
40
20
15
25
2xM10 THRU ALL
96
Φ30
50
3
R10
R26.5
24
R5
40
R17.5

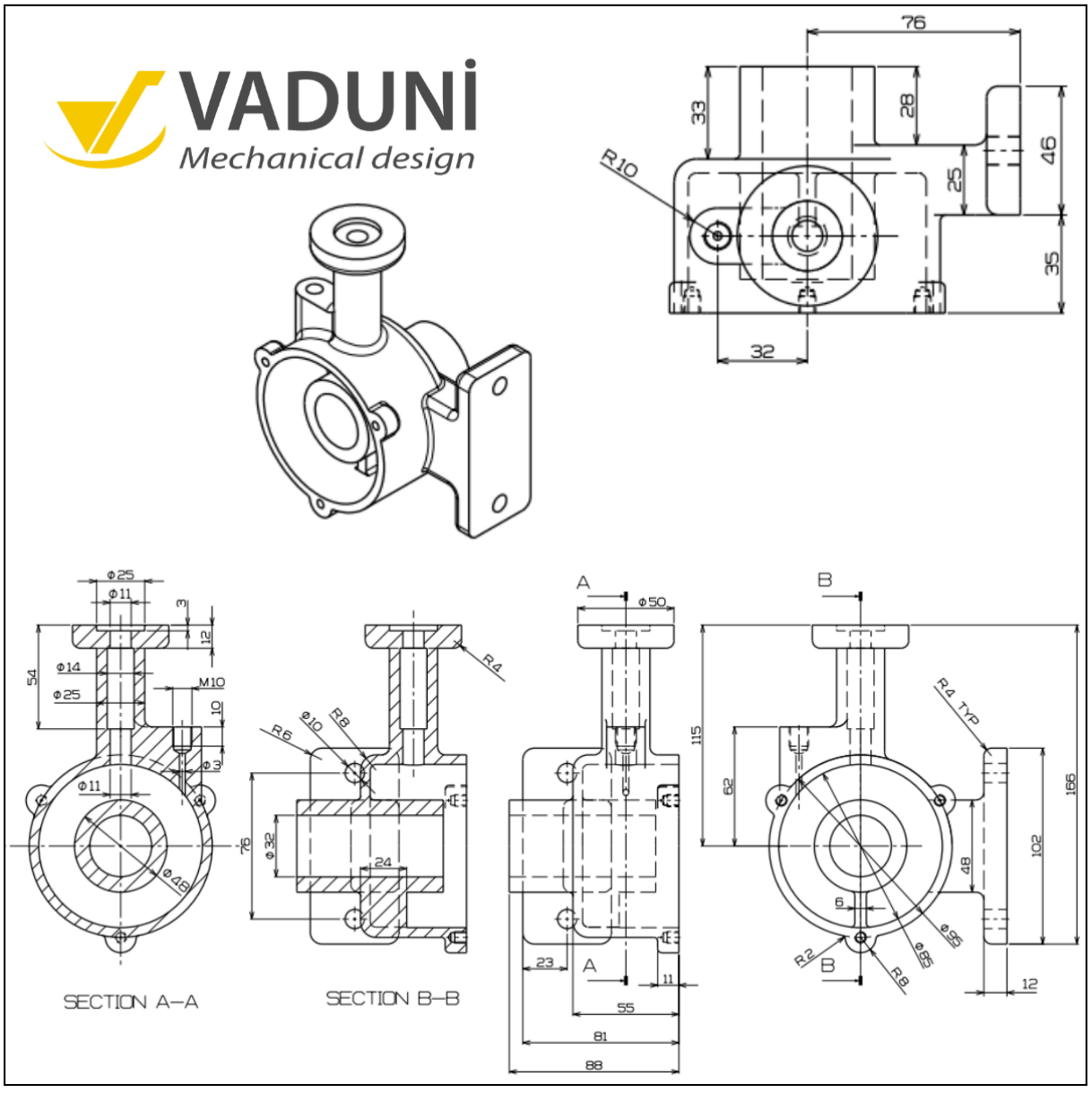
Bài tập 324


VADUNI
Mechanical design
50
20
20
5
29
58
4
15
R4–R2.5
6–Ø4
25
A
3
10
R2
R2
38
10
R5
R5
18
5
R15
R20
40
5
A
25
83
SECTION A–A

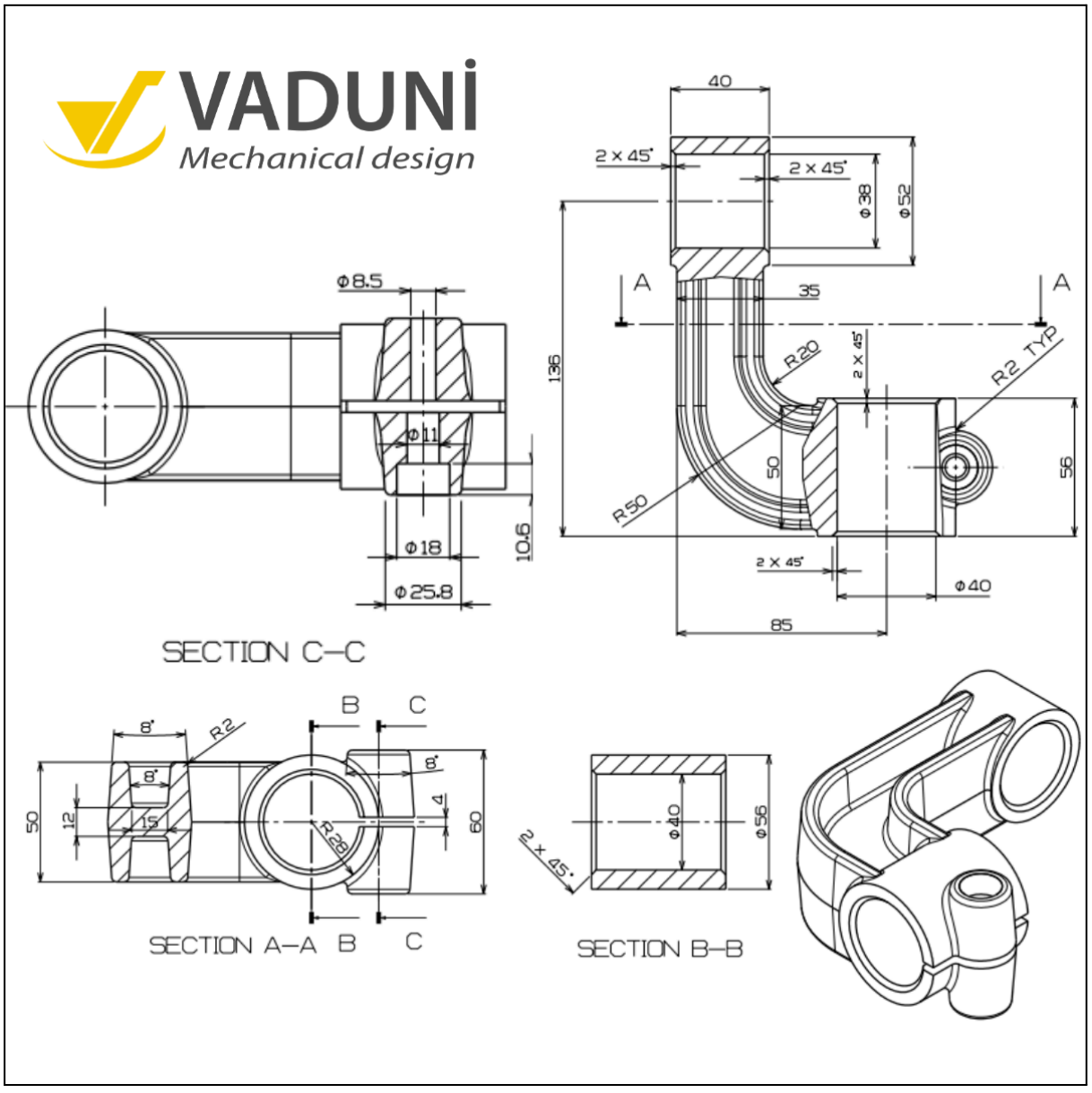
Bài tập 325



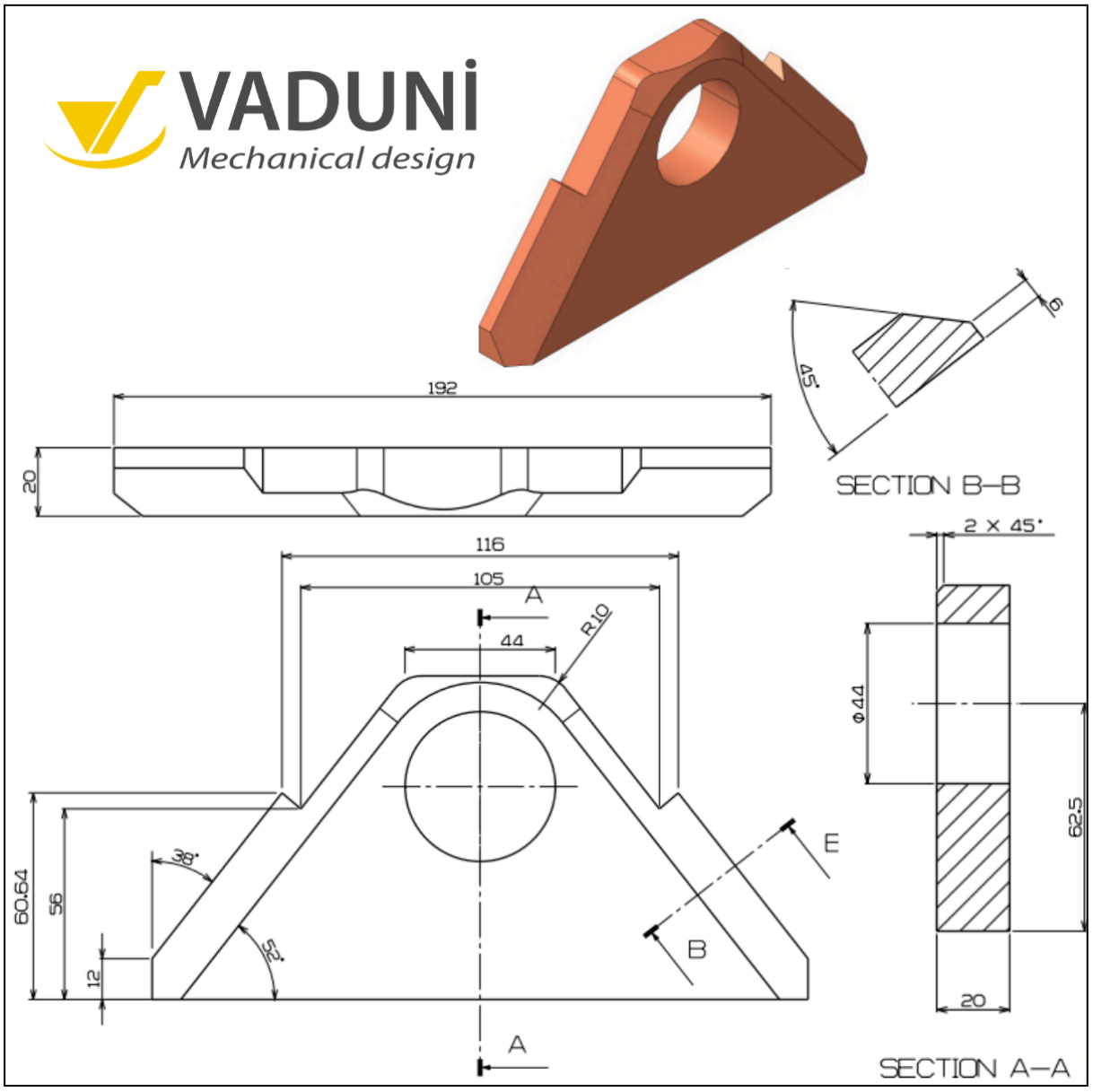
Bài tập 326


VADUNİ
Mechanical design
76
33
28
46
R10
25
35
32
SECTION A–A
SECTION B–B
A
B
R4 TYP
R4
M10
R6
R8
24
23
55
81
88
62
115
166
102
48
12

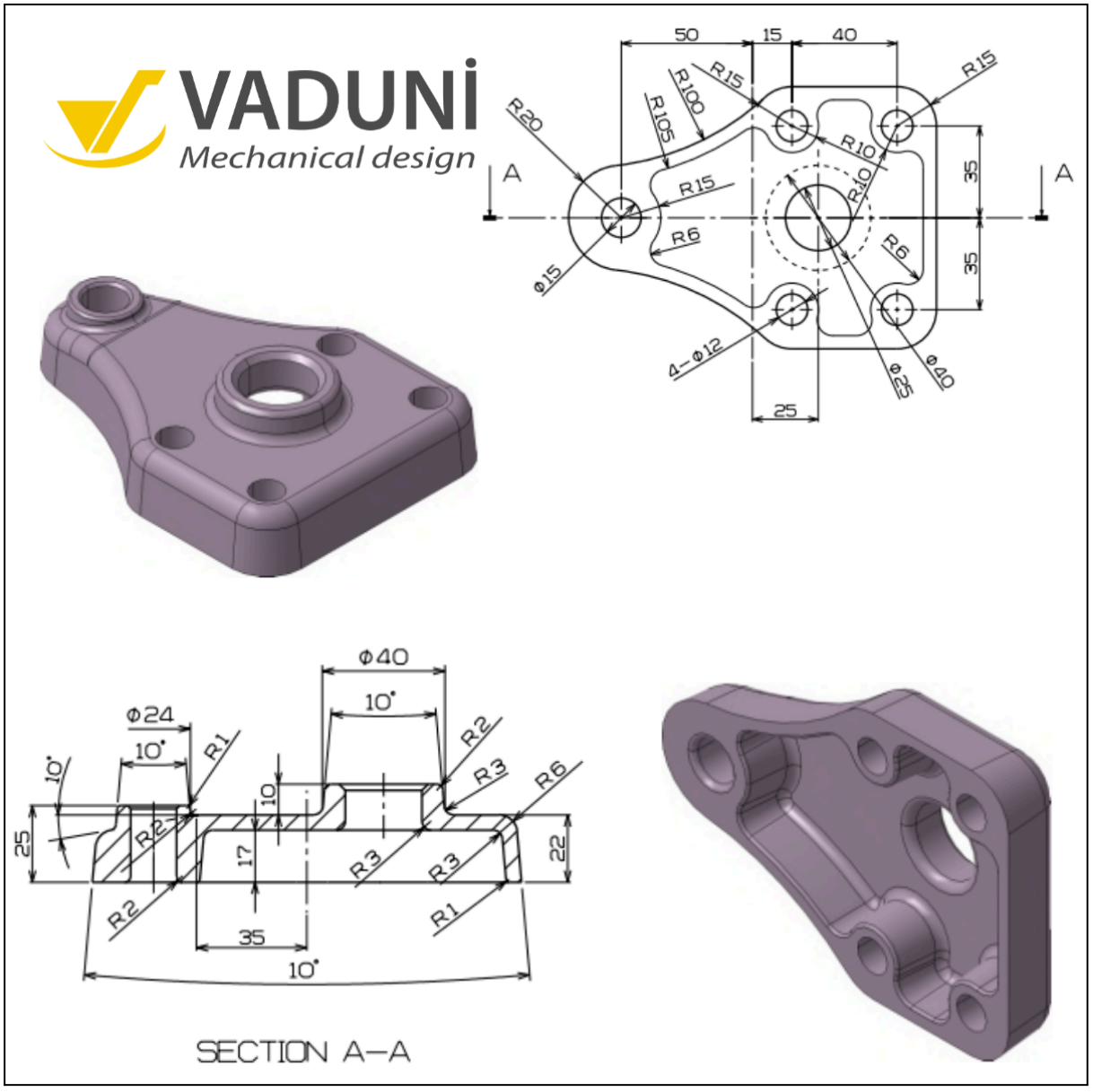
Bài tập 327


VADUNI
Mechanical design
40
2 x 45°
2 x 45°
Φ38
Φ52
A
35
A
136
R20
2 x 45°
R2 TYP
50
56
R50
2 x 45°
Φ40
85
Φ8.5
Φ11
Φ18
Φ25.8
10.6
SECTION C–C
B
C
8°
R2
8°
8°
50
12
15
4
60
R28
SECTION A–A B C
2 x 45°
Φ40
Φ56
SECTION B–B

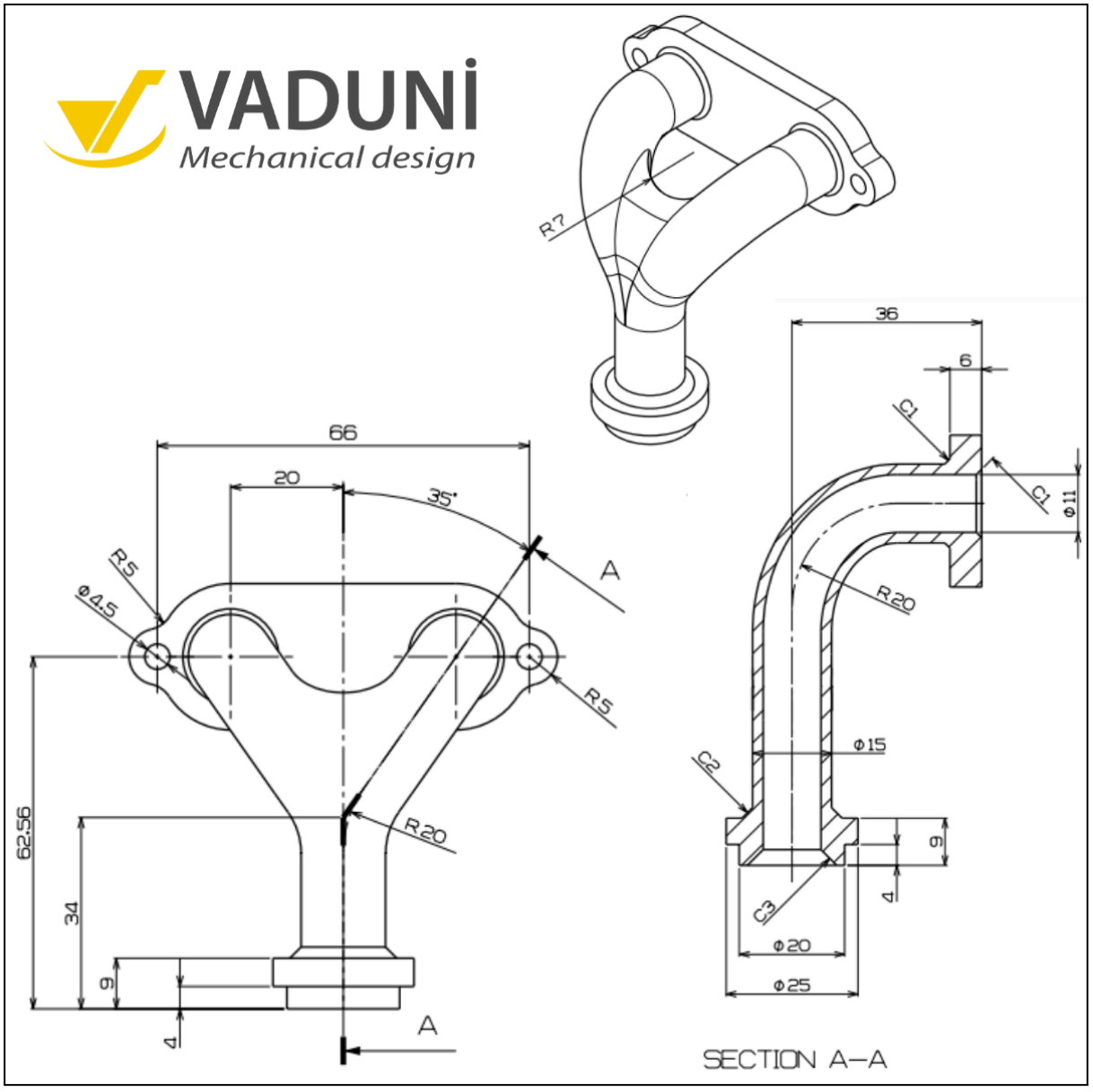
Bài tập 328


VADUNİ
Mechanical design
192
20
45°
6
SECTION B–B
116
105
A
R10
44
2 X 45°
Φ44
62.5
60.64
56
12
38°
52°
B
E
20
A
SECTION A–A

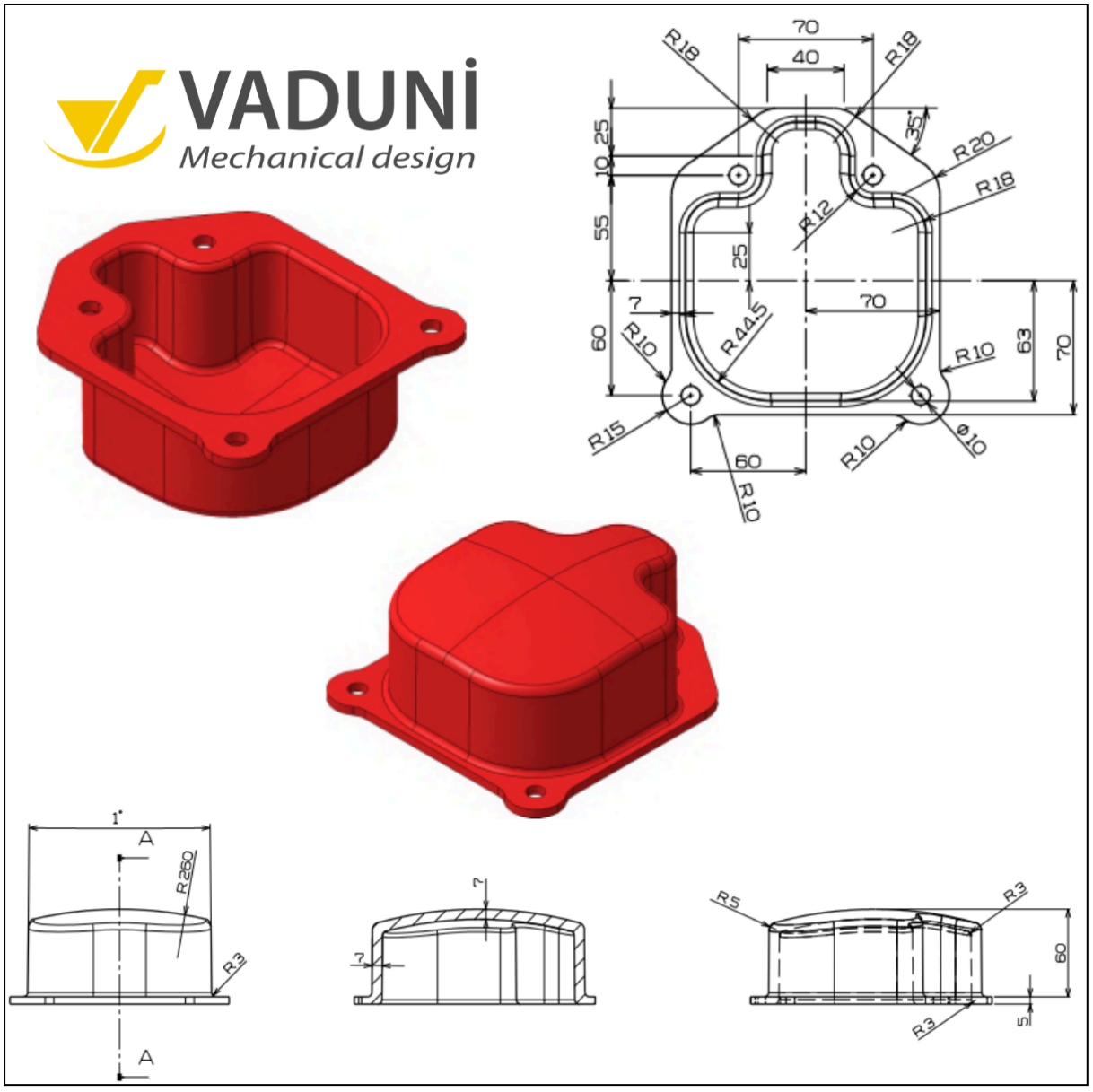
Bài tập 329


VADUNİ
Mechanical design
50
15
40
R15
R100
R105
R20
R10
R40
A
A
35
35
R6
R6
ϕ15
4–ϕ12
ϕ25
ϕ40
25
ϕ40
10°
ϕ24
10°
R1
R2
R3
R6
10°
10
25
R2
17
R3
R3
22
R2
R1
35
10°
SECTION A–A

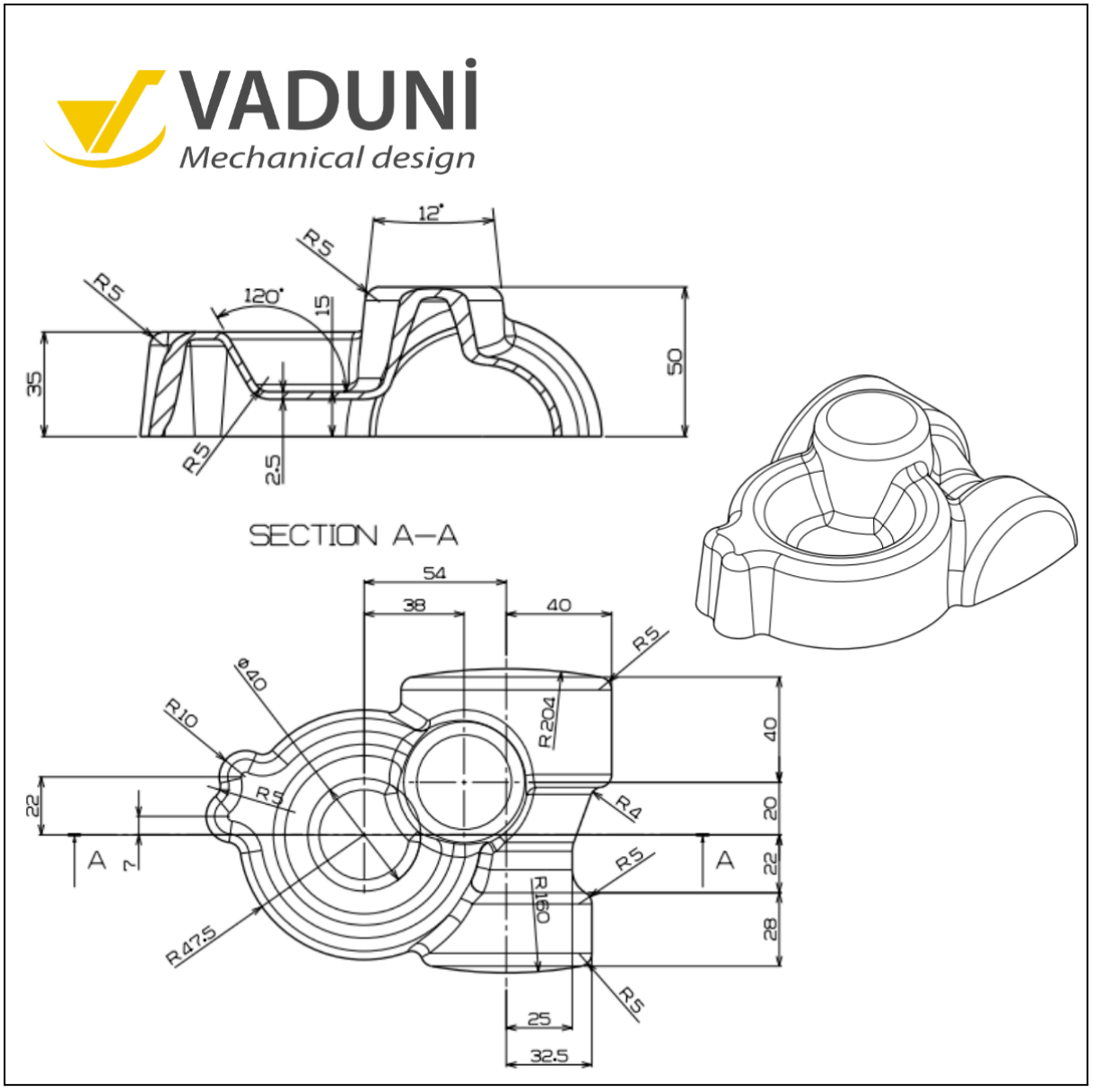
Bài tập 330


VADUNI
Mechanical design
R7
66
20
35°
R5
Φ4.5
A
R5
R20
62.56
34
9
4
A
36
6
C1
C1
Φ11
R20
Φ15
C2
9
4
C3
Φ20
Φ25
SECTION A–A

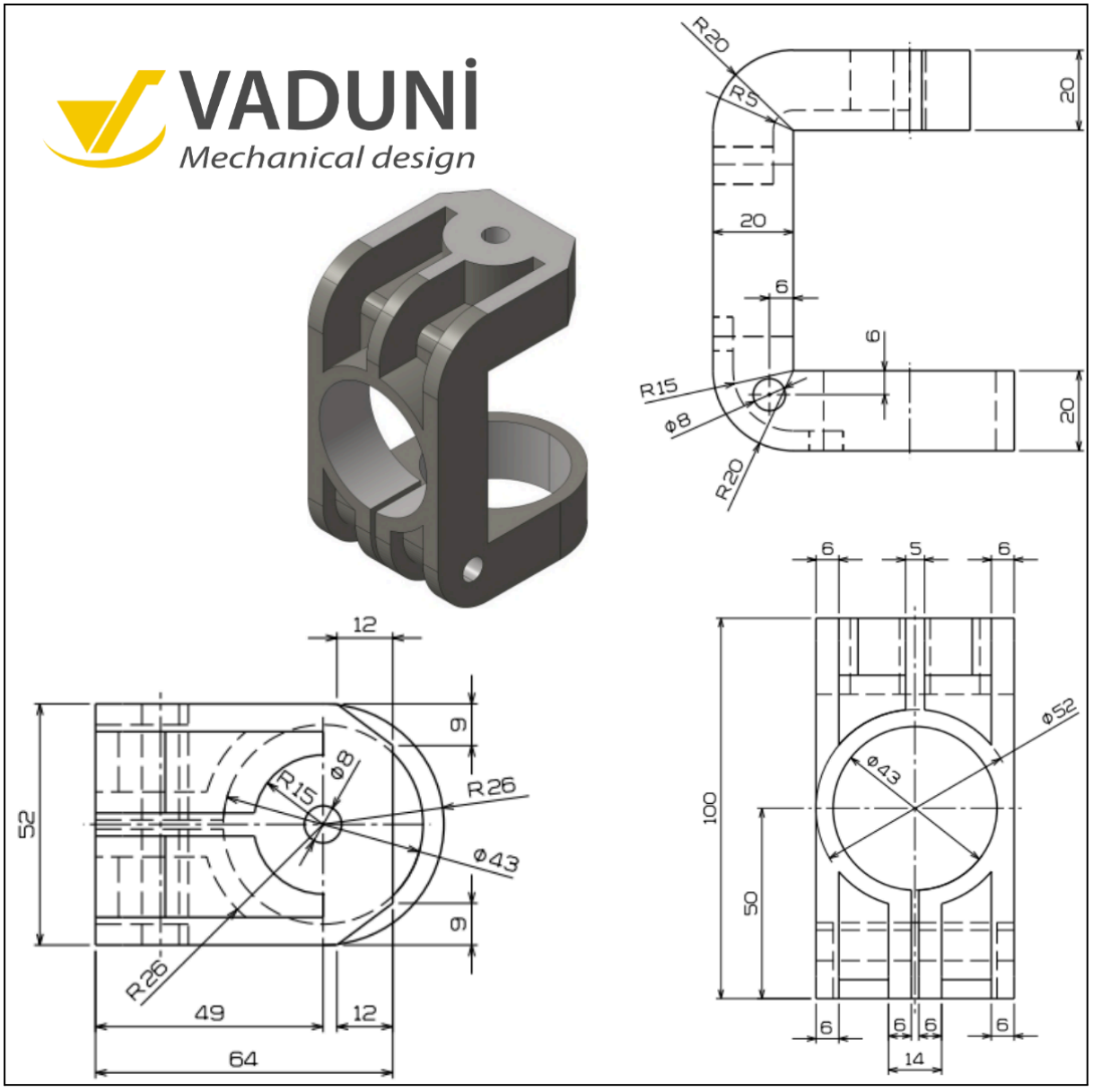
Bài tập 331


VADUNİ
Mechanical design
R18
70
40
R18
35°
R20
R18
R12
25
10
55
25
7
70
60
R10
R44.5
R10
63
70
R15
60
R10
R10
Ø10
R10
1°
A
R260
R3
A
7
7
R5
R3
60
5
R3

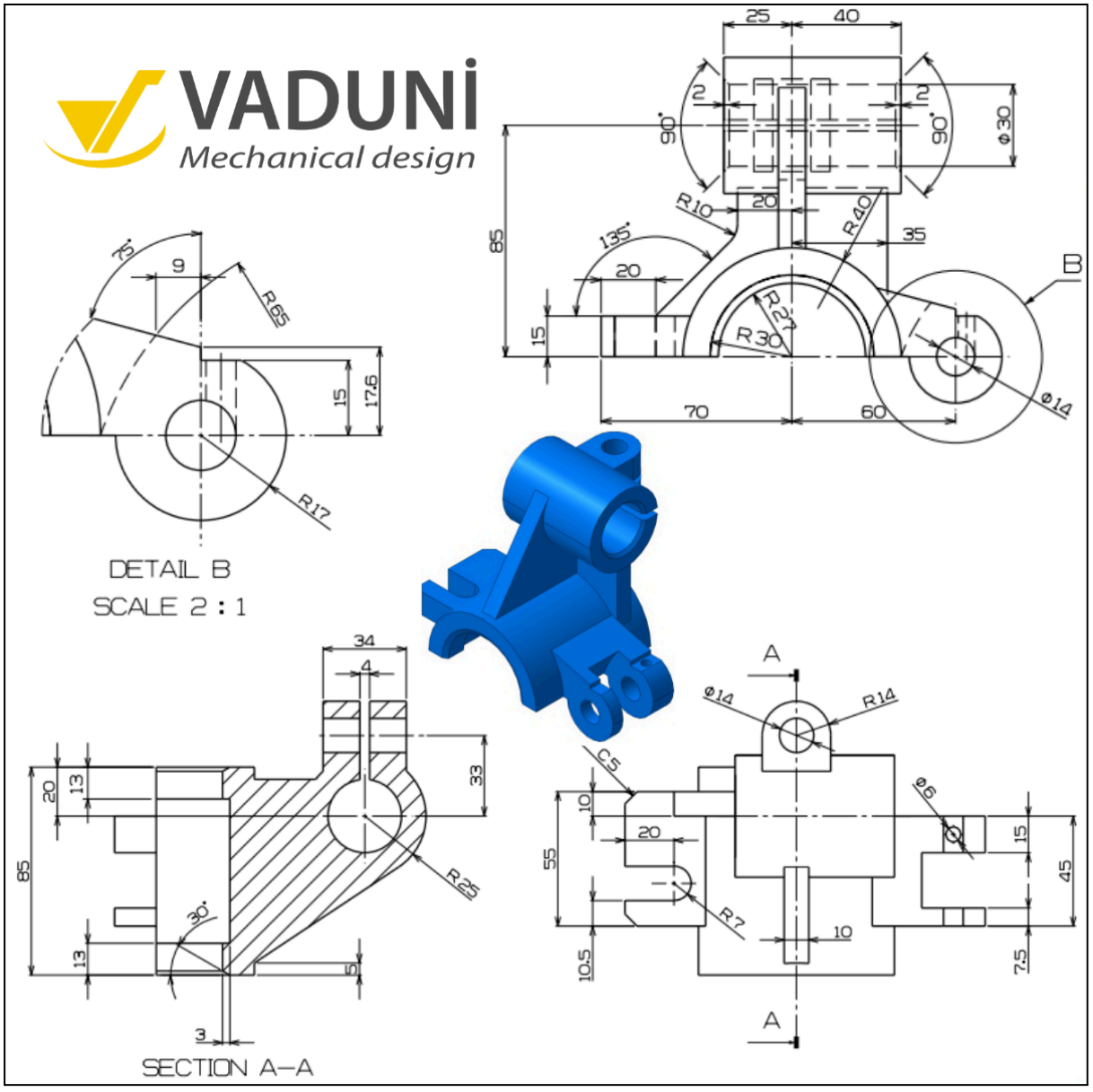
Bài tập 332


VADUNİ
Mechanical design
12
R5
R5
120°
15
35
50
R5
2.5
SECTION A–A
54
38
40
R5
Ø40
R10
R204
40
22
R5
R4
20
A
7
A
R5
22
R47.5
R180
28
R5
25
32.5

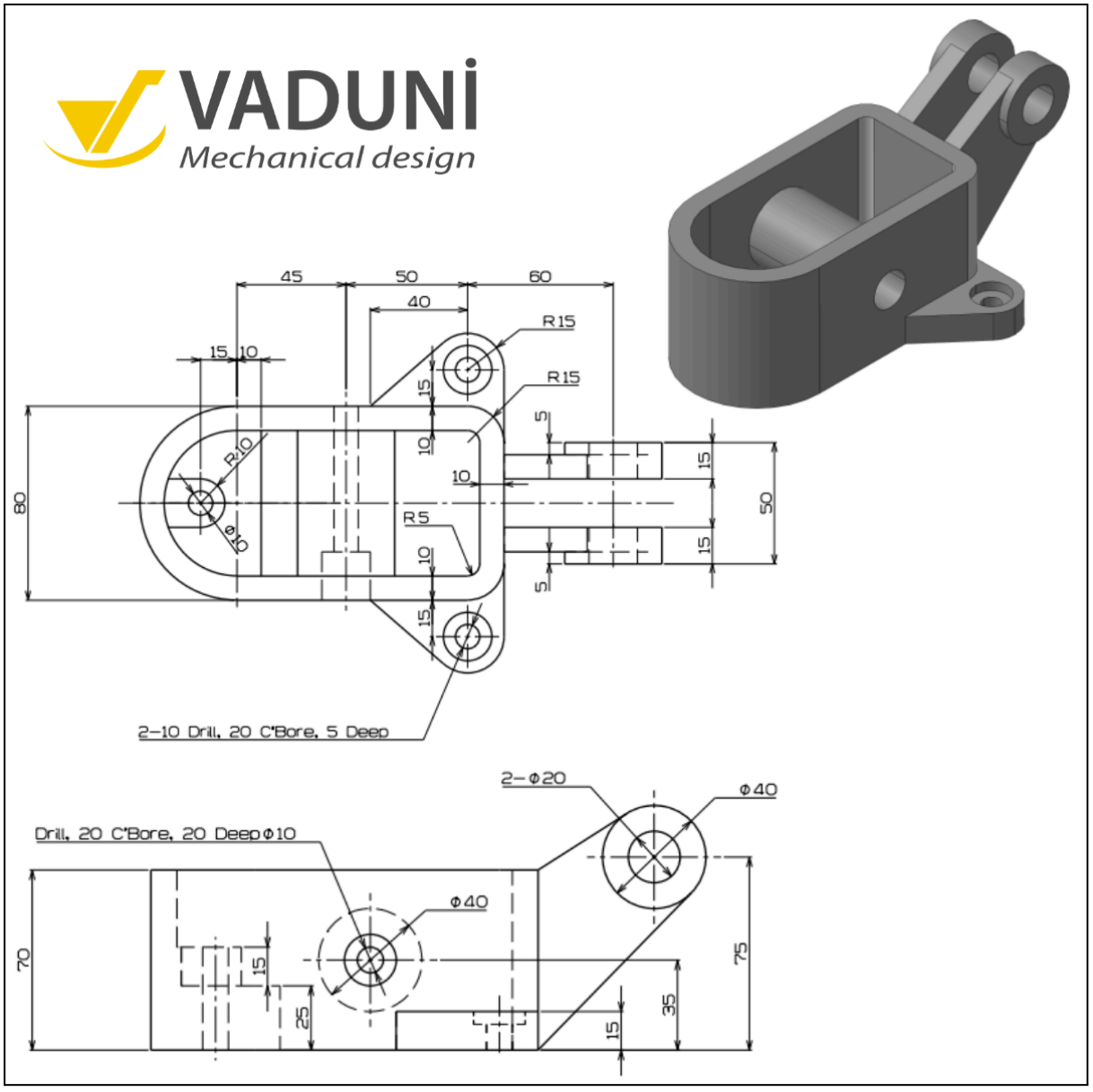
Bài tập 333


VADUNI
Mechanical design
R20
R5
20
20
6
6
R15
ø8
R20
20
6
5
6
ø52
ø43
100
50
6
6
6
6
14
12
9
R15
ø8
R26
ø43
9
52
R26
49
12
64

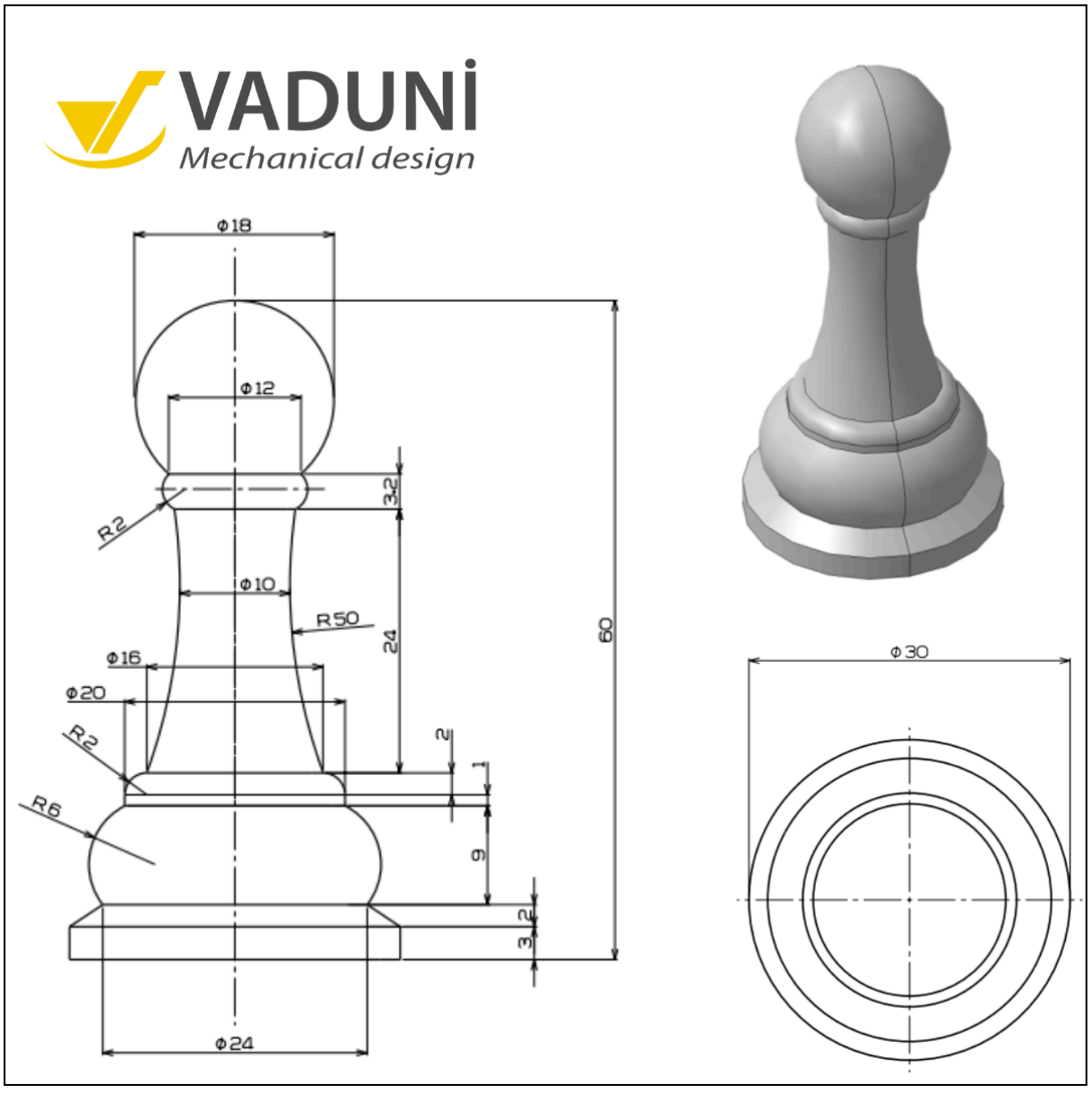
Bài tập 334



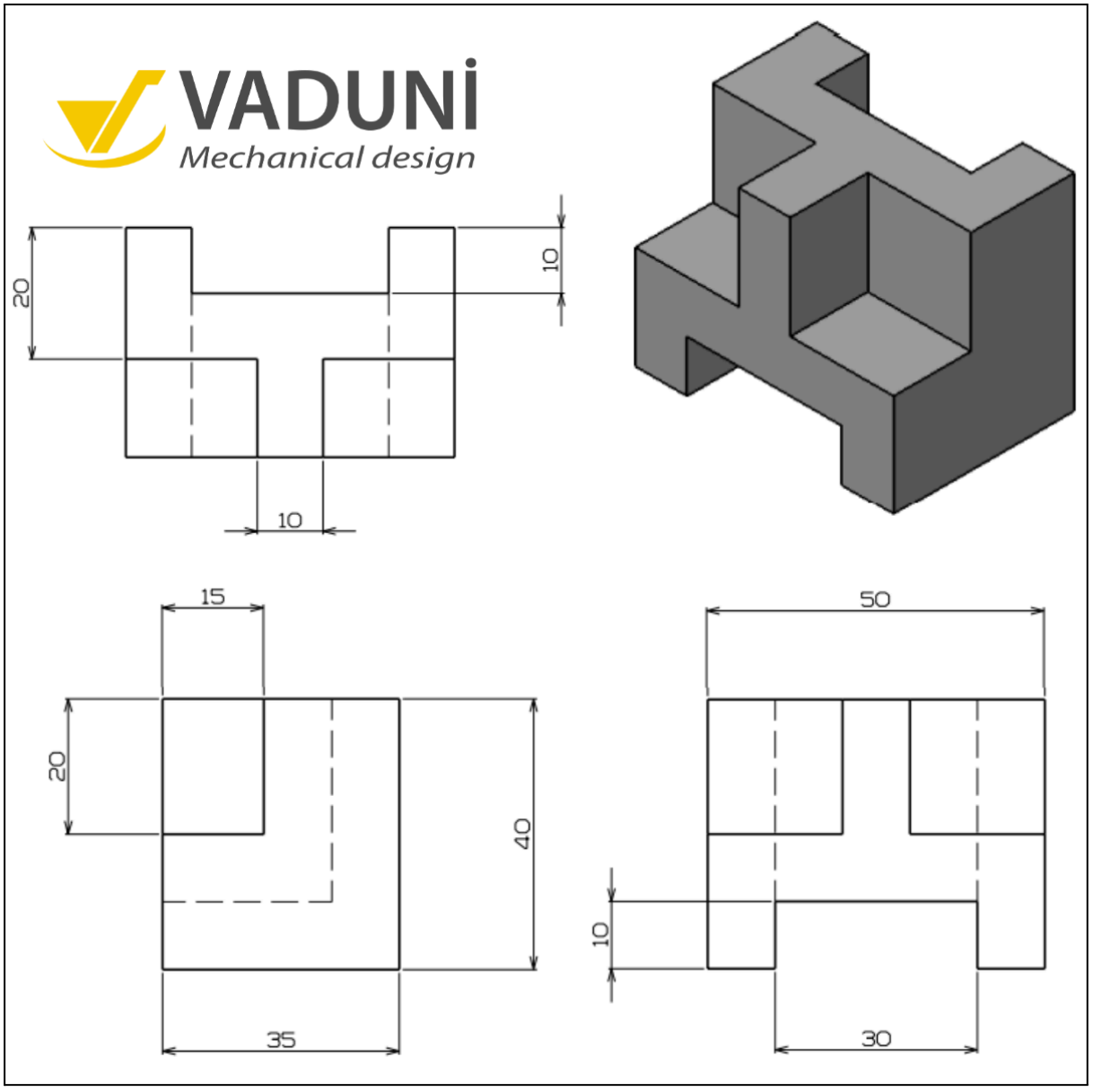
Bài tập 335


VADUNİ
Mechanical design
45
50
60
40
R15
R15
15
10
5
10
15
50
80
R10
Φ10
R5
10
15
5
15
2-10 Drill, 20 C'Bore, 5 Deep
2-Φ20
Φ40
Drill, 20 C'Bore, 20 Deep Φ10
Φ40
70
15
25
75
35
15

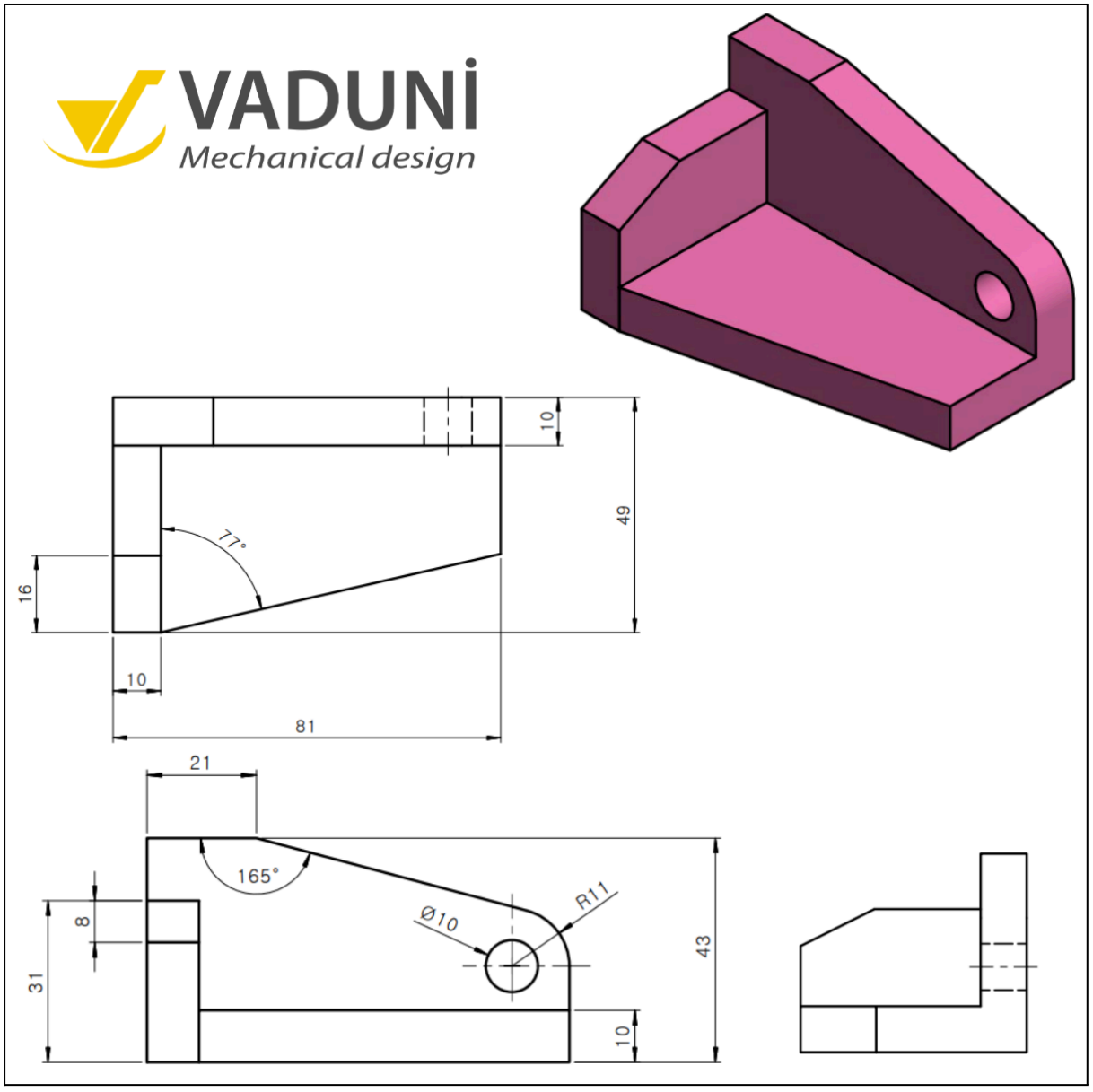
Bài tập 336


VADUNI
Mechanical design
Φ18
Φ12
32
R2
Φ10
R50
24
60
Φ16
Φ20
R2
2
1
R6
9
3,2
Φ24
Φ30

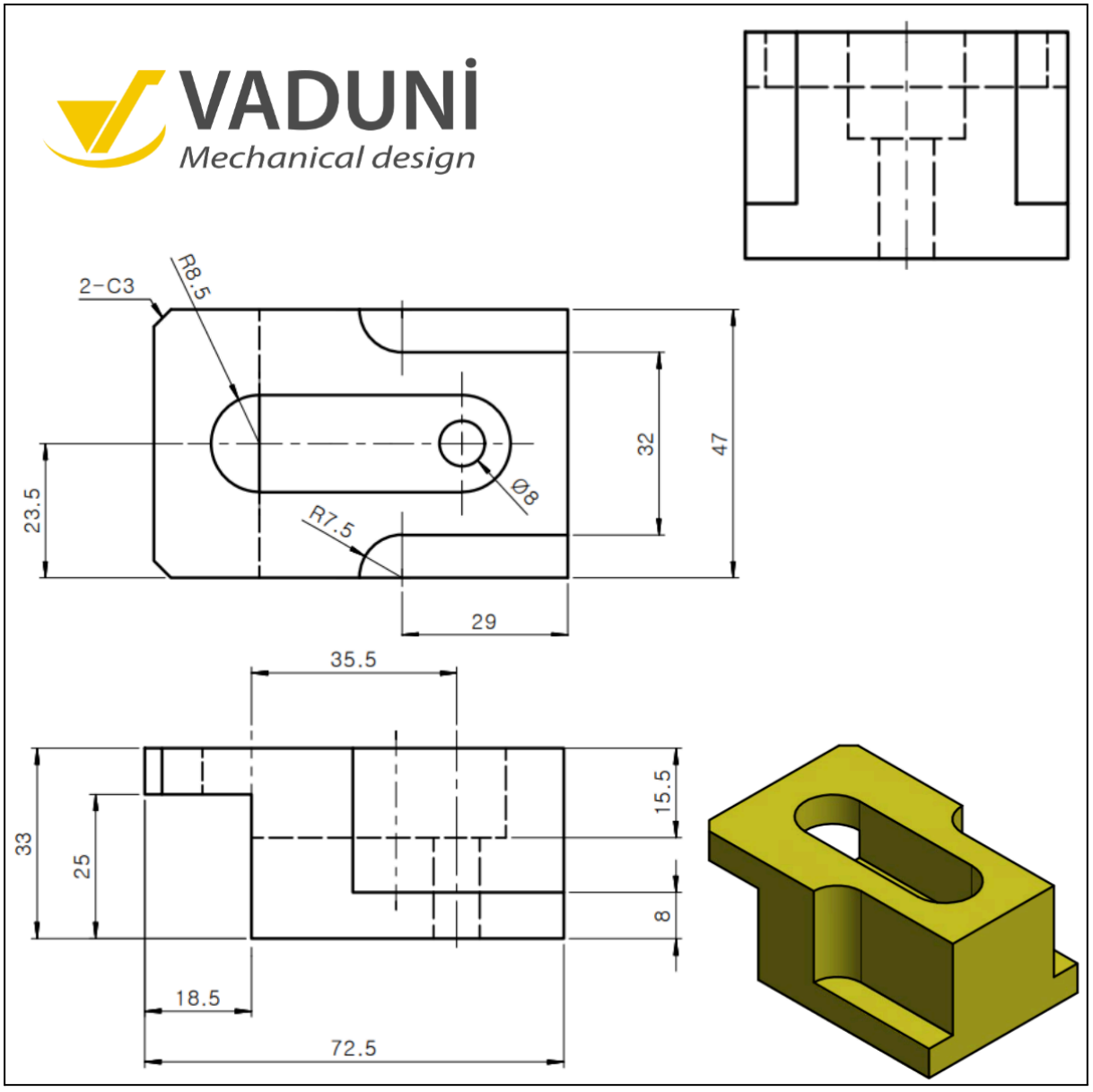
Bài tập 337



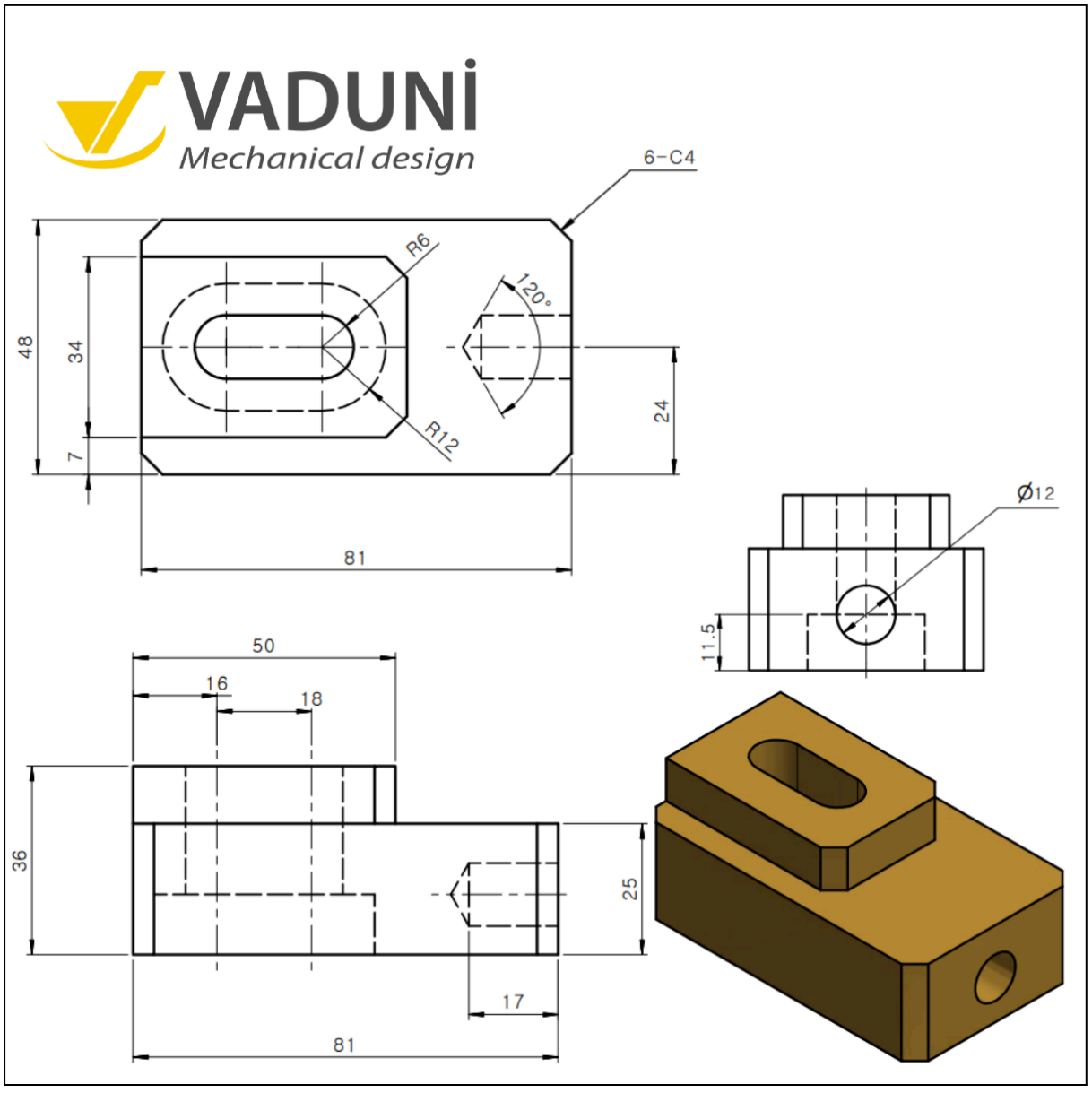
Bài tập 338


VADUNİ
Mechanical design
10
49
77°
16
10
81
21
165°
8
31
Ø10
R11
43
10

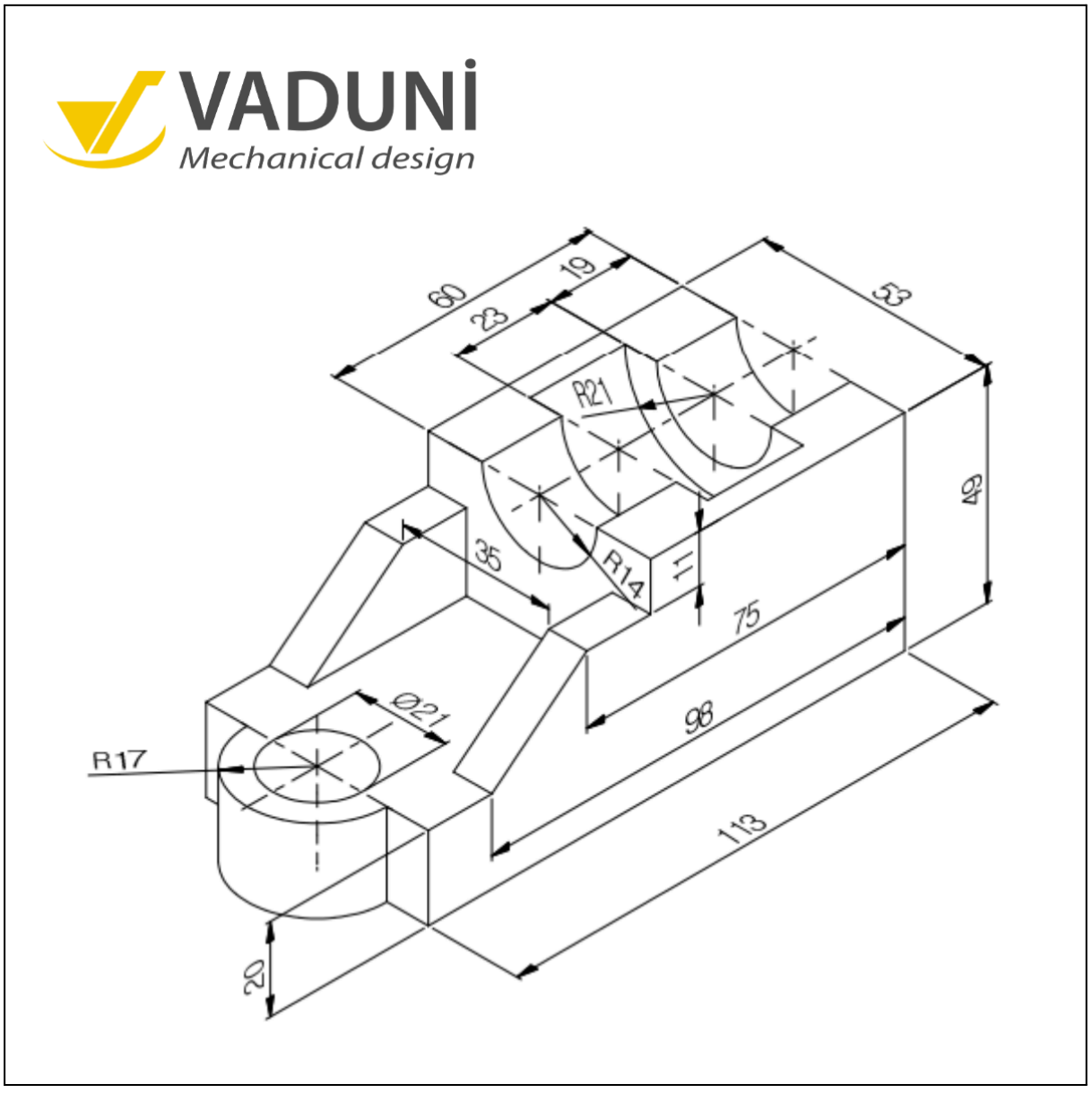
Bài tập 339


VADUNI
Mechanical design
2-C3
R8.5
R7.5
Ø8
23.5
32
47
29
35.5
33
25
15.5
8
18.5
72.5

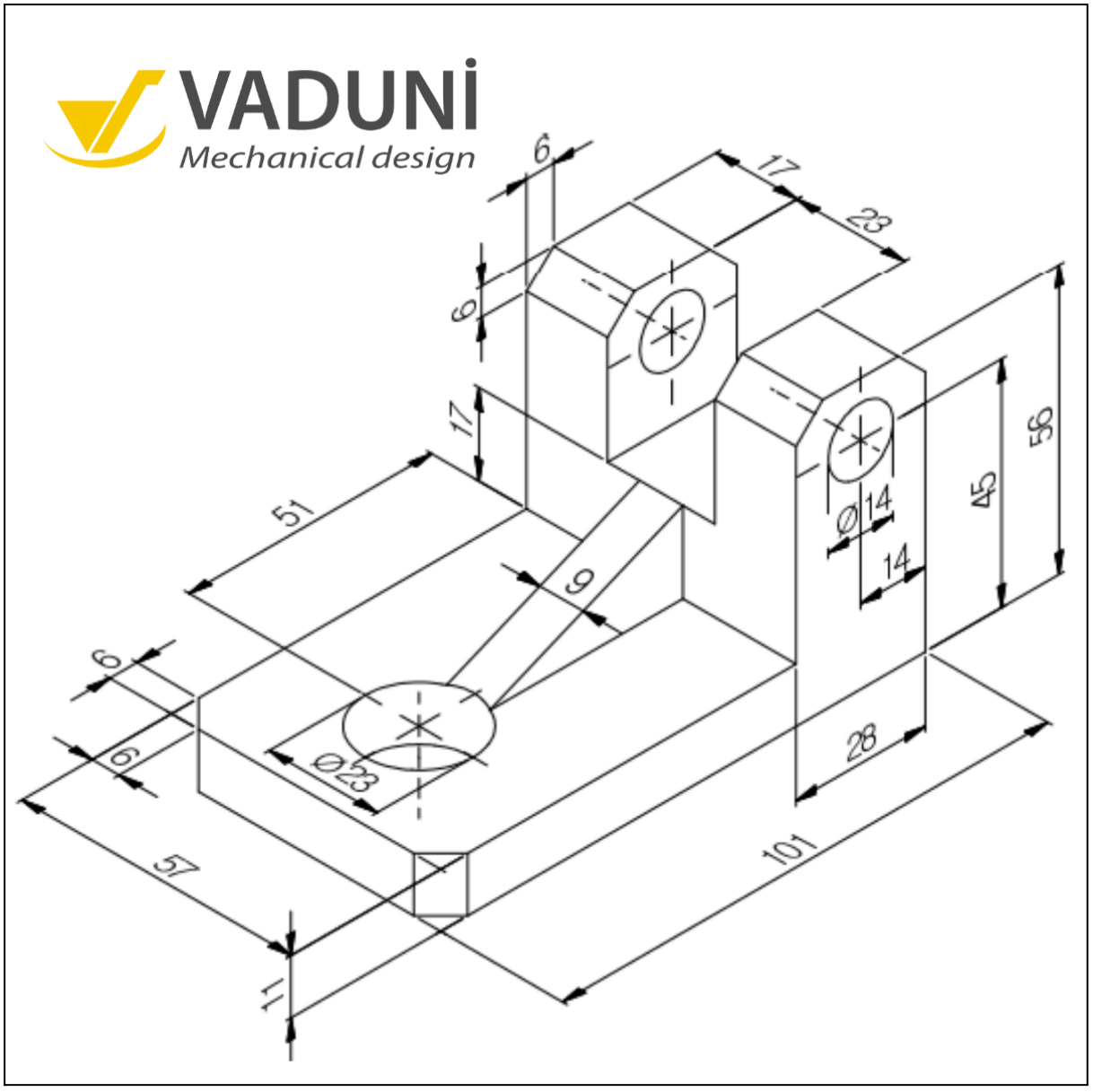
Bài tập 340


VADUNİ
Mechanical design
6-C4
R6
120°
R12
48
34
7
24
81
Ø12
11.5
50
16
18
36
25
17
81

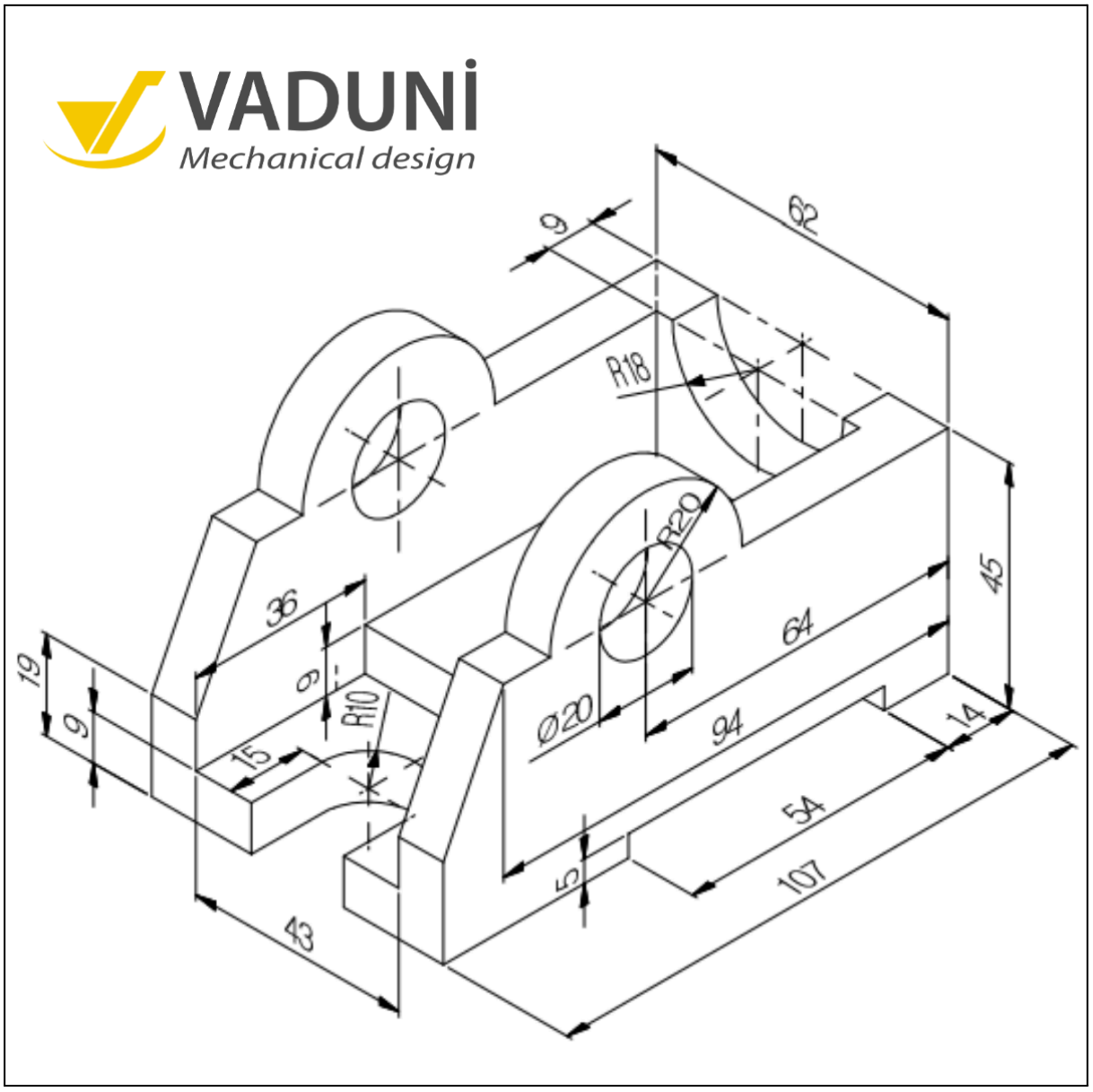
Bài tập 341


VADUNİ
Mechanical design
80
19
23
53
R21
42
35
R14
11
75
98
Ø21
R17
113
20

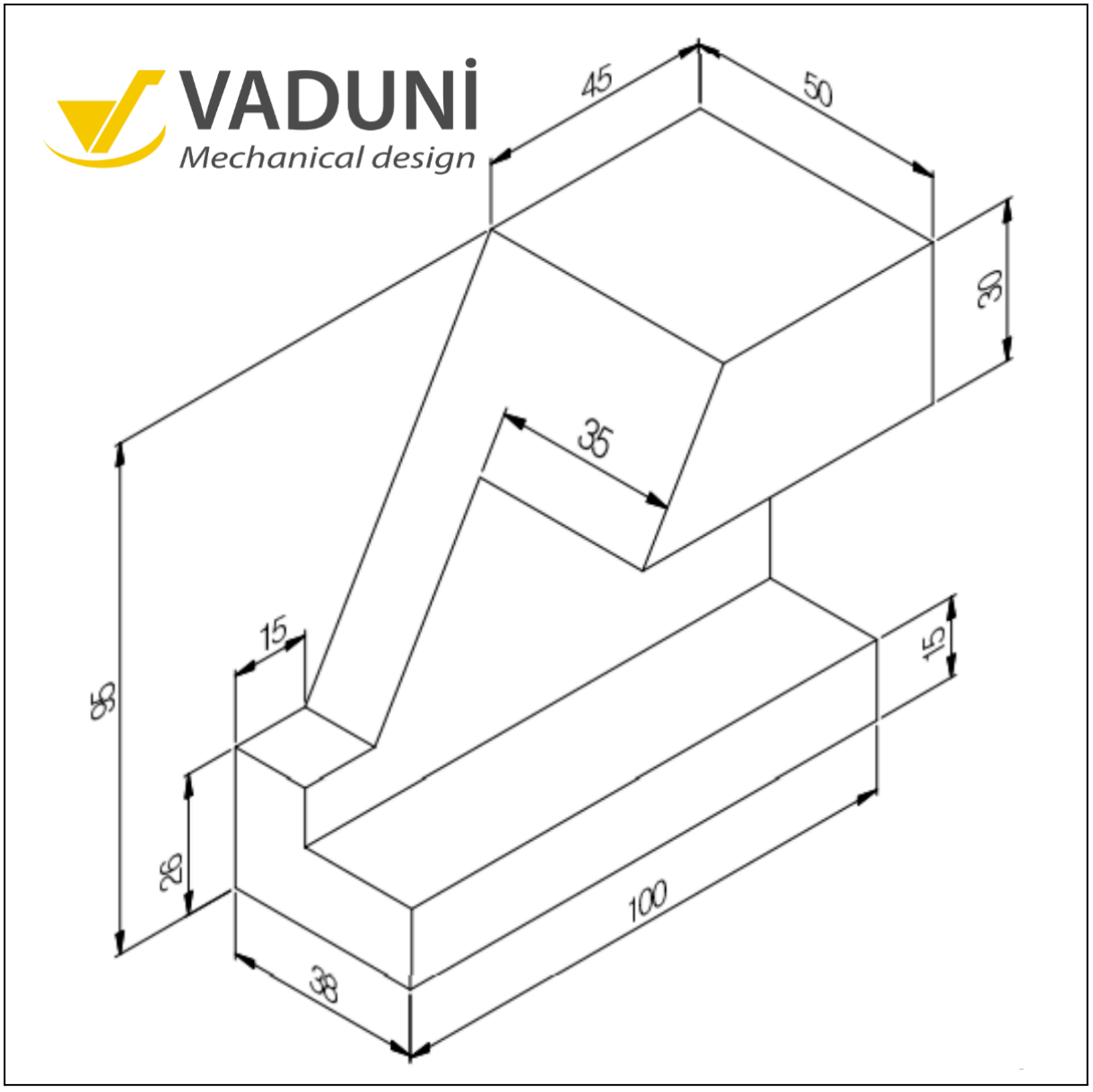
Bài tập 342


VADUNI
Mechanical design
6
17
23
9
17
51
9
Ø14
14
45
58
6
6
Ø23
28
57
101
11

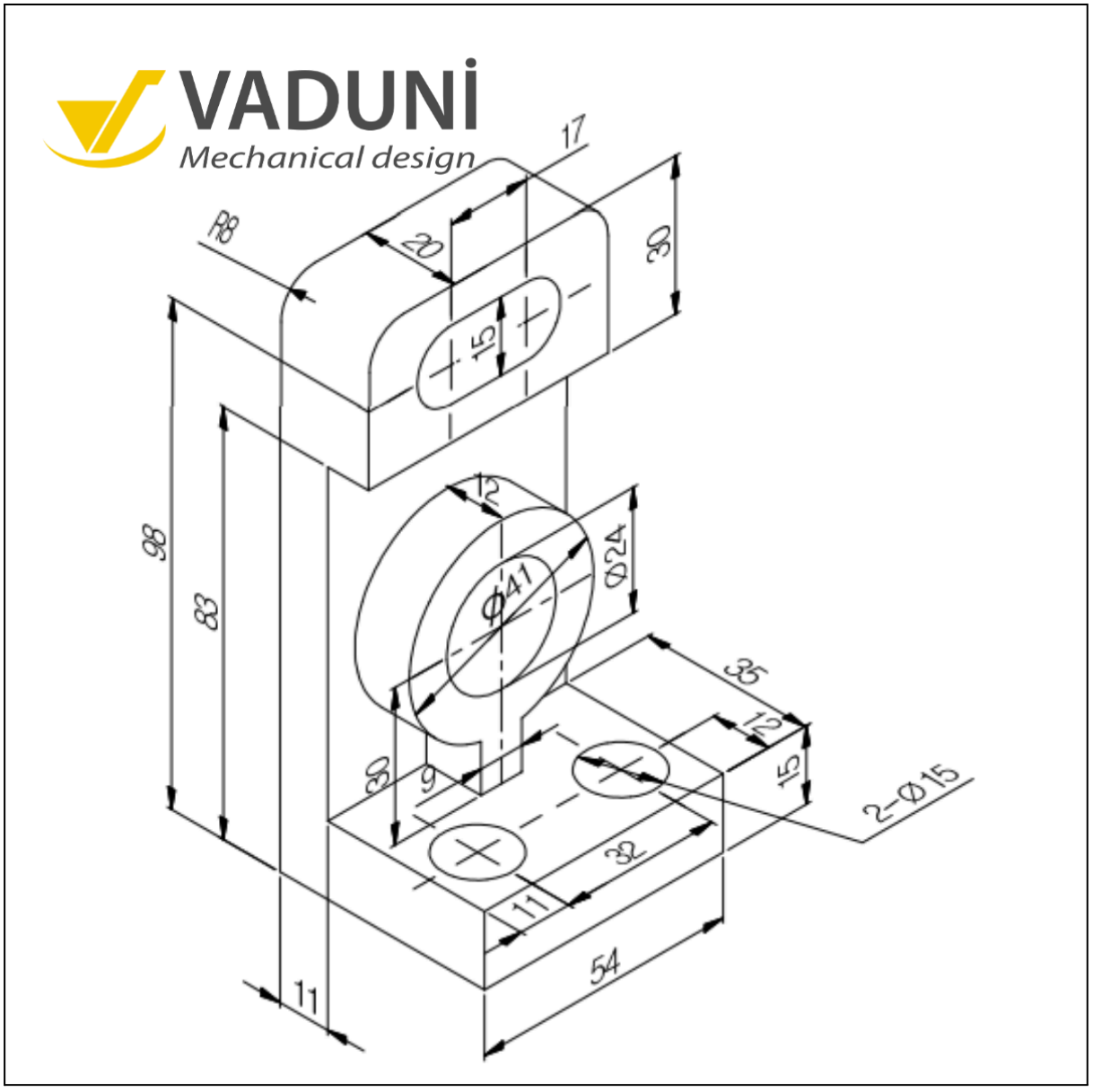
Bài tập 343


VADUNİ
Mechanical design
9
62
R18
R20
45
36
64
19
9
6
R10
15
Ø20
94
14
54
5
107
43

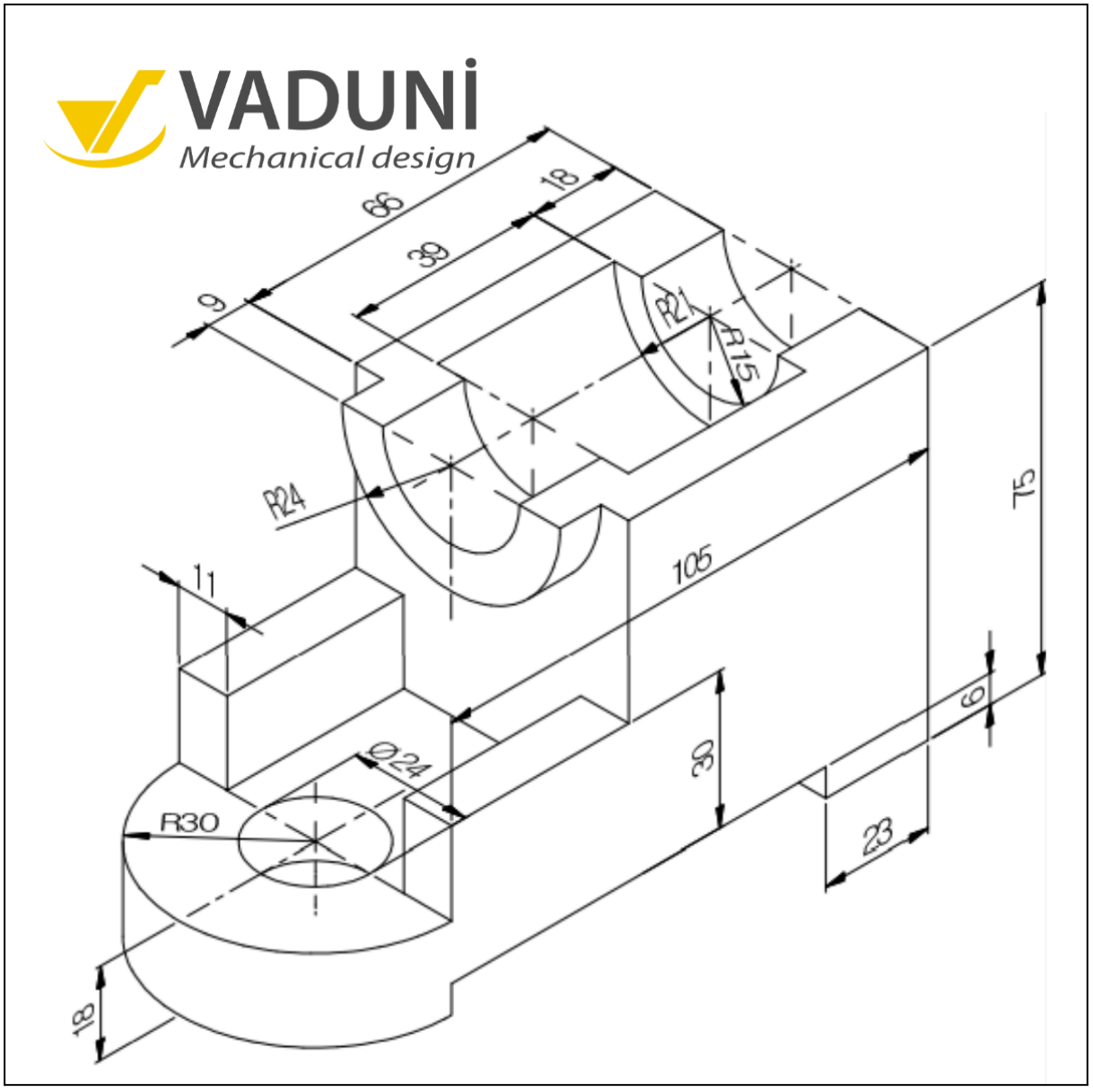
Bài tập 344



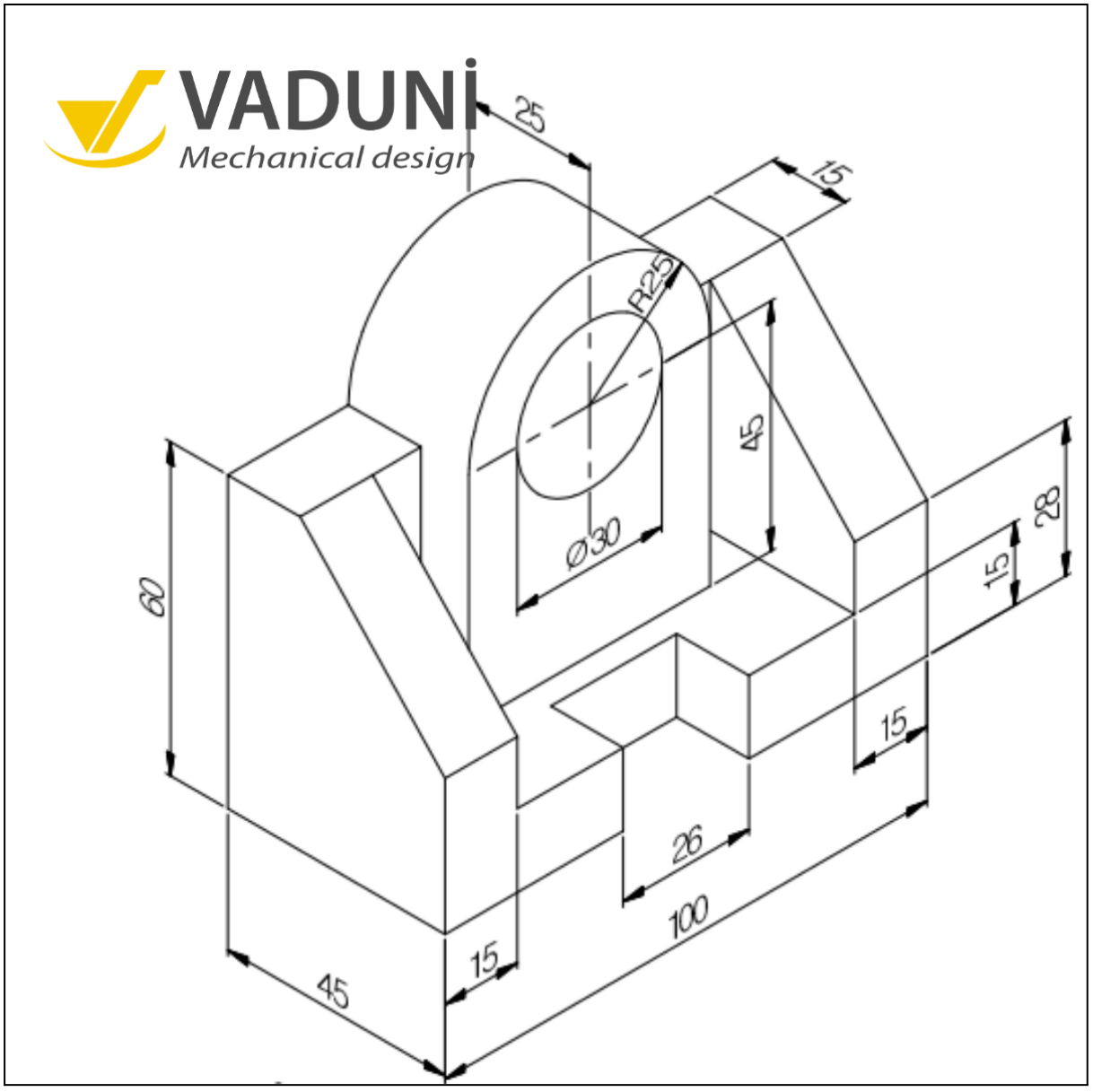
Bài tập 345


VADUNI
Mechanical design
17
R8
20
30
15
98
83
12
Ø24
Ø41
35
12
15
8
9
2-Ø15
32
11
54
11

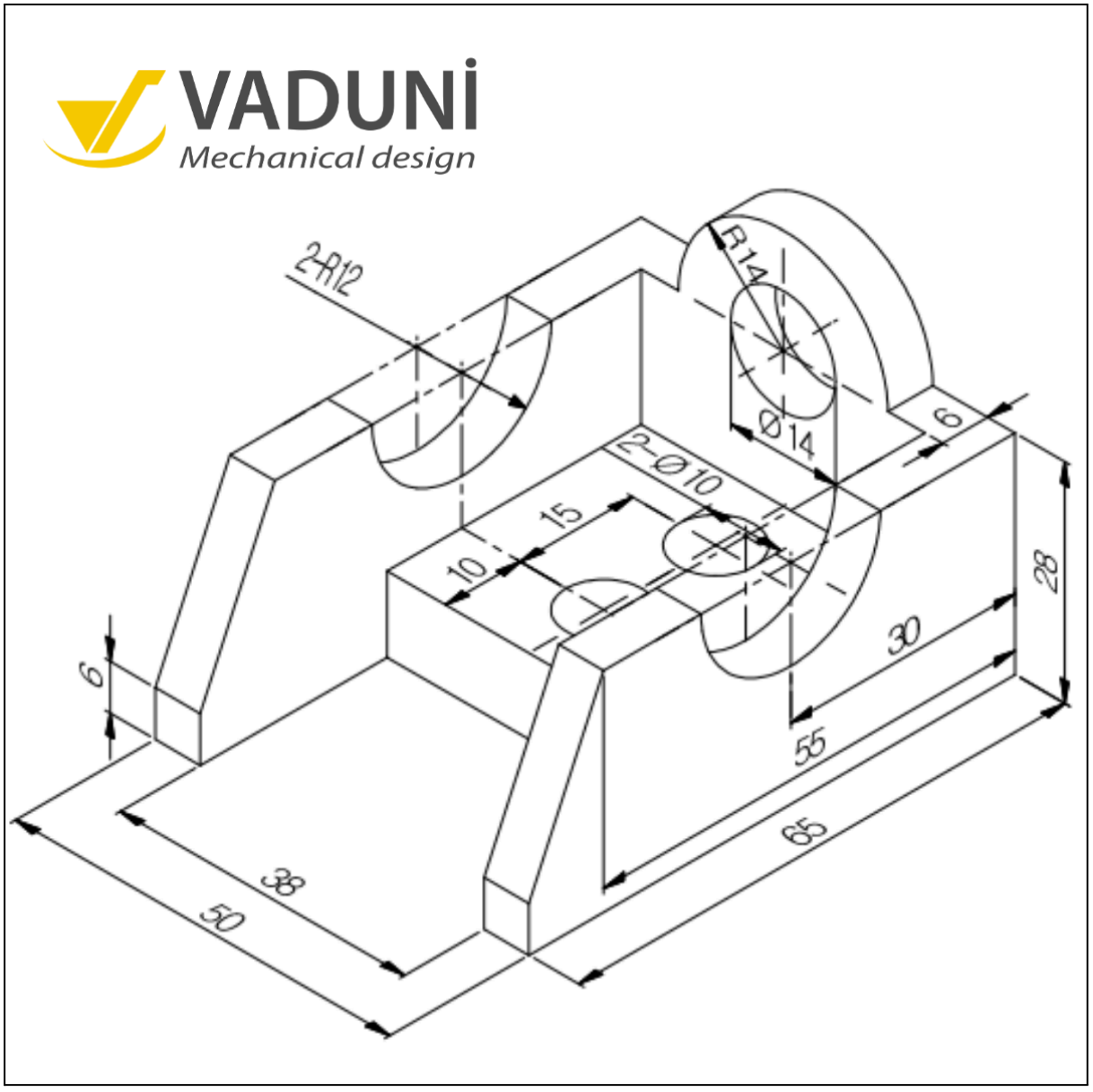
Bài tập 346


VADUNİ
Mechanical design
66
18
39
9
R21
R15
R24
105
75
11
Ø24
R30
38
6
23
18

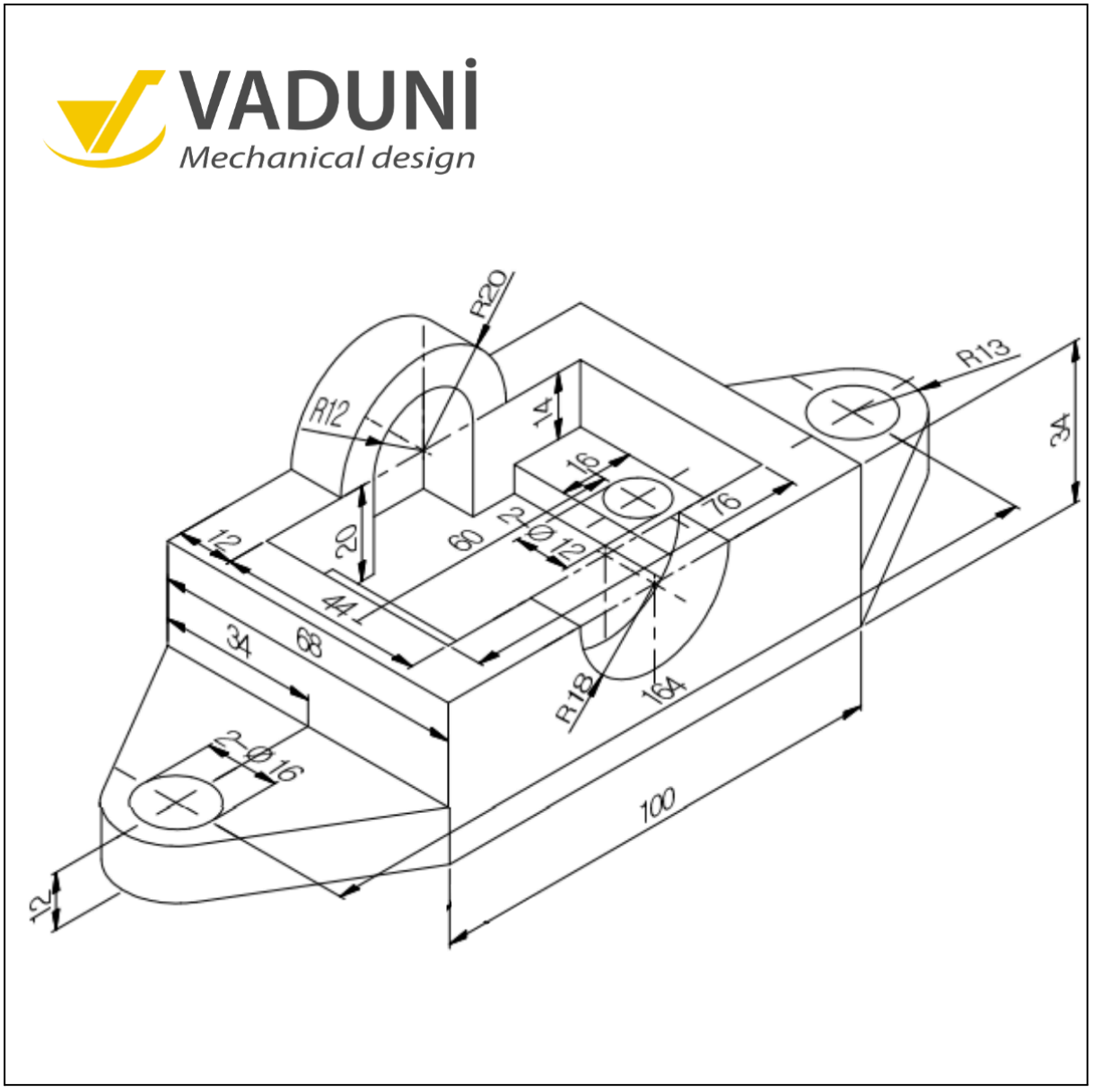
Bài tập 347


VADUNI
Mechanical design
25
15
R25
45
Ø30
60
28
15
15
26
100
45
15

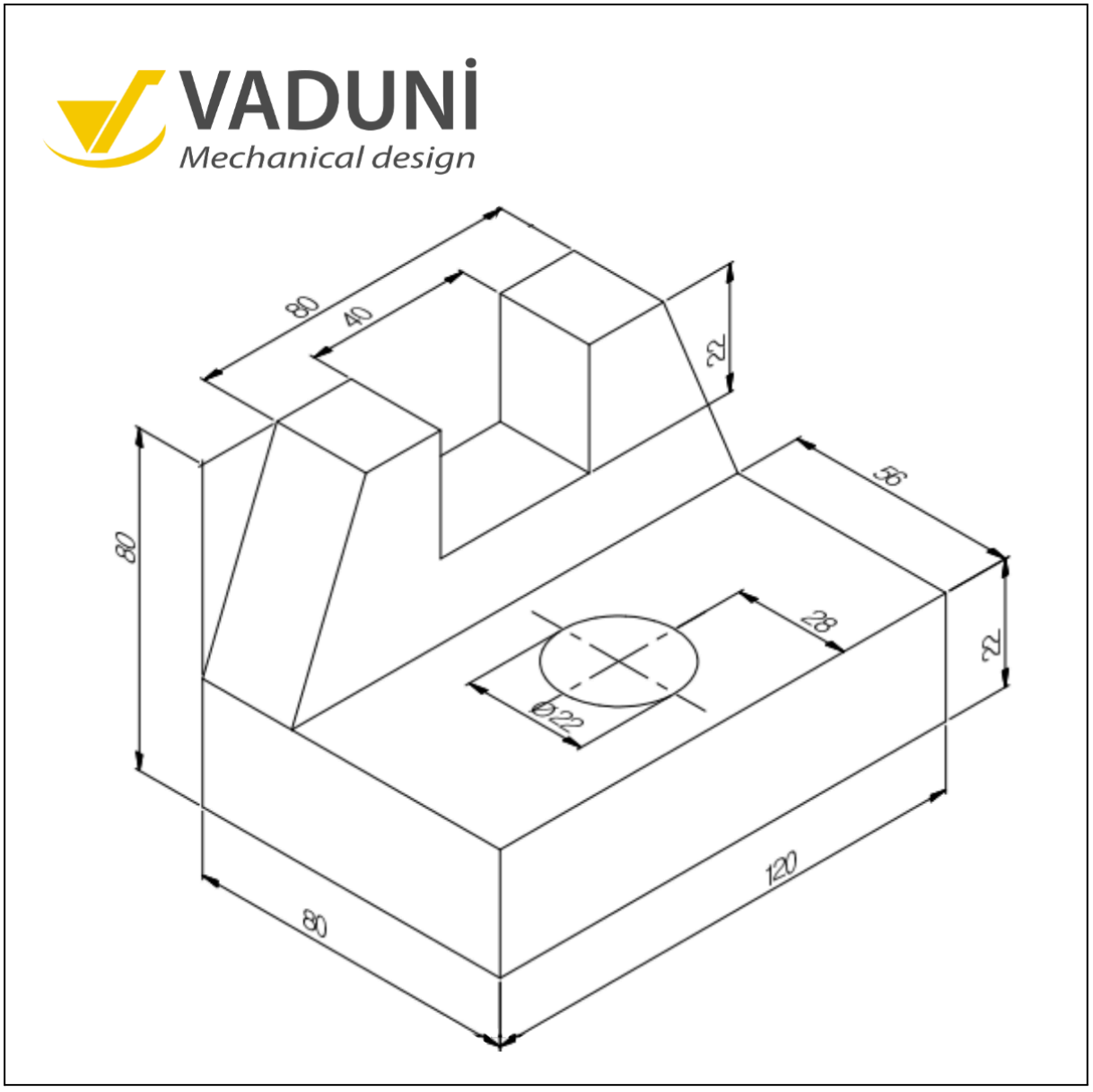
Bài tập 348


VADUNİ
Mechanical design
2-R12
R14
Ø14
6
2-Ø10
15
10
28
30
6
55
65
38
50

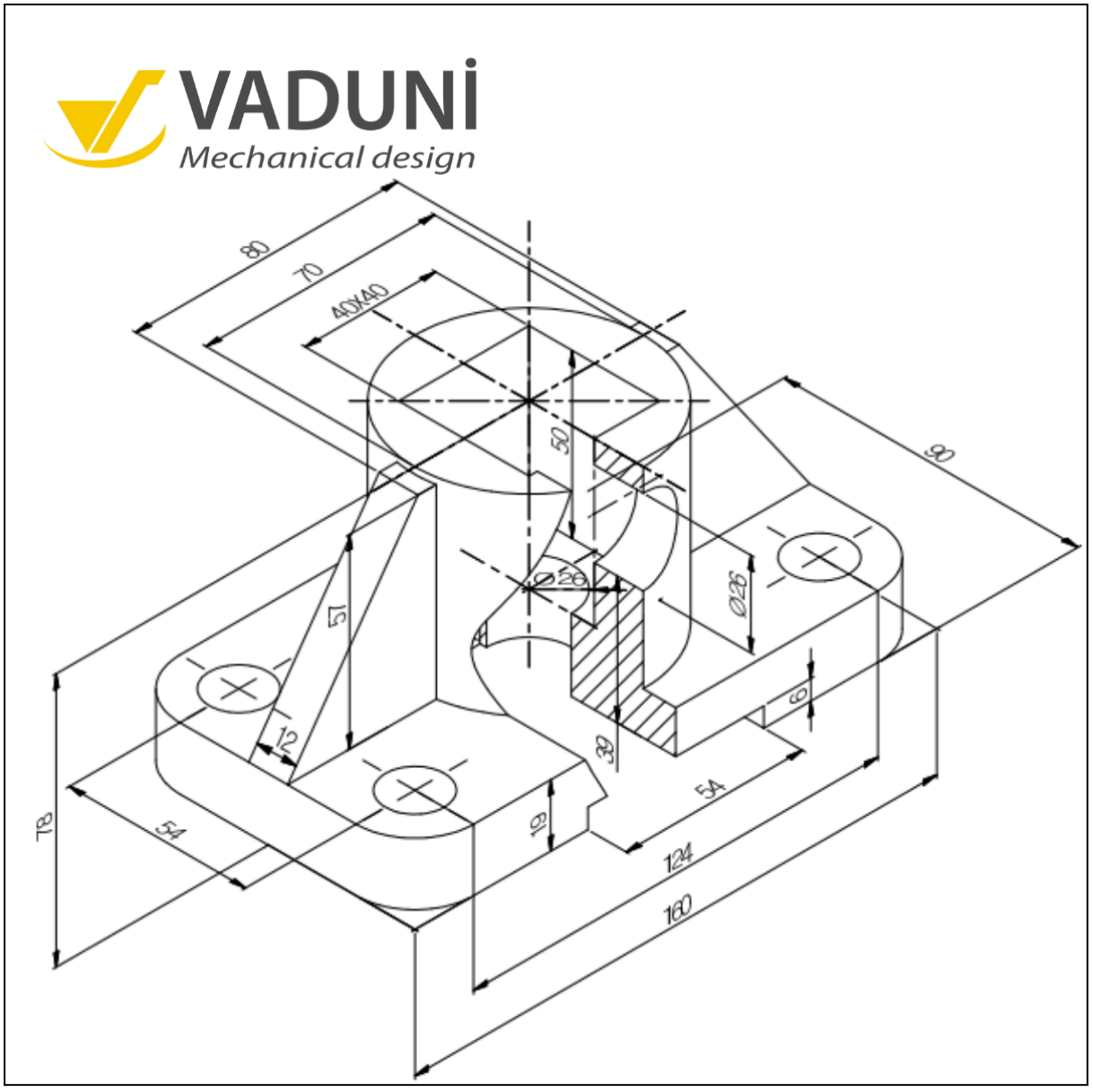
Bài tập 349


VADUNİ
Mechanical design
R20
R12
R13
14
16
76
24
12
20
80
2-Ø12
44
34
68
R18
164
2-Ø16
12
100

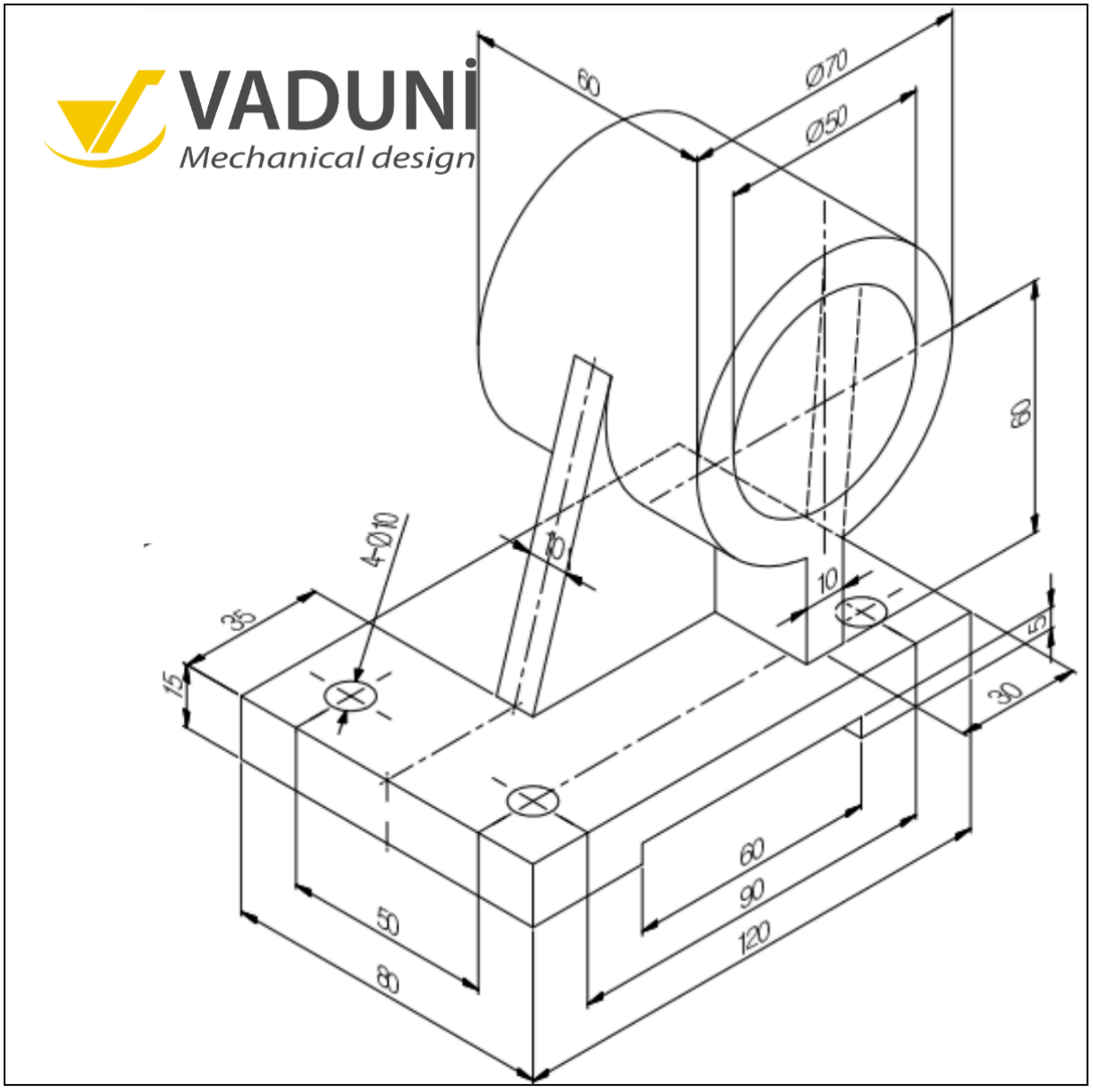
Bài tập 350



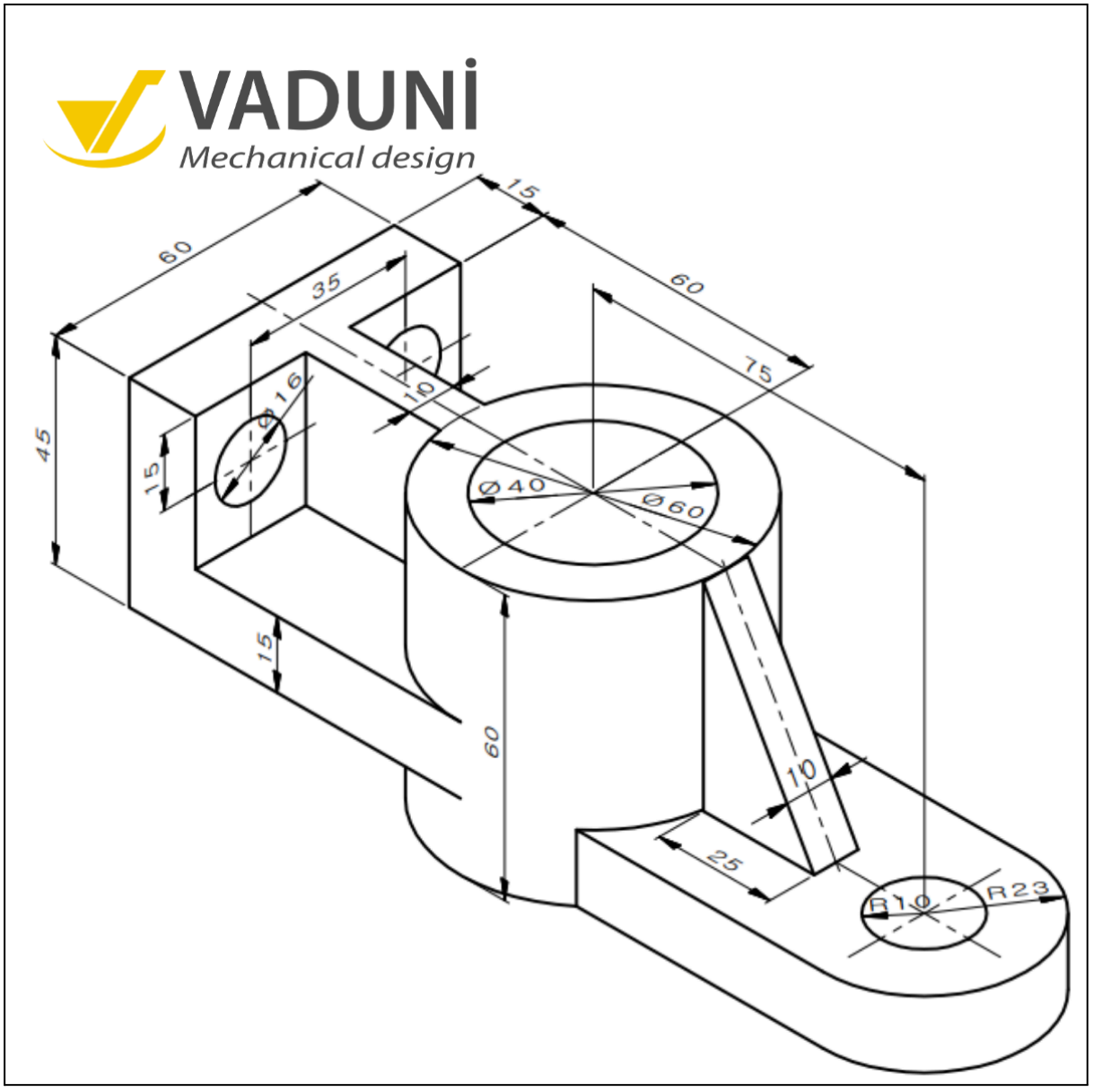
Bài tập 351


VADUNİ
Mechanical design
80
70
40X40
50
90
Ø26
Ø26
51
12
30
8
54
54
124
160
70
19

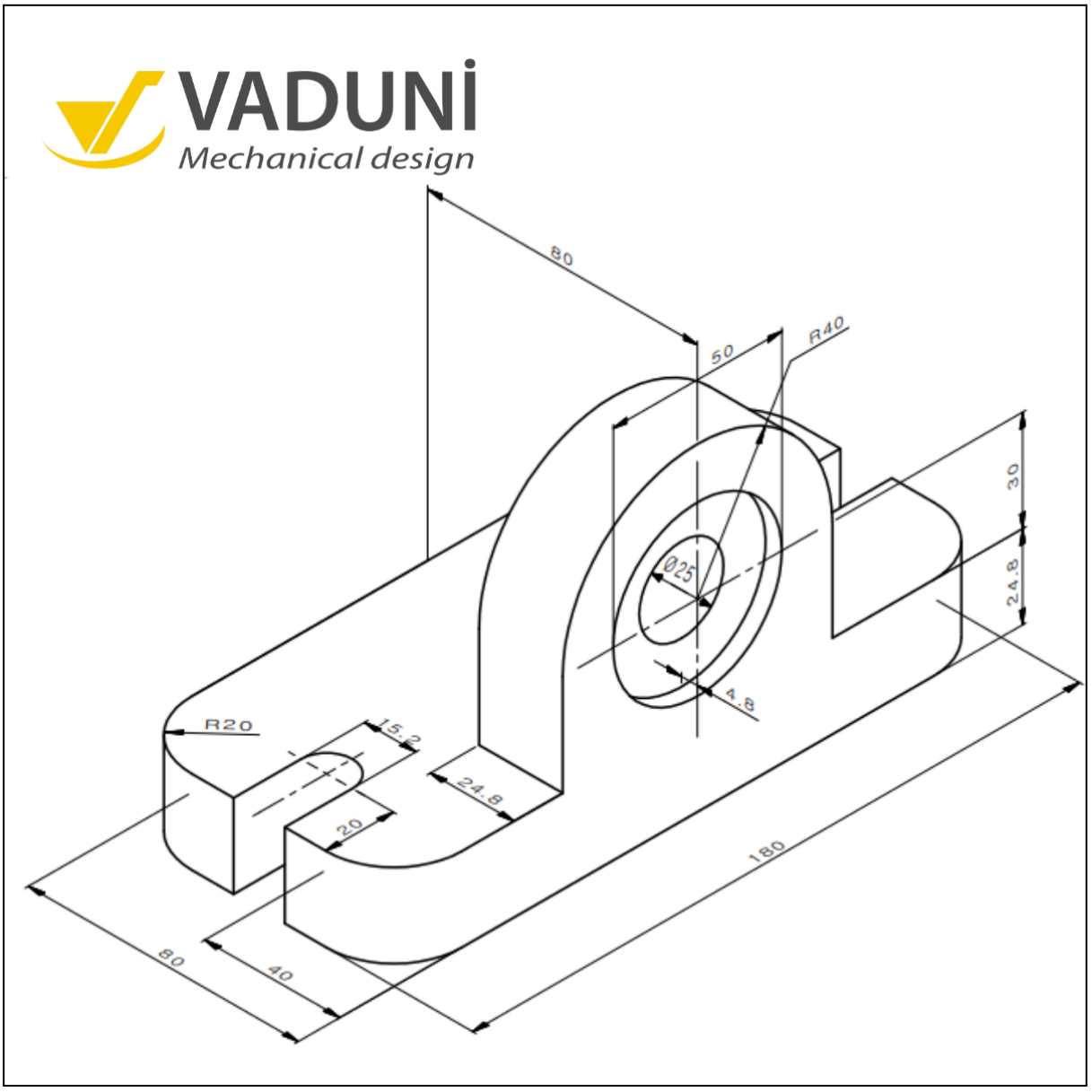
Bài tập 352


VADUNI
Mechanical design
60
Ø70
Ø50
60
4-Ø10
10
10
35
15
5
30
60
90
120
50
80

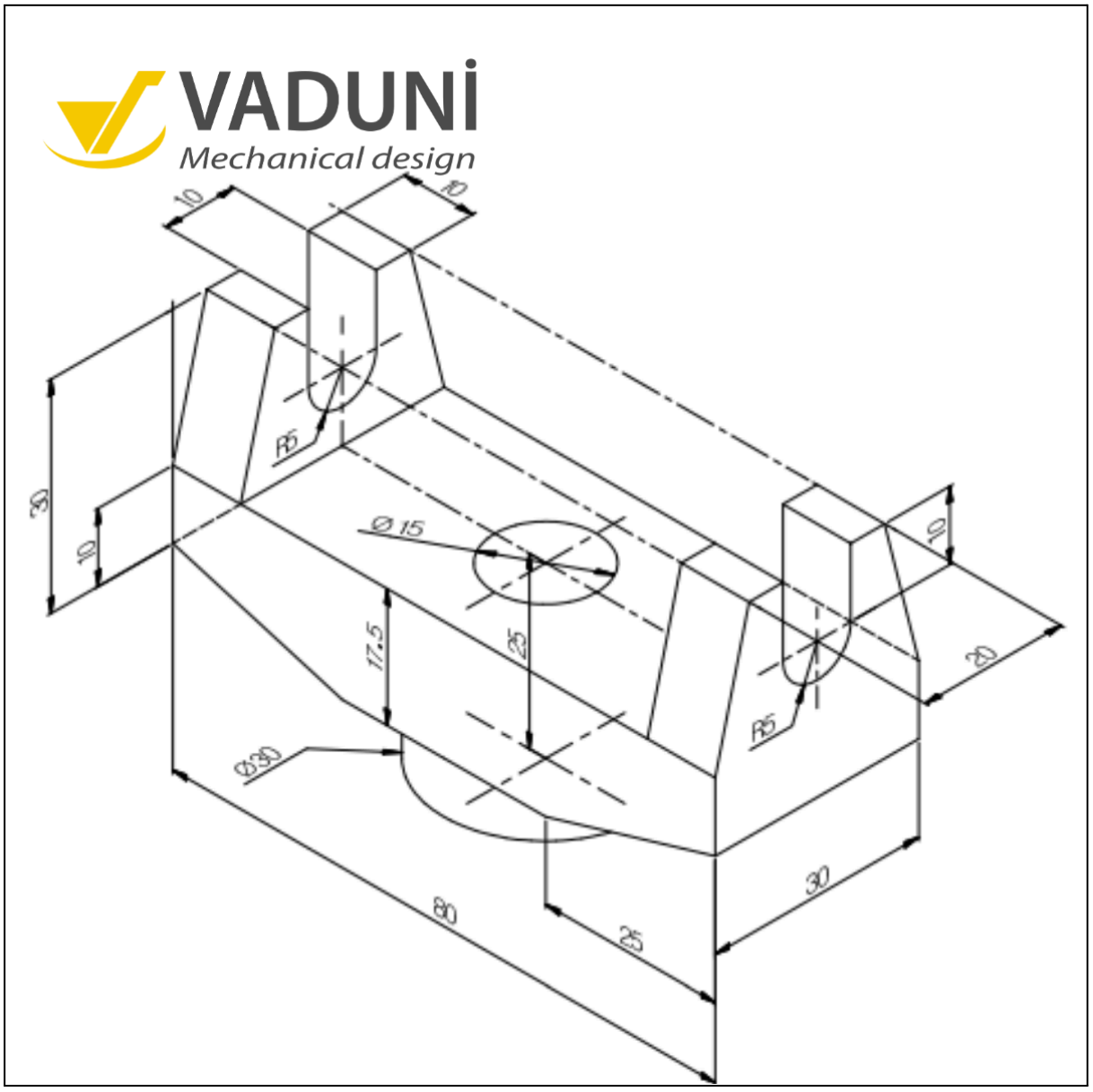
Bài tập 353


VADUNİ
Mechanical design
60
35
15
60
75
45
15
Ø16
10
Ø40
Ø60
15
60
10
25
R10
R23

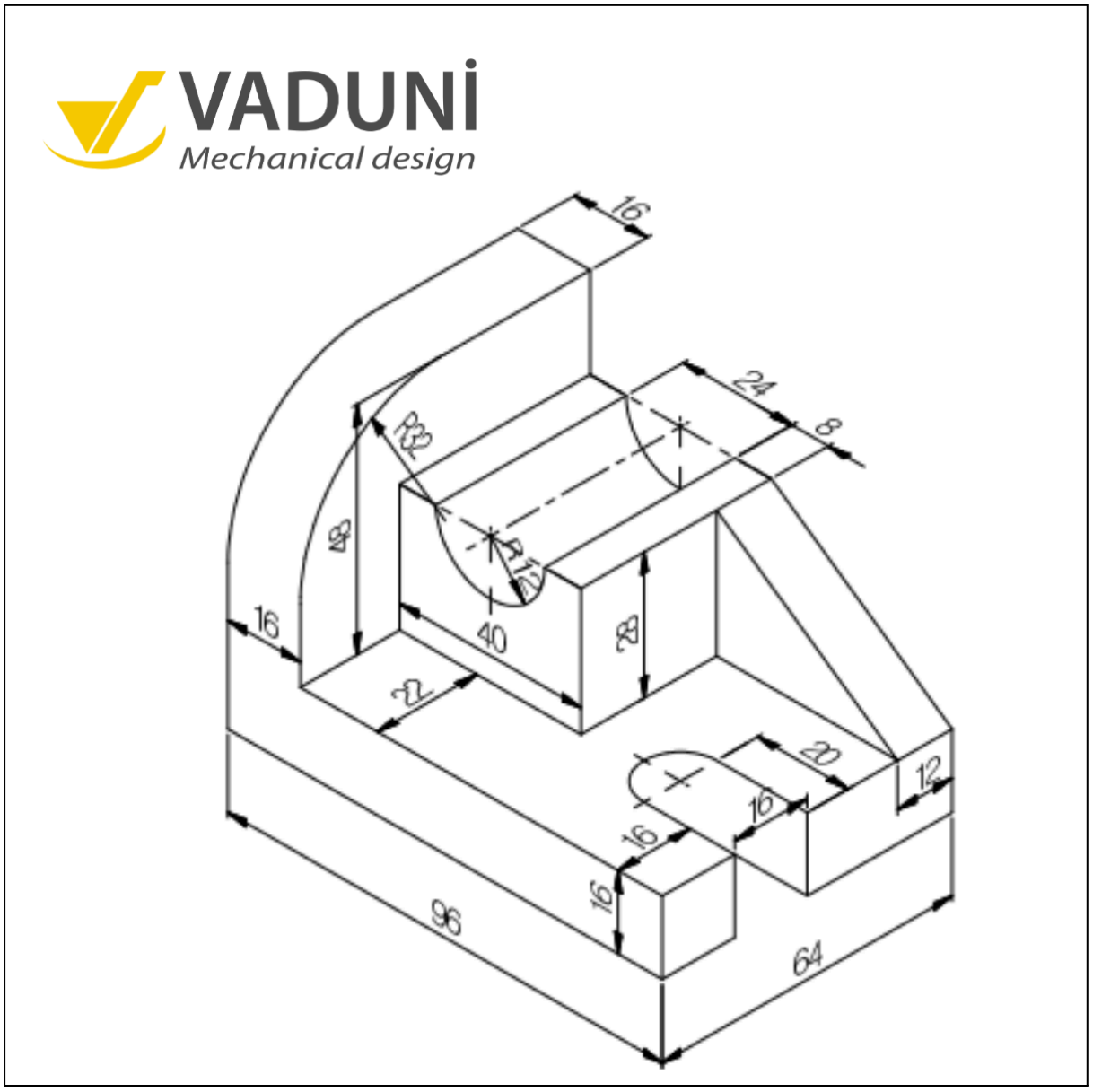
Bài tập 354


VADUNI
Mechanical design
80
50
R40
30
24.8
Ø25
4.8
R20
15.2
24.6
20
180
80
40

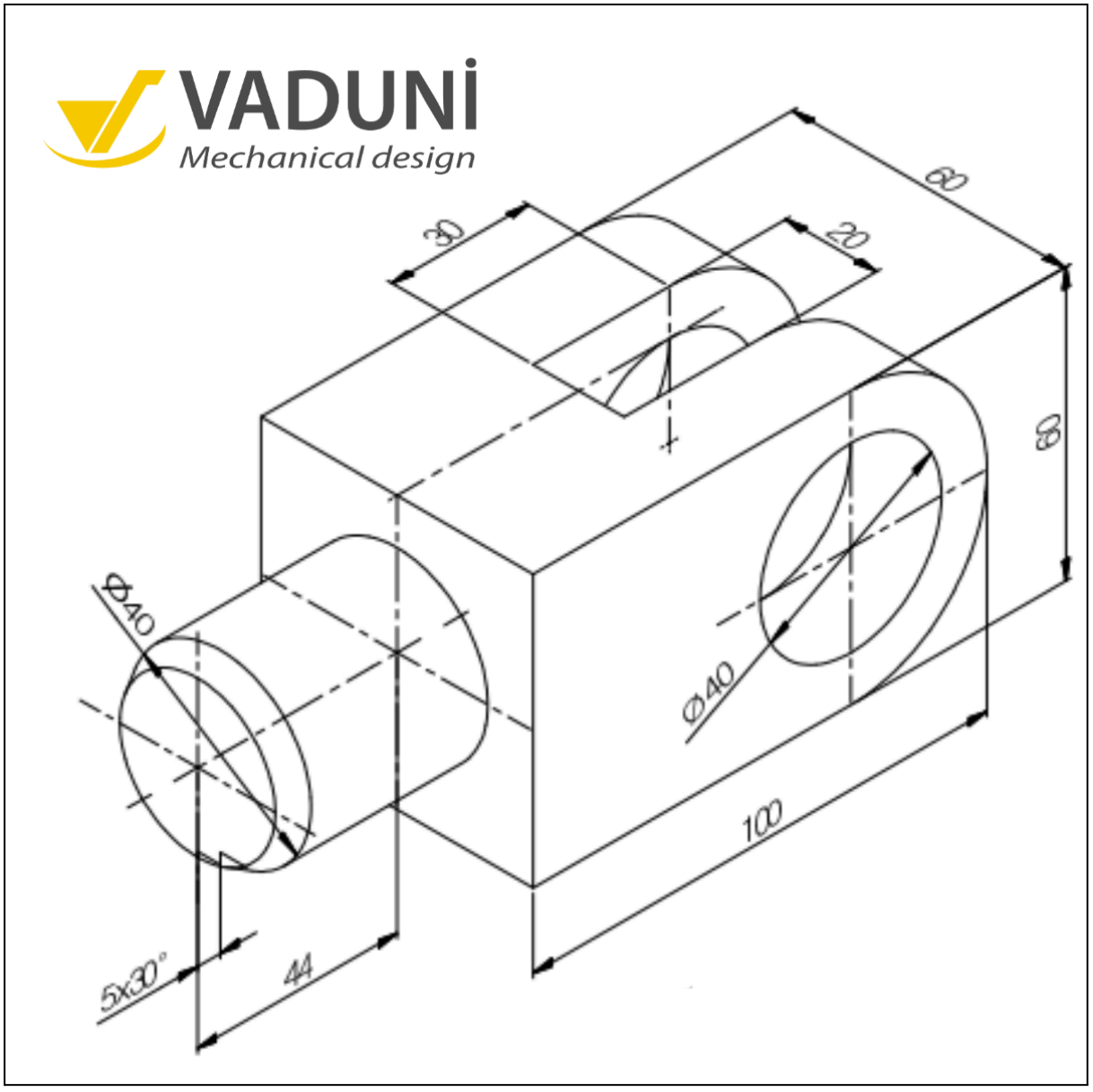
Bài tập 355


VADUNI
Mechanical design
10
10
R5
30
10
Ø15
17.5
25
10
20
R5
Ø30
80
25
30

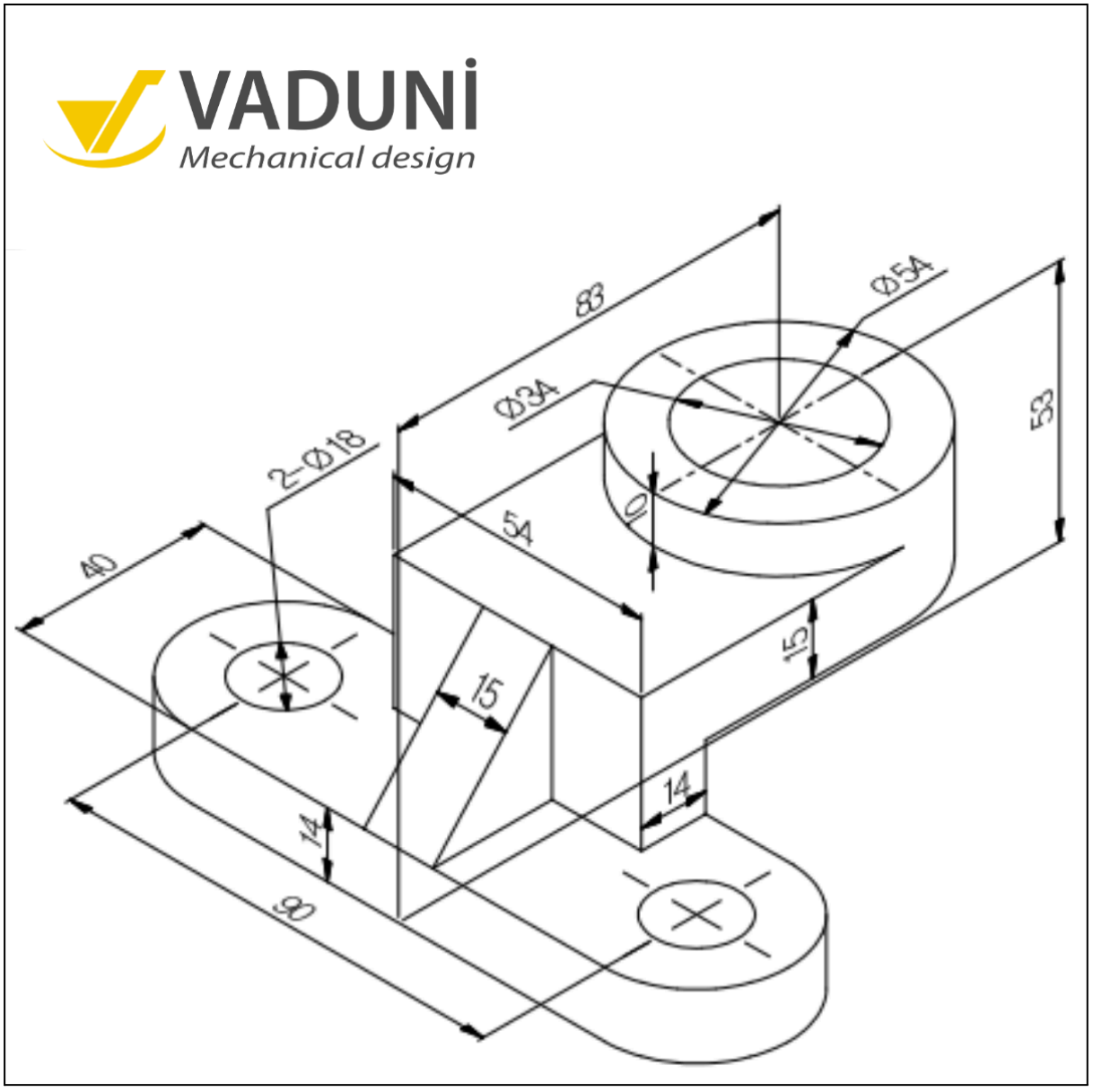
Bài tập 356


VADUNİ
Mechanical design
16
24
8
R8
48
R12
16
40
28
22
20
12
16
16
16
96
64

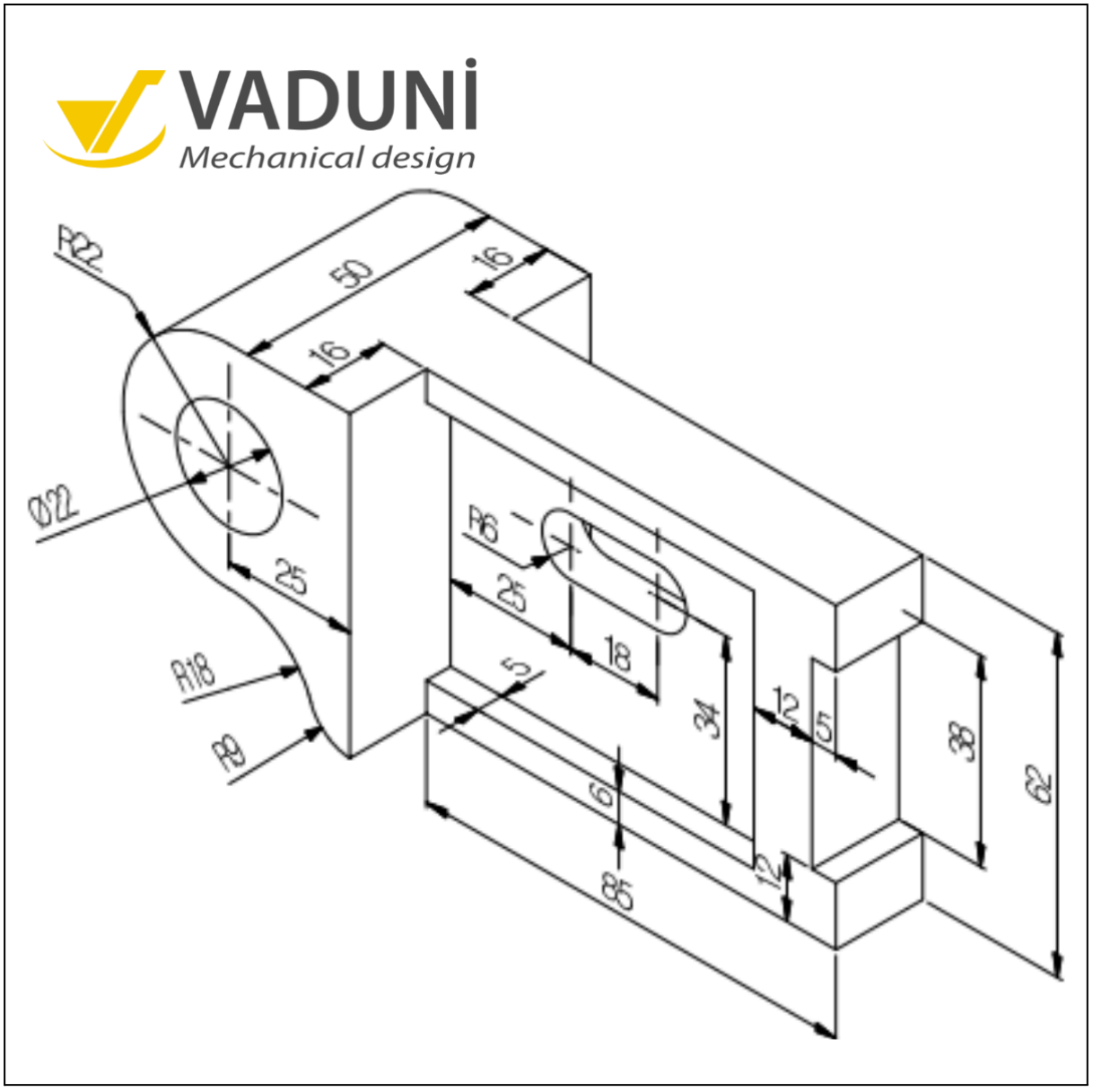
Bài tập 357



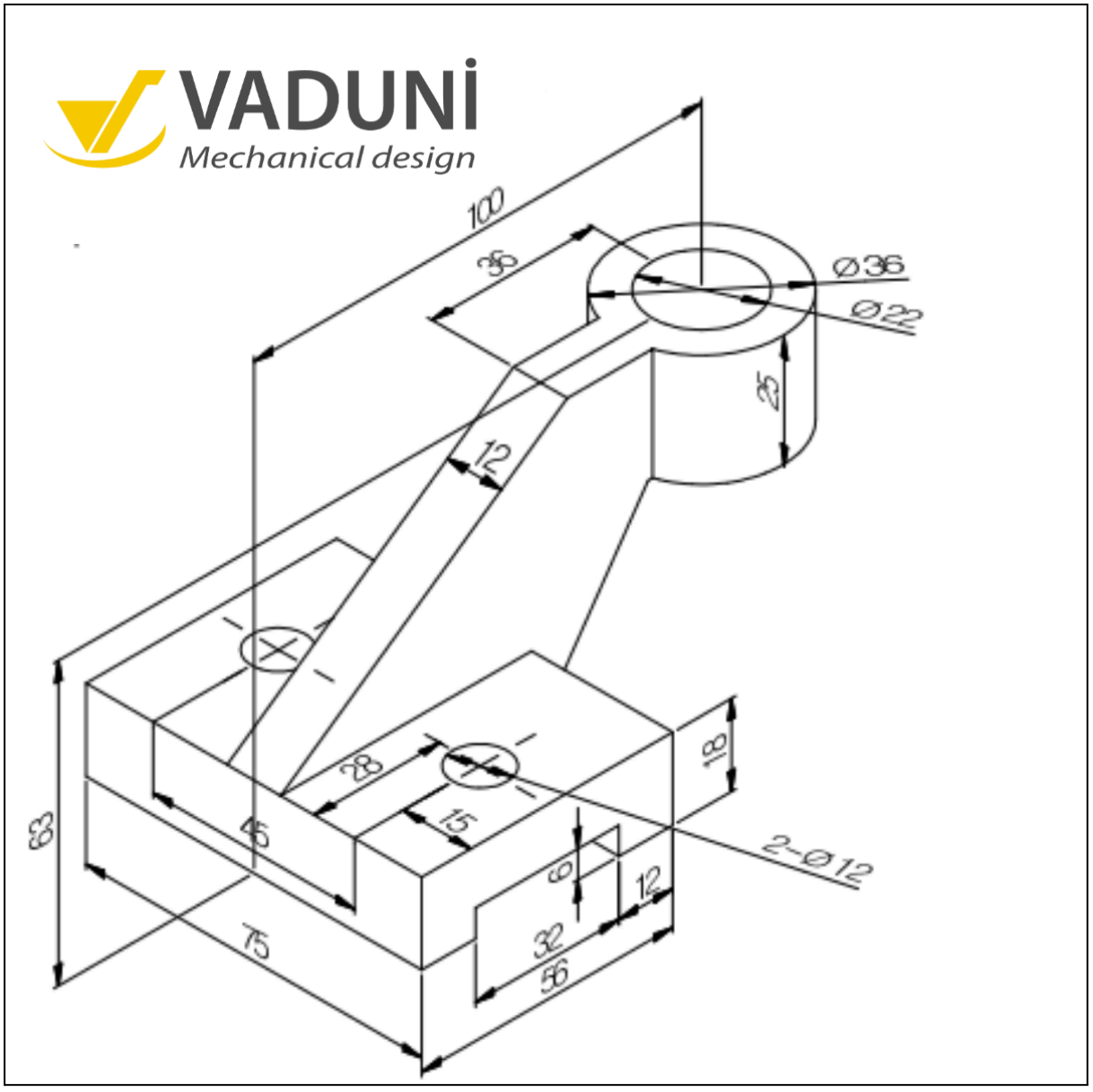
Bài tập 358


VADUNİ
Mechanical design
83
Ø54
Ø34
2-Ø18
40
54
53
15
15
14
14
80

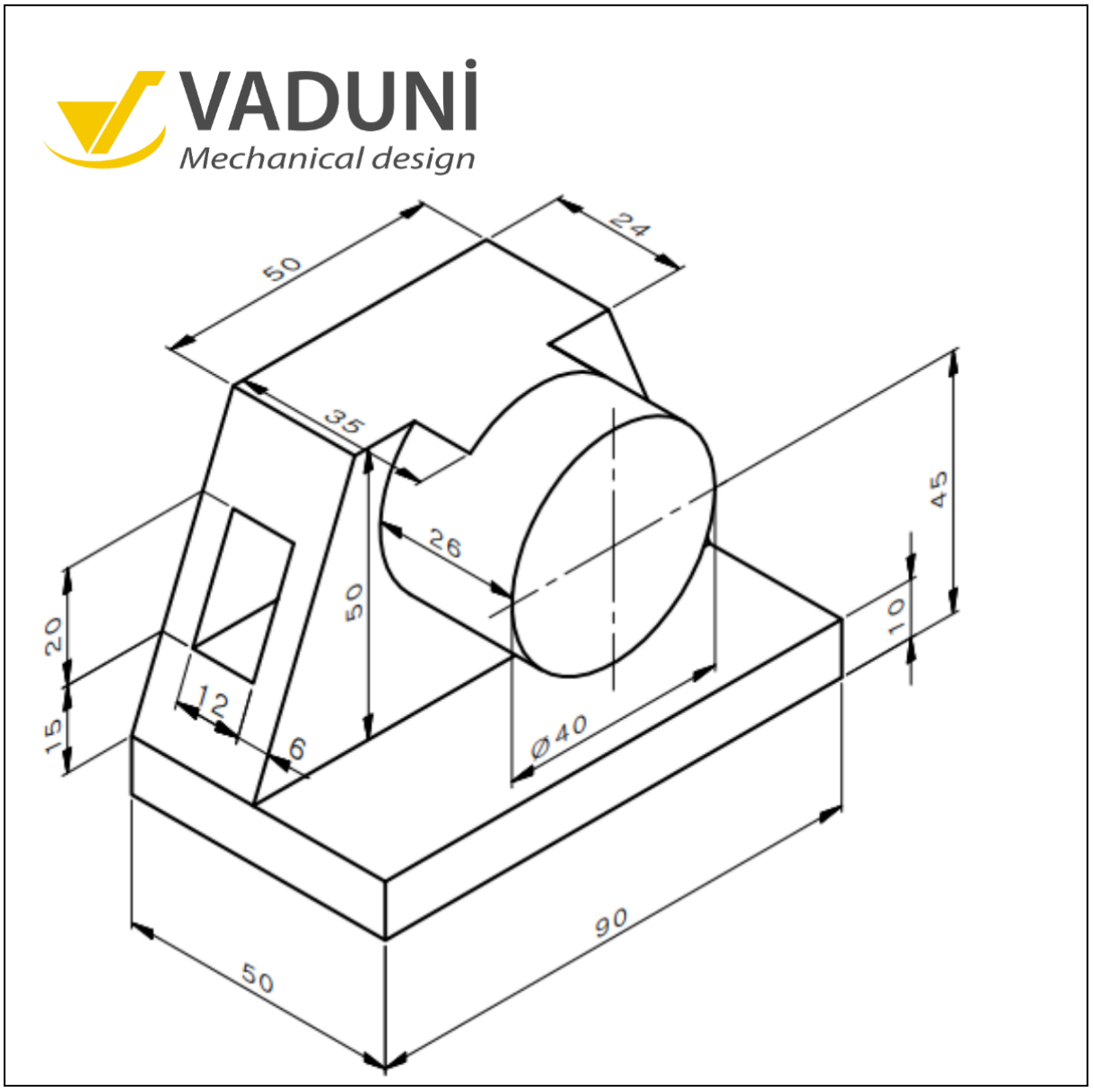
Bài tập 359


VADUNİ
Mechanical design
R22
50
16
16
Ø22
25
R18
R8
R6
25
18
5
34
12
51
38
62
6
85
12

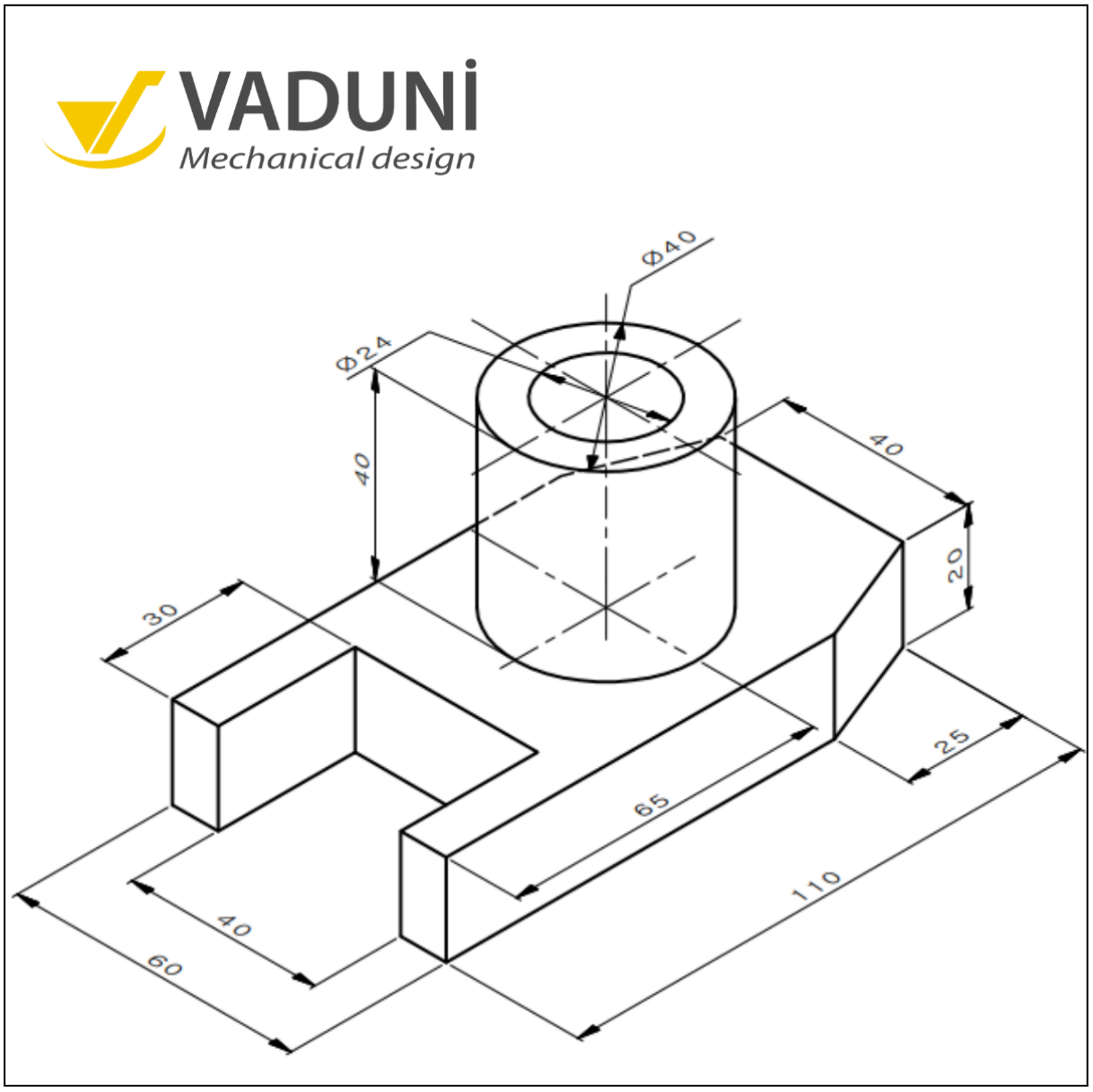
Bài tập 360


VADUNİ
Mechanical design
100
36
Ø36
Ø22
25
12
28
15
45
63
75
18
2-Ø12
6
12
32
56

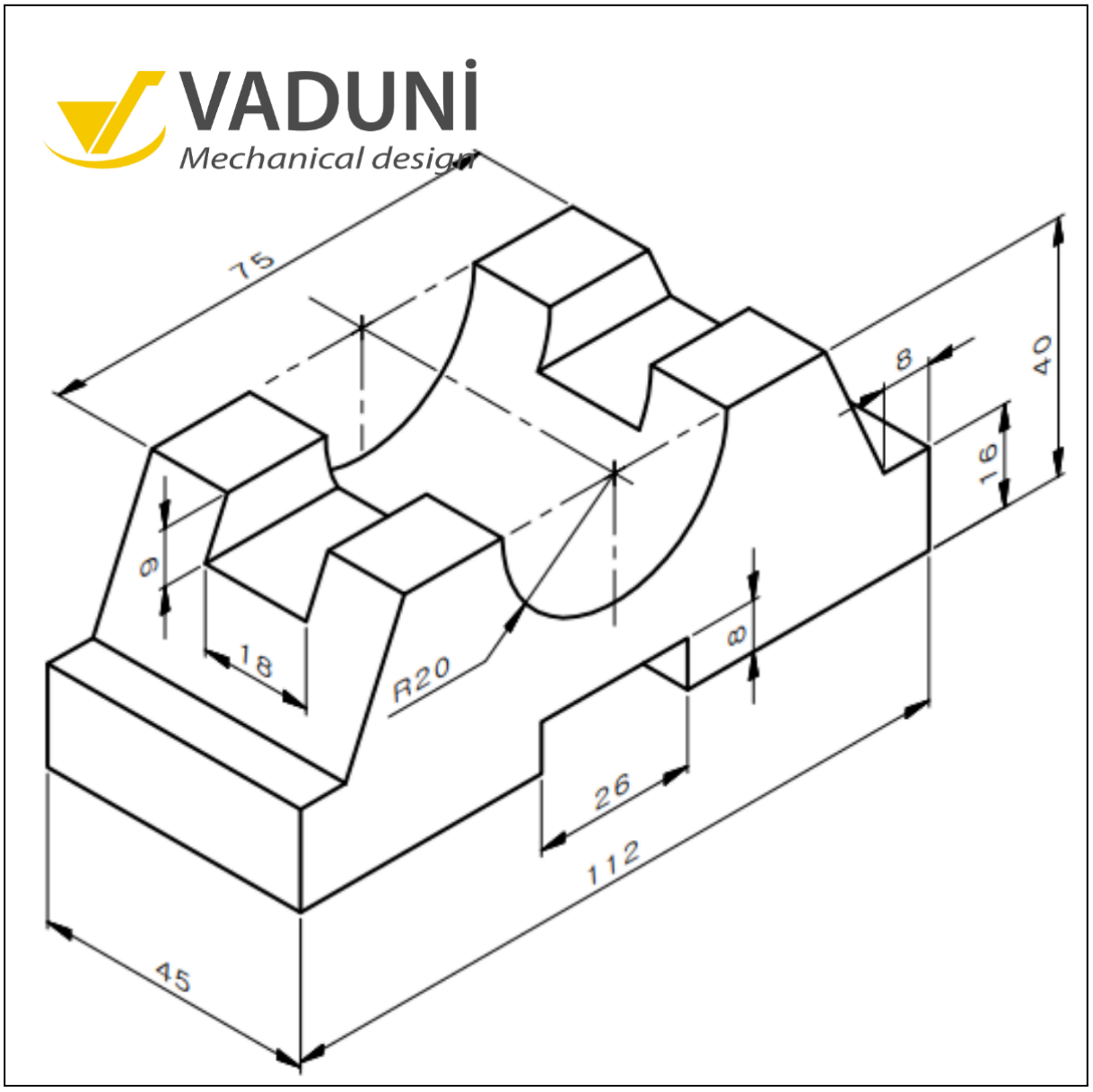
Bài tập 361


VADUNİ
Mechanical design
50
24
35
26
45
50
20
15
12
6
Ø40
10
90
50

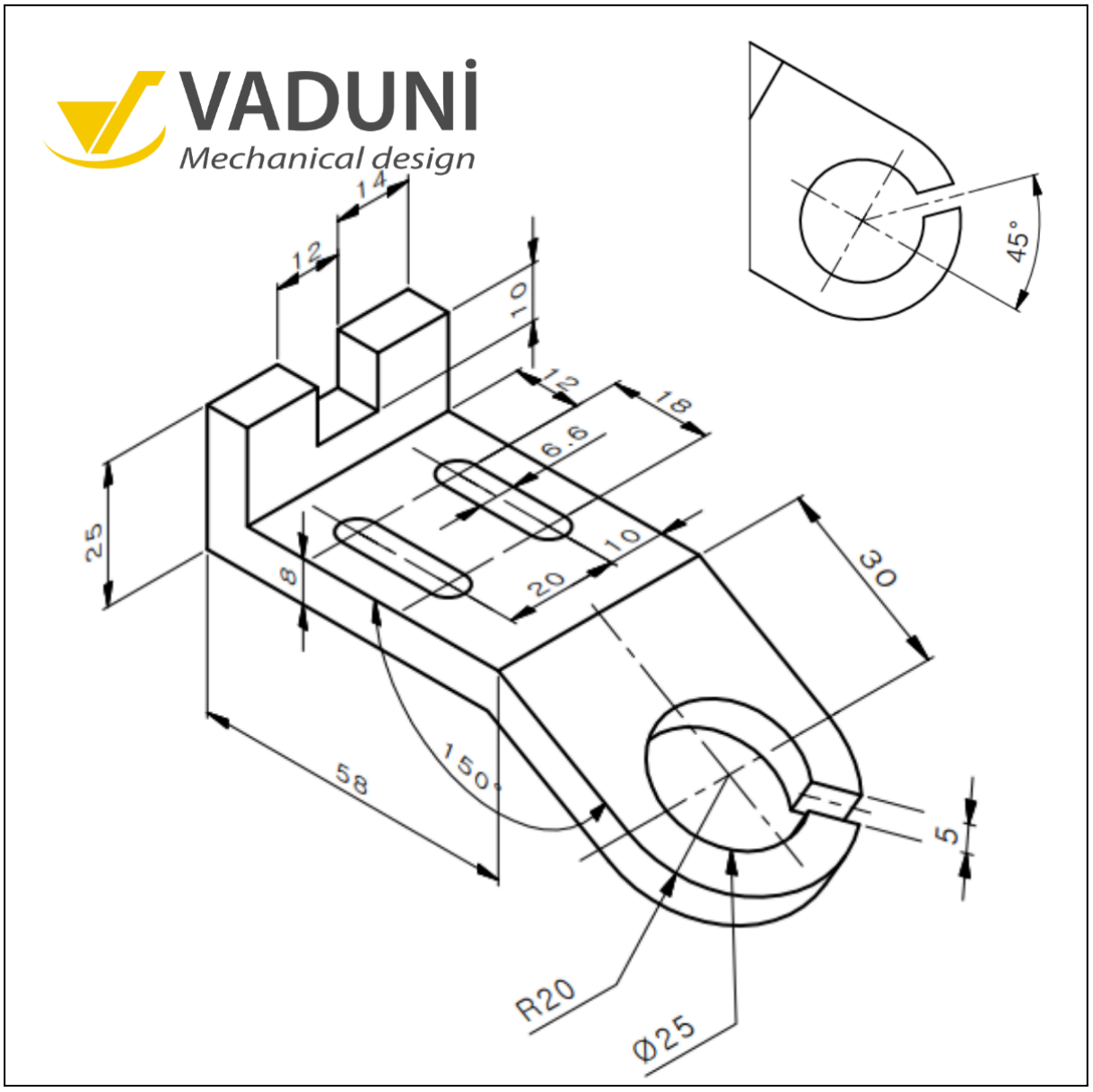
Bài tập 362



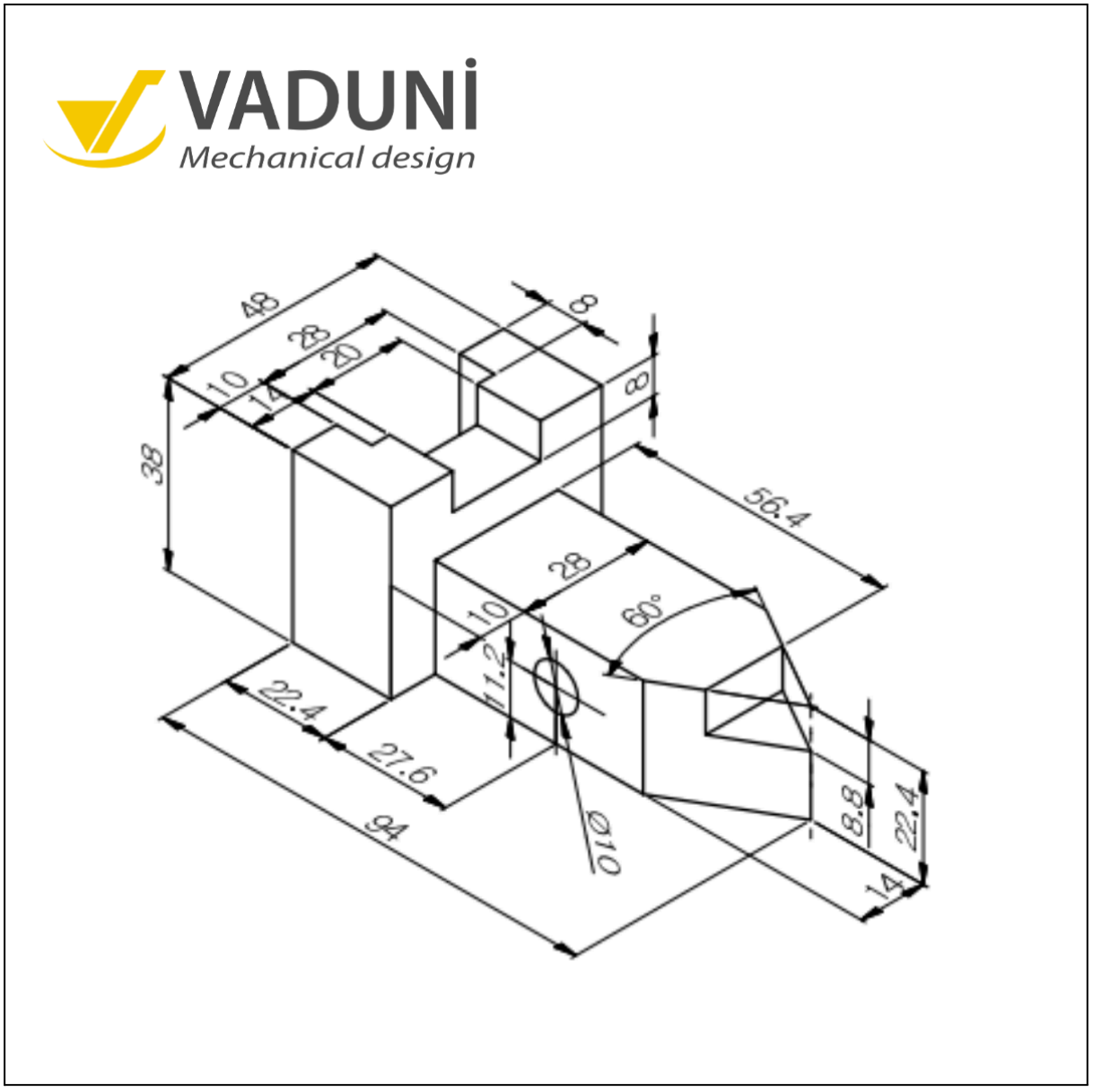
Bài tập 363



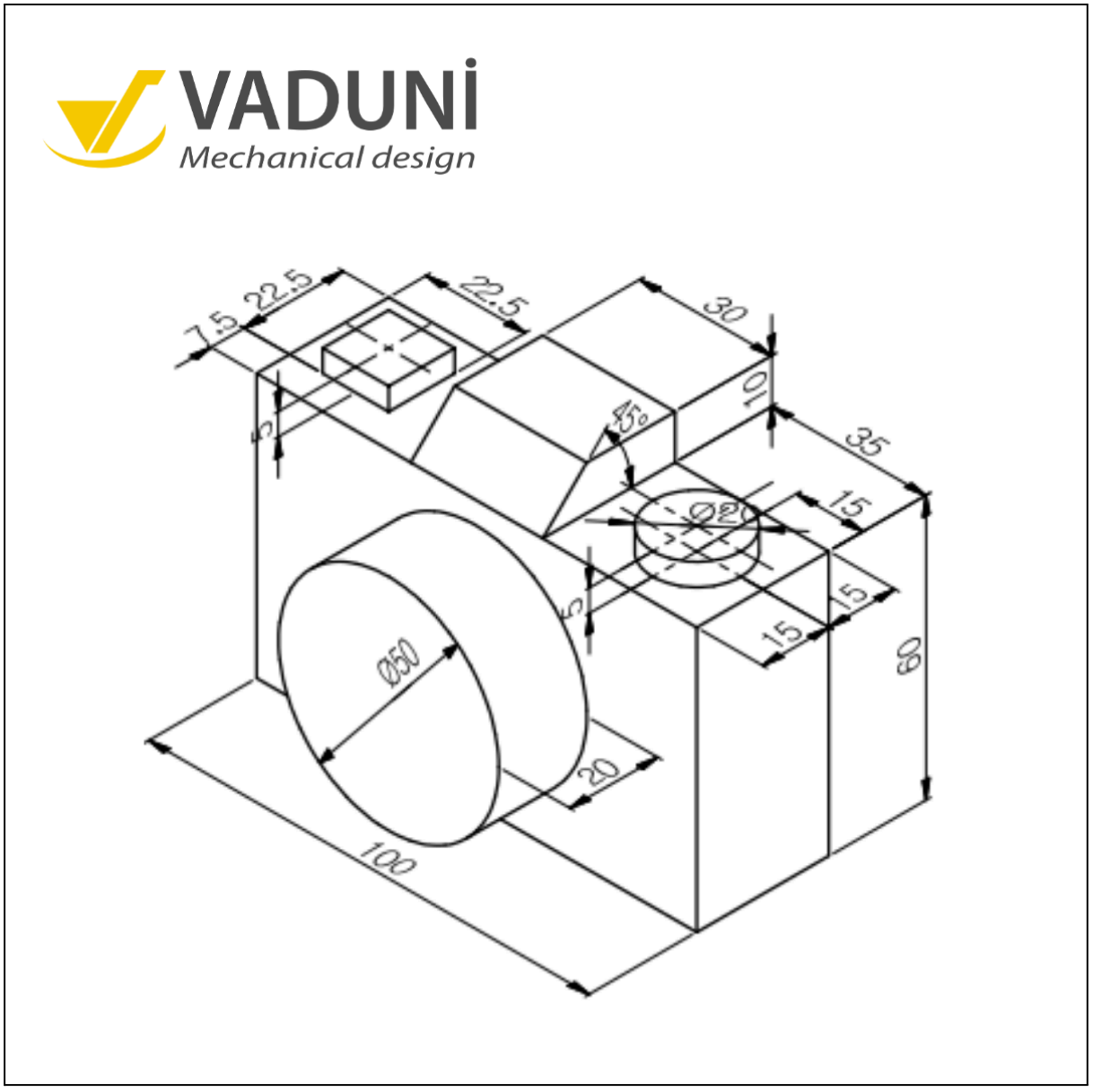
Bài tập 364


VADUNİ
Mechanical design
14
12
10
12
18
6.6
10
20
8
25
30
58
150°
5
R20
Ø25
45°

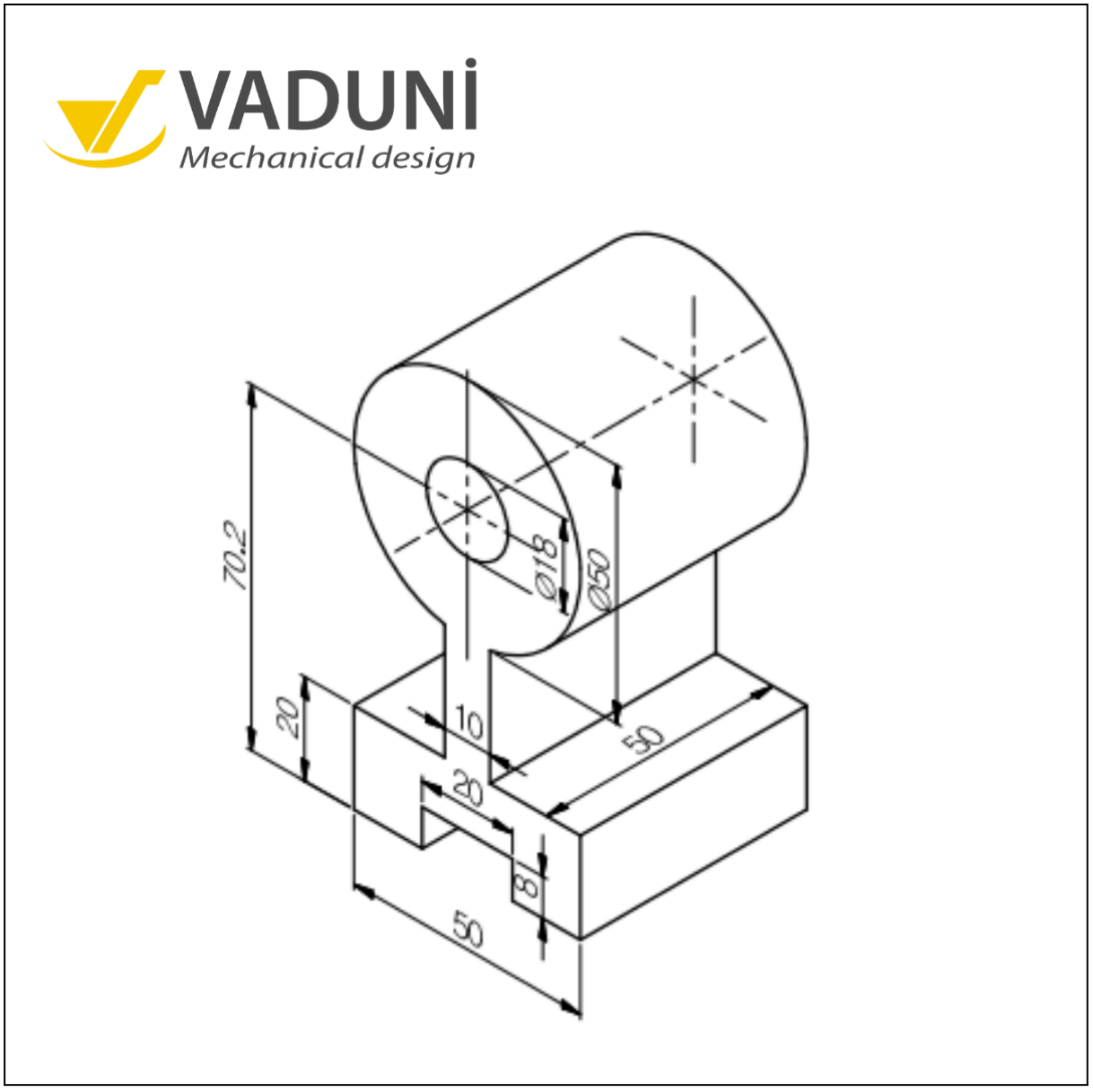
Bài tập 365


VADUNİ
Mechanical design
48
28
20
10
14
8
8
38
56.4
28
10
60°
11.2
22.4
27.6
94
Ø10
8.8
22.4
14

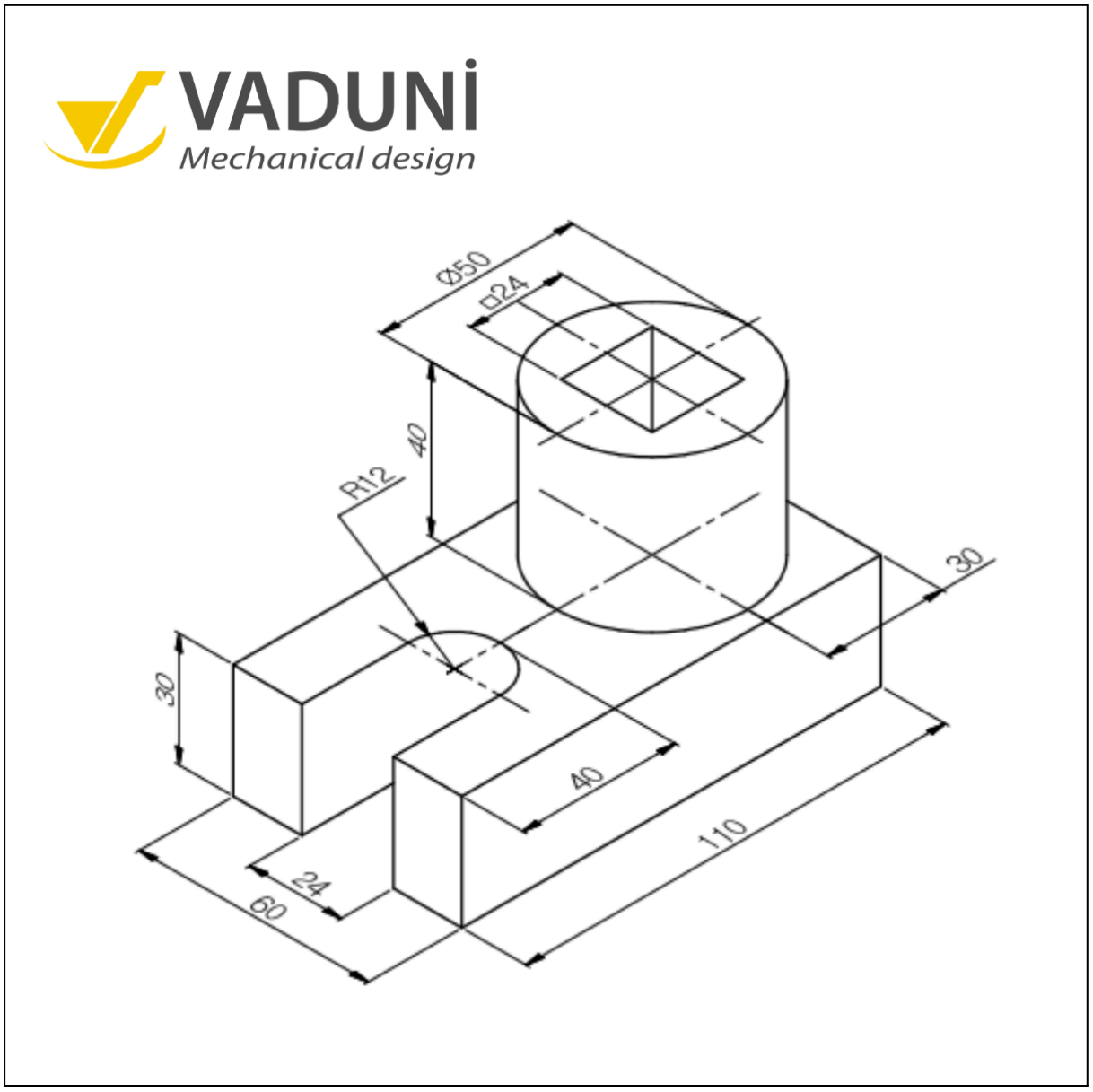
Bài tập 366


VADUNİ
Mechanical design
7.5
22.5
22.5
30
10
35
15
Ø20
15
15
60
Ø50
20
100

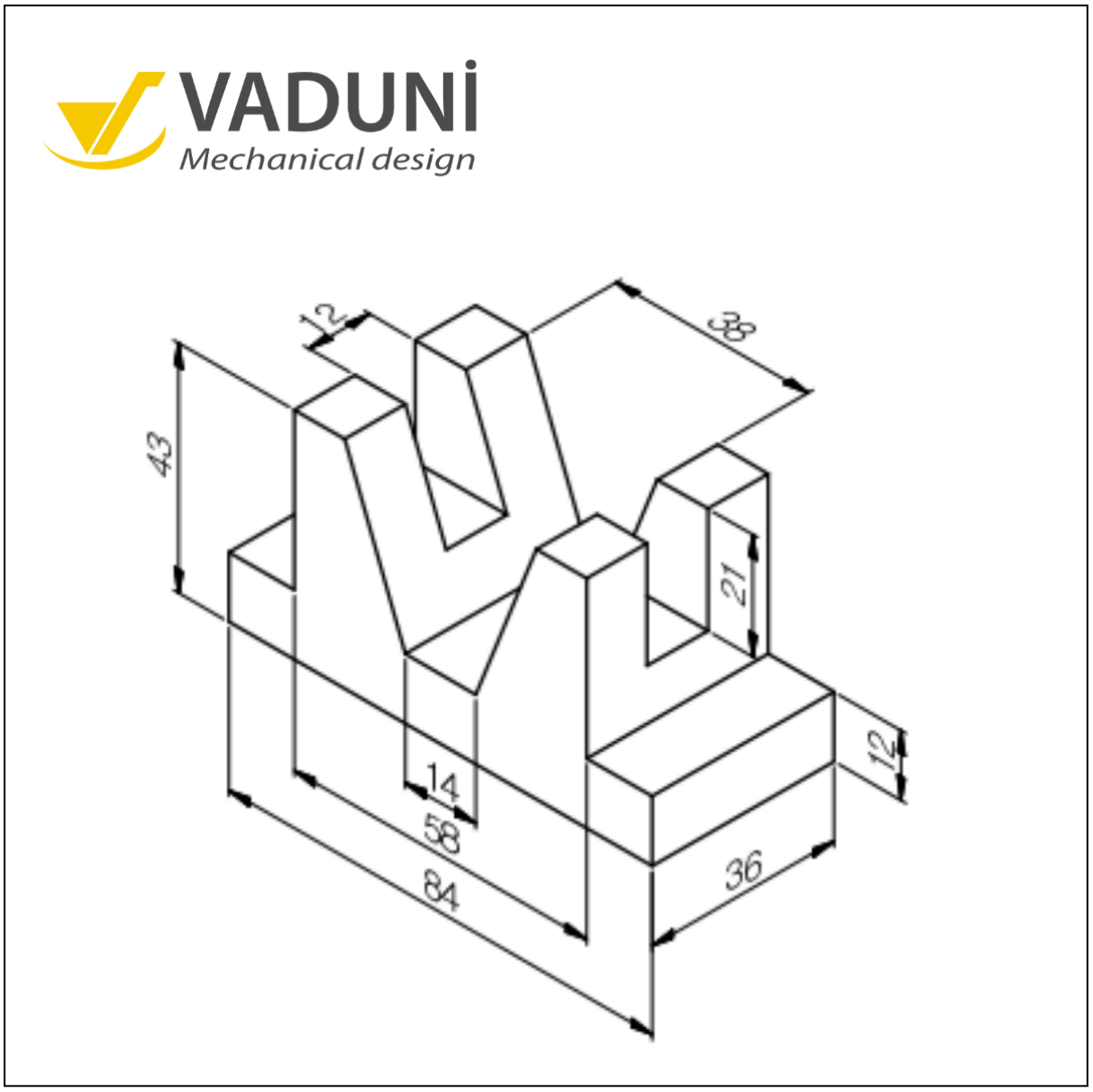
Bài tập 367



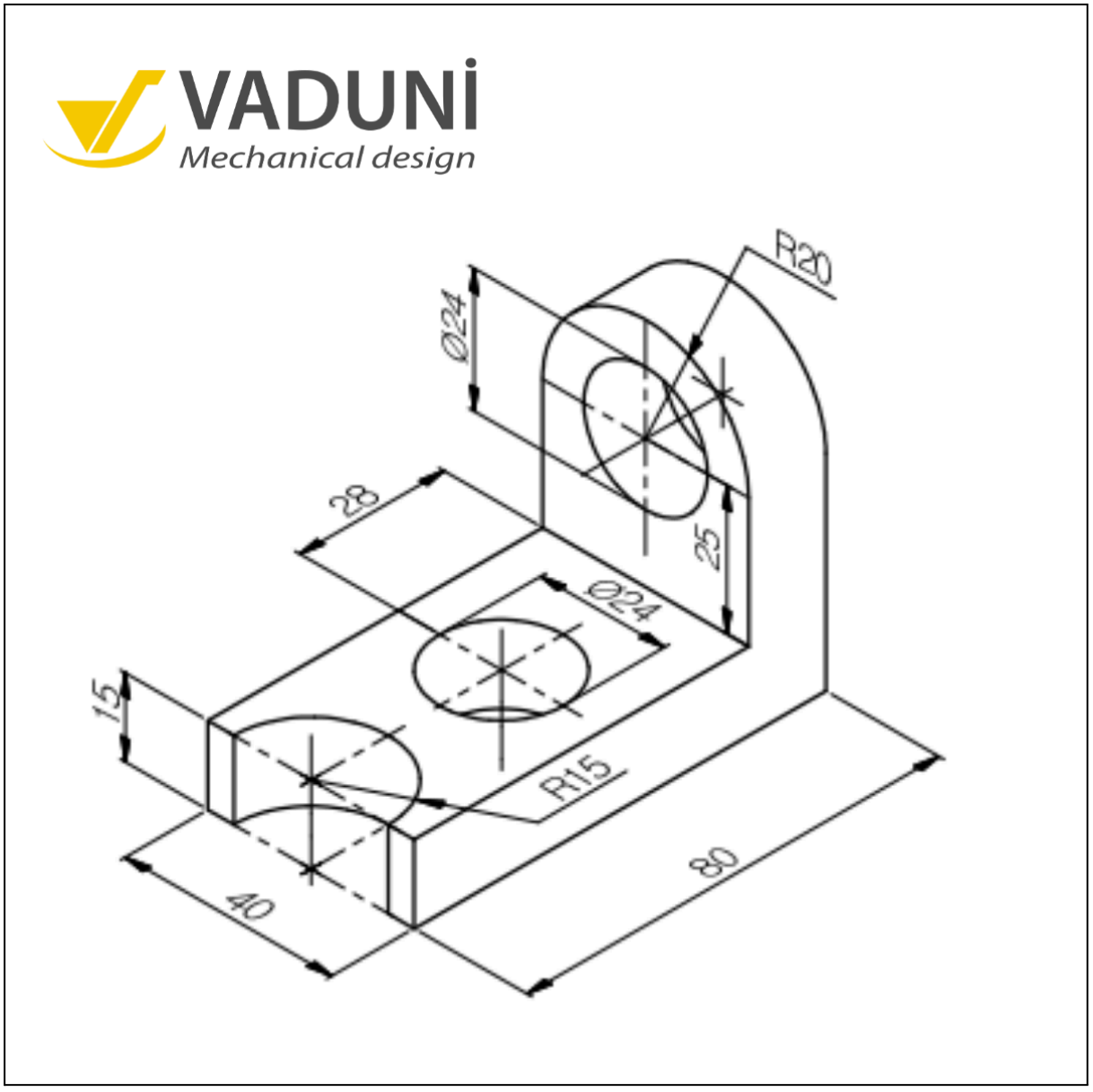
Bài tập 368



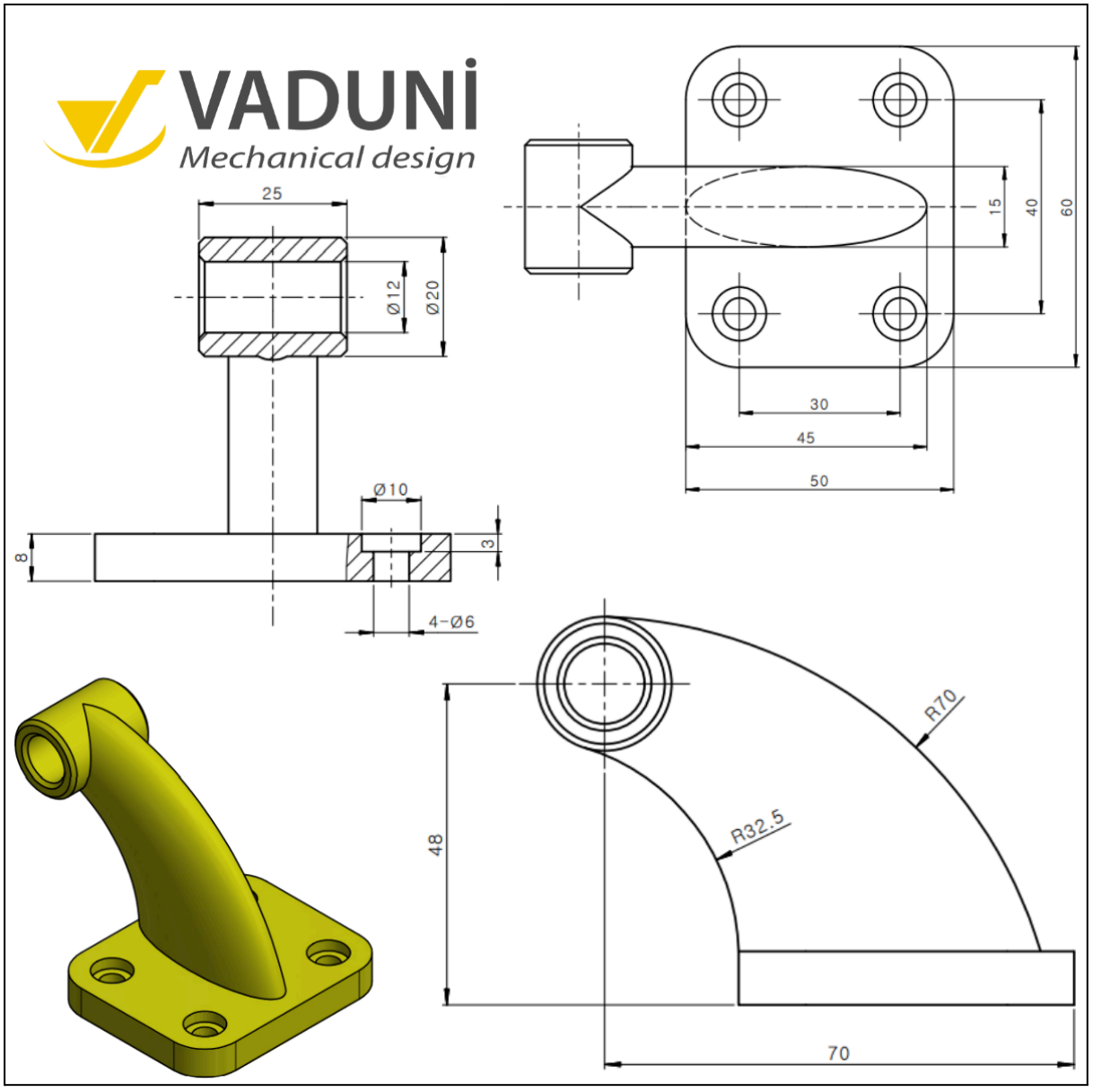
Bài tập 369



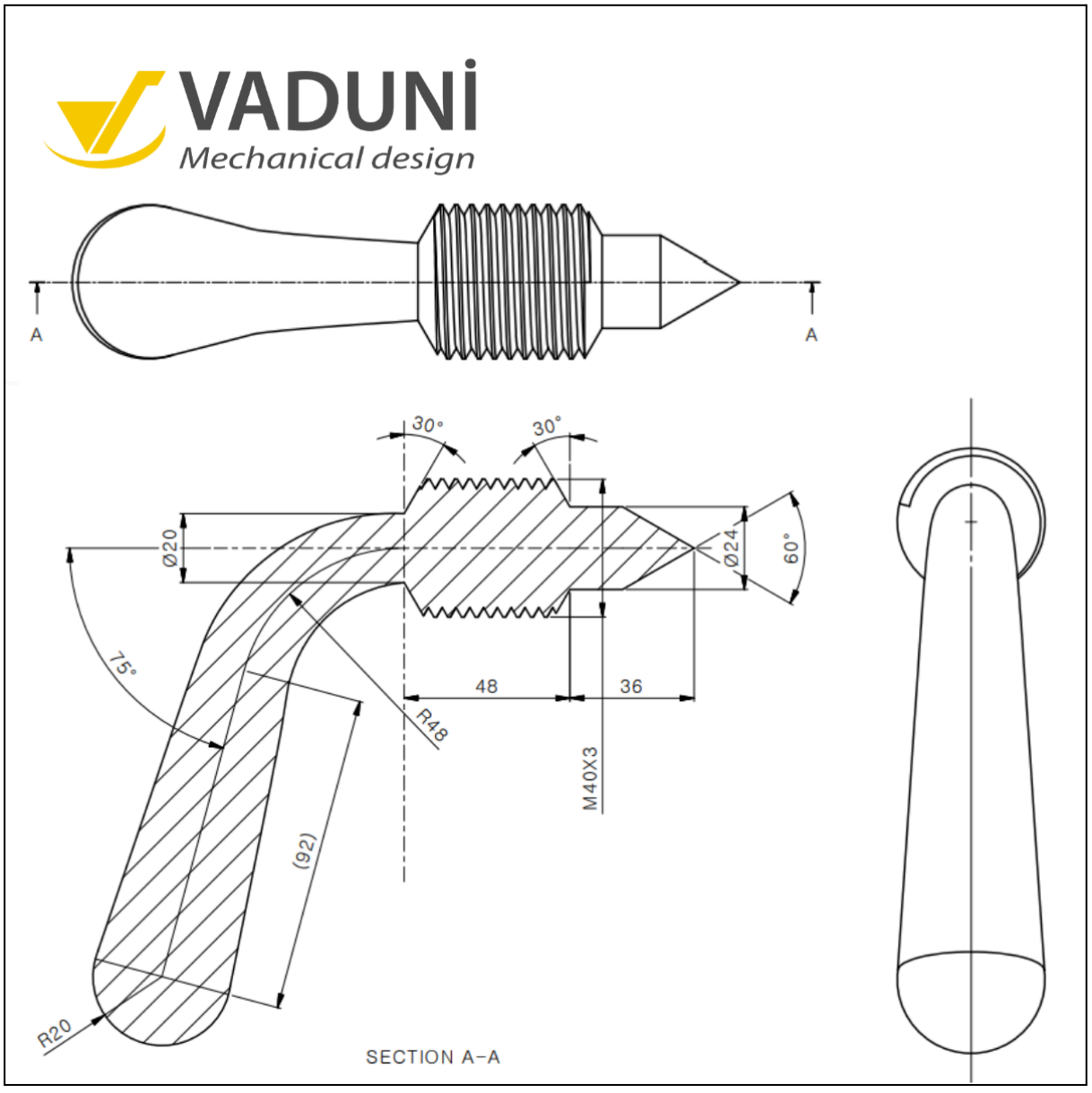
Bài tập 370



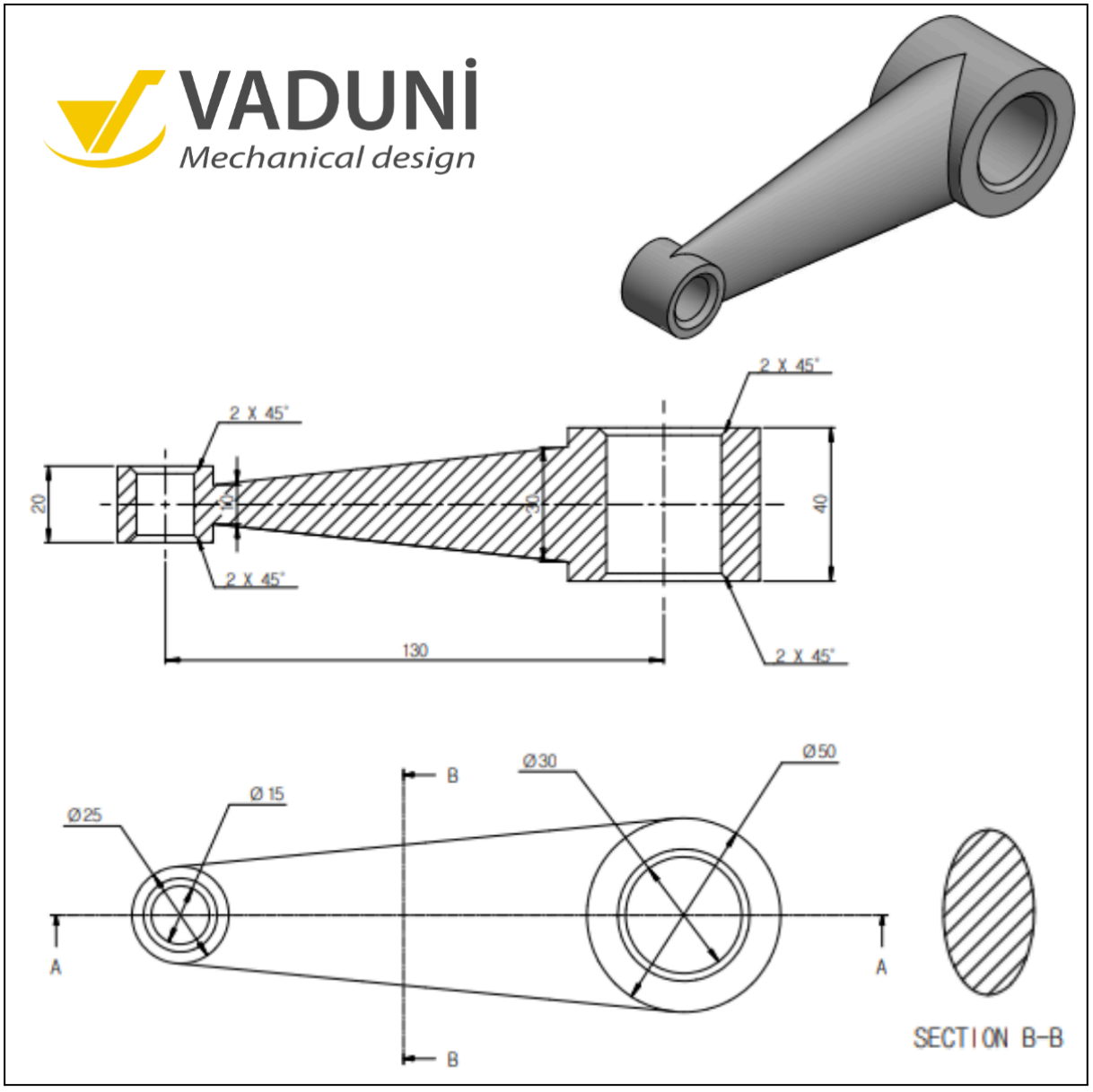
Bài tập 371


VADUNI
Mechanical design
25
Ø12
Ø20
Ø10
8
3
4-Ø6
15
40
60
30
45
50
R70
R32.5
48
70

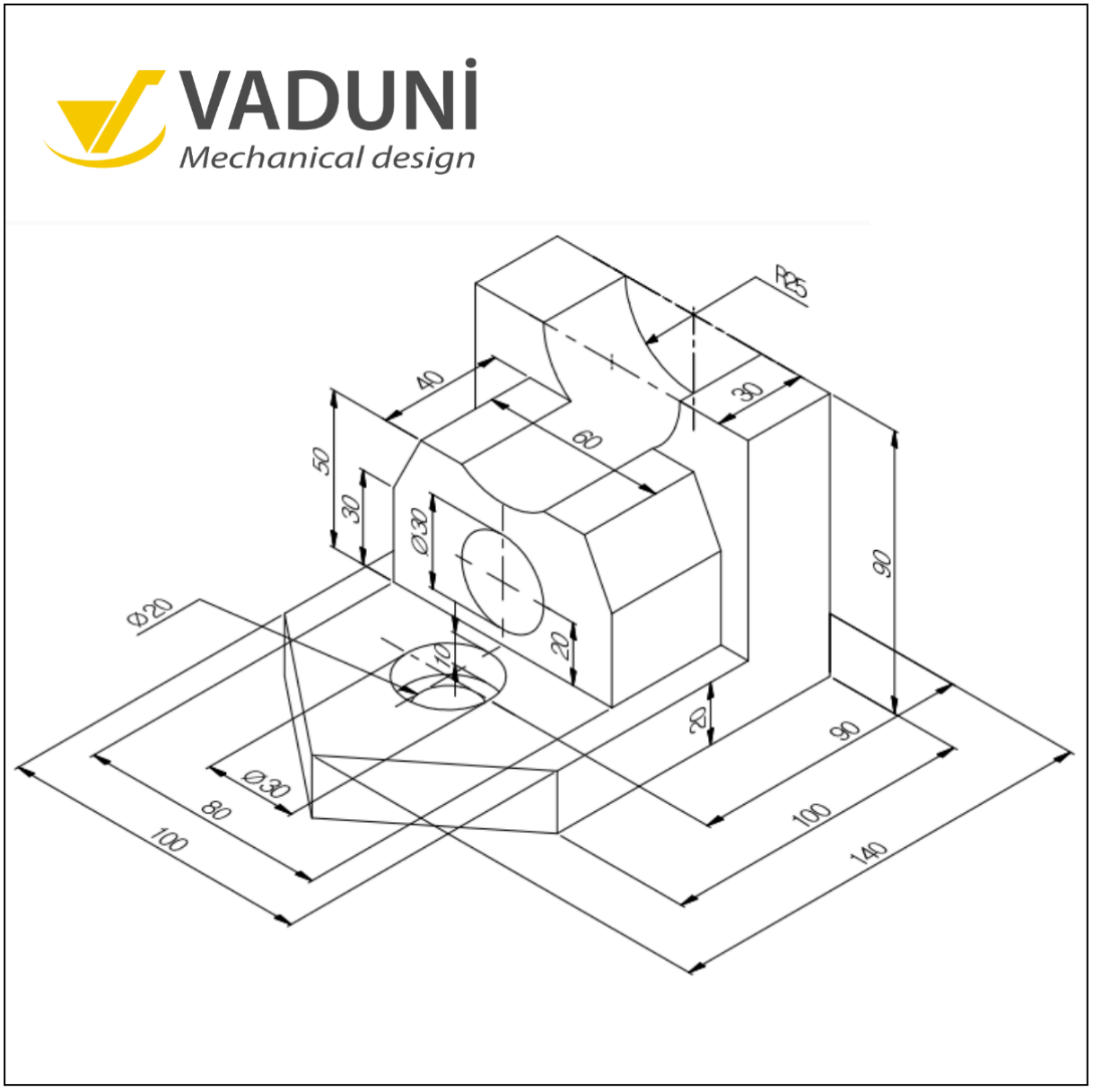
Bài tập 372


VADUNI
Mechanical design
A
A
30°
30°
Ø20
Ø24
60°
75°
48
36
R48
M40X3
(92)
R20
SECTION A–A

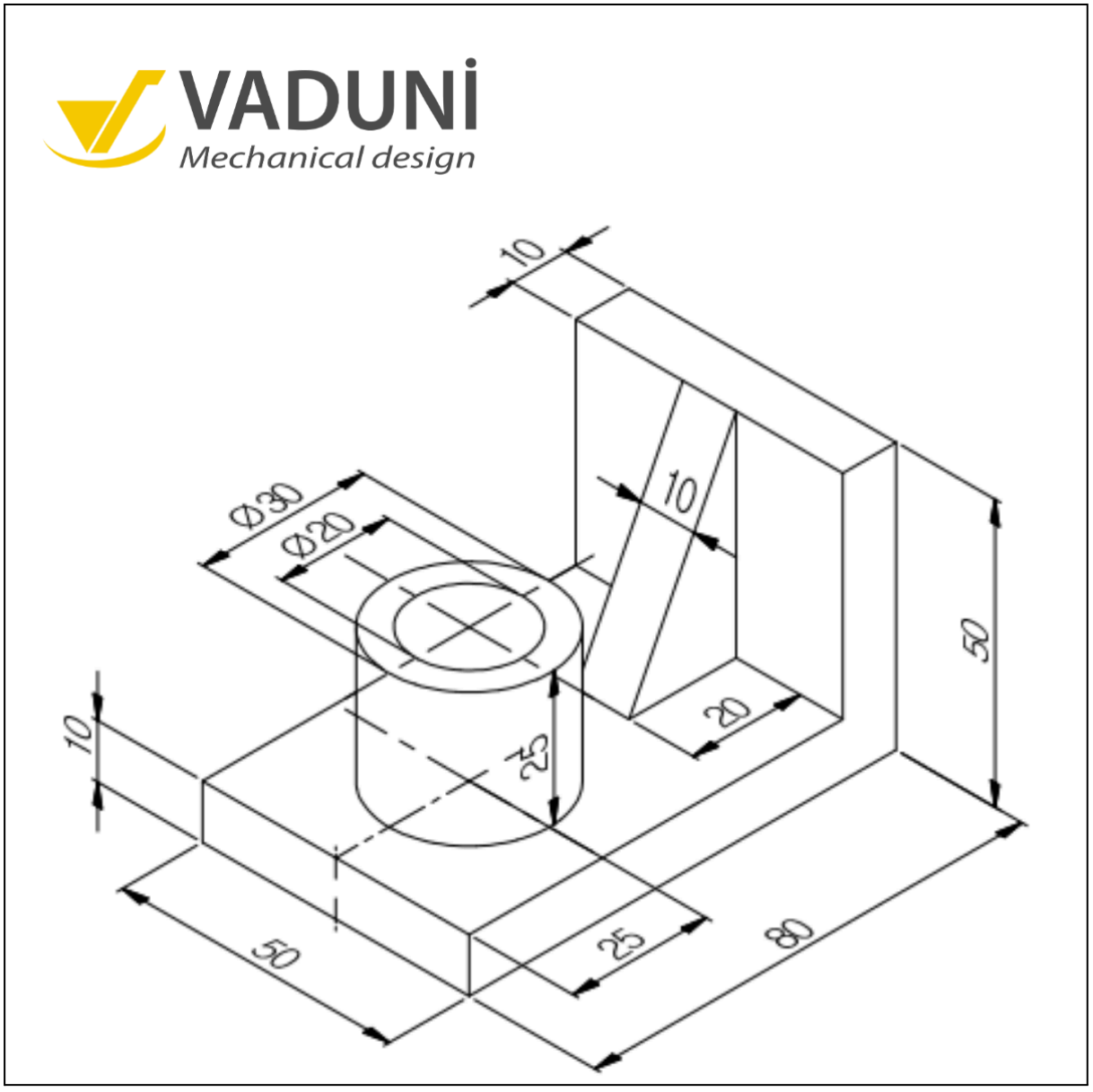
Bài tập 373


VADUNİ
Mechanical design
2 X 45°
2 X 45°
2 X 45°
2 X 45°
20
10
30
40
130
Ø25
Ø 15
Ø30
Ø50
B
B
A
A
SECTION B-B

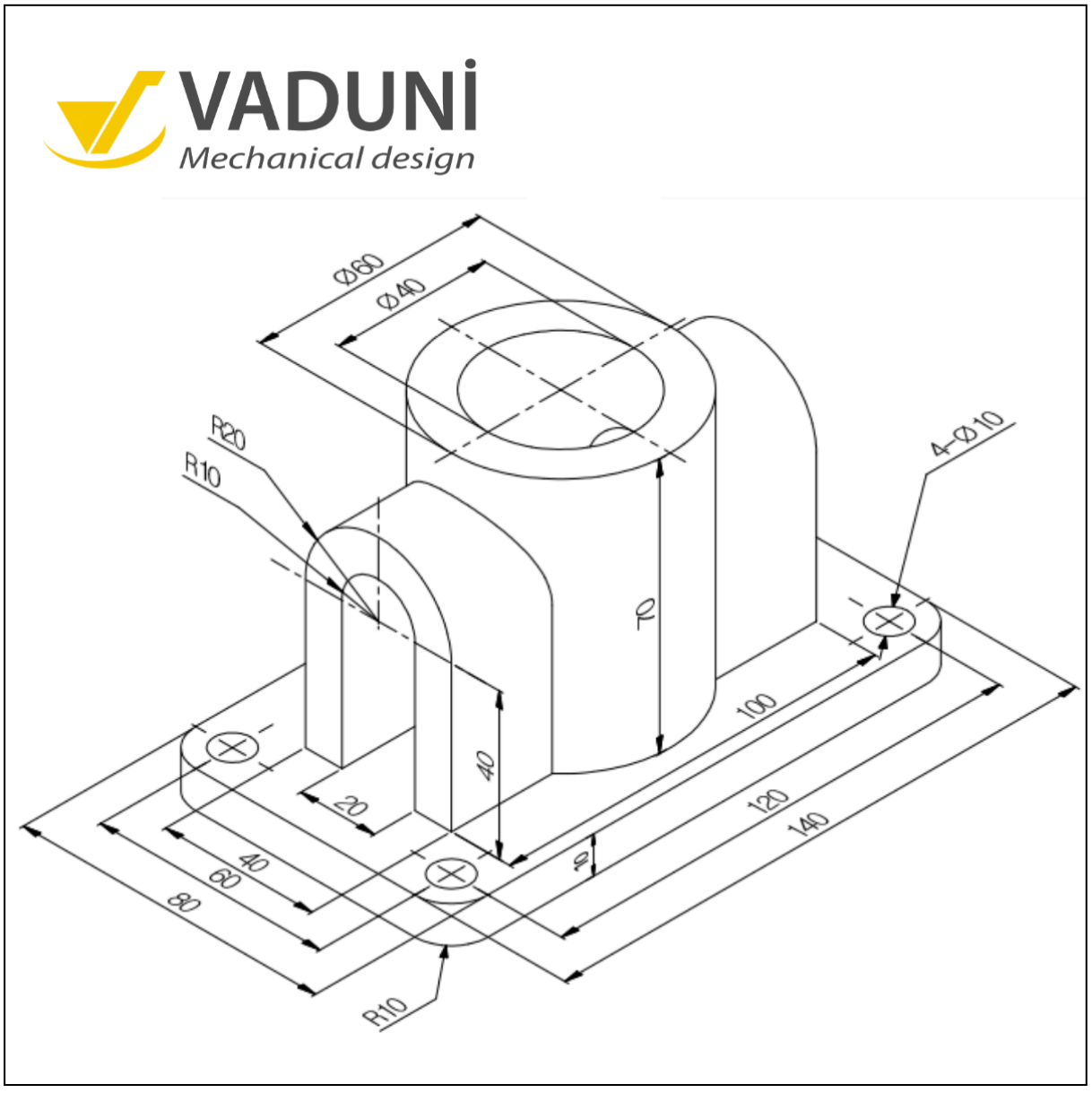
Bài tập 374


VADUNİ
Mechanical design
R25
40
30
80
50
30
Ø30
90
Ø20
10
20
20
90
Ø30
80
100
100
140

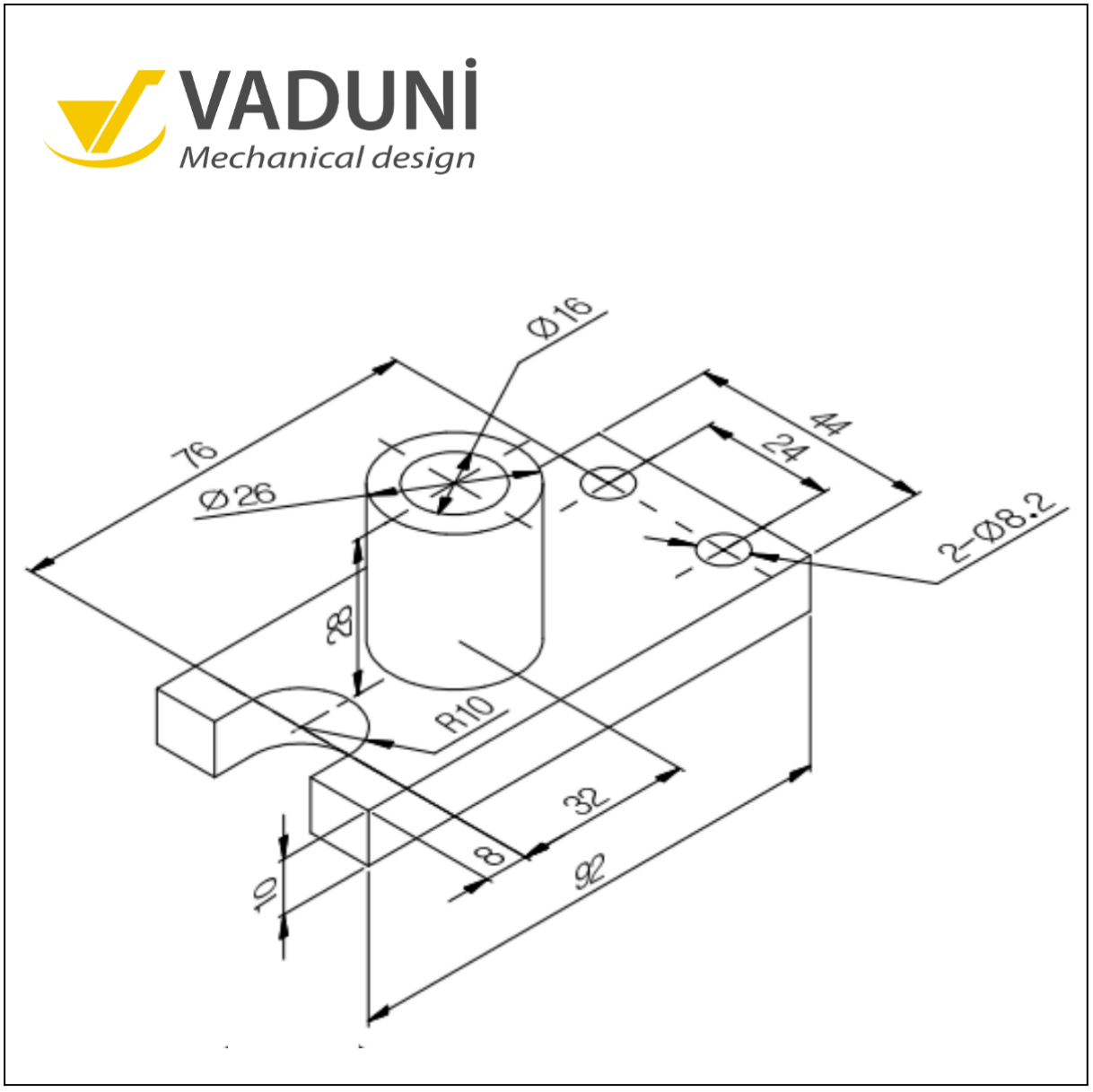
Bài tập 375



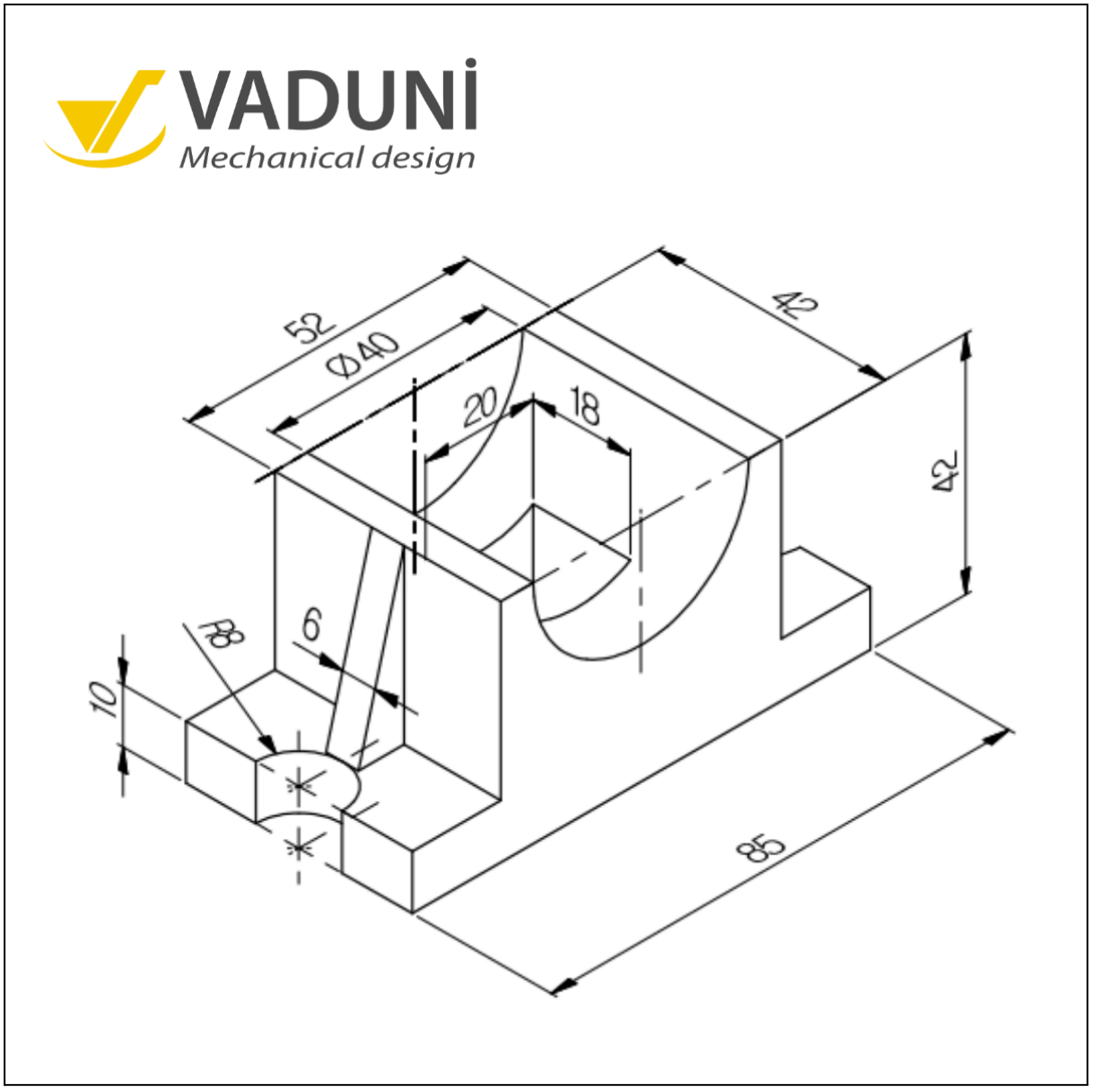
Bài tập 376


VADUNİ
Mechanical design
Ø60
Ø40
R20
R10
4-Ø10
70
100
120
140
40
20
40
60
80
9
R10

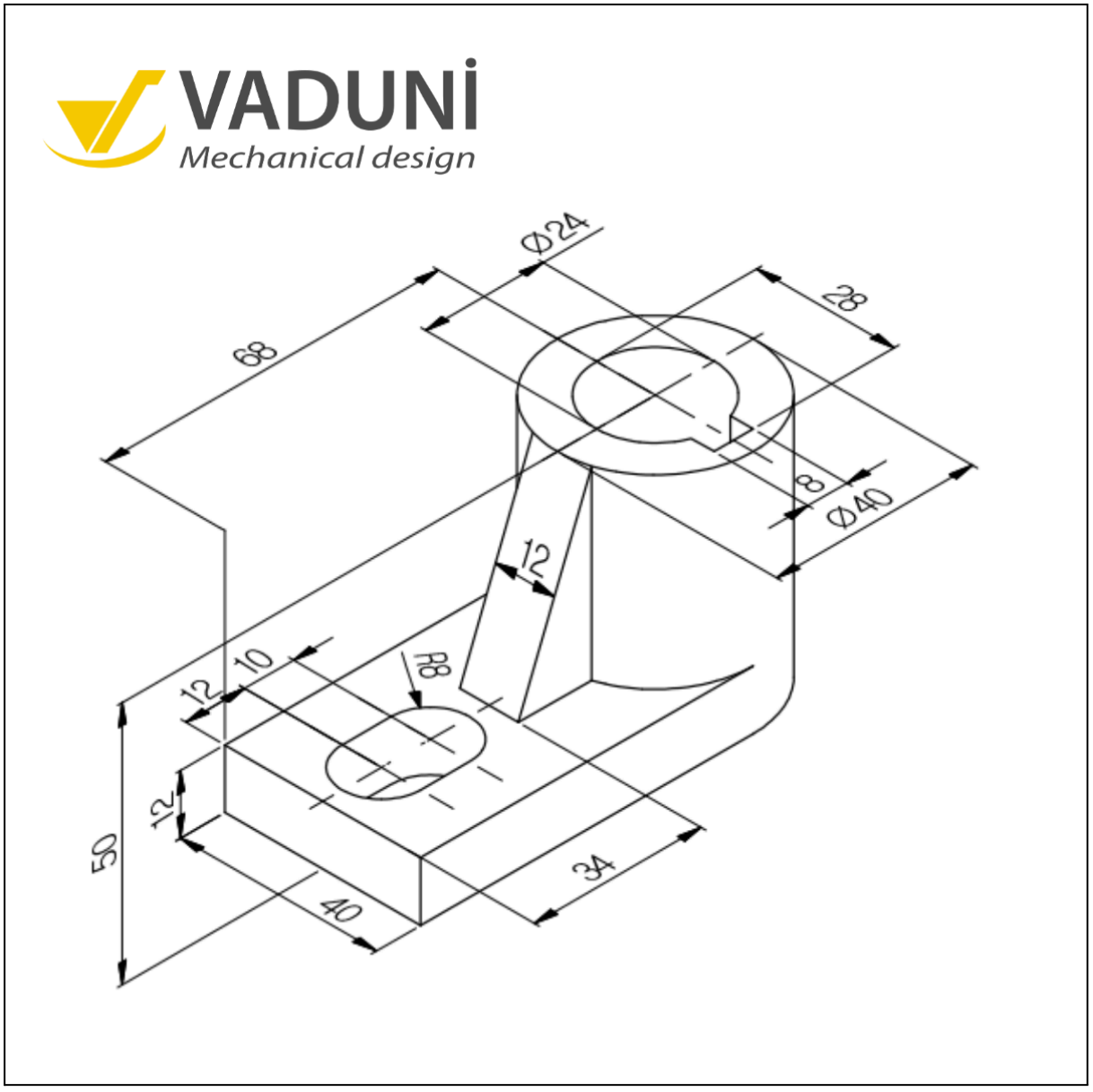
Bài tập 377


VADUNİ
Mechanical design
Ø16
76
Ø26
44
24
2-Ø8.2
28
R10
32
8
92
10

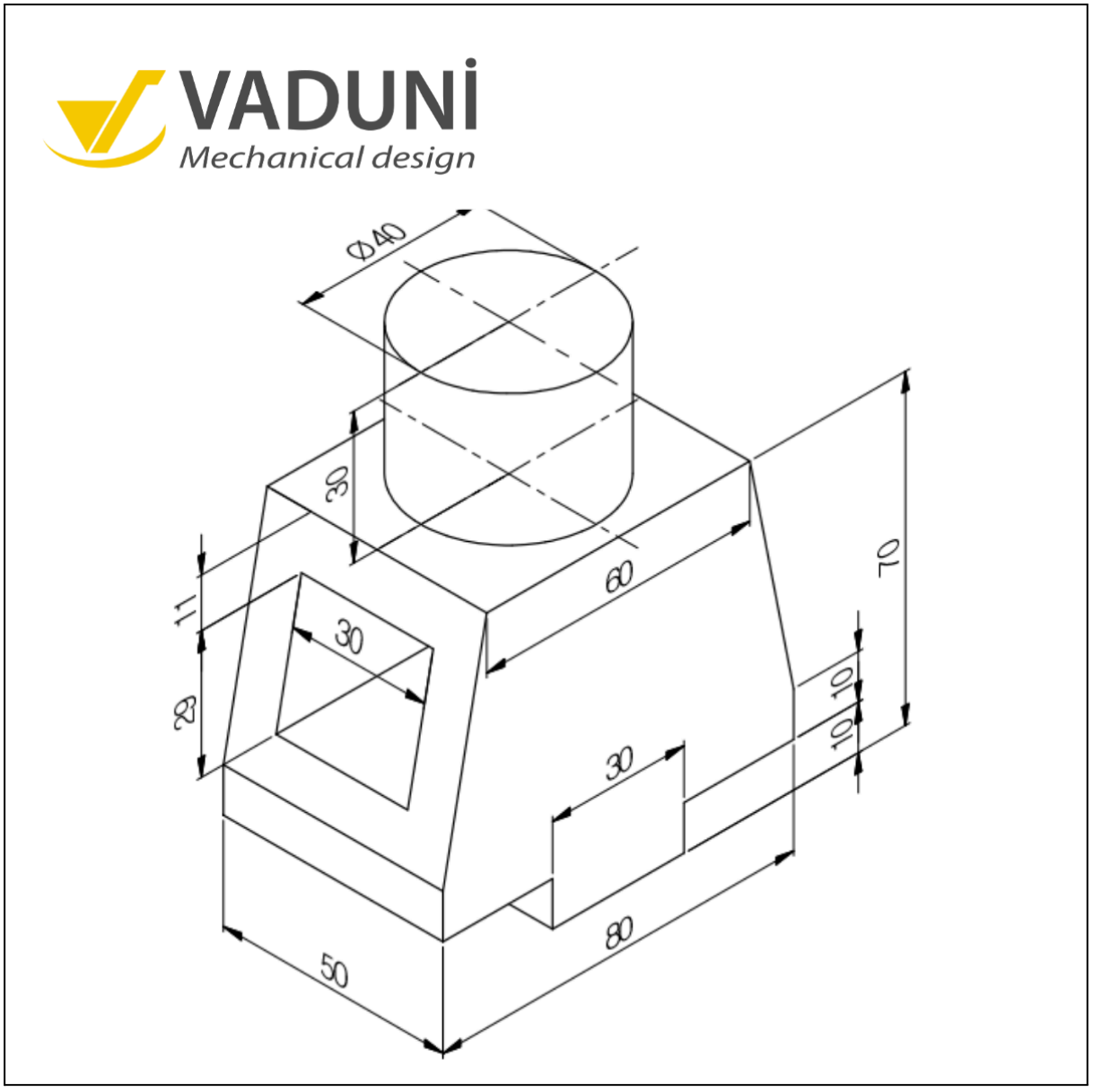
Bài tập 378



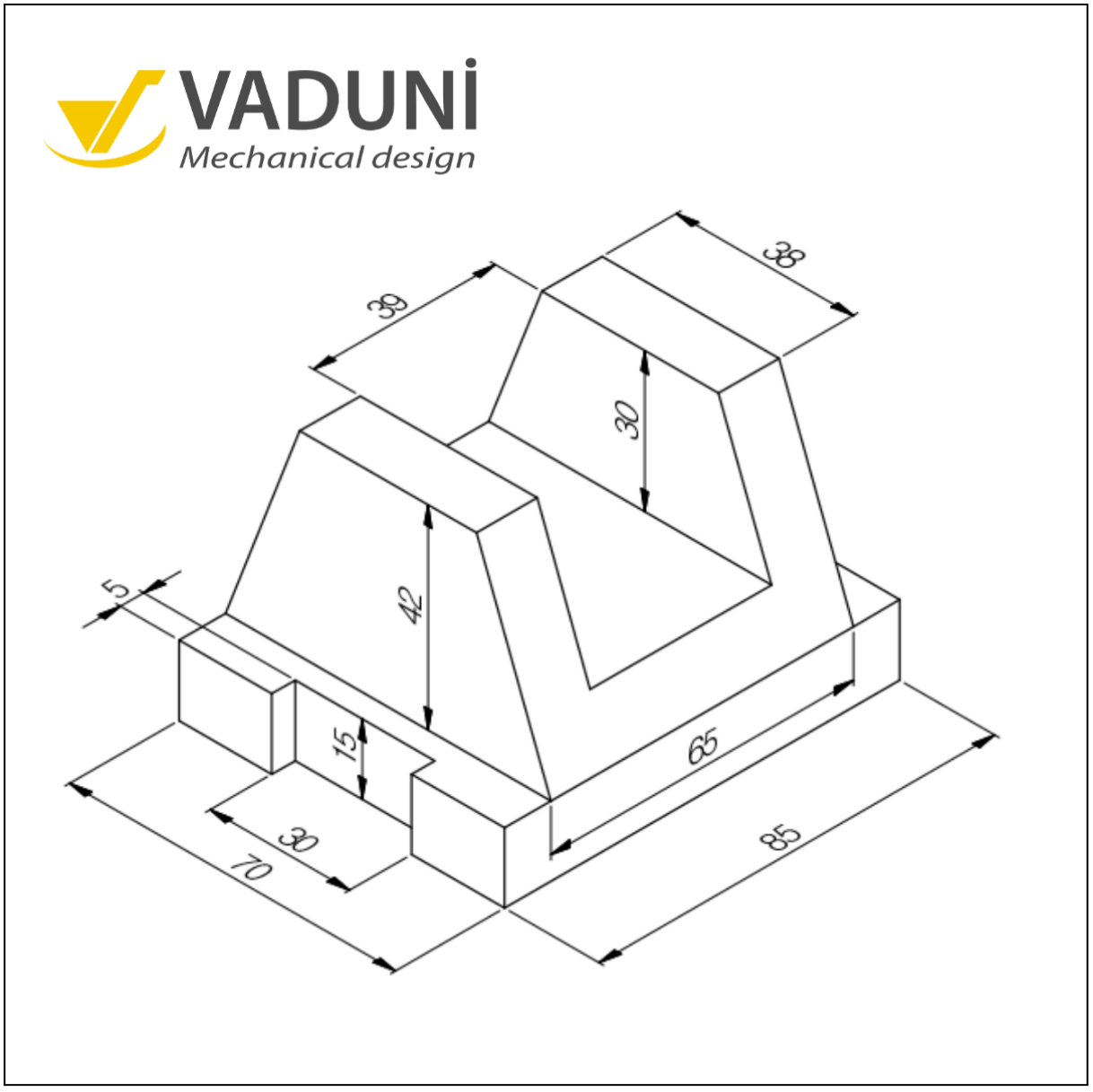
Bài tập 379



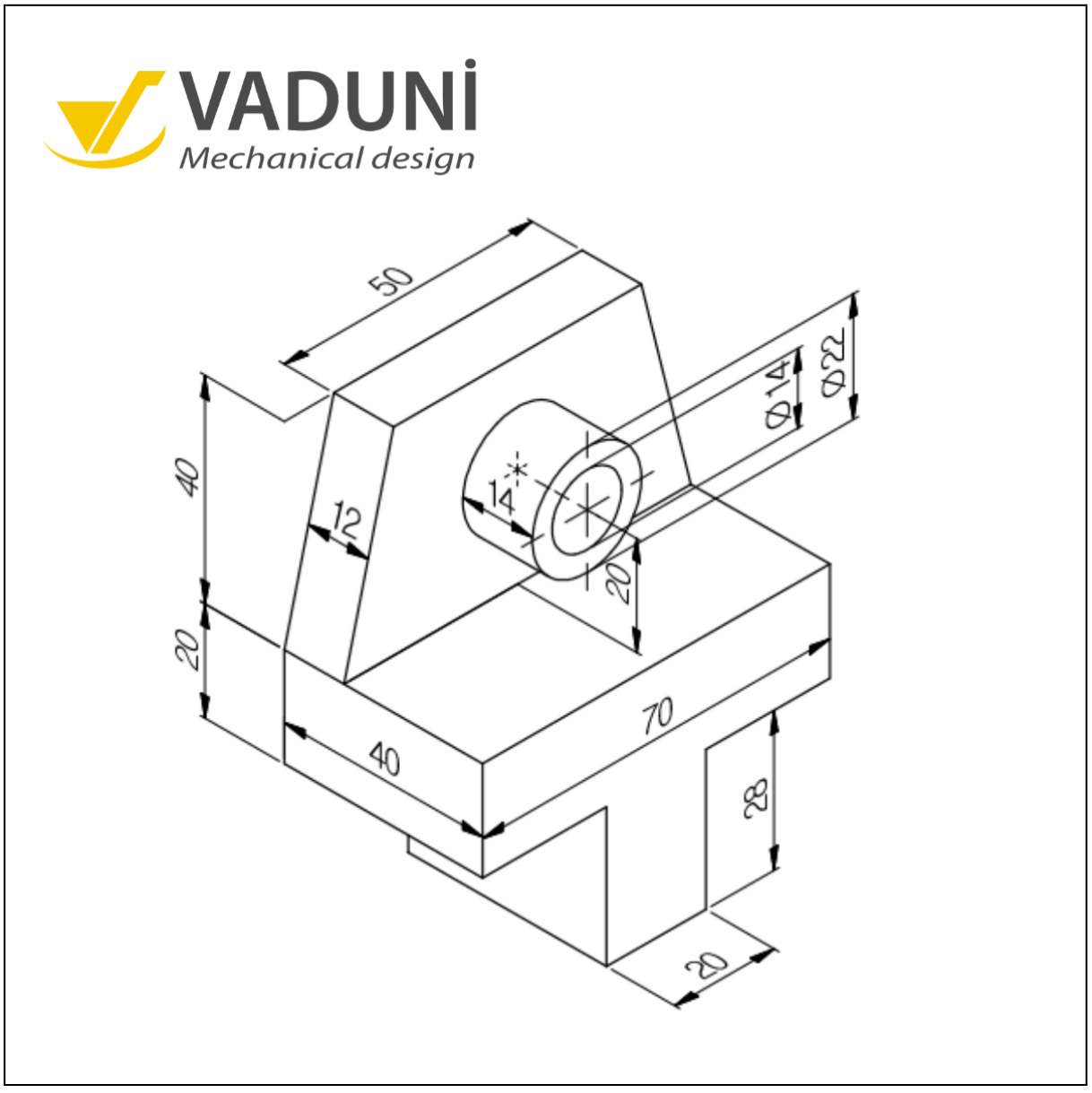
Bài tập 380



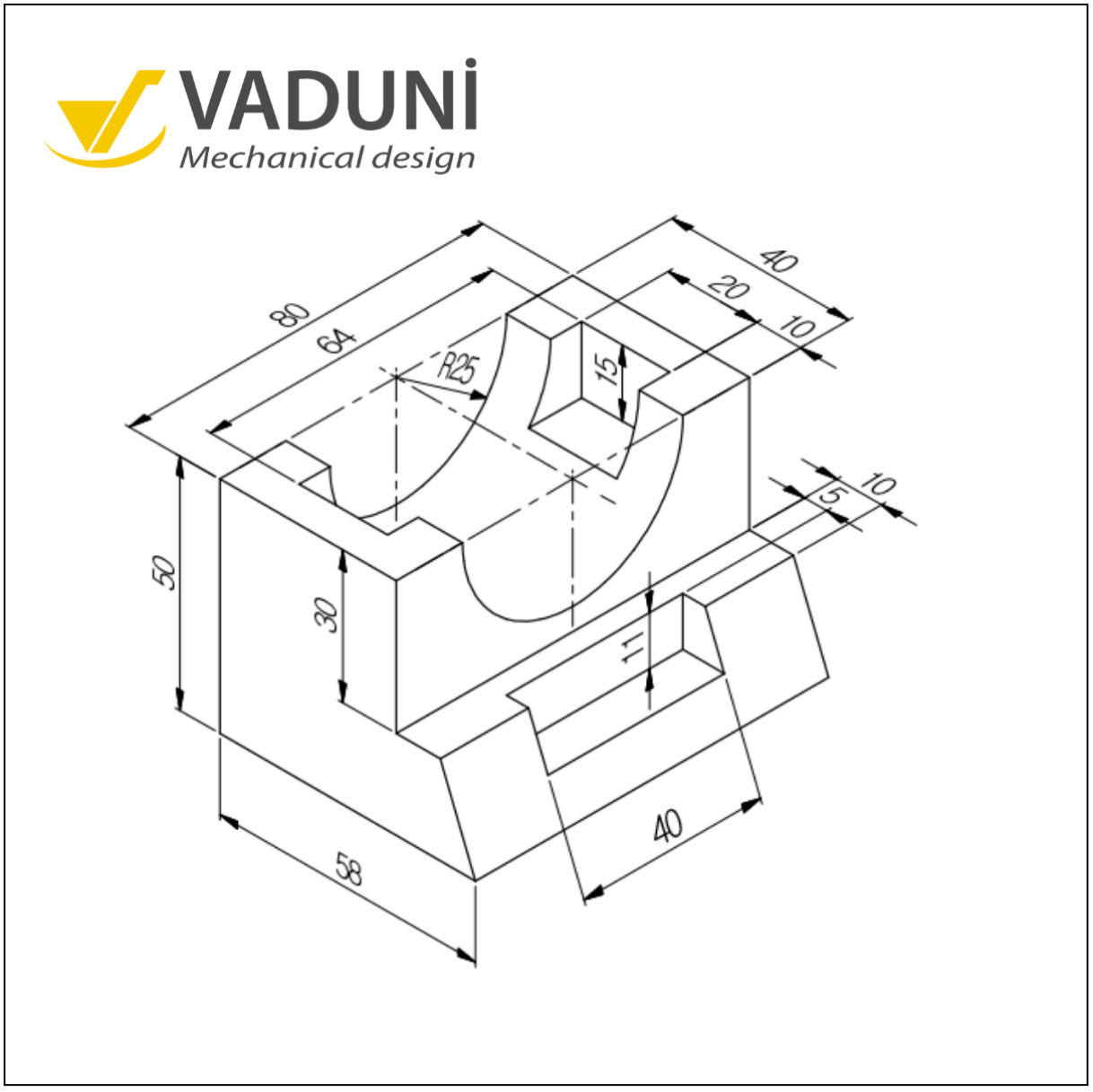
Bài tập 381



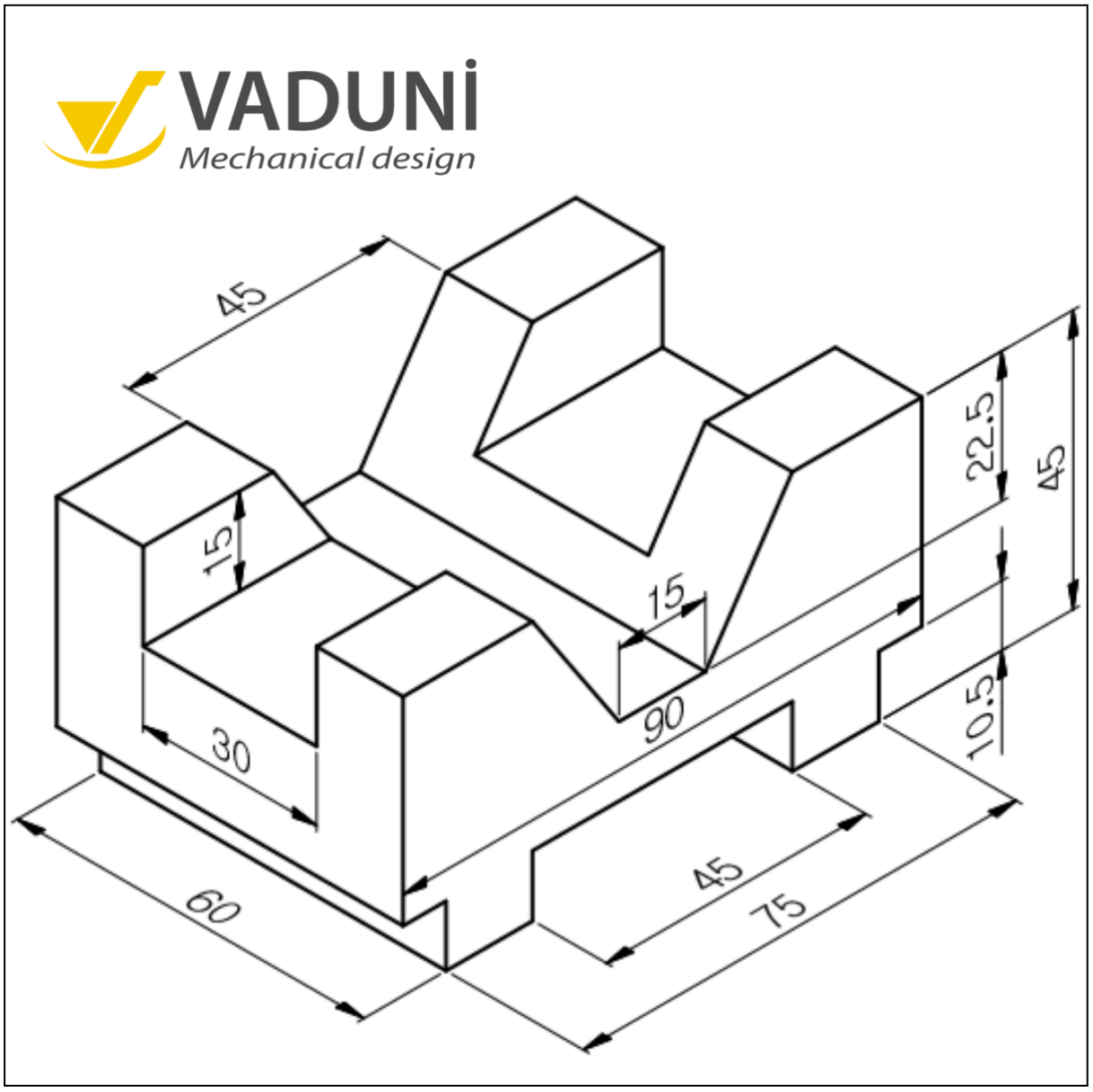
Bài tập 382



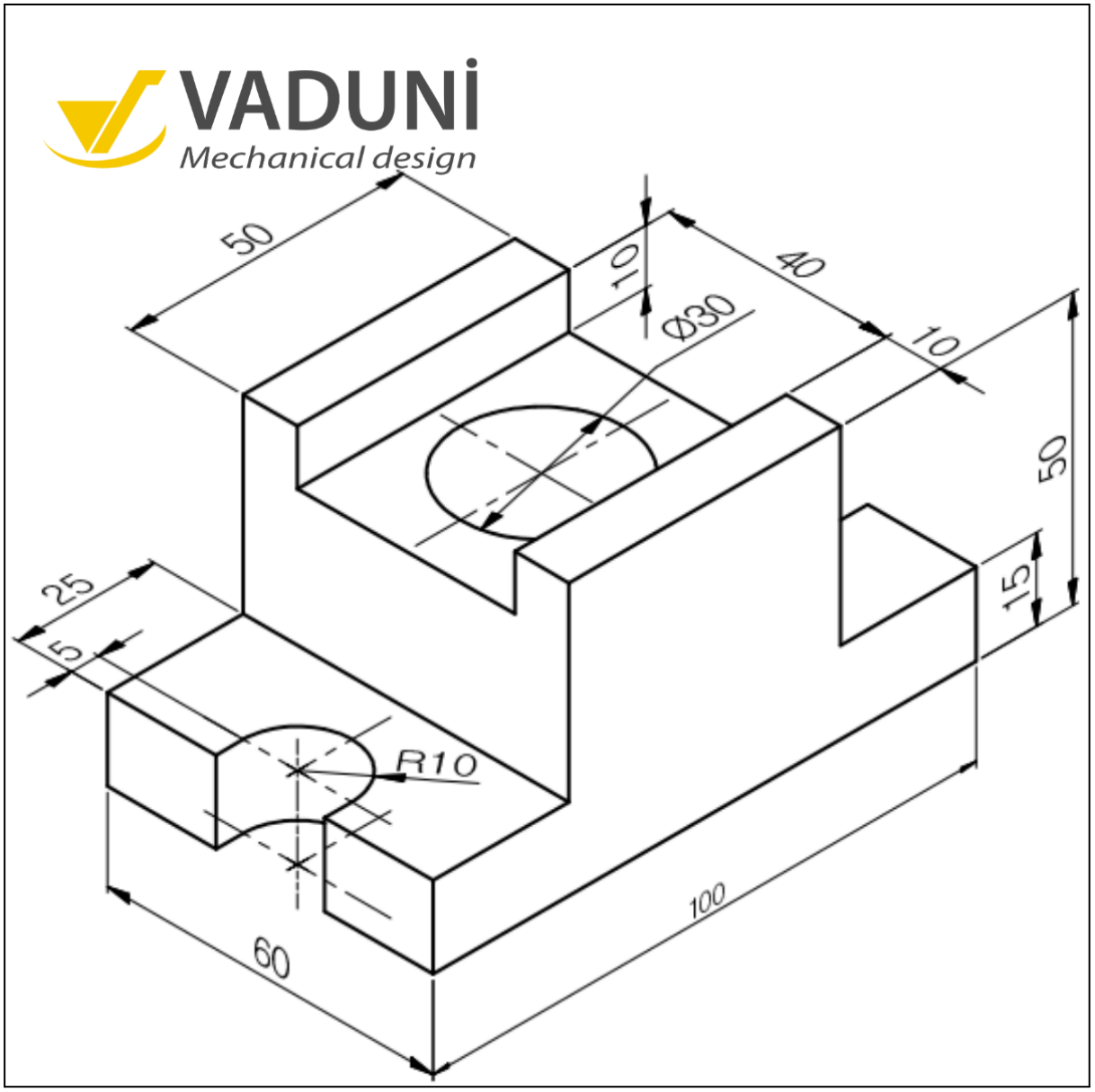
Bài tập 383


VADUNİ
Mechanical design
80
64
R25
40
20
10
15
10
5
50
30
11
40
58

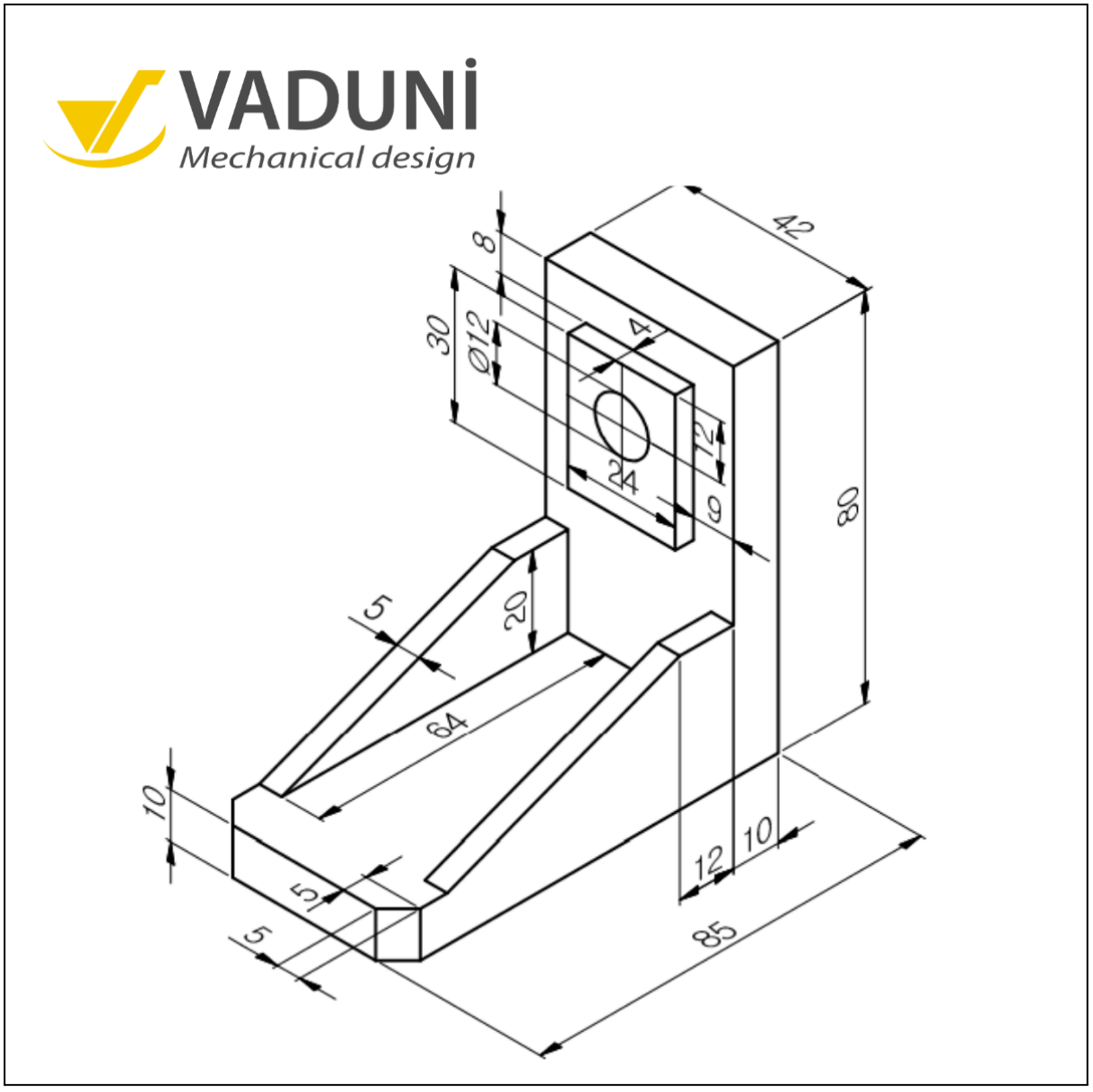
Bài tập 384



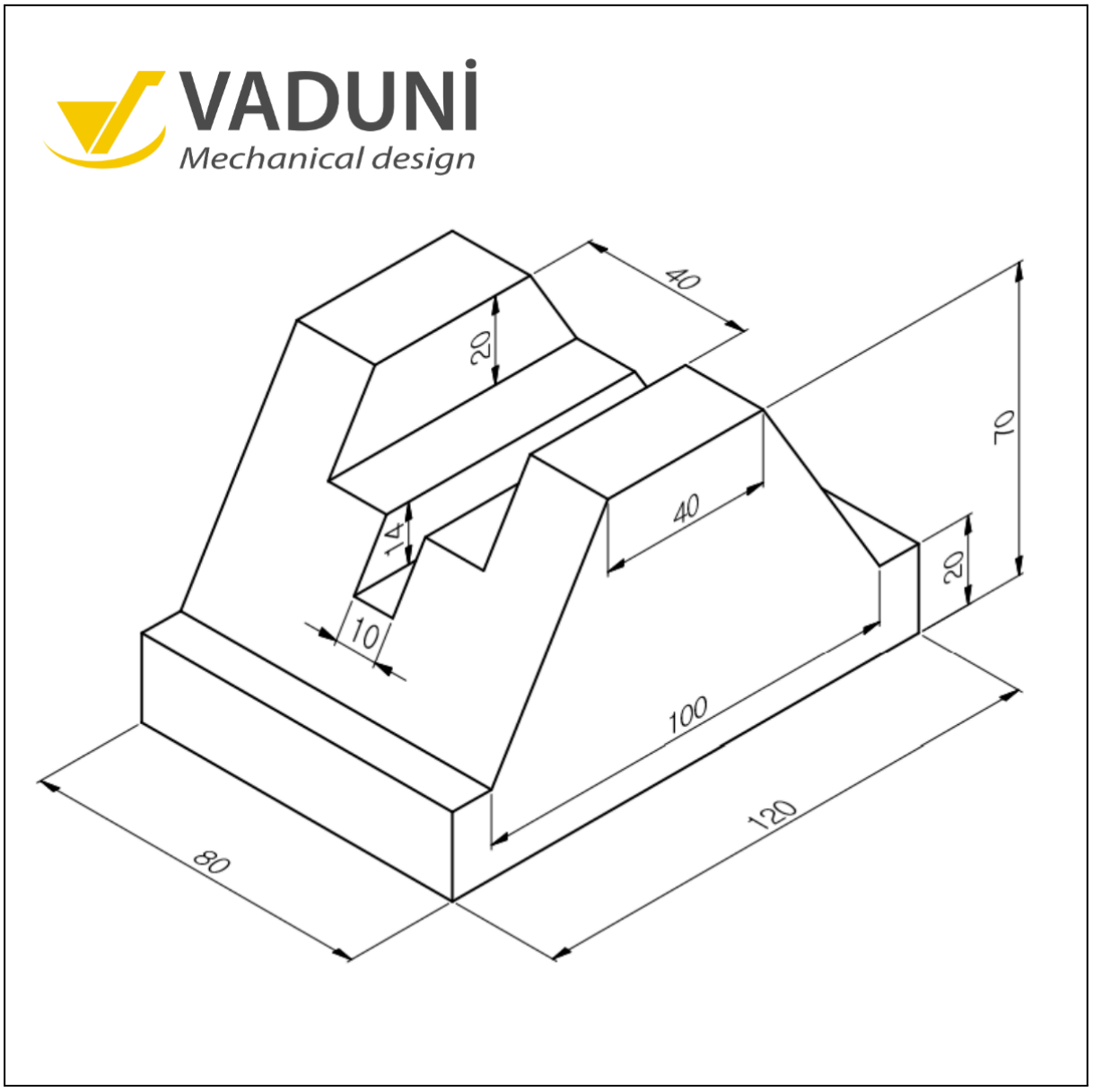
Bài tập 385



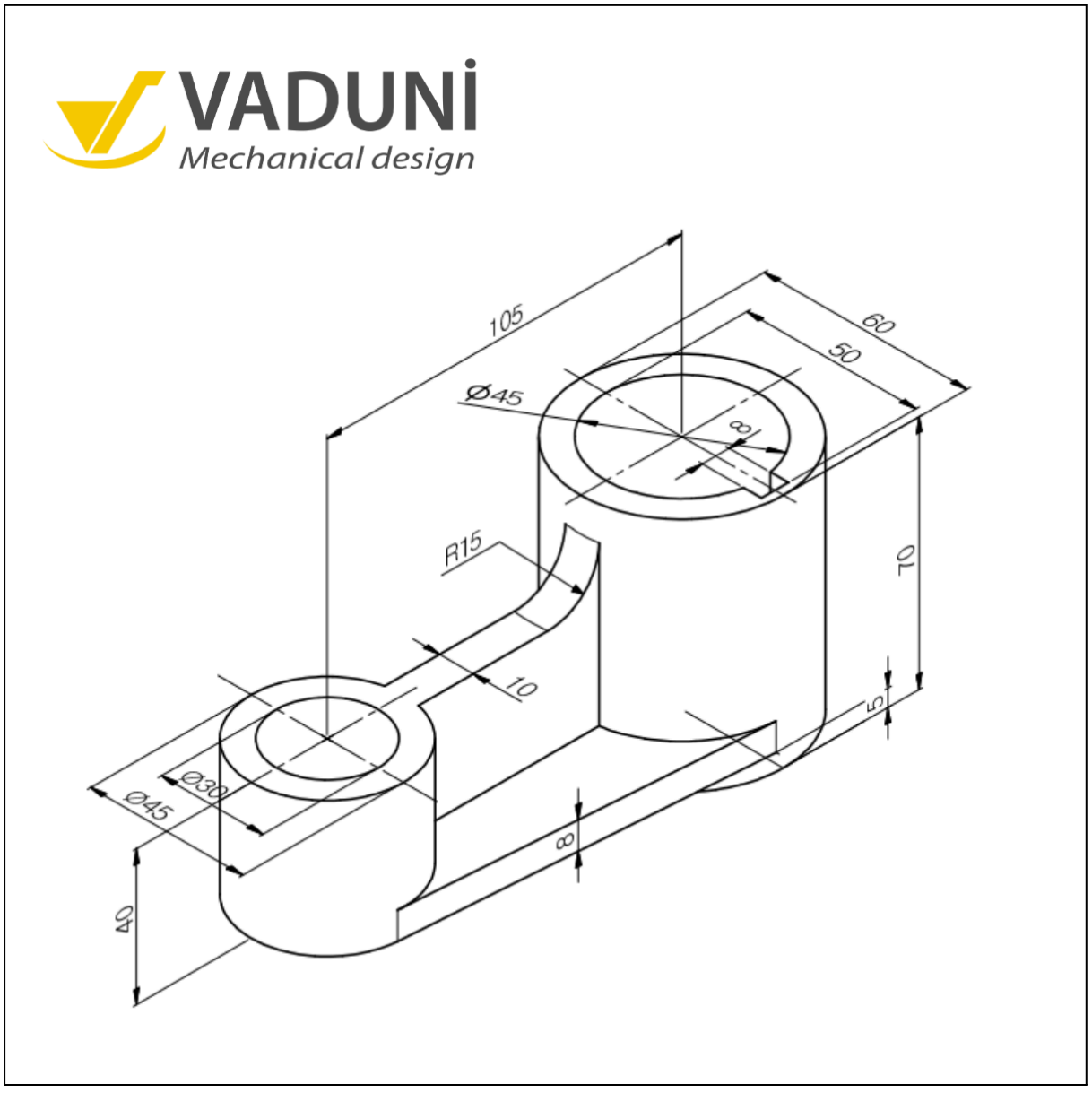
Bài tập 386


VADUNİ
Mechanical design
42
8
30
Ø12
4
12
24
9
80
5
20
64
10
5
5
12
10
85

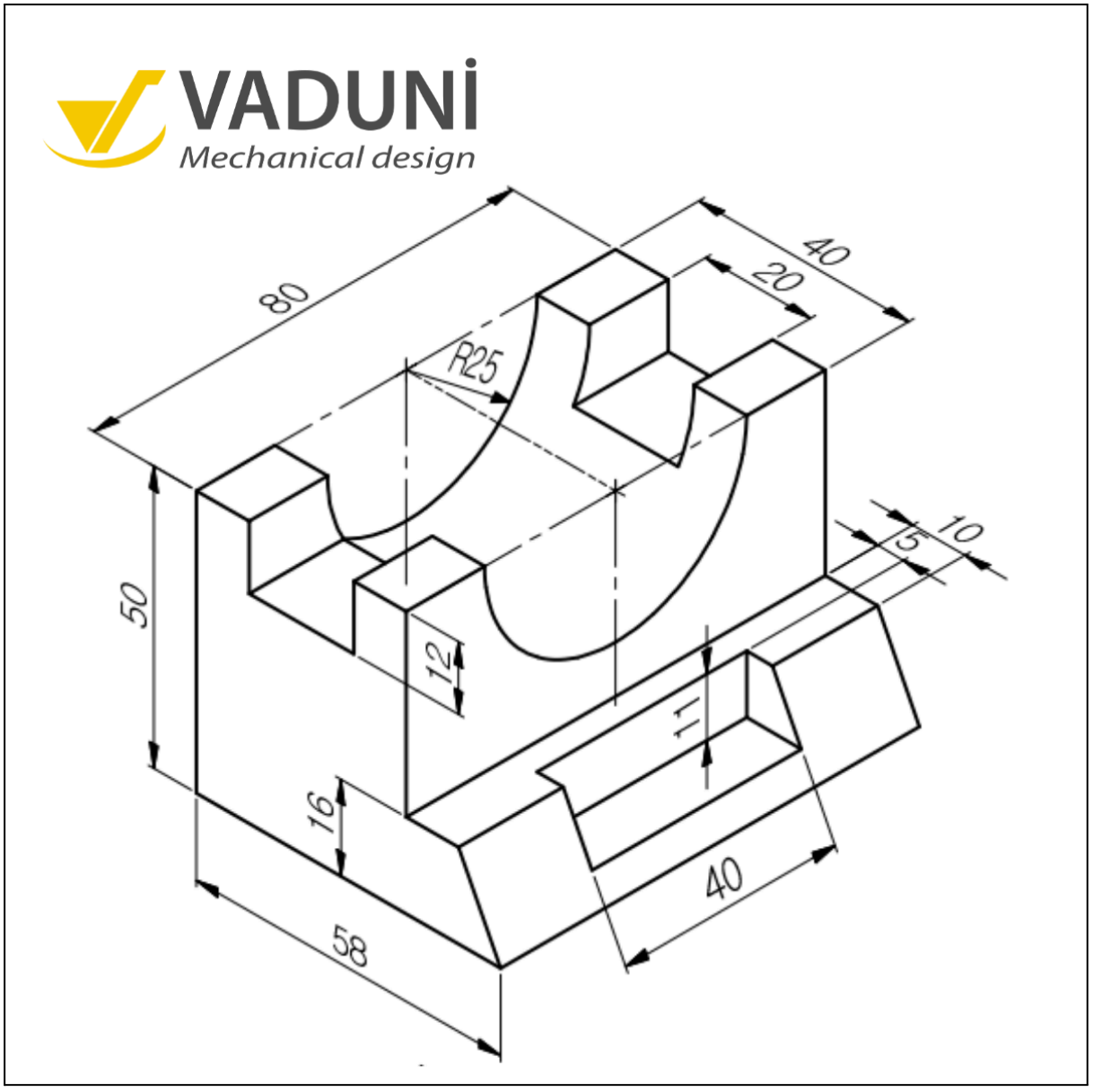
Bài tập 387



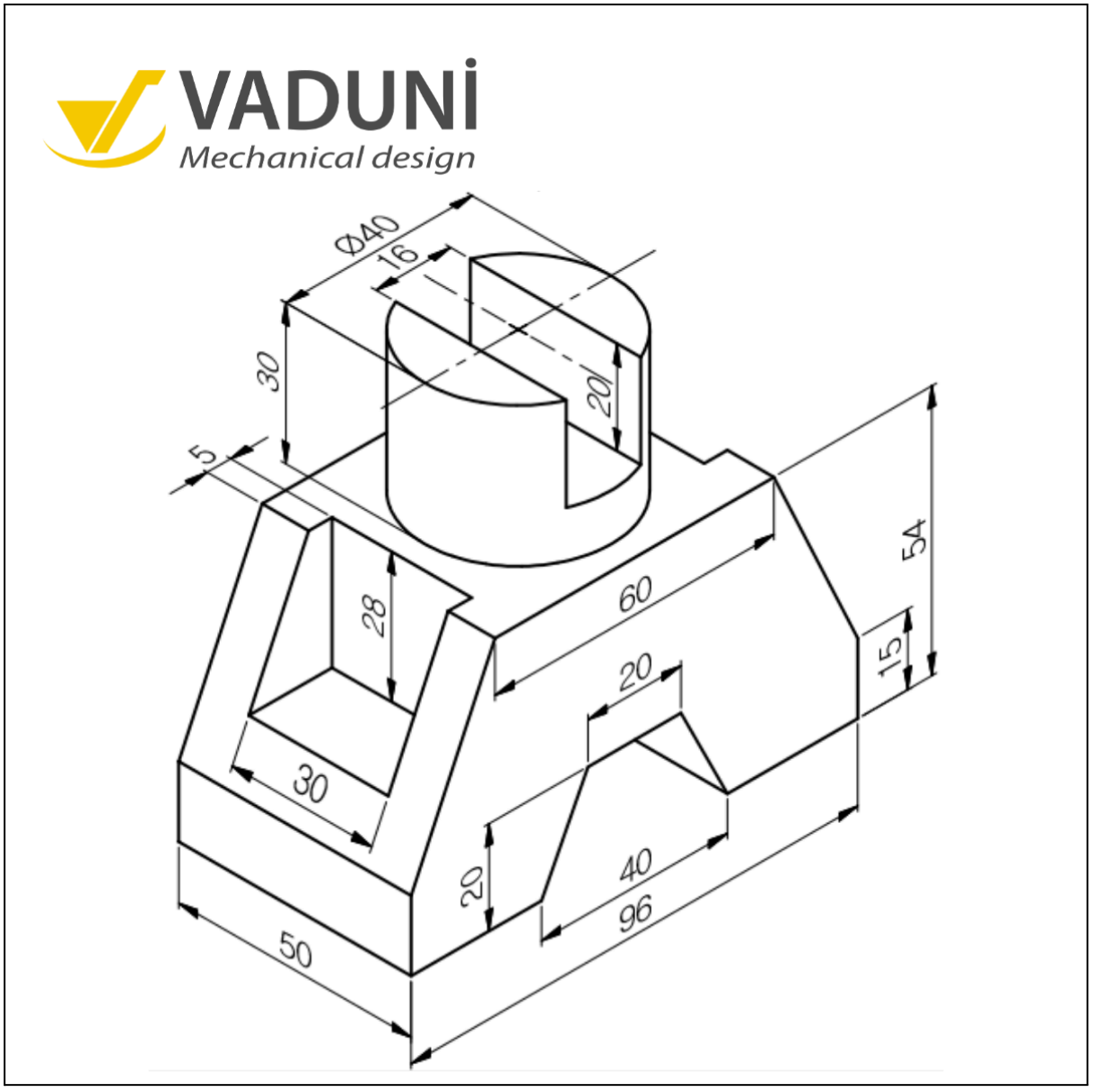
Bài tập 388


VADUNİ
Mechanical design
105
60
50
Ø45
8
R15
70
10
5
Ø30
Ø45
40
8

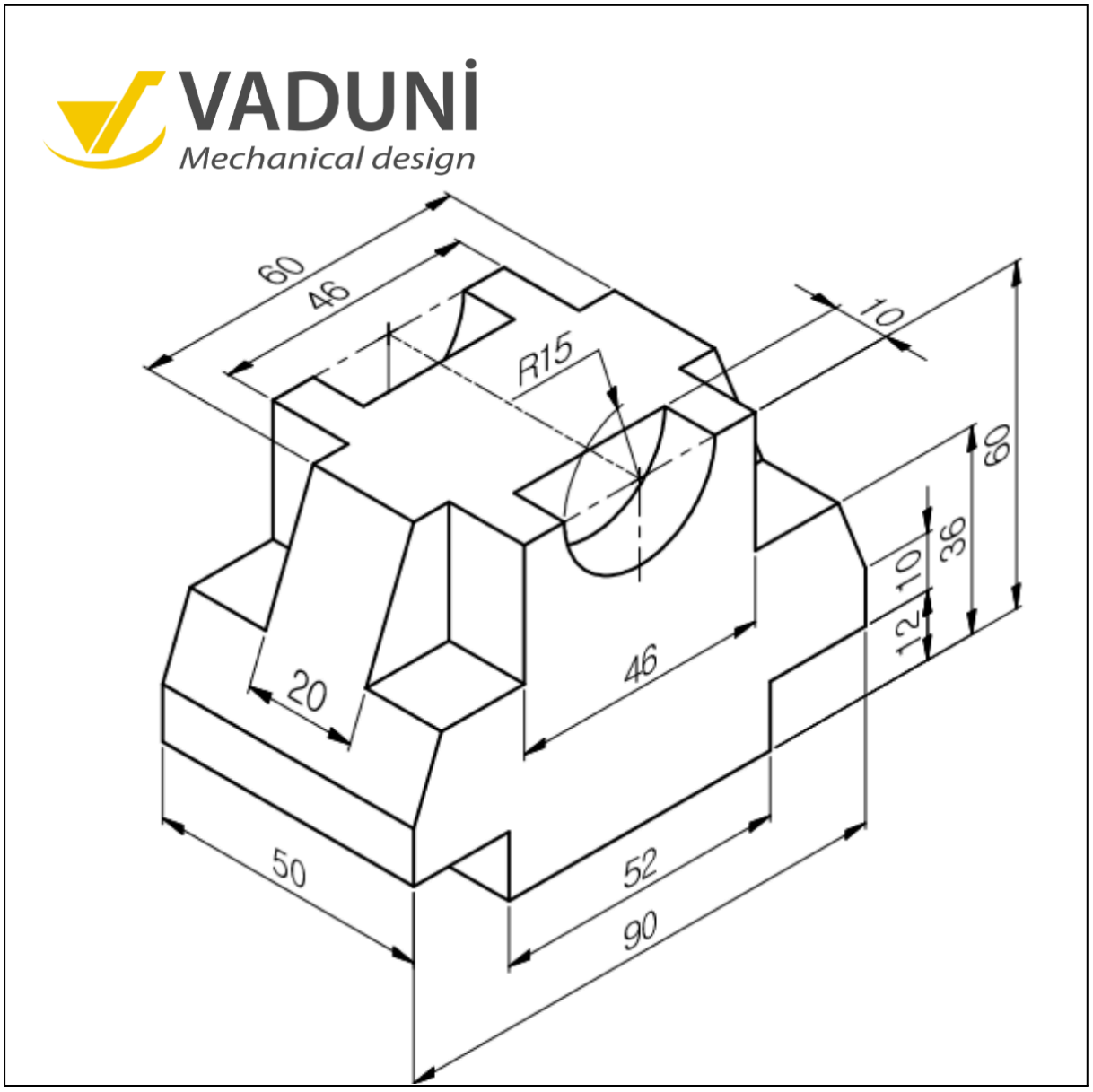
Bài tập 389



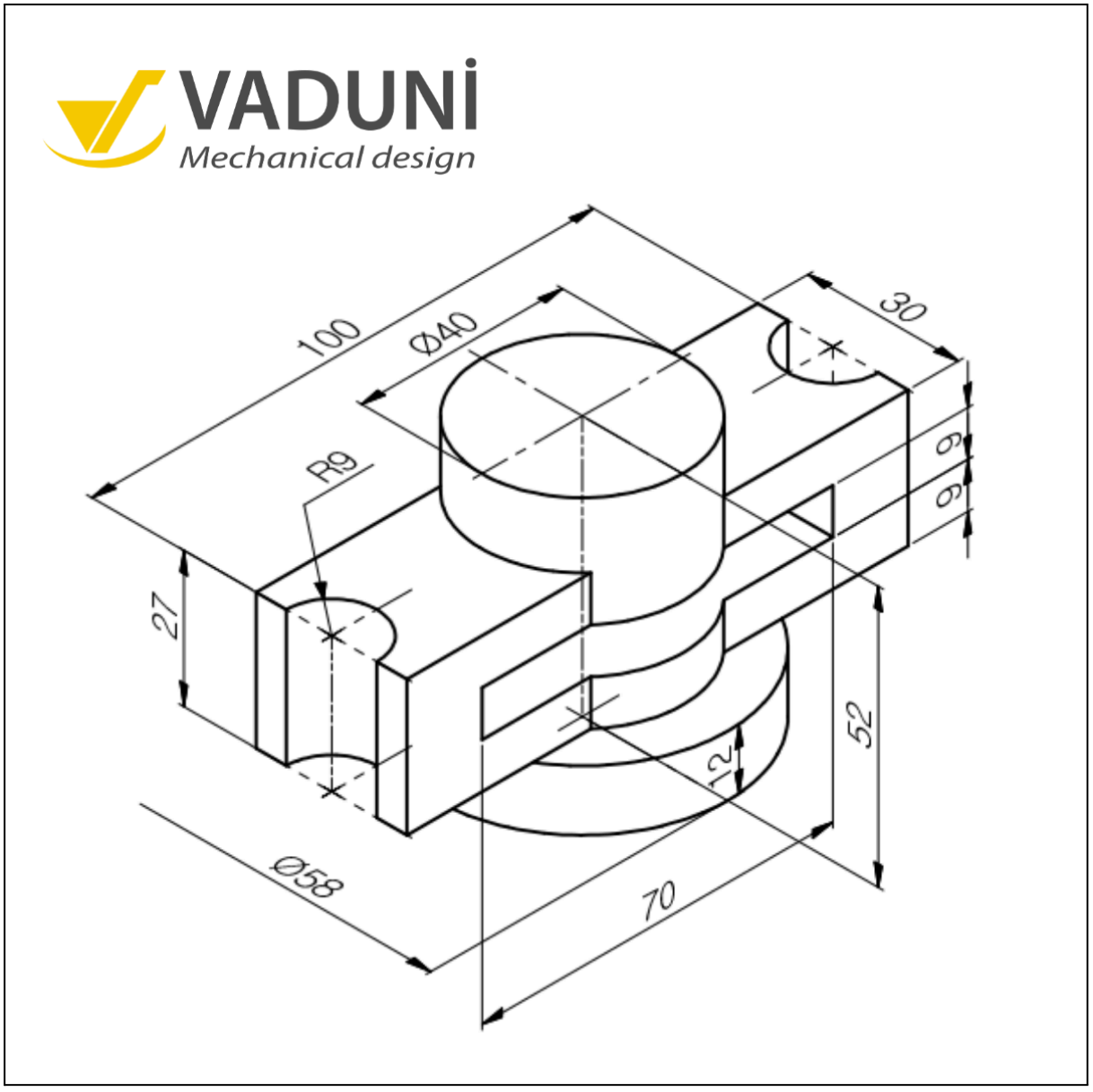
Bài tập 390


VADUNİ
Mechanical design
Ø40
16
30
20
5
28
60
54
15
20
30
20
40
96
50

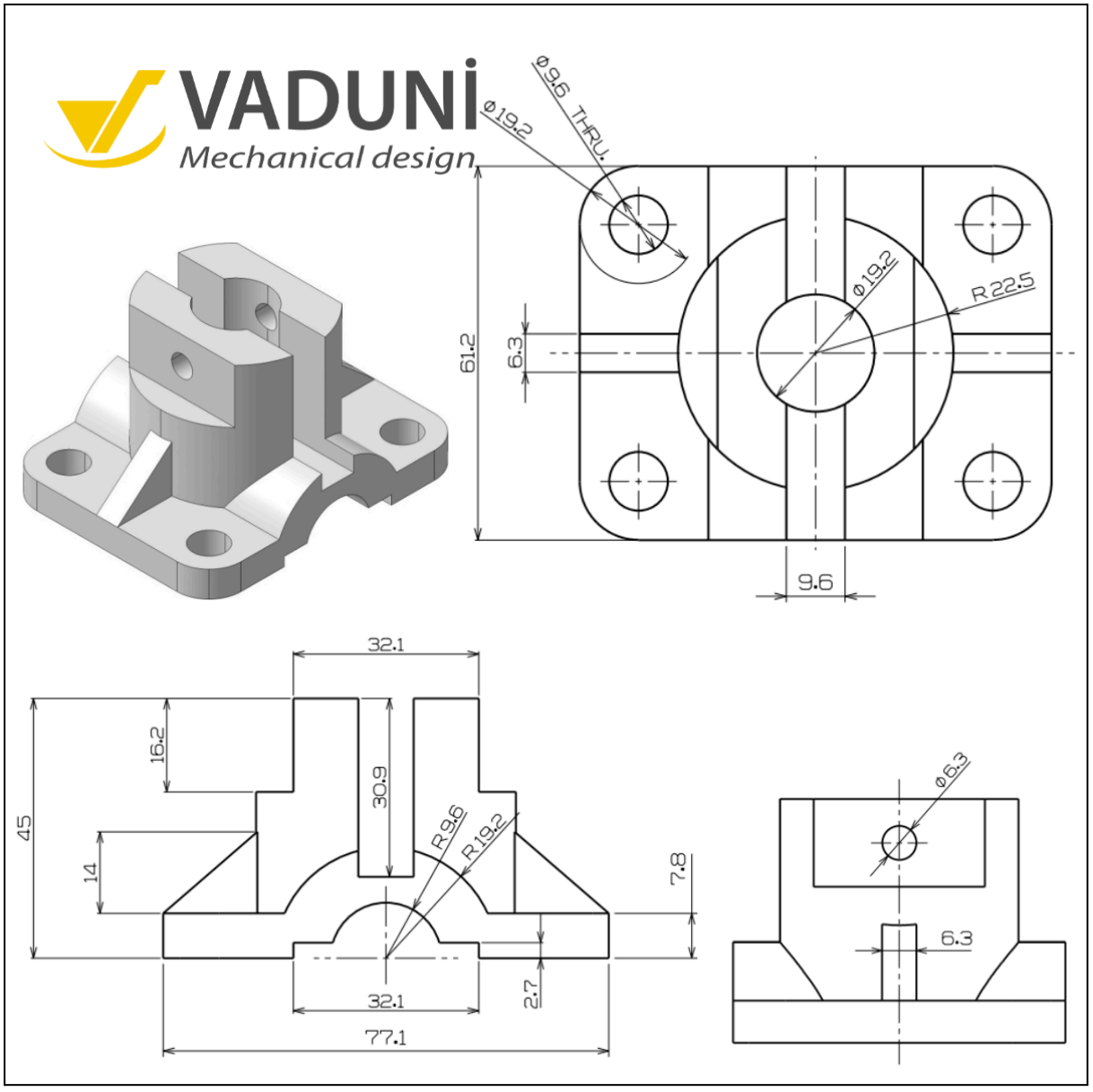
Bài tập 391



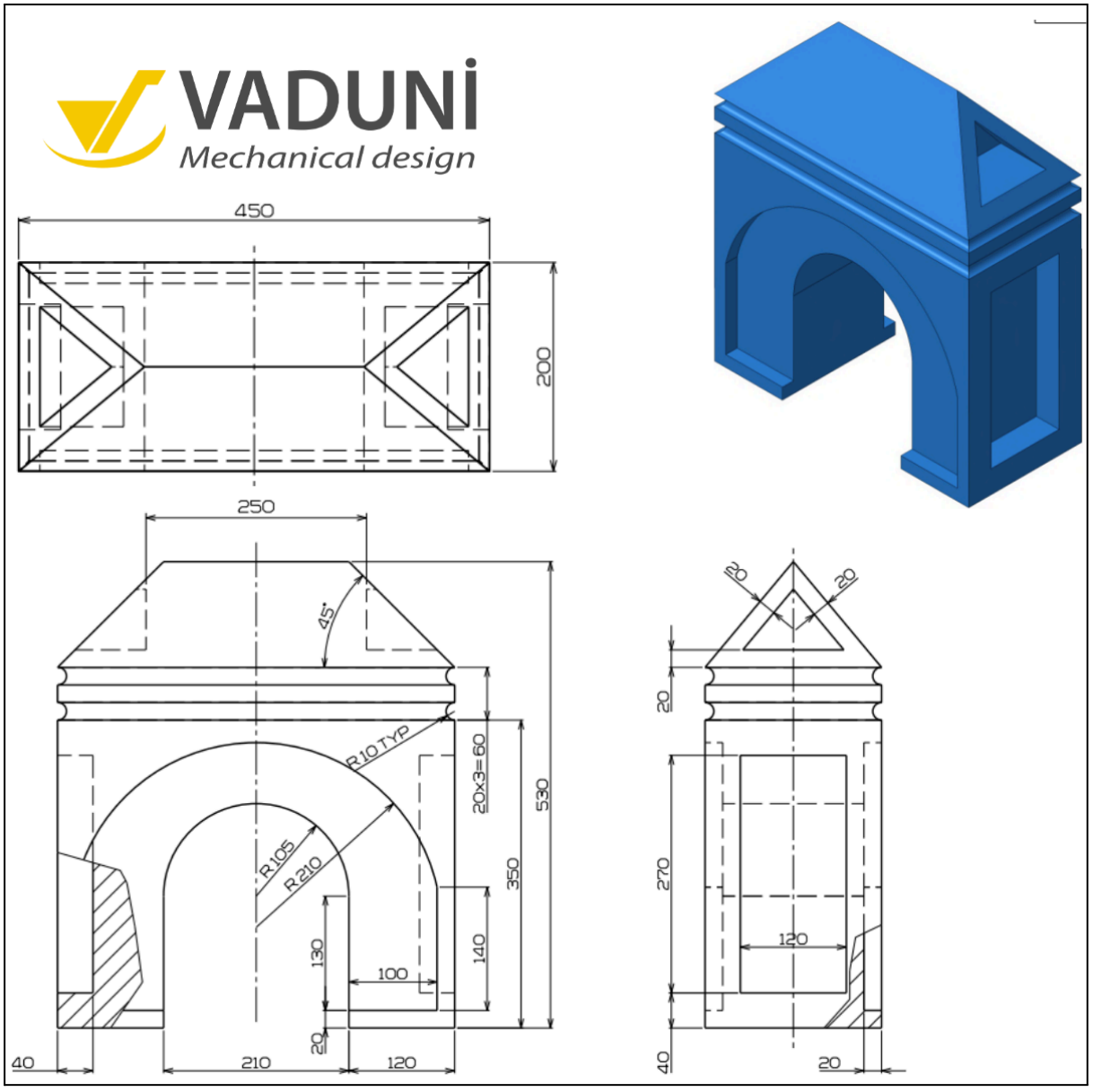
Bài tập 392



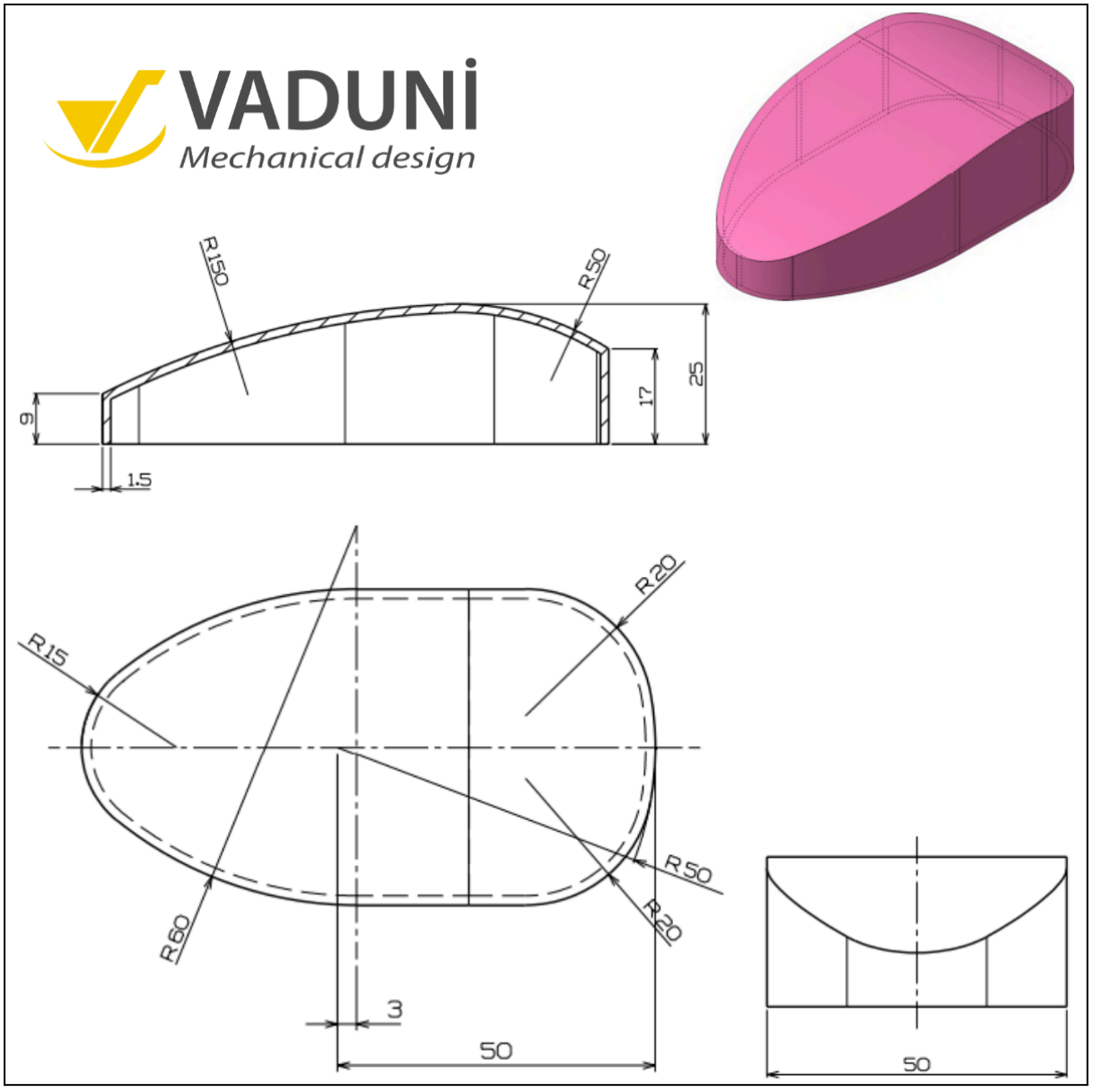
Bài tập 393


VADUNI
Mechanical design
Ø9.6 THRU.
Ø19.2
61.2
6.3
Ø19.2
R 22.5
9.6
32.1
16.2
30.9
45
14
R9.6
R19.2
7.8
2.7
32.1
77.1
Ø6.3
6.3

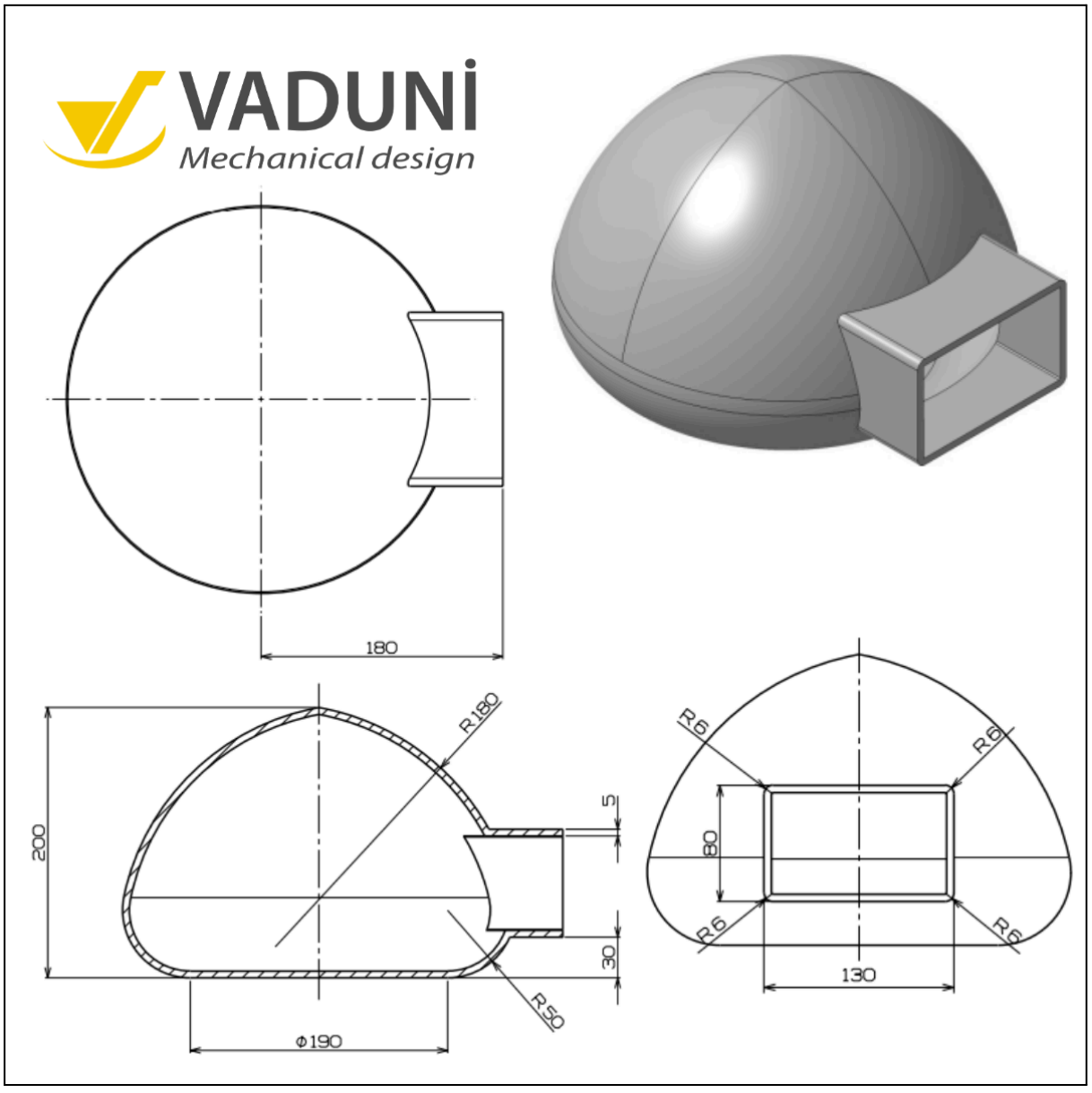
Bài tập 394


VADUNI
Mechanical design
450
200
250
45°
R10 TYP
20x3= 60
530
350
140
R105
R210
130
100
20
40
210
120
20
20
20
270
120
40
20

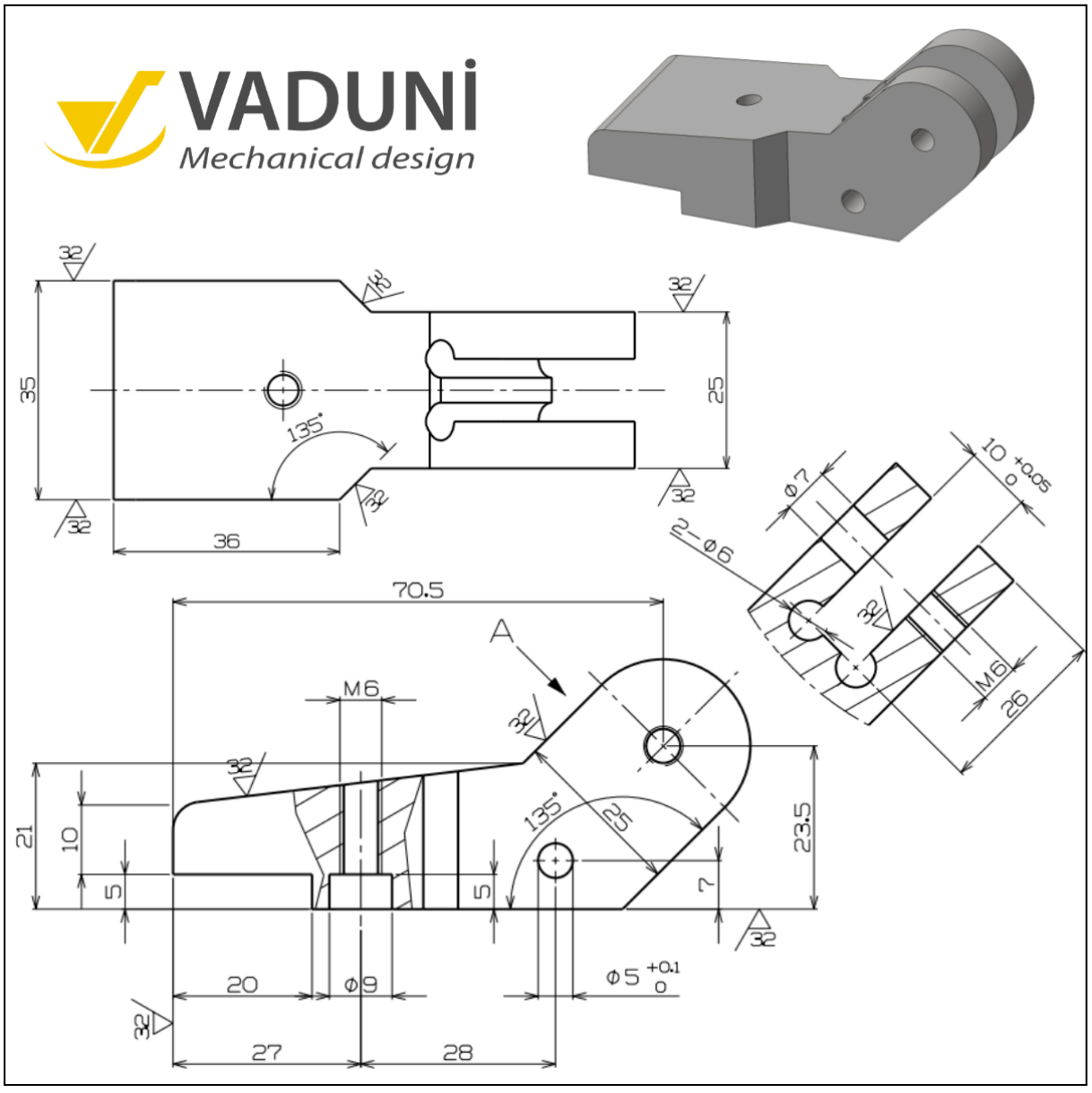
Bài tập 395


VADUNI
Mechanical design
R150
R50
9
1.5
17
25
R20
R15
R60
R50
R20
3
50
50

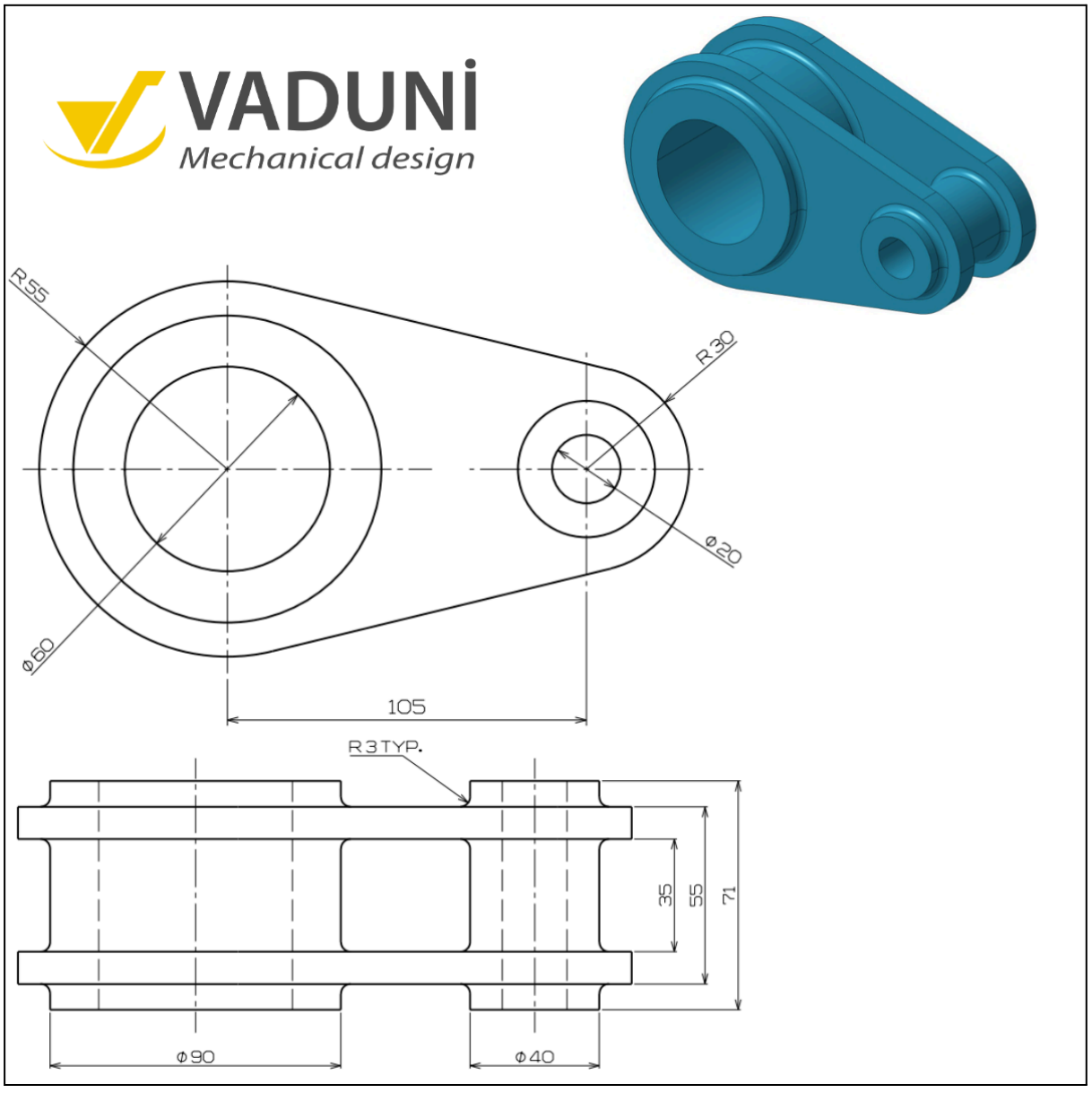
Bài tập 396


VADUNİ
Mechanical design
180
R180
200
5
30
R50
Φ190
R6
R6
R6
R6
80
130

Bài tập 397

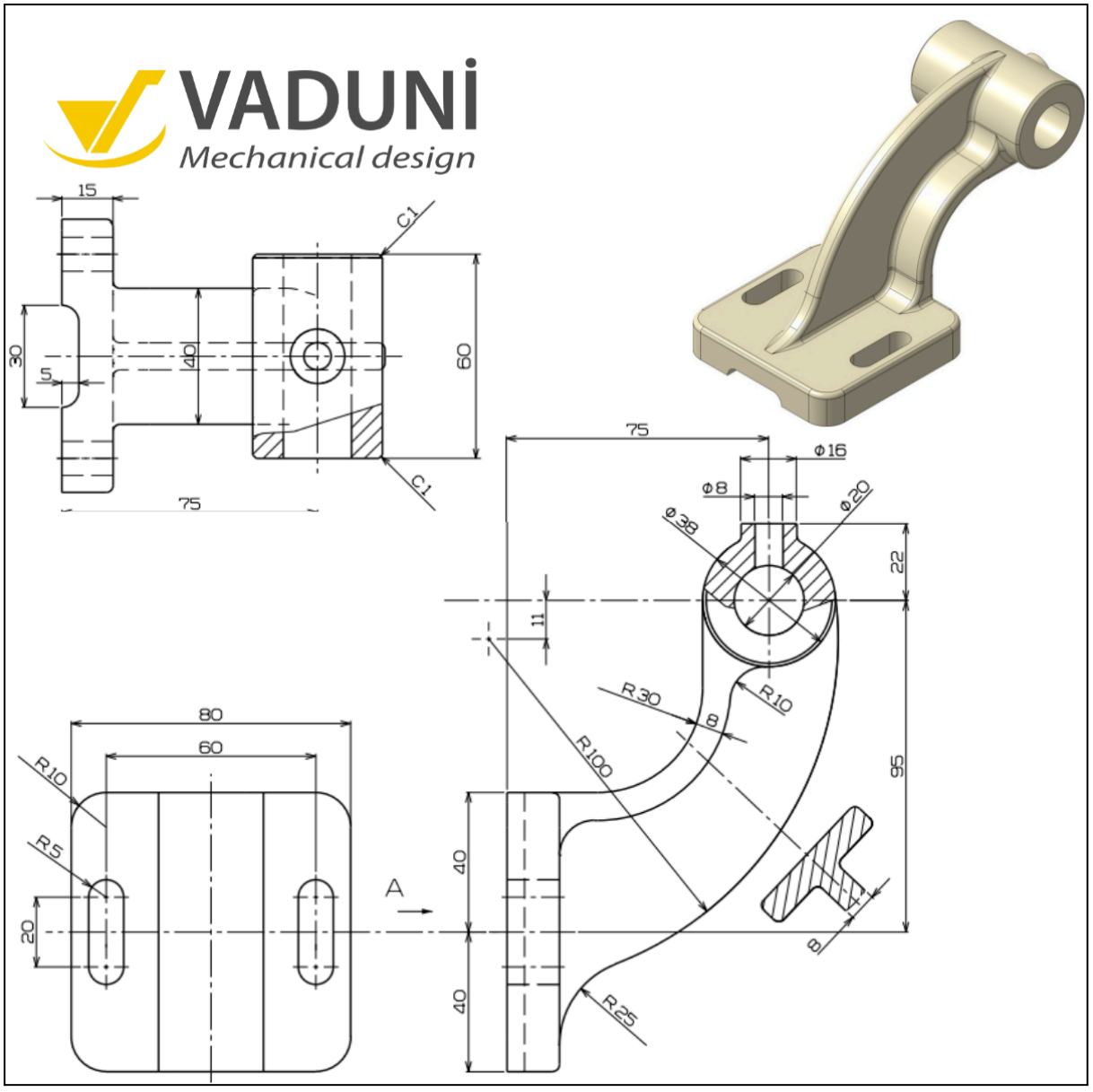

VADUNİ
Mechanical design
35
25
135°
36
70.5
A
M6
21
10
5
23.5
7
20
ϕ9
ϕ5 +0.1 0
27
28
2−ϕ6
ϕ7
10 +0.05 0
26

Bài tập 398

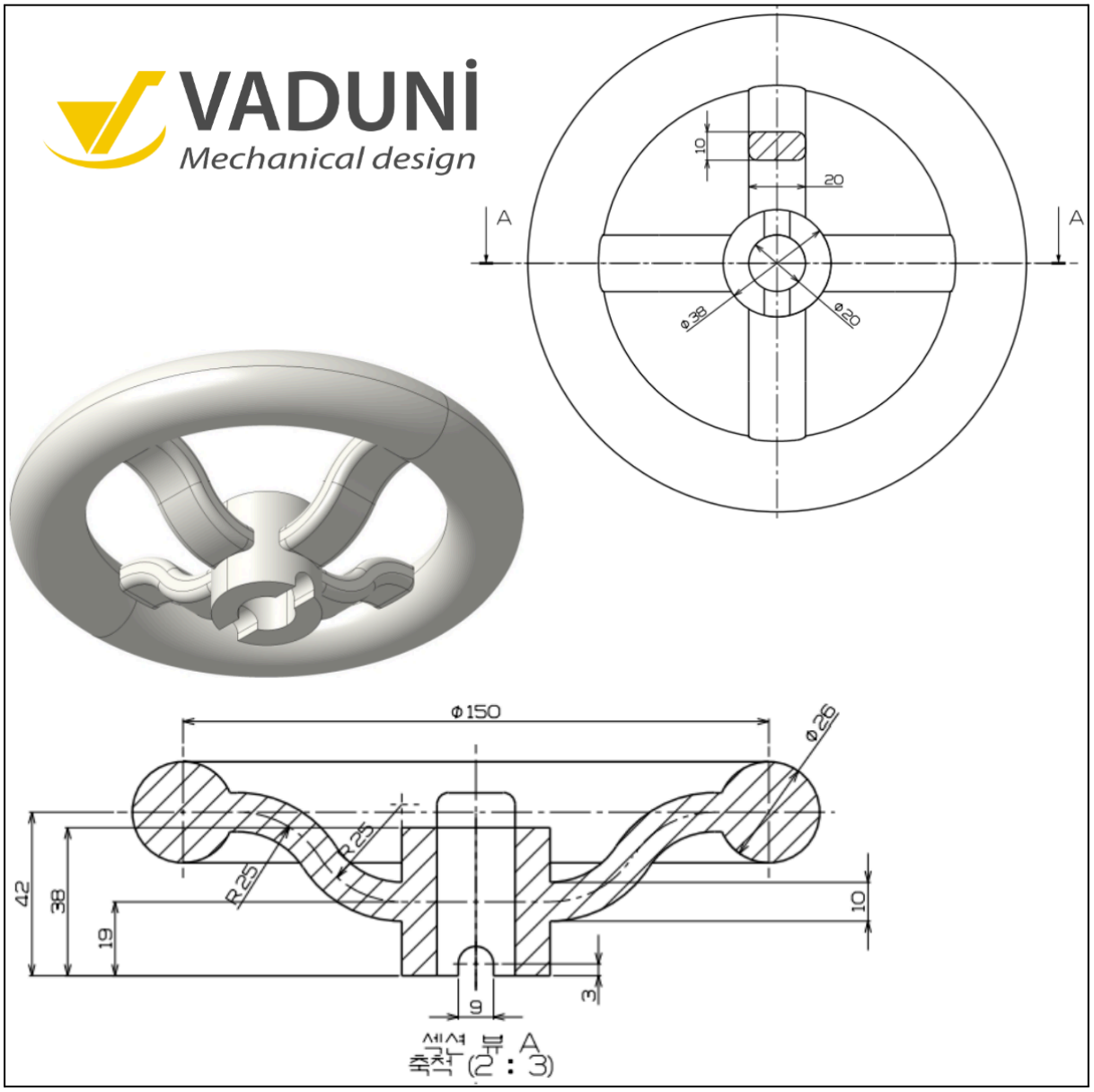

VADUNİ
Mechanical design
R55
R30
ϕ20
ϕ60
105
R3TYP.
35
55
71
ϕ90
ϕ40

Bài tập 399

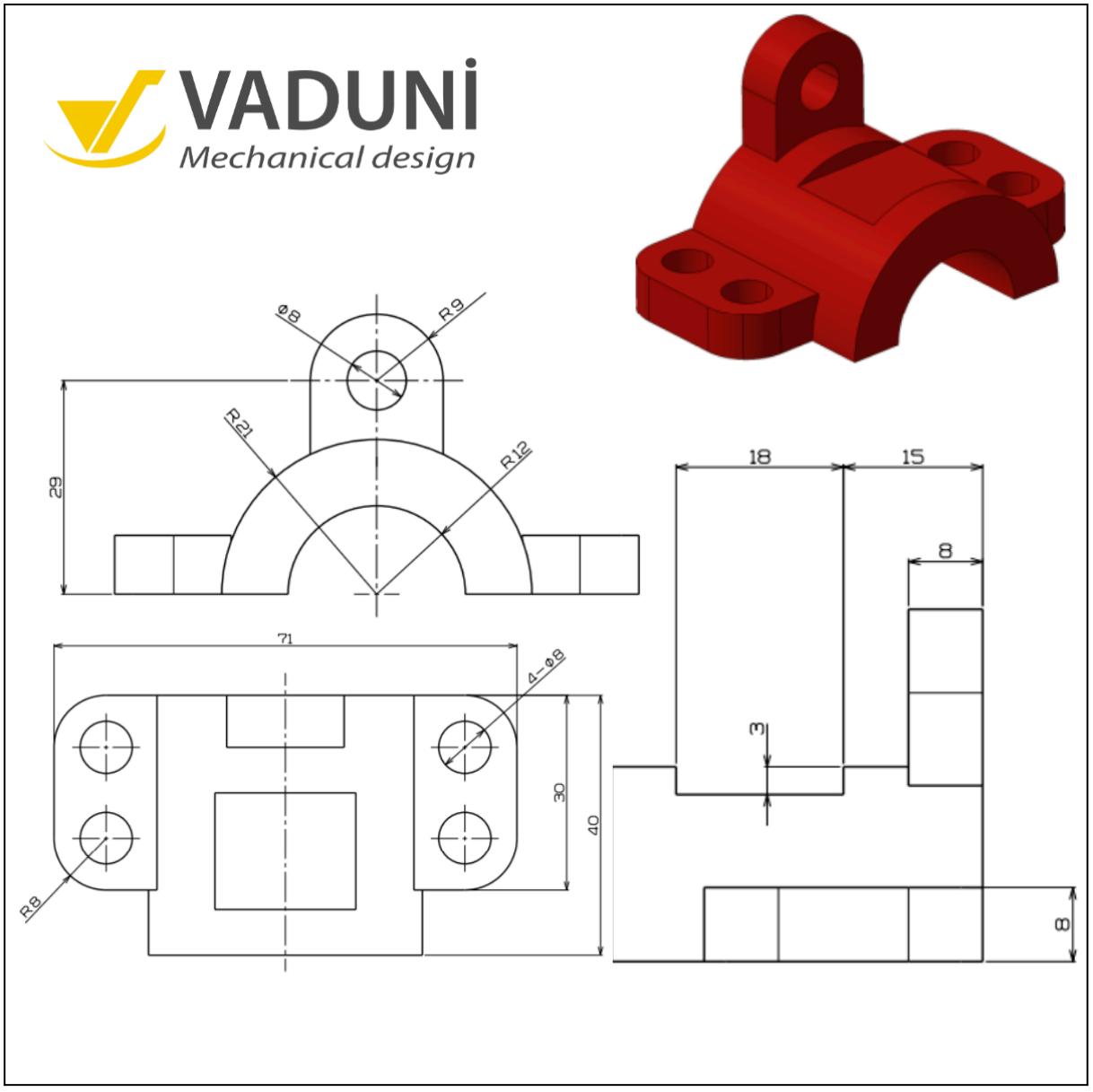
Bài tập 400


VADUNI
Mechanical design
15
C1
30
5
40
60
75
C1
75
Φ16
Φ8
Φ20
Φ38
22
11
R30
R10
8
R100
95
80
60
R10
R5
20
A
40
40
R25
8

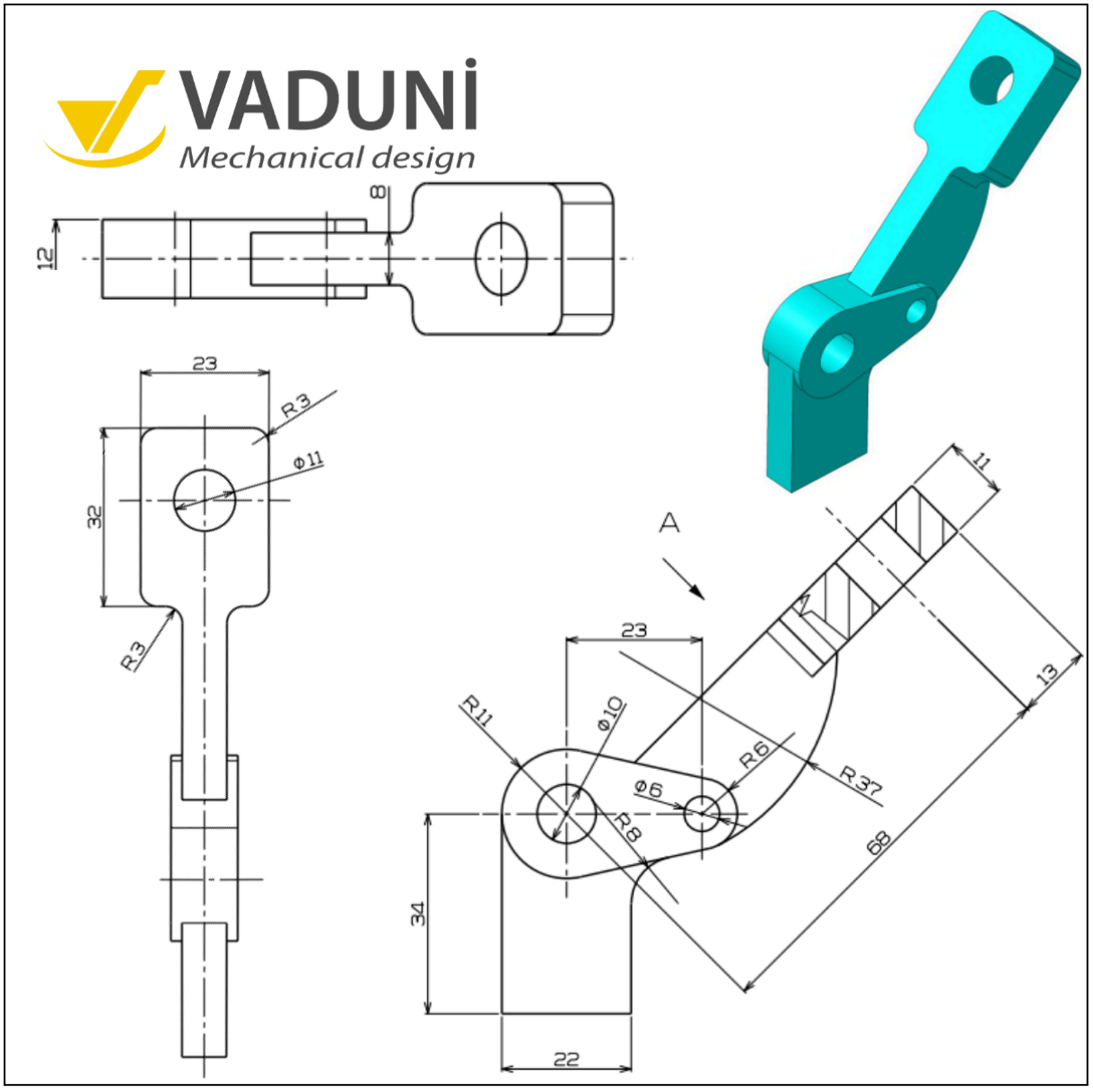
Bài tập 401


VADUNI
Mechanical design
A
A
10
20
ø38
ø20
Φ150
ø26
R25
R25
42
38
19
10
3
9
섹션 A
축척 (2 : 3)

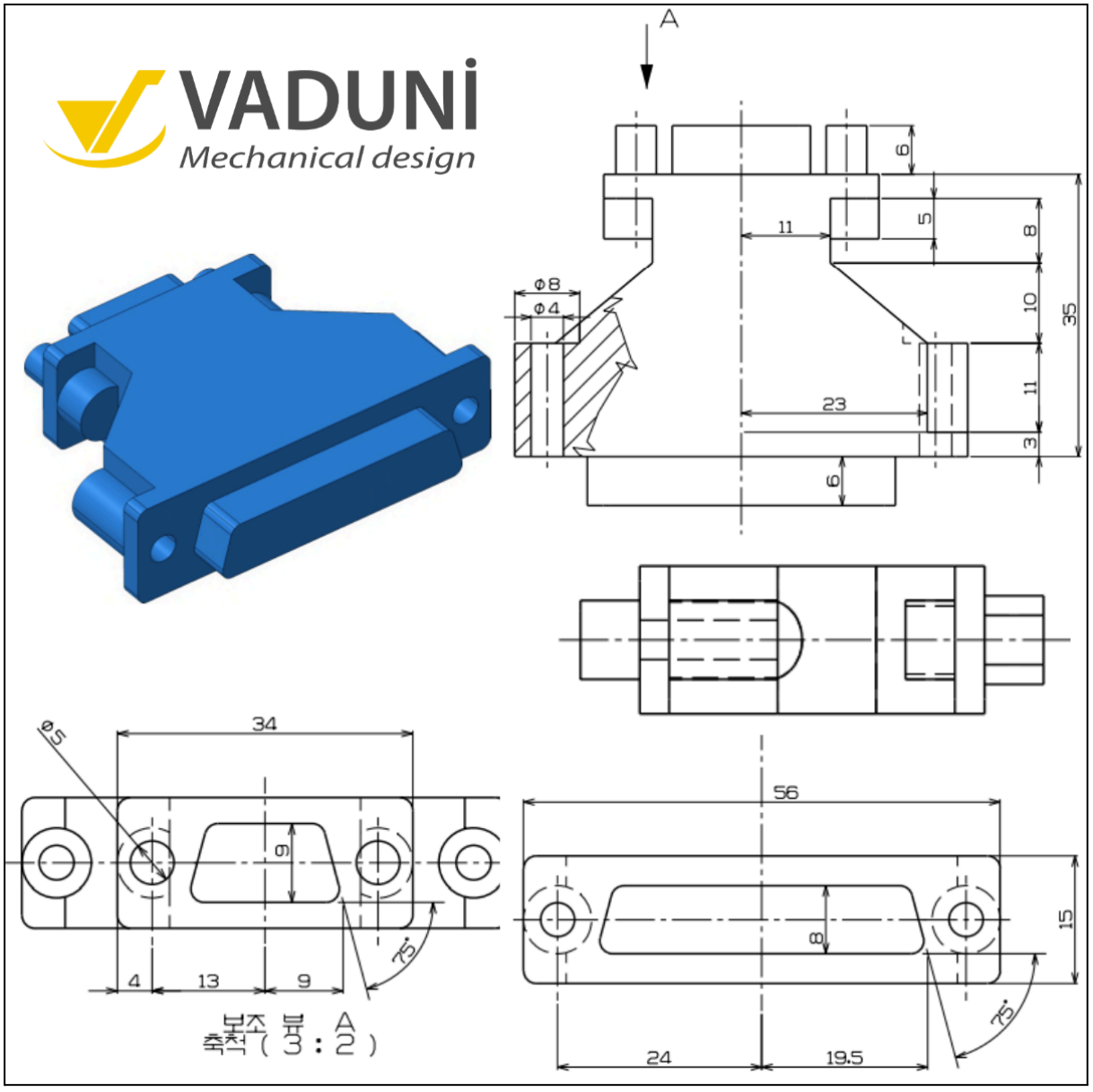
Bài tập 402


VADUNİ
Mechanical design
Ø8
R9
R21
R12
29
18
15
8
3
8
71
4-Ø8
30
40
R8

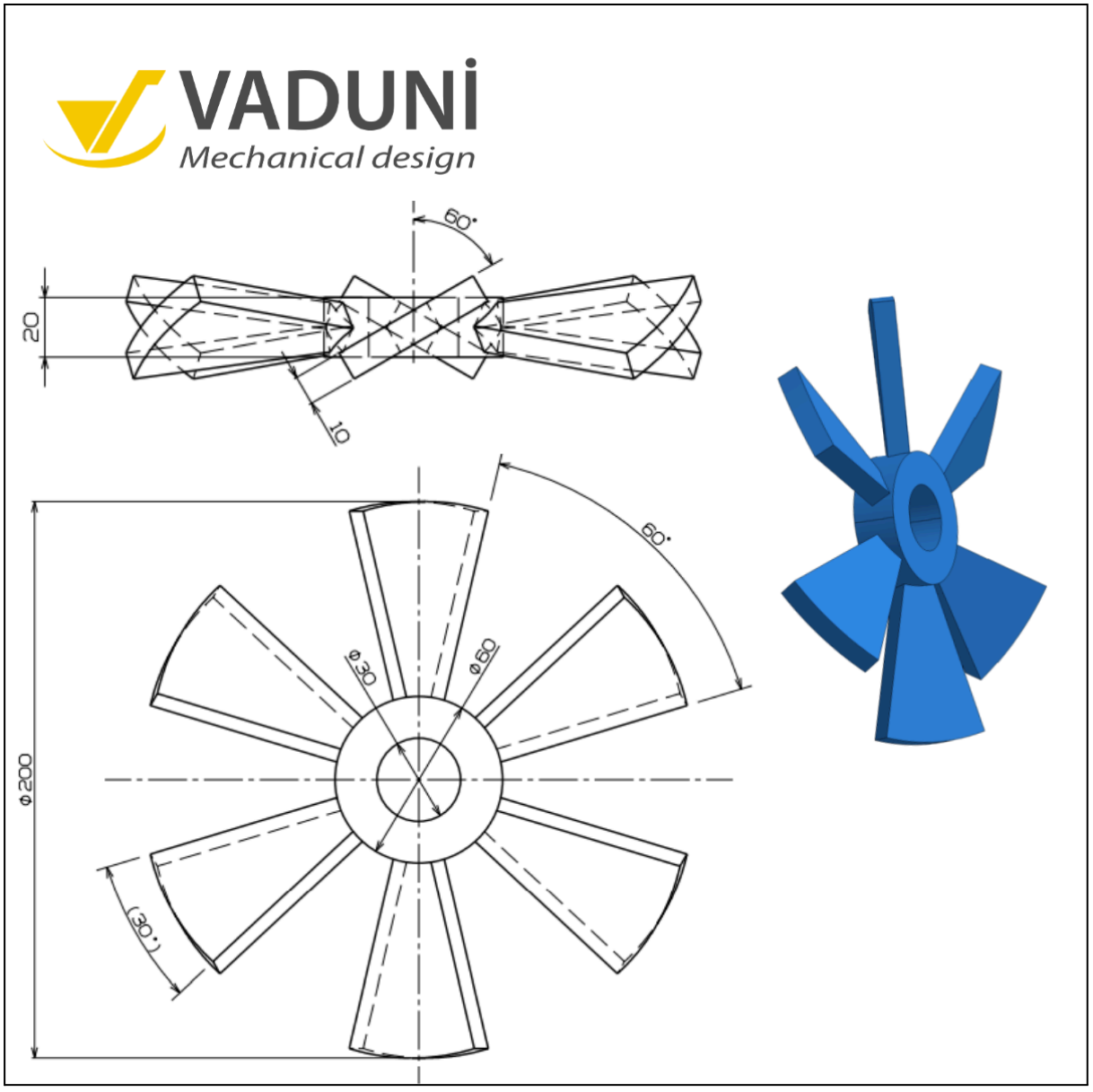
Bài tập 403


VADUNI
Mechanical design
8
12
23
R3
Φ11
32
R3
A
11
23
R11
Φ10
R6
R37
Φ6
R8
13
68
34
22

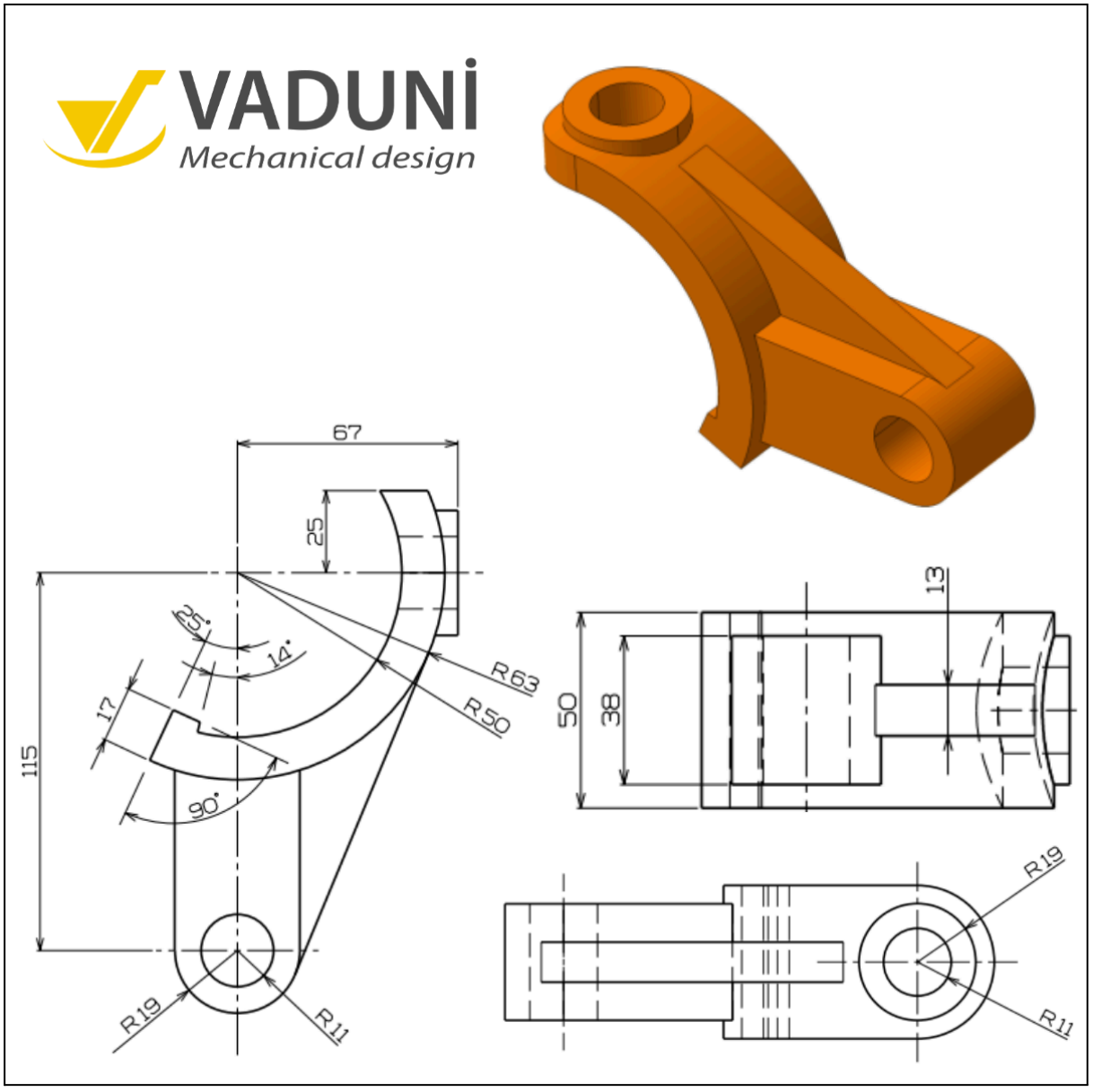
Bài tập 404


VADUNI
Mechanical design
A
6
5
8
11
10
35
ϕ8
ϕ4
23
11
3
6
ø5
34
9
4
13
9
75°
보조 뷰 A
축척 (3 : 2)
56
8
15
24
19.5
75°

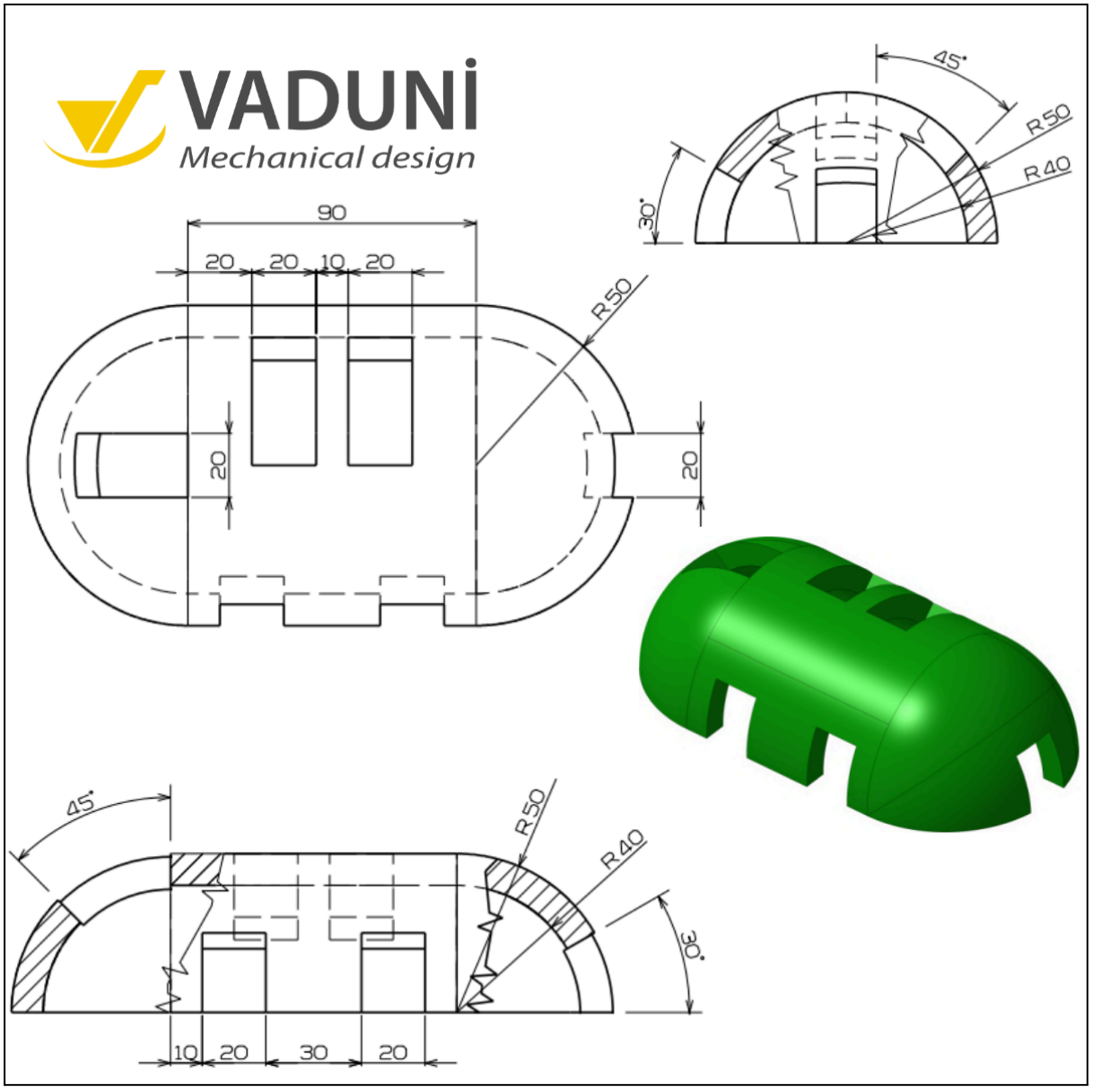
Bài tập 405



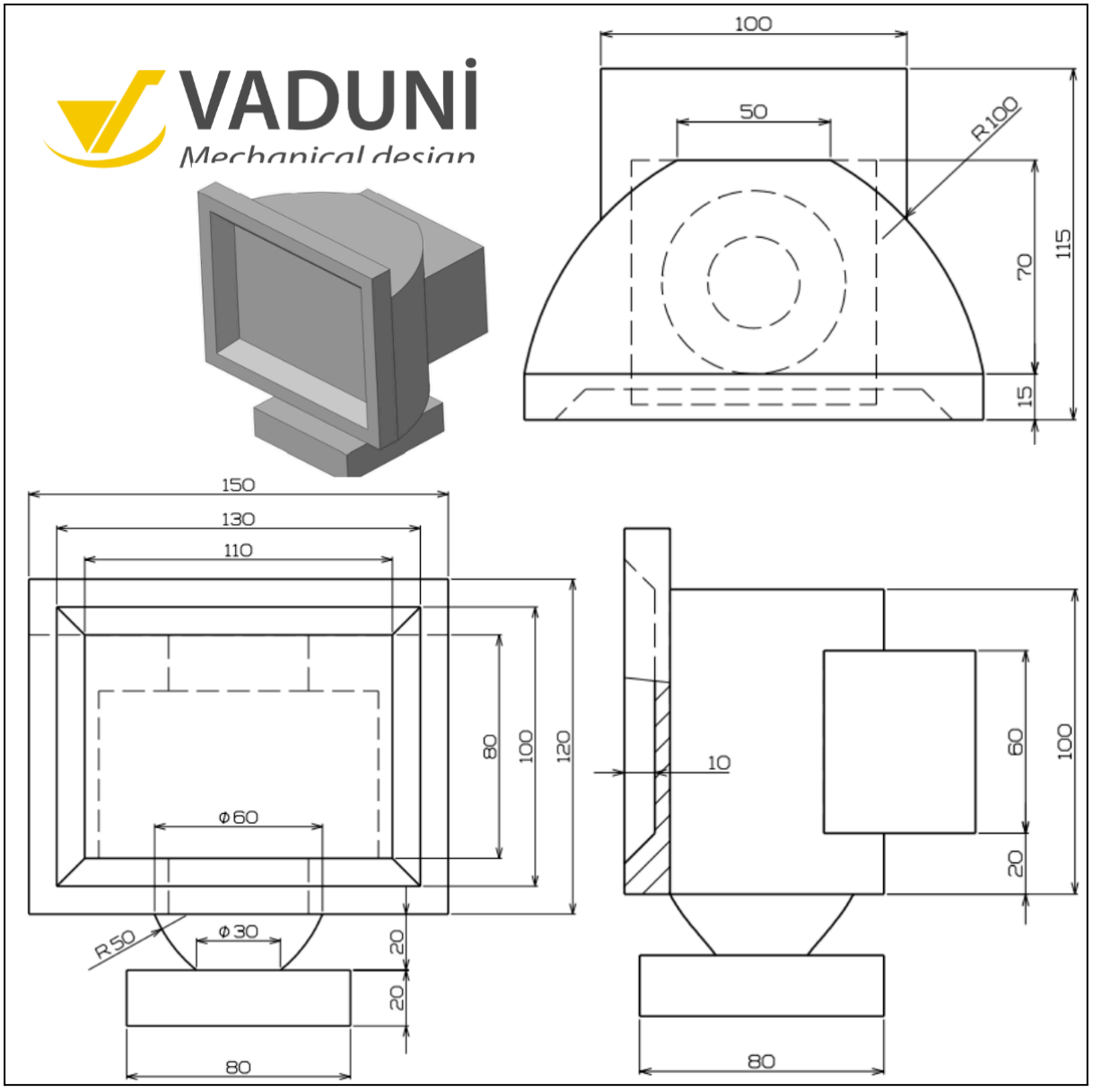
Bài tập 406


VADUNI
Mechanical design
67
25
25°
14°
17
90°
115
R63
R50
R19
R11
13
50
38
R19
R11

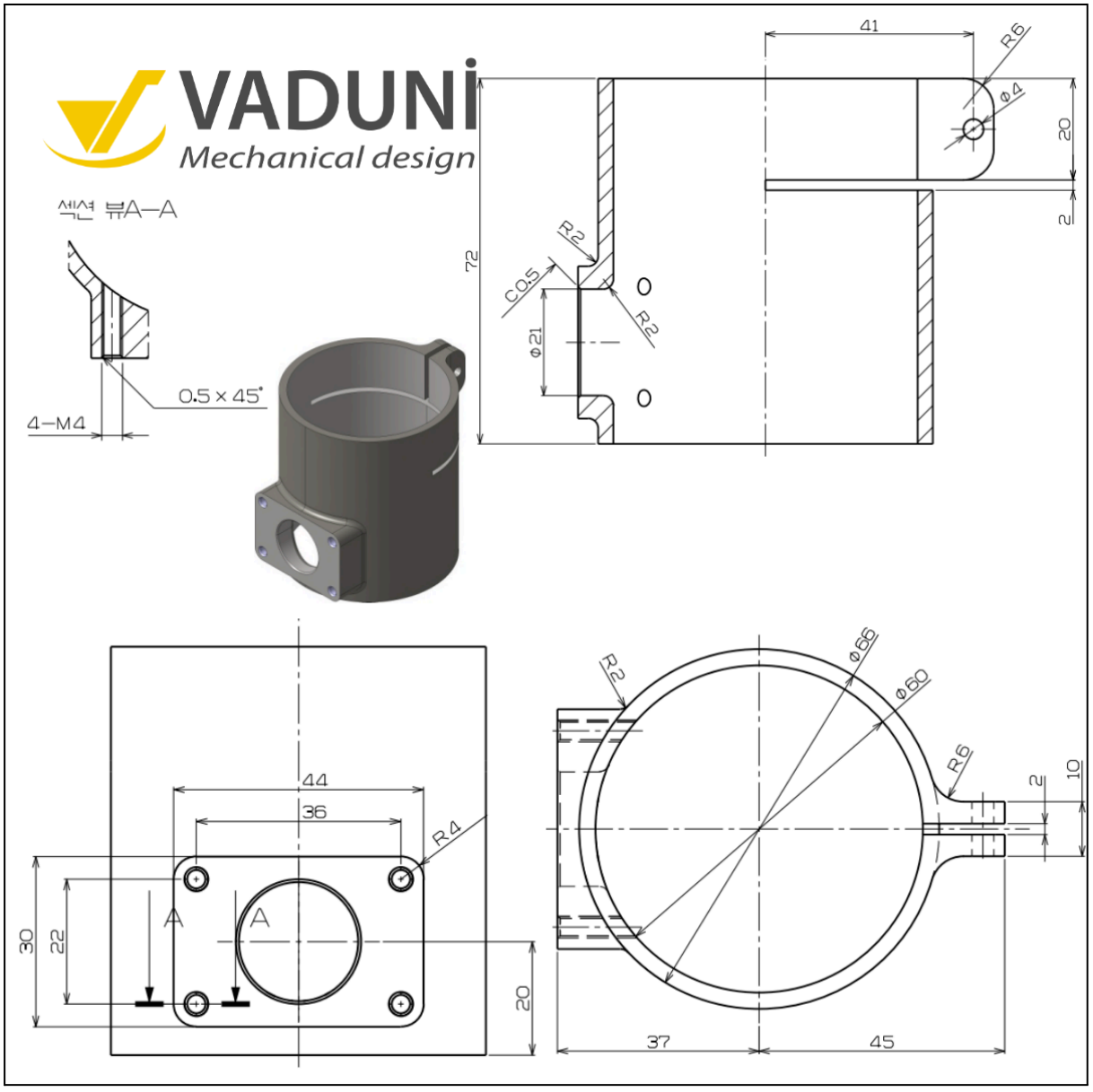
Bài tập 407


VADUNİ
Mechanical design
45°
R50
R40
30°
90
20
20
10
20
R50
20
20
45°
R50
R40
30°
10
20
30
20

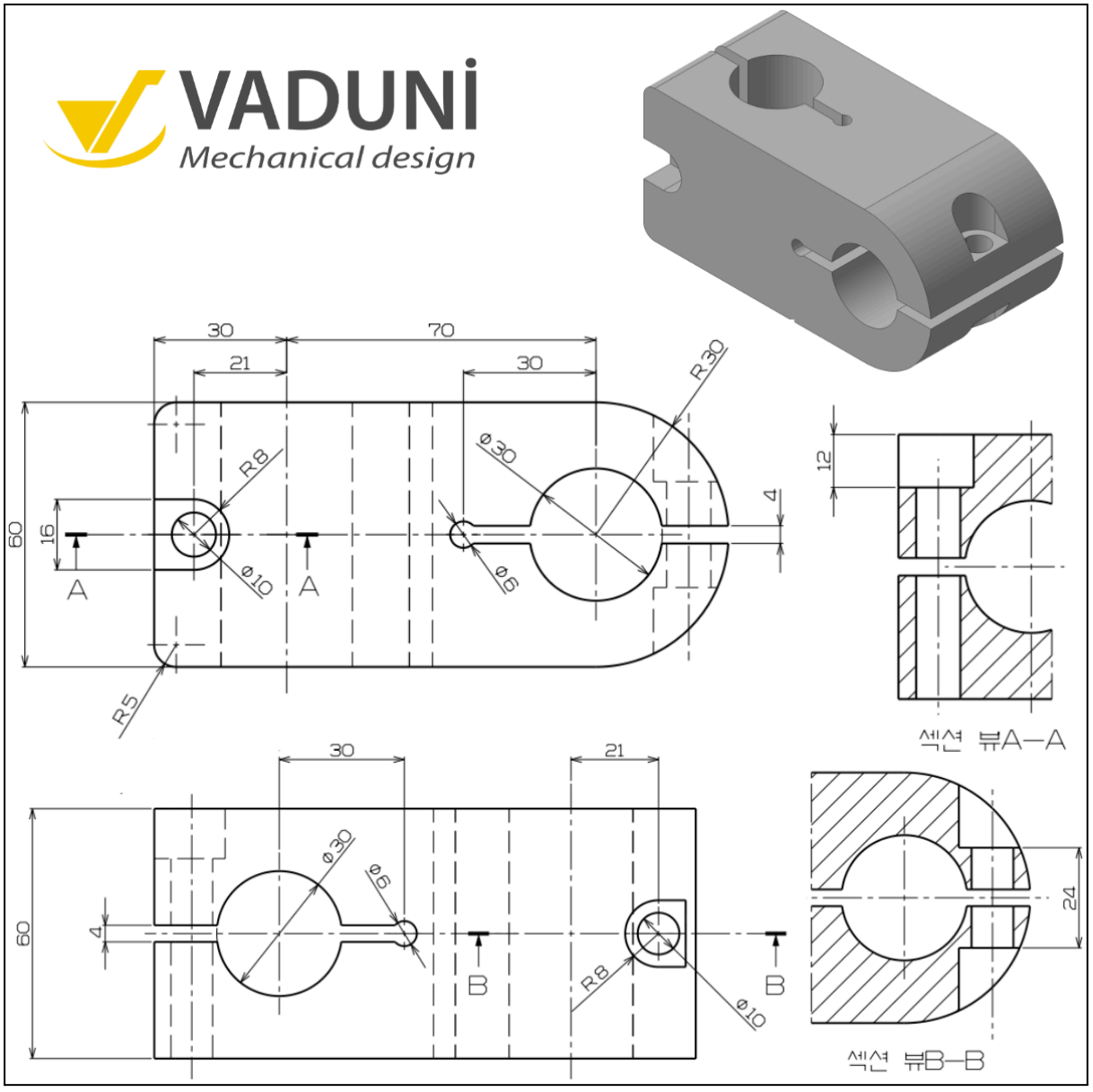
Bài tập 408


VADUNI
Mechanical design
100
50
R100
70
115
15
150
130
110
80
100
120
ϕ60
R50
ϕ30
20
20
80
10
60
100
20
80

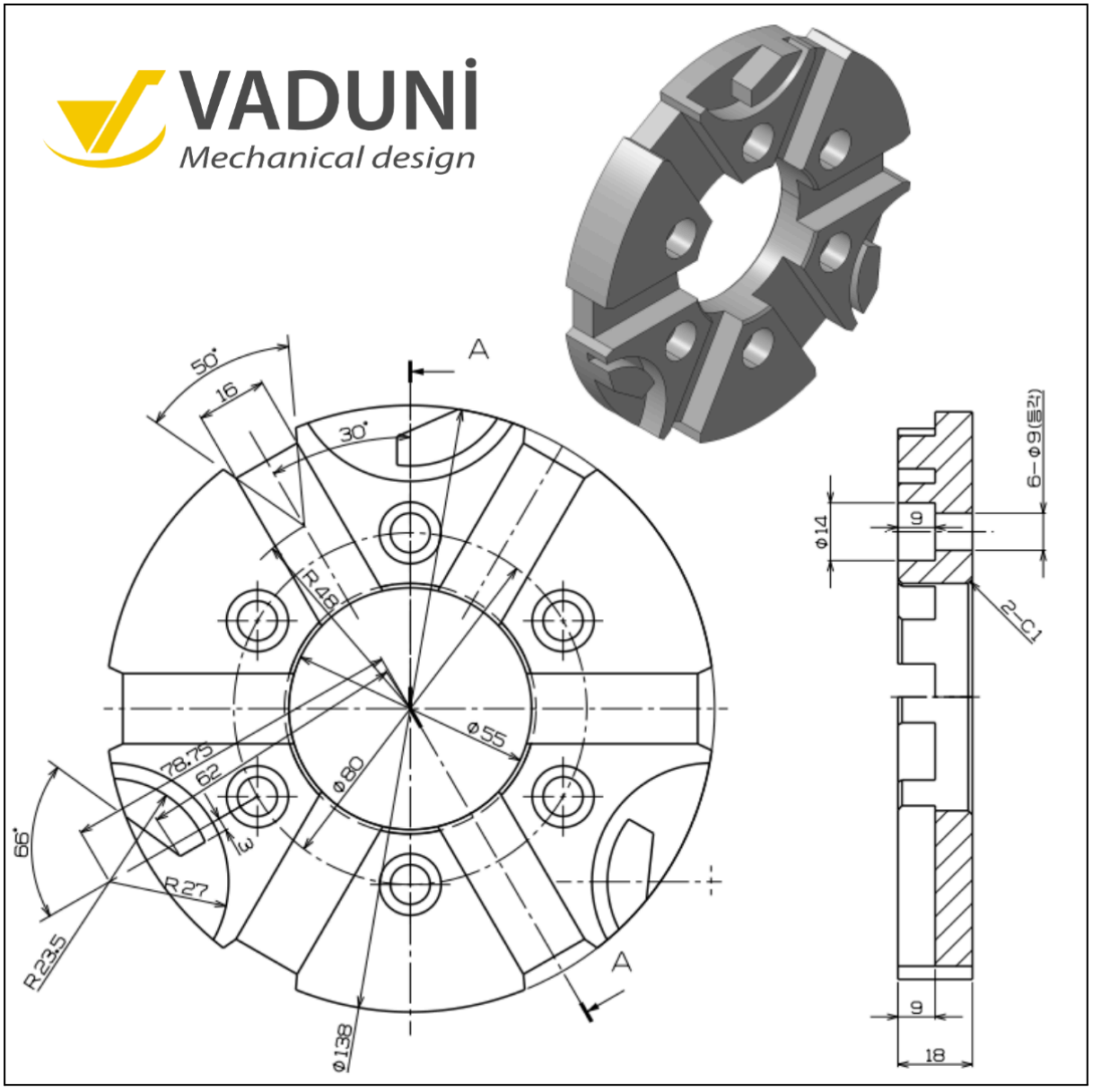
Bài tập 409


VADUNI
Mechanical design
섹션 뷰A–A
0.5 x 45°
4–M4
41
R6
ø4
20
2
72
R2
C0.5
ø21
R2
44
36
R4
30
22
A
A
20
R2
ø66
ø60
R6
2
10
37
45

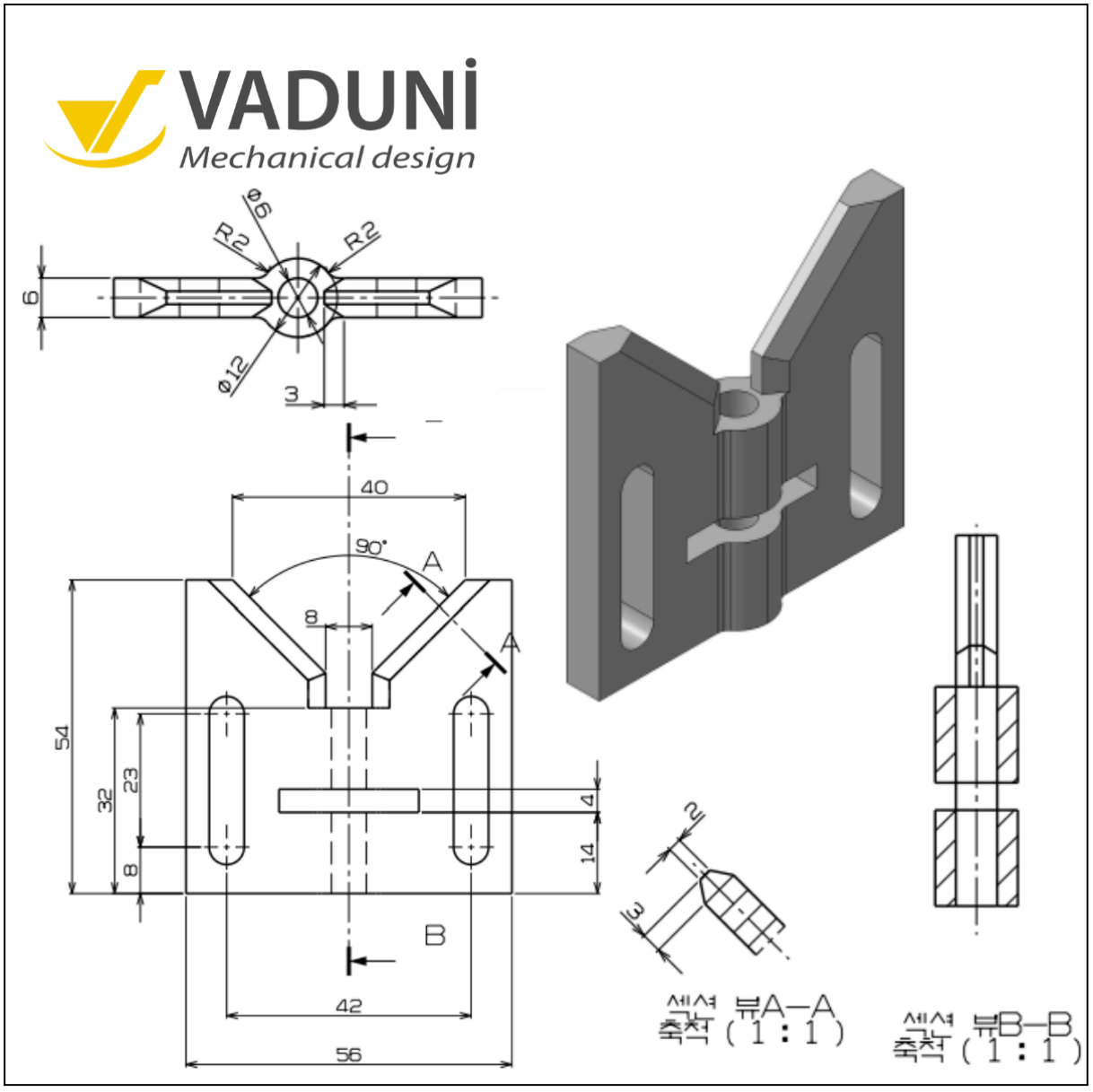
Bài tập 410


VADUNİ
Mechanical design
30
70
21
30
R30
R8
ø30
60
16
A
A
ø10
ø6
4
R5
12
섹션 뷰A–A
30
21
ø30
ø6
60
4
B
B
R8
ø10
24
섹션 뷰B–B

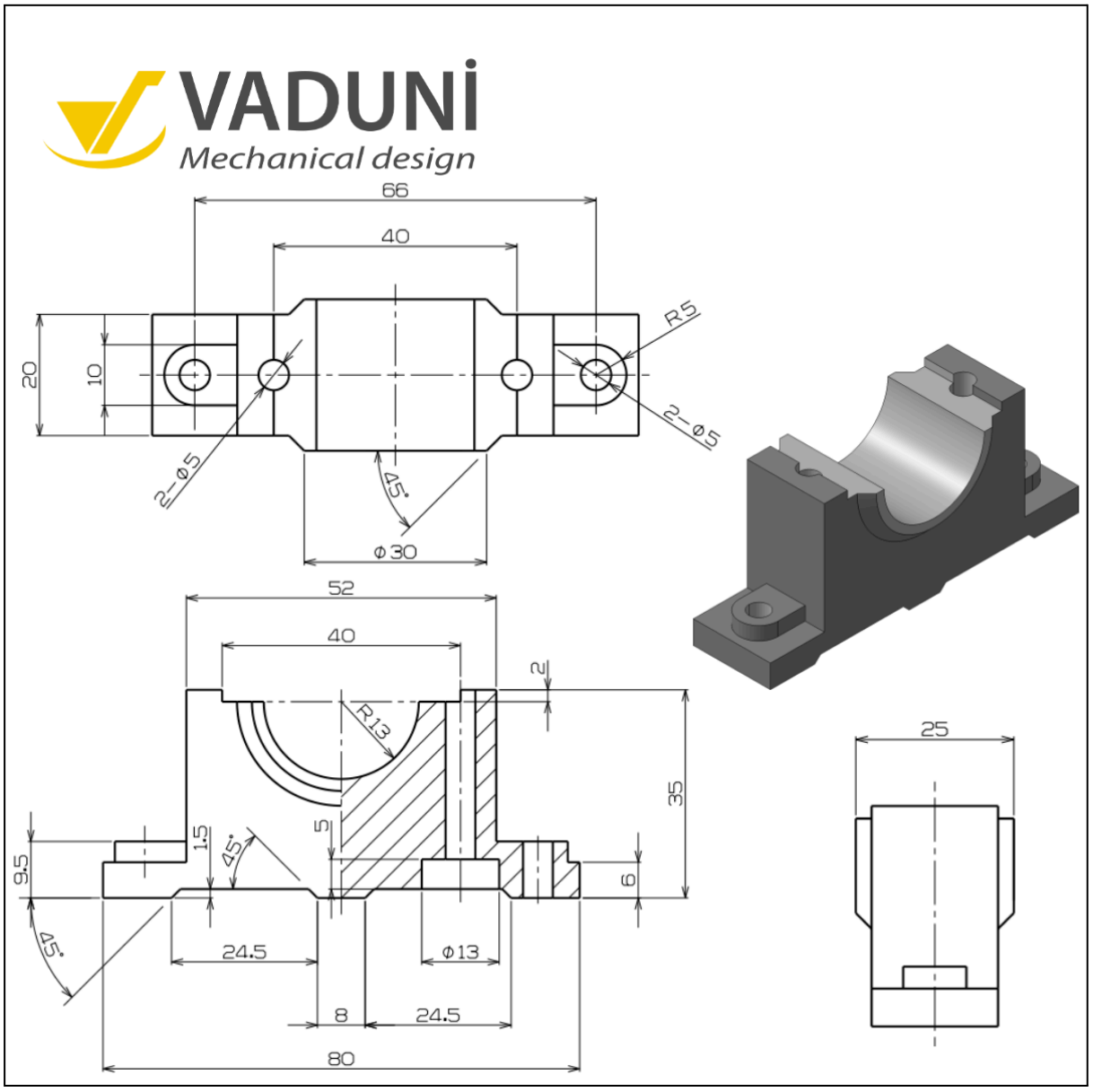
Bài tập 411


VADUNİ
Mechanical design
A
A
50°
16
30°
R48
ø55
ø80
78.75
62
66°
R27
R23.5
ø138
ø14
6
6
18
2-C1
6-ø9(등간)

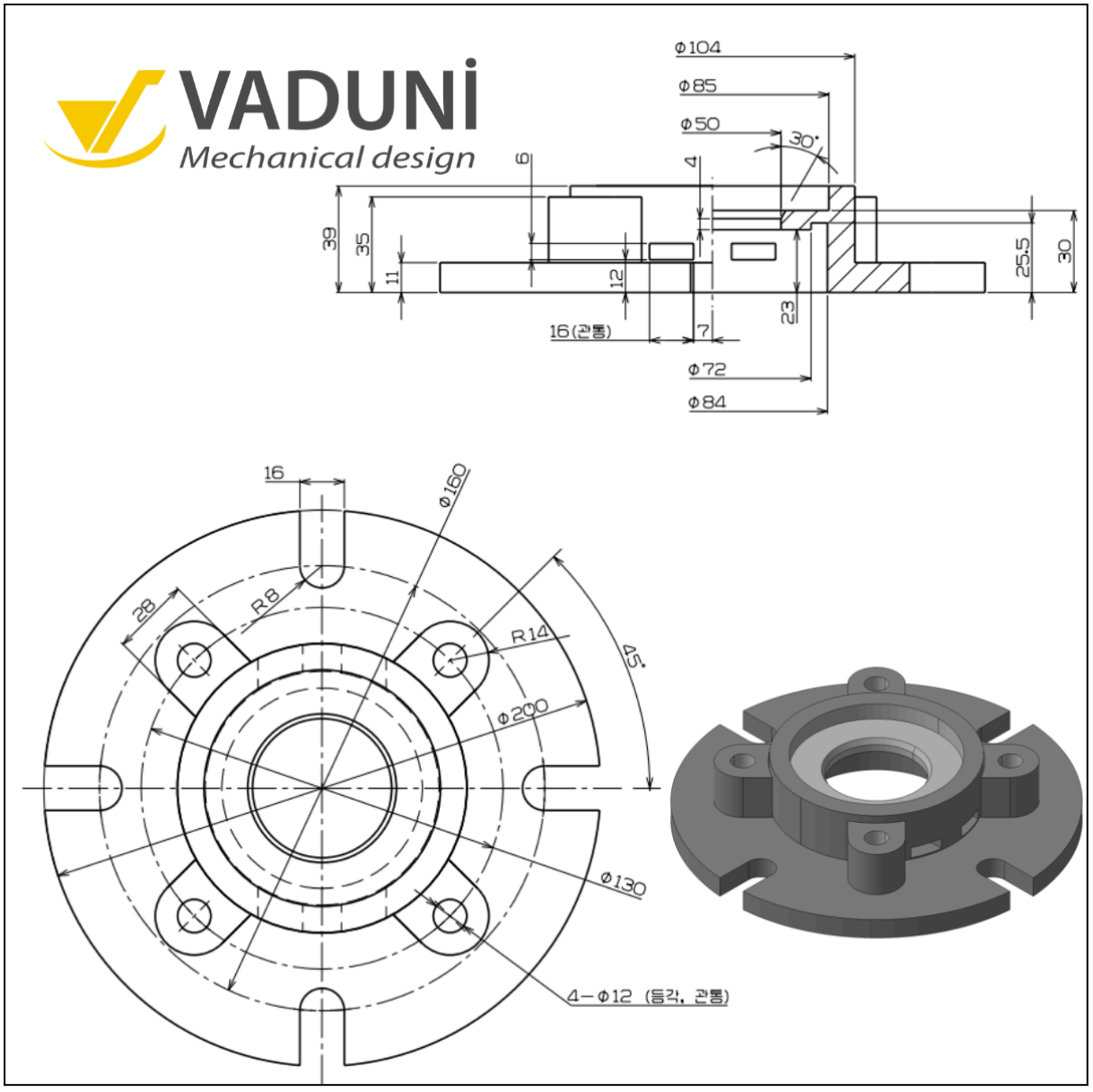
Bài tập 412


VADUNİ
Mechanical design
ø6
R2
R2
6
ø12
3
40
90°
A
8
A
54
32
23
8
4
14
B
42
56
2
3
A–A
B–B

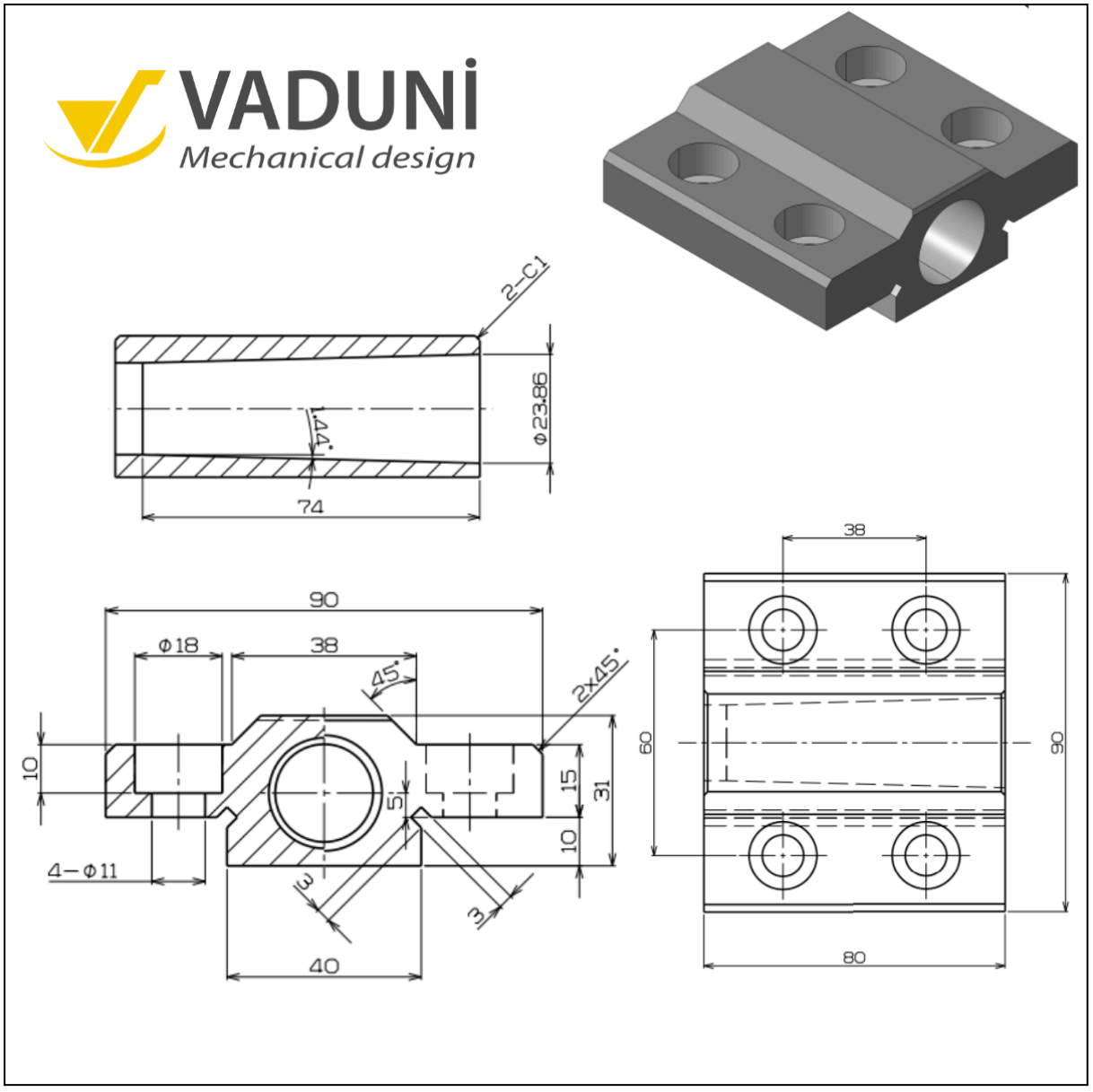
Bài tập 413


VADUNİ
Mechanical design
66
40
20
10
R5
2–ϕ5
2–ϕ5
45°
ϕ30
52
40
2
R13
35
5
1.5
45°
9.5
6
45°
24.5
ϕ13
8
24.5
80
25

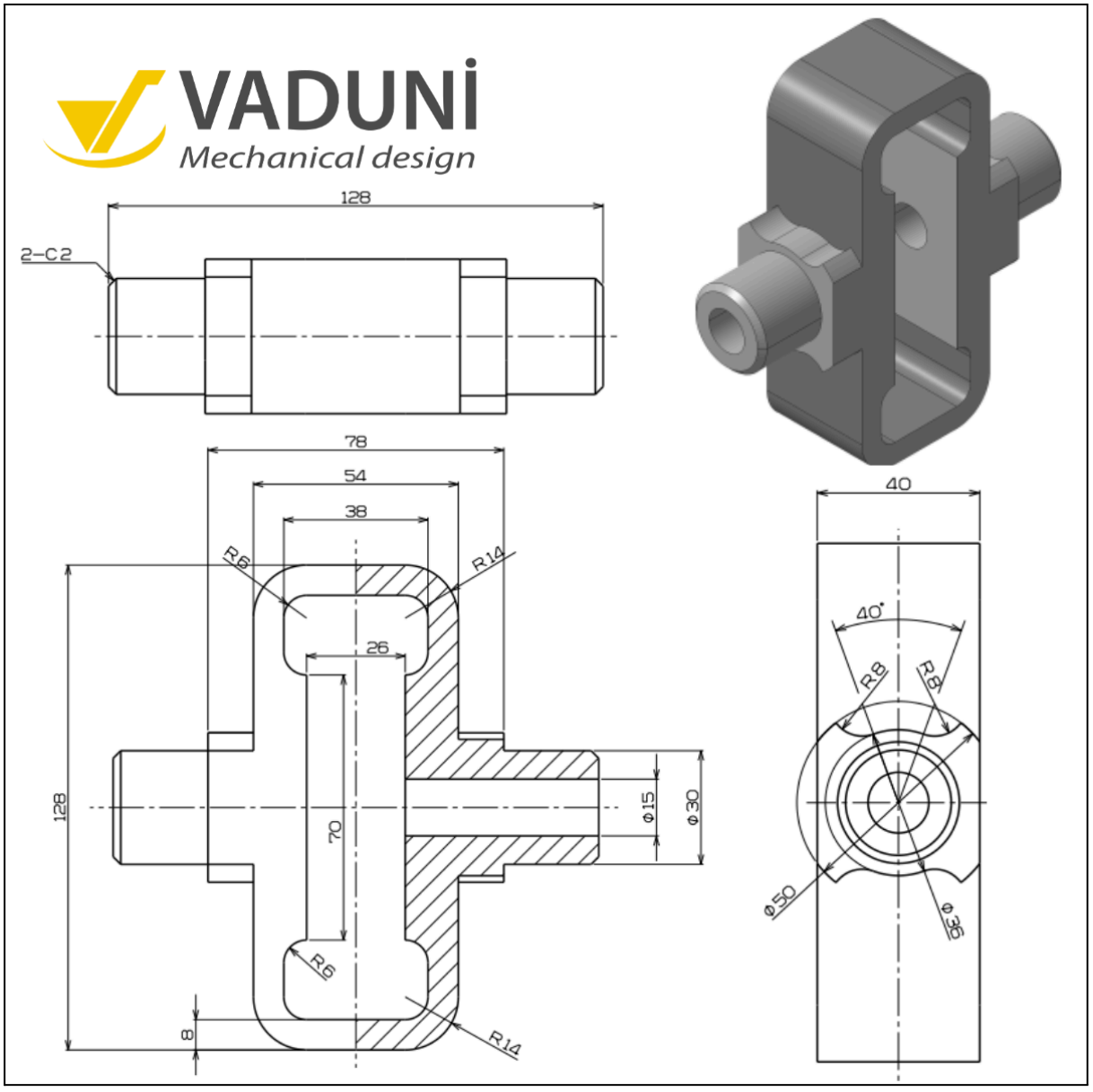
Bài tập 414


VADUNI
Mechanical design
φ104
φ85
φ50
30°
6
4
39
35
11
12
16(관통)
7
23
25.5
30
φ72
φ84
16
φ160
28
R8
R14
45°
φ200
φ130
4-φ12 (등각, 관통)

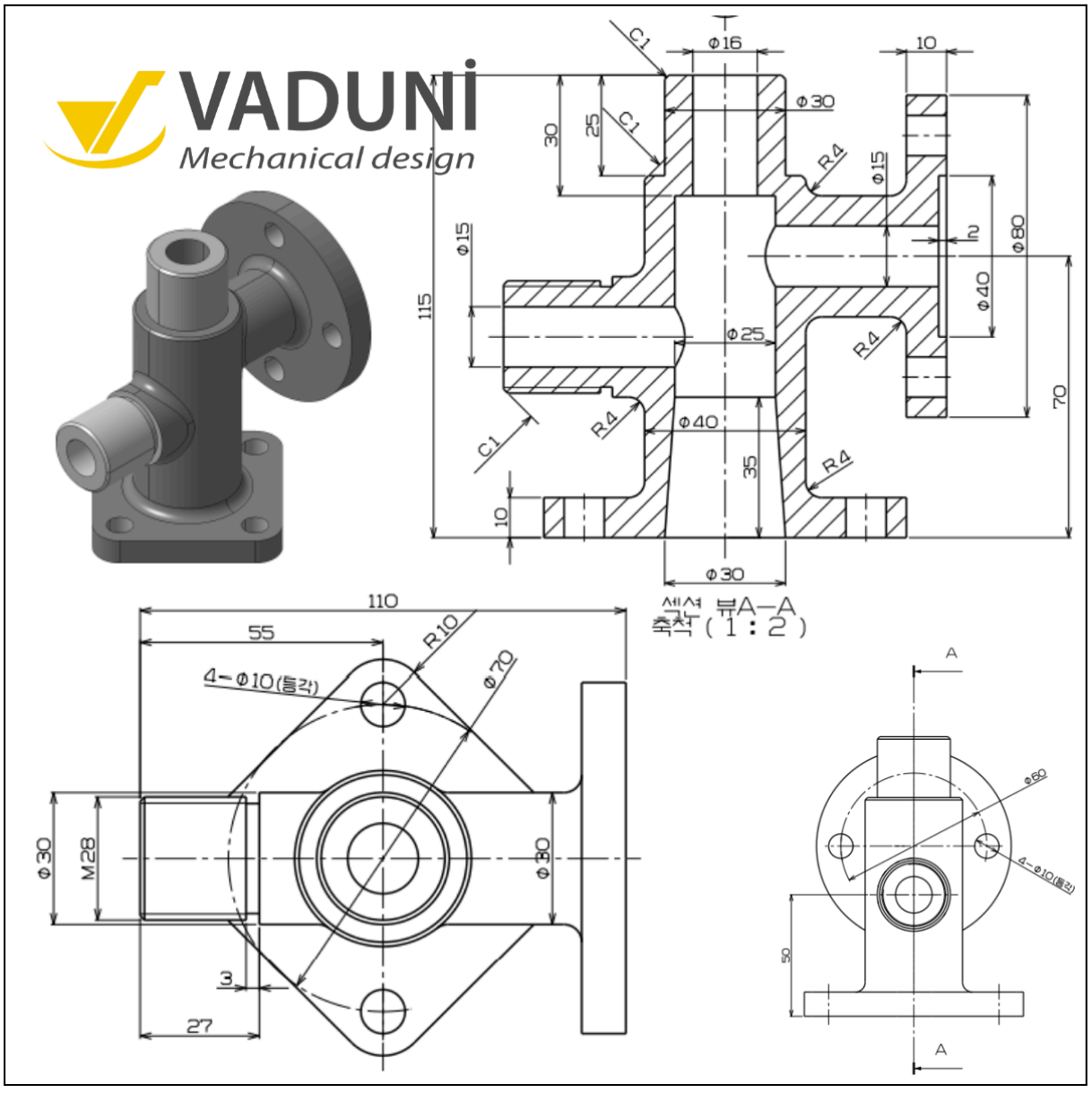
Bài tập 415


VADUNİ
Mechanical design
2–C1
144°
Φ23.86
74
90
Φ18
38
45°
2x45°
10
15
31
5
10
4–Φ11
3
40
38
60
90
80

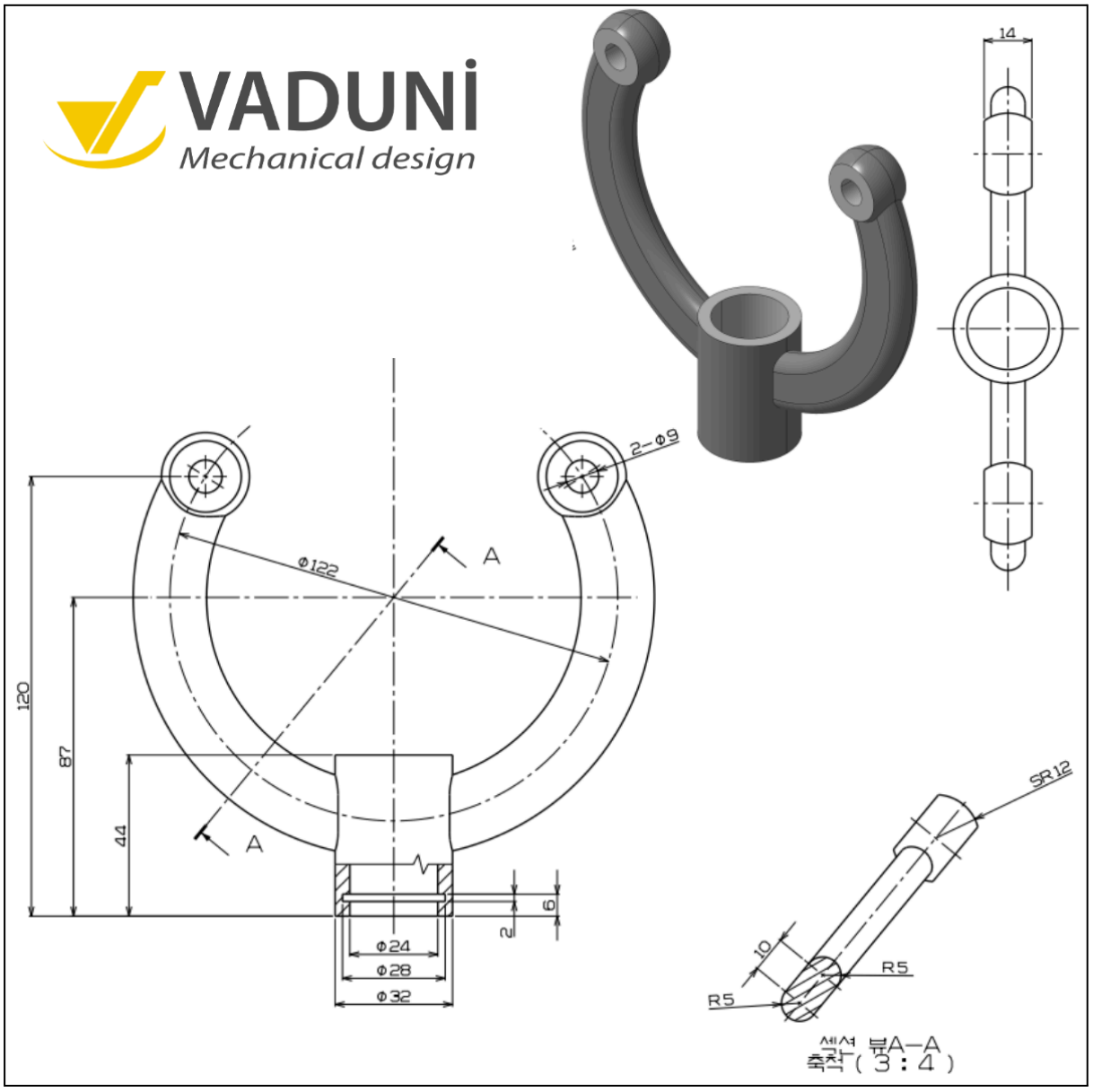
Bài tập 416


VADUNİ
Mechanical design
128
2–C2
78
54
38
R6
R14
26
128
70
ϕ15
ϕ30
R6
R14
8
40
40°
R8
R8
ϕ50
ϕ36

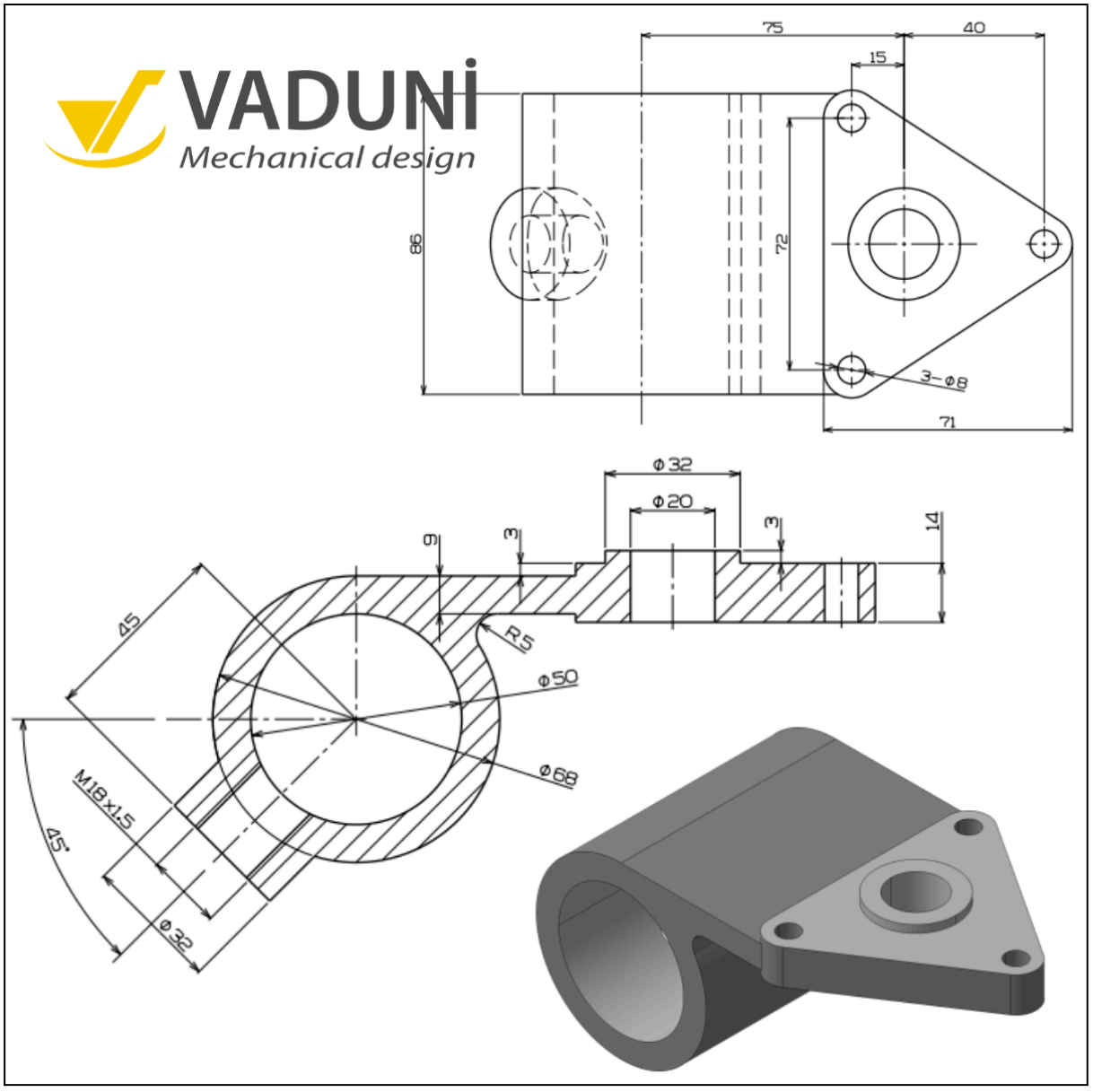
Bài tập 417


VADUNI
Mechanical design
C1
Φ16
10
Φ30
30
25
C1
R4
Φ15
Φ15
Φ80
Φ40
115
Φ25
R4
70
C1
R4
Φ40
35
R4
10
Φ30
110
55
R10
4-Φ10(틈각)
Φ70
Φ30
M28
Φ30
3
27
A
Φ60
4-Φ10(틈각)
50
A

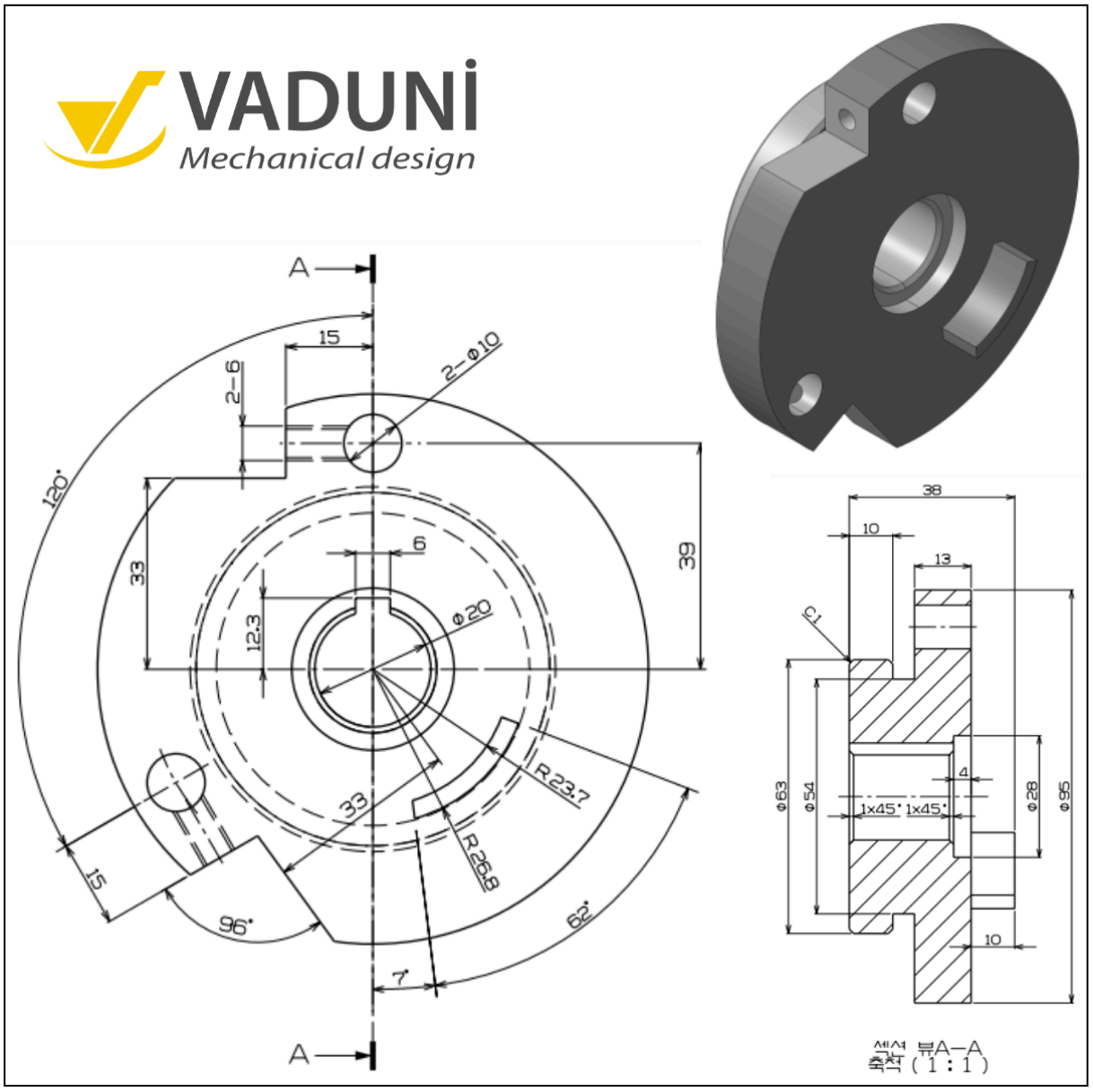
Bài tập 418


VADUNI
Mechanical design
14
2-Φ9
Φ122
A
A
120
87
44
6
2
Φ24
Φ28
Φ32
SR12
10
R5
R5
단면 뷰A-A
축척 (3 : 4)

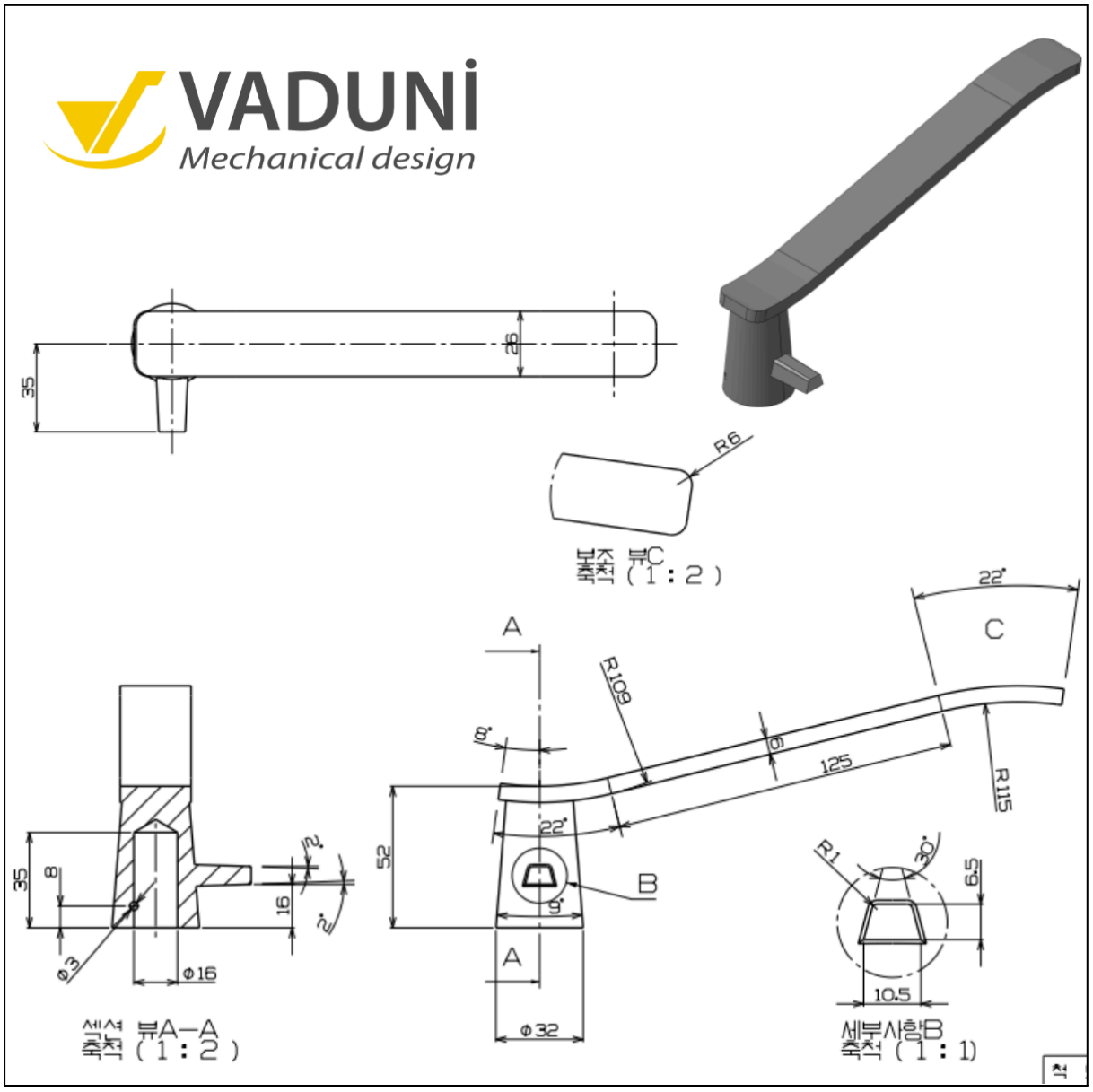
Bài tập 419


VADUNİ
Mechanical design
75
40
15
86
72
3-Φ8
71
Φ32
Φ20
9
3
3
14
45
R5
Φ50
Φ68
M18x1.5
45°
Φ32

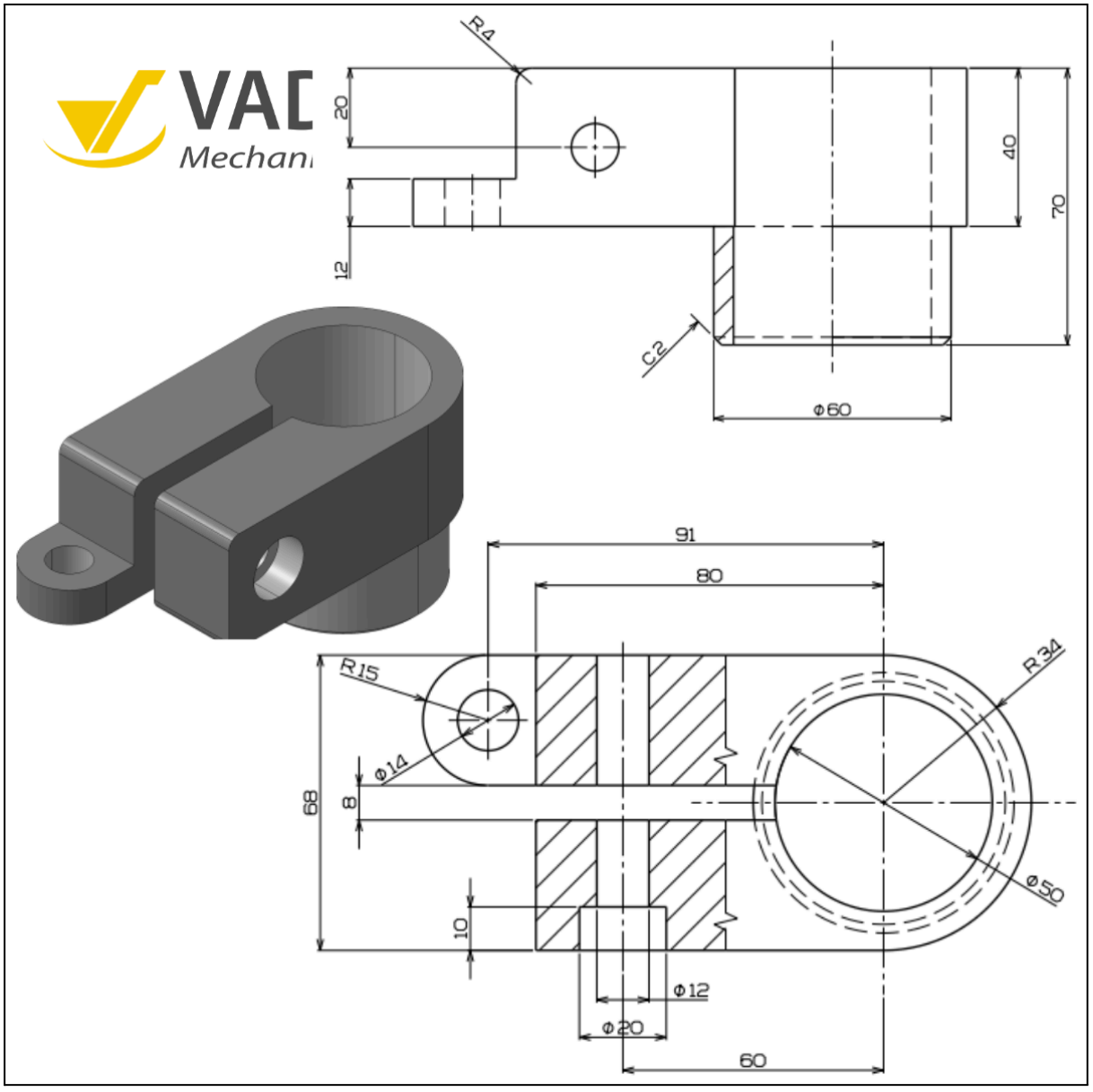
Bài tập 420


VADUNİ
Mechanical design
A
A
15
2-6
2-ø10
120°
33
6
12.3
ø20
39
33
R23.7
R26.8
15
96°
62°
7
38
10
13
C1
ø63
ø54
4
1x45°
1x45°
ø28
ø95
10
뷰A-A
척도 (1 : 1)

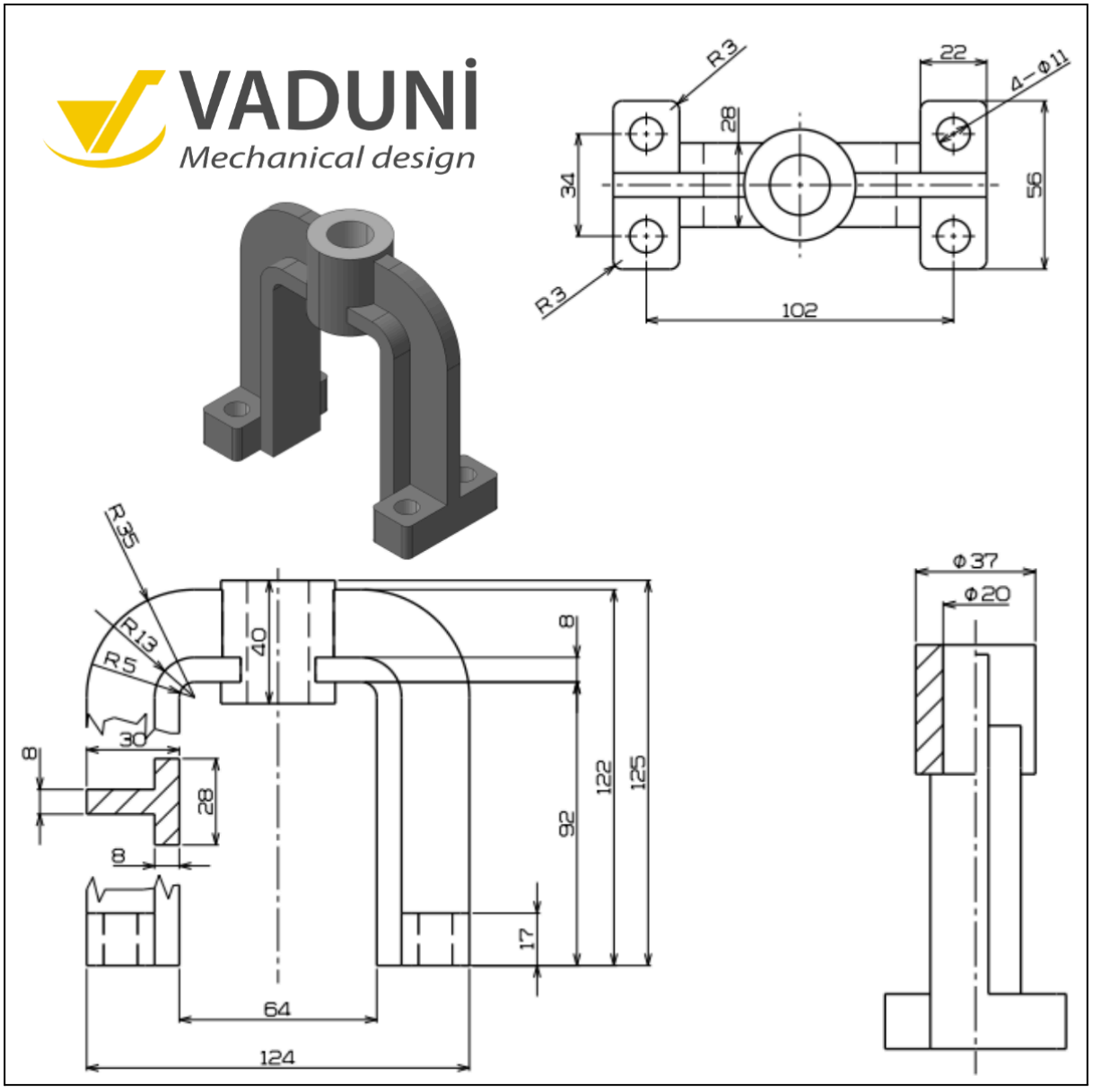
Bài tập 421


VADUNİ
Mechanical design
35
26
R6
부조 뷰C
축척 (1 : 2)
22°
C
A
R109
8°
10
125
R115
52
22°
B
9°
A
35
8
2°
16
2°
ø3
Φ16
Φ32
R1
30°
6.5
10.5
세부사항B
축척 (1 : 1)

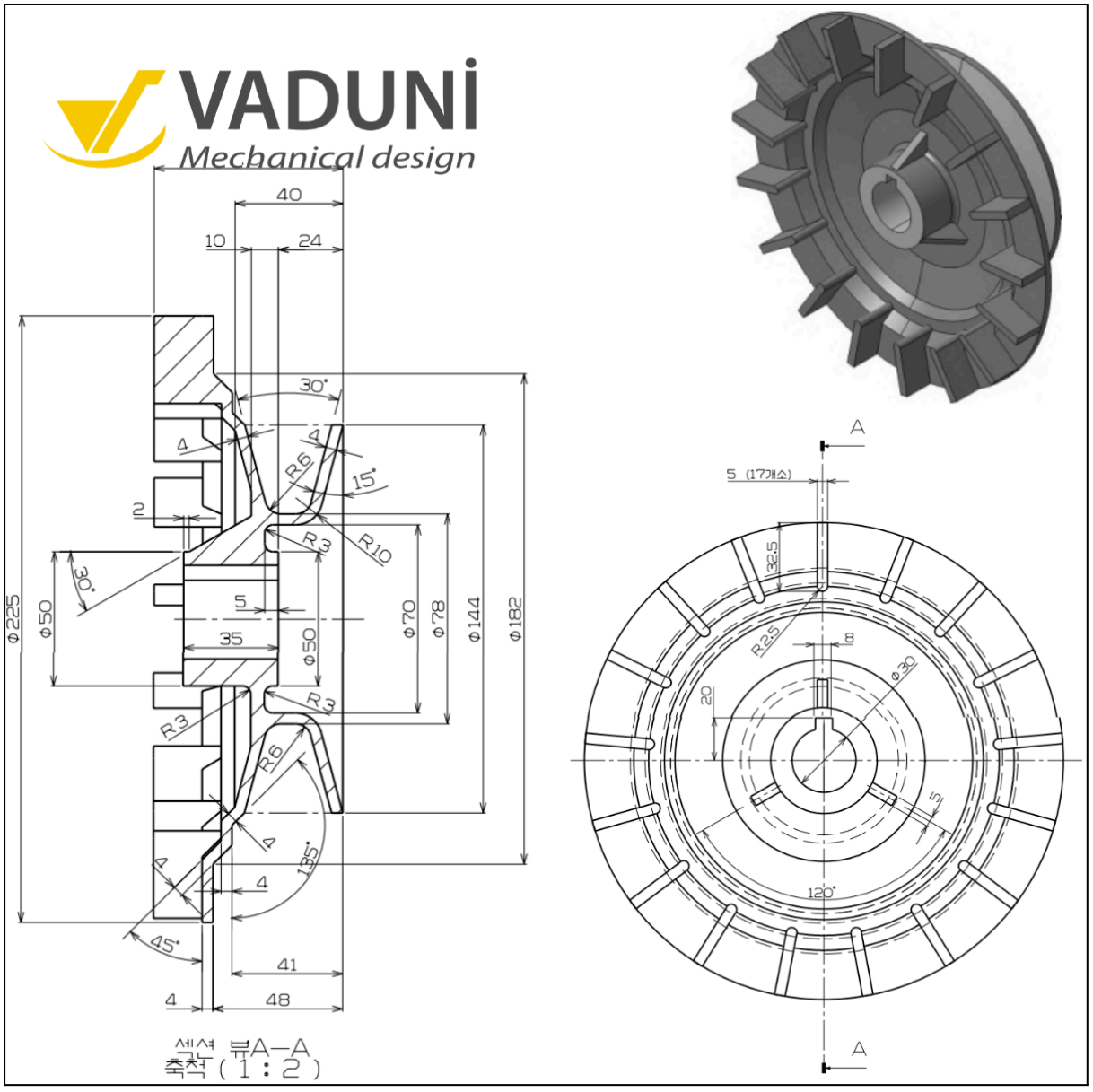
Bài tập 422



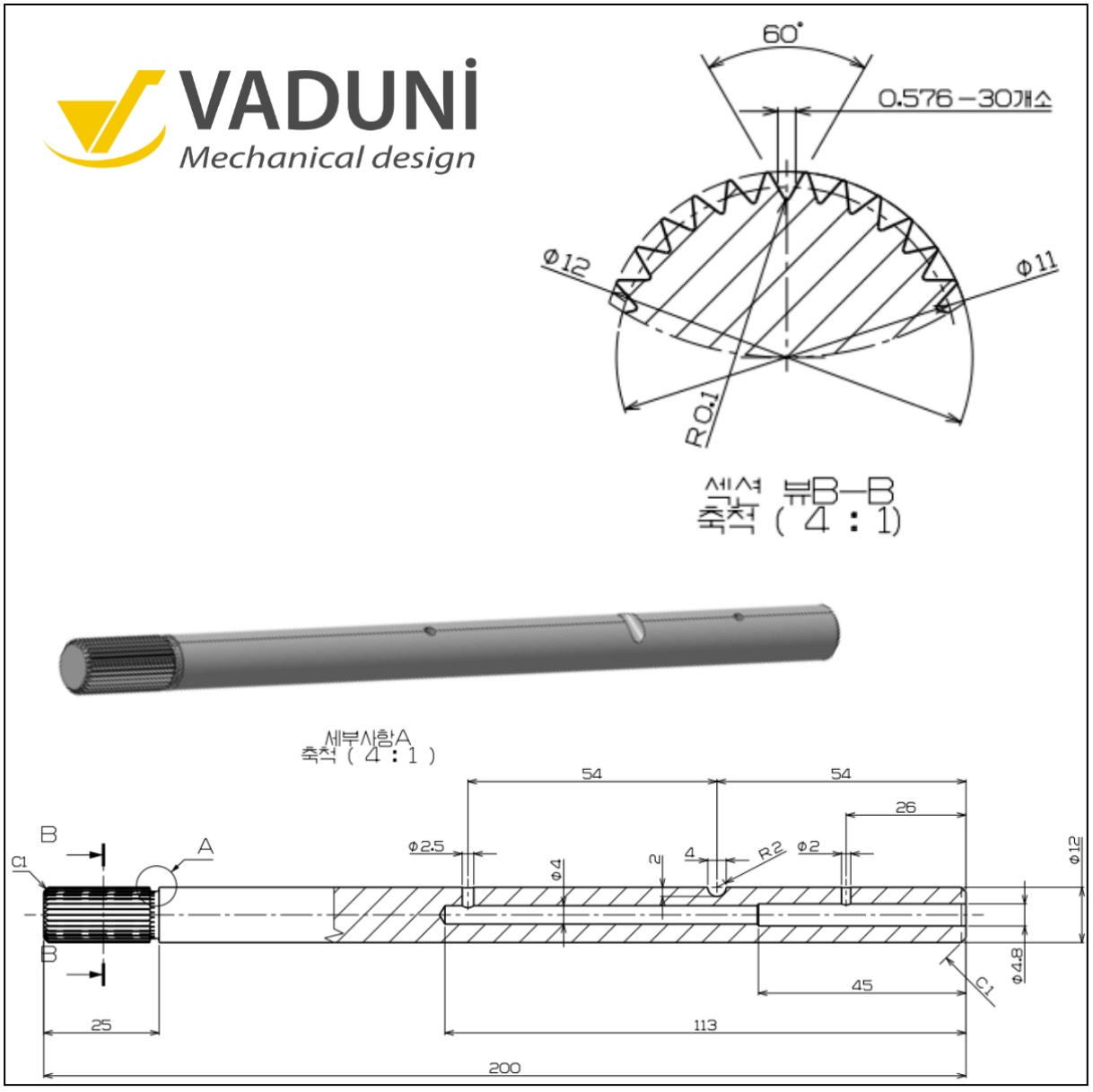
Bài tập 423


VADUNİ
Mechanical design
R3
22
4-Φ11
28
34
56
R3
102
R35
R13
R5
40
8
30
8
28
8
92
122
125
17
64
124
Φ37
Φ20

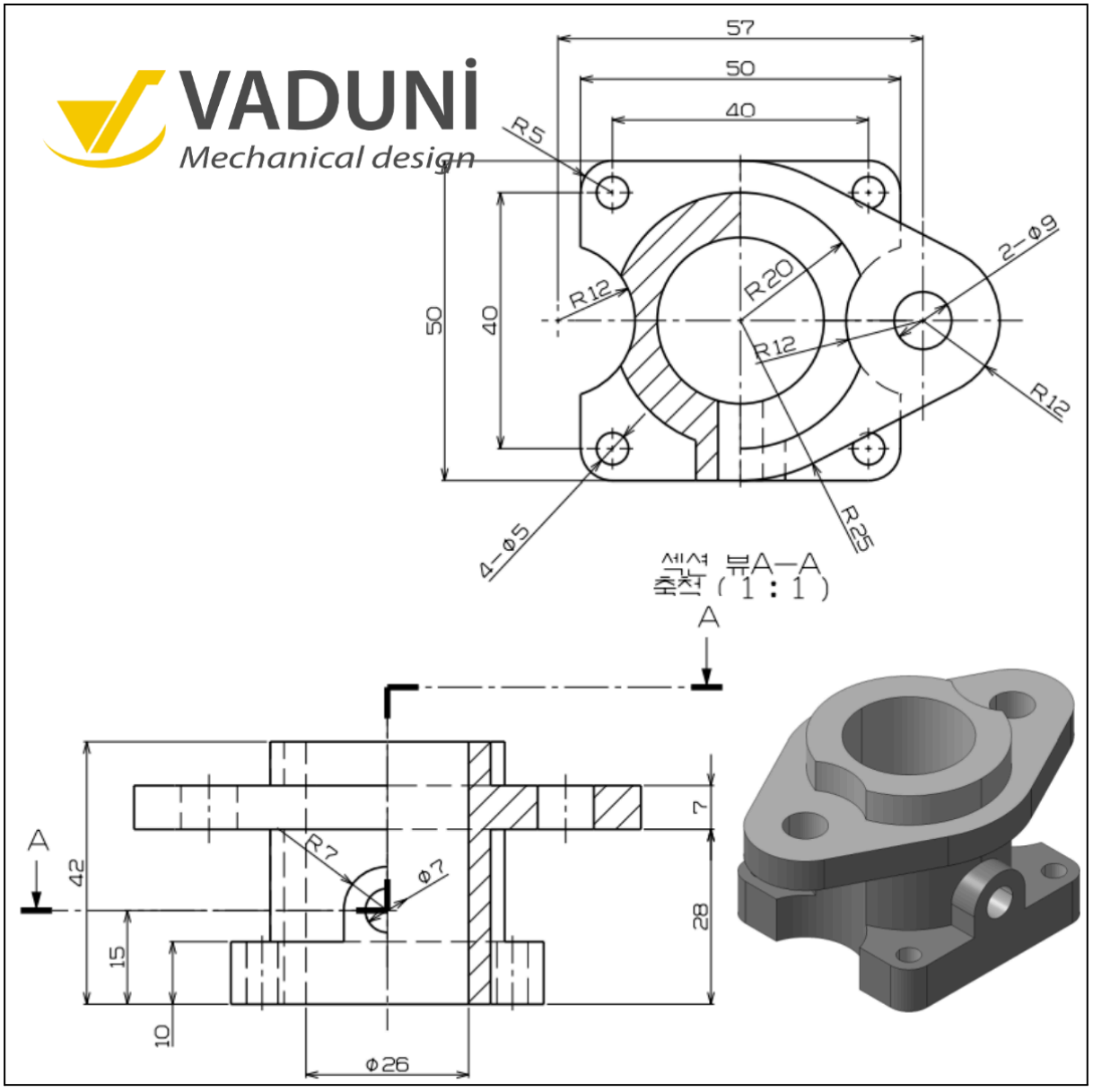
Bài tập 424


VADUNI
Mechanical design
40
10
24
30°
4
4
R6
15°
2
R3
R10
30°
5
35
Φ225
Φ50
Φ50
Φ70
Φ78
Φ144
Φ182
R3
R3
R6
4
4
4
135°
45°
41
4
48
단면 뷰A-A
축척 (1 : 2)
A
5 (17개소)
32.5
R2.5
8
Φ30
20
5
120°
A

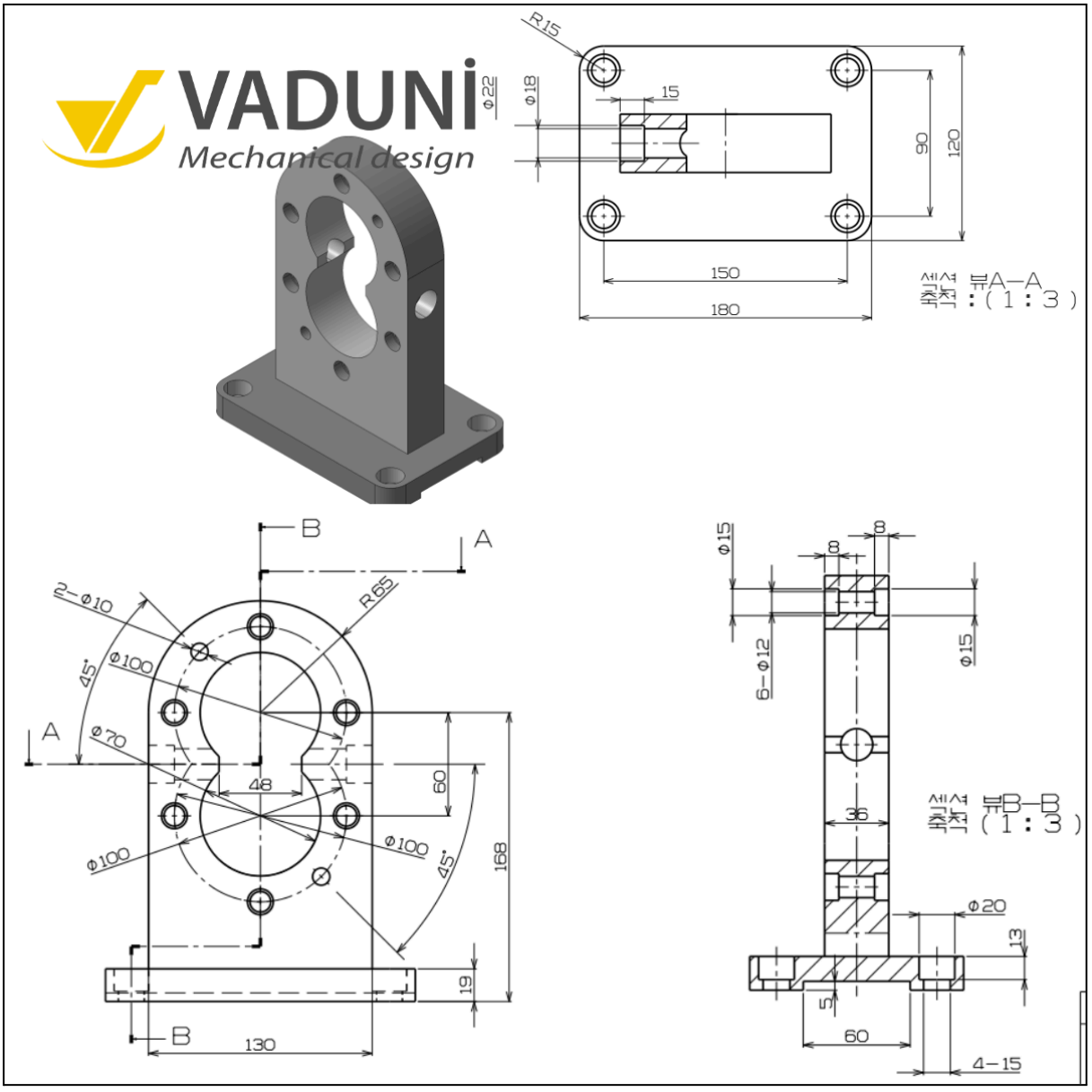
Bài tập 425


VADUNI
Mechanical design
60°
0.576 –30개소
Φ12
Φ11
R0.1
세부사항B–B
축척 (4 : 1)
세부사항A
축척 (4 : 1)
54
54
26
B
A
C1
Φ2.5
Φ4
2
4
R2
Φ2
Φ12
Φ4.8
C1
45
25
113
200

Bài tập 426

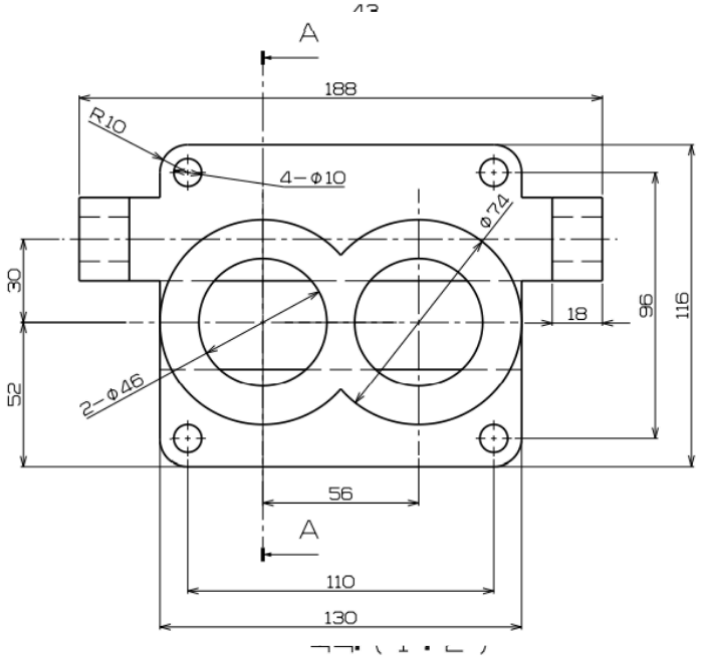

VADUNI
Mechanical design
57
50
40
R5
2-ø9
R12
R20
R12
R12
R25
50
40
4-ø5
A
A
42
15
10
R7
ø7
7
28
ø26

Bài tập 427

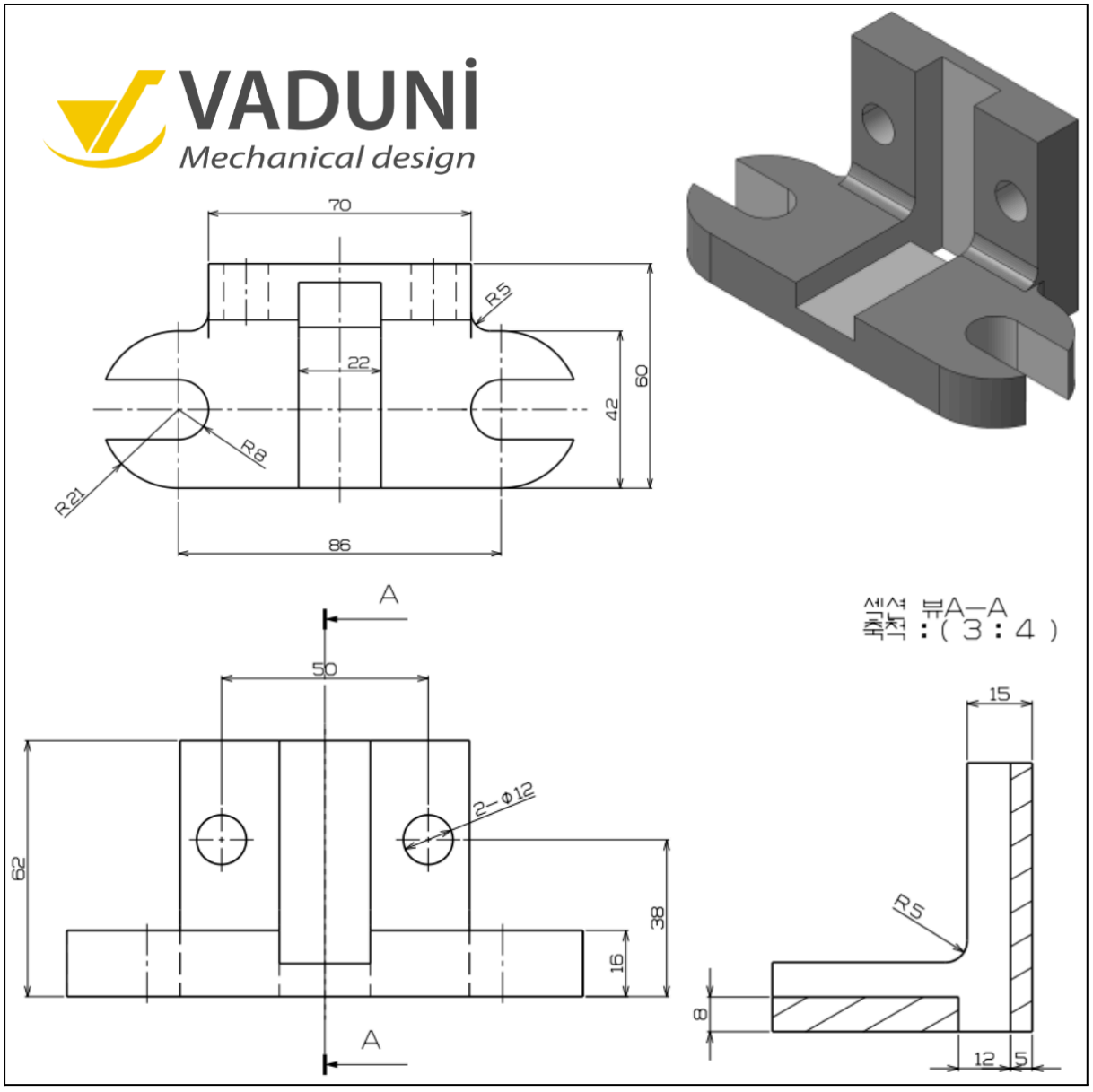

VADUNI
Mechanical design
R15
Φ22
Φ18
15
90
120
150
180
섹션 뷰A–A
척도 : (1 : 3)
B
A
2–Φ10
R65
45°
Φ100
A
Φ70
48
60
Φ100
Φ100
45°
168
19
B
130
Φ15
8
8
6–Φ12
Φ15
36
섹션 뷰B–B
척도 (1 : 3)
Φ20
13
5
60
4–15

Bài tập 428

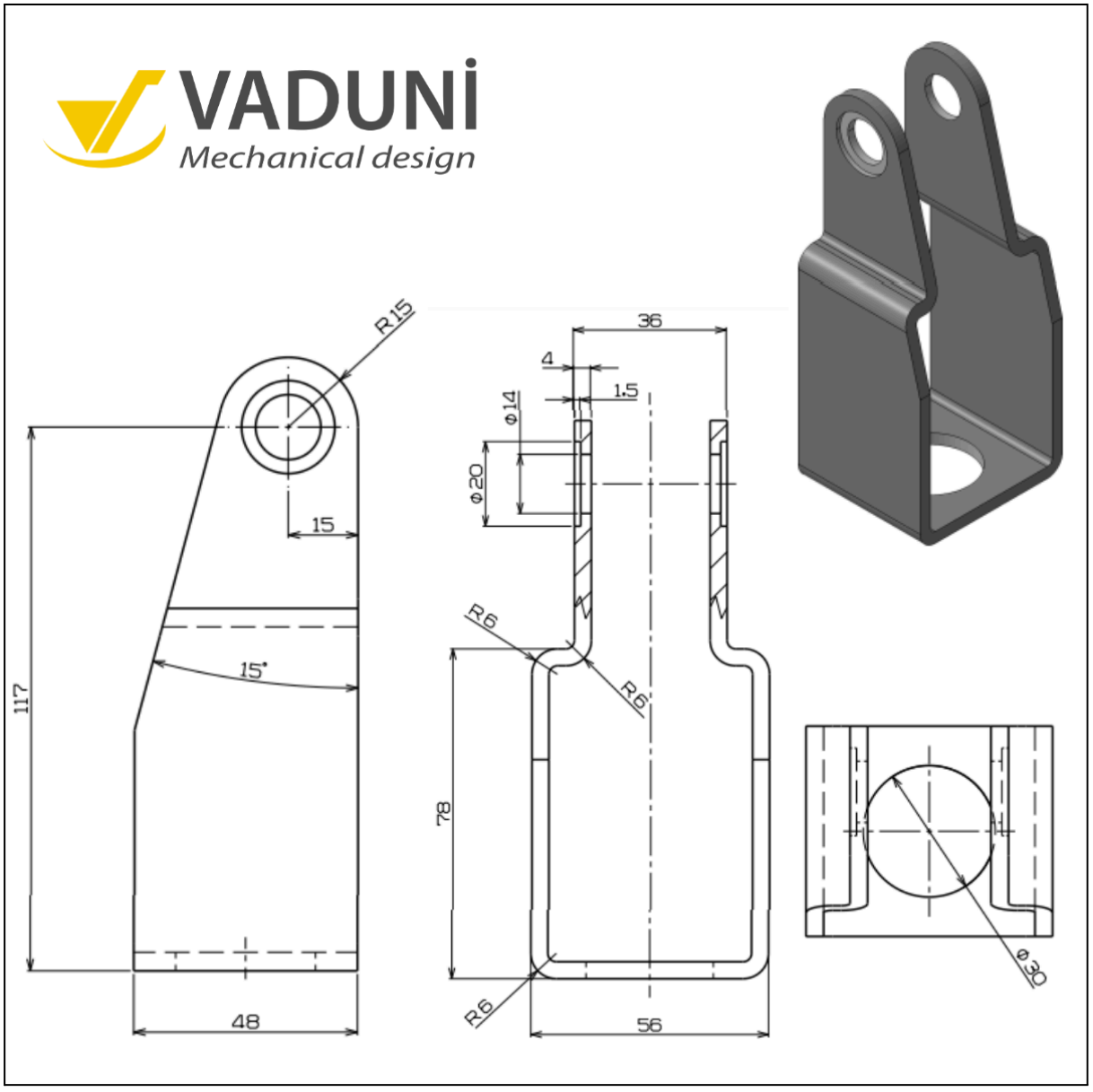
VADUNİ
Mechanical design



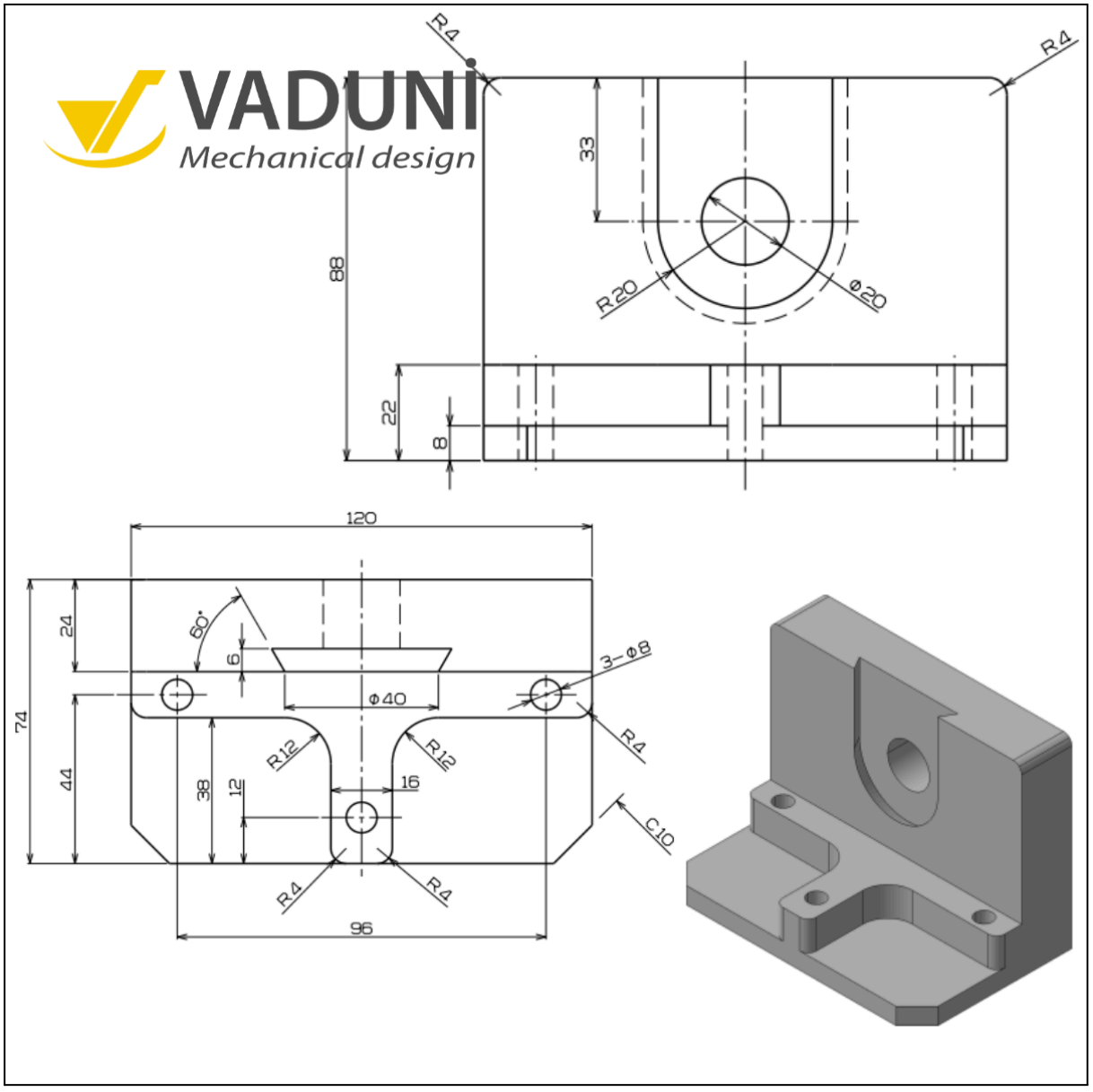
Bài tập 429


VADUNİ
Mechanical design
70
R5
22
60
42
R8
R21
86
A
50
62
2-Φ12
38
16
A
15
R5
8
12
5
뷰A-A
척도 : (3 : 4)

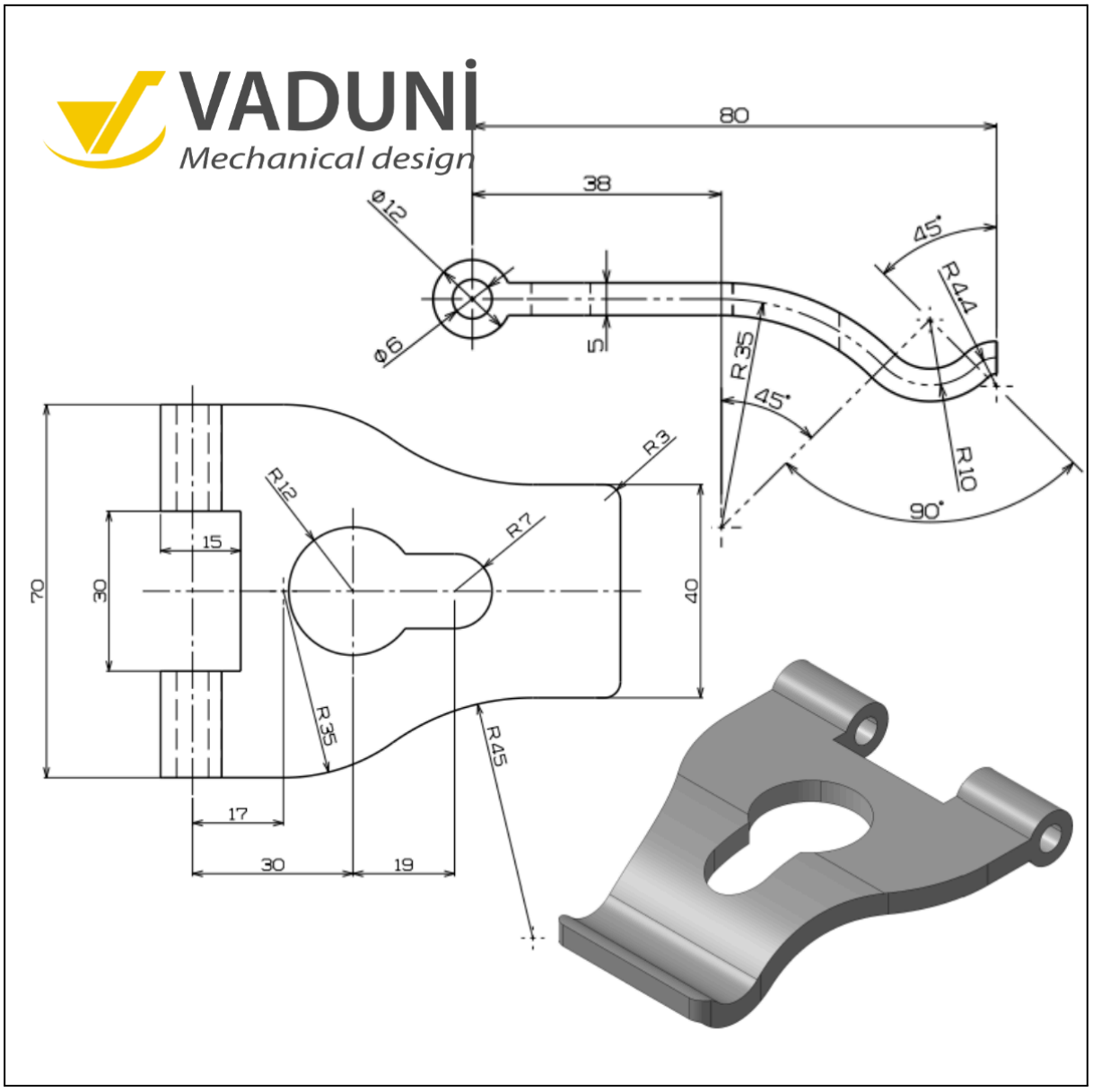
Bài tập 430


VADUNİ
Mechanical design
R15
15
15°
117
48
36
4
1.5
Φ14
Φ20
R6
R6
78
R6
56
Φ30

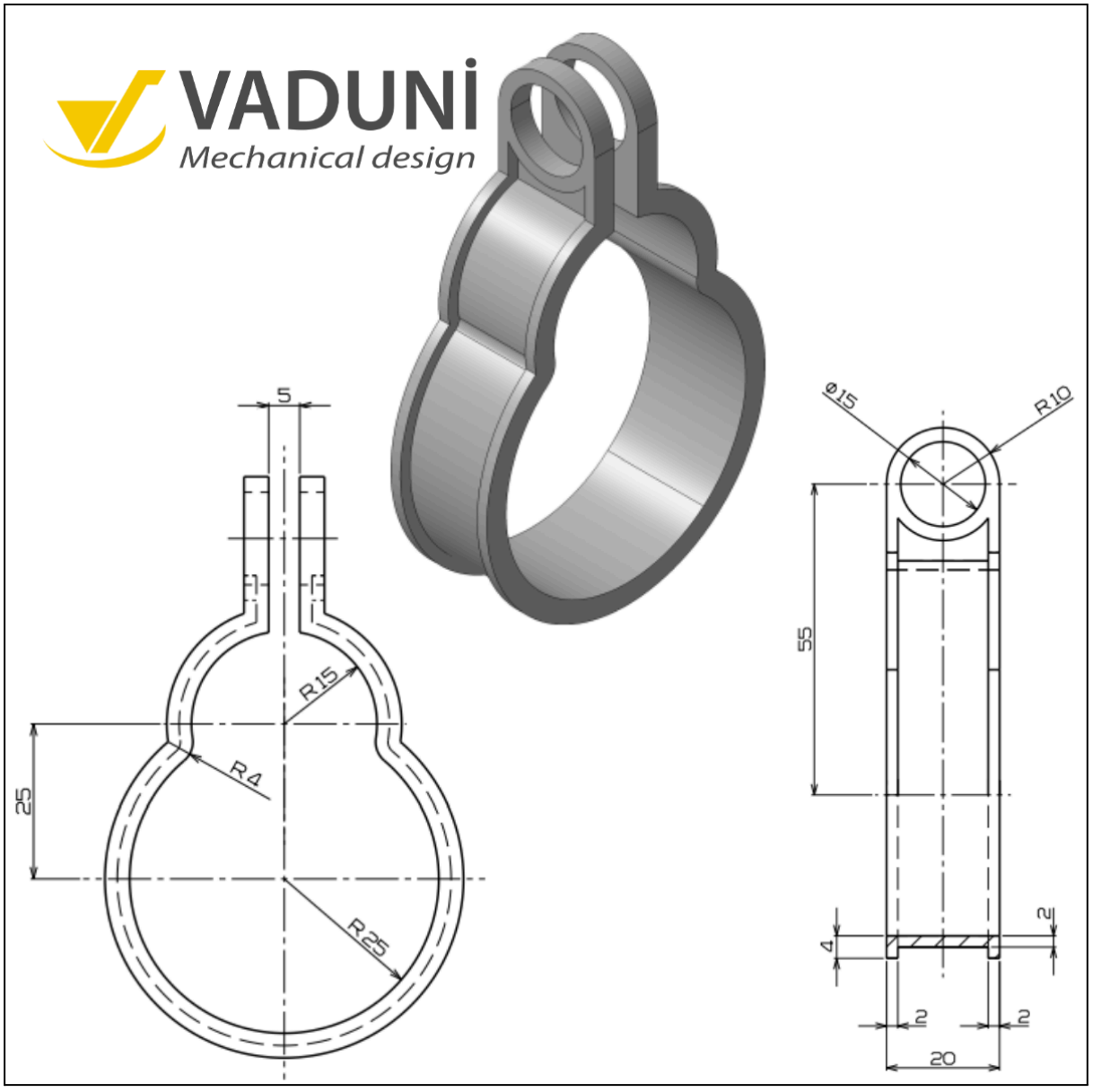
Bài tập 431


VADUNI
Mechanical design
R4
R4
33
88
R20
Φ20
22
8
120
24
60°
6
3-Φ8
Φ40
R4
74
44
38
12
R12
R12
16
C10
R4
R4
96

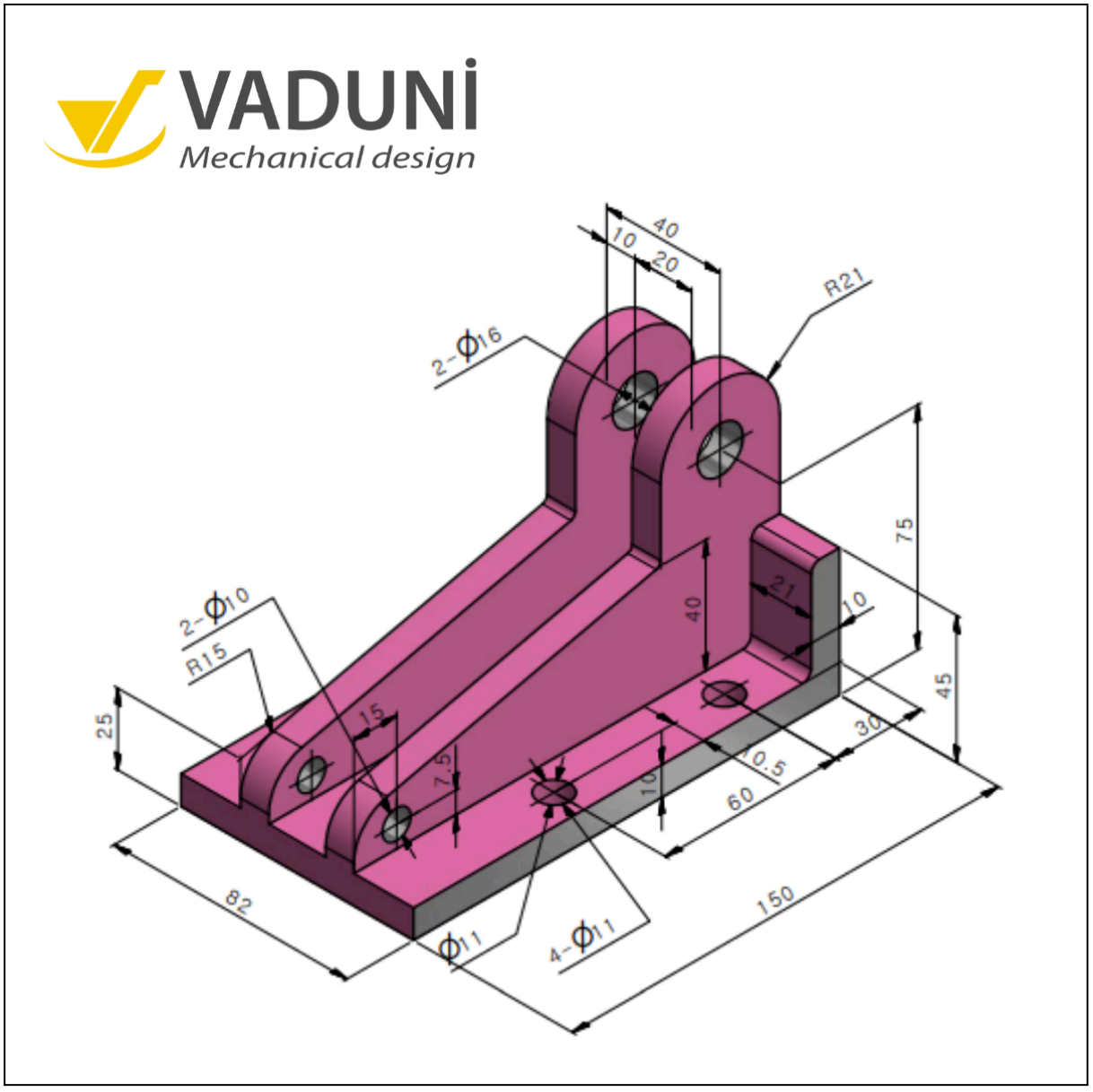
Bài tập 432


VADUNİ
Mechanical design
80
38
Ø12
Ø6
5
45°
R44
R35
45°
R10
90°
R3
R12
R7
15
70
30
40
R35
R45
17
30
19

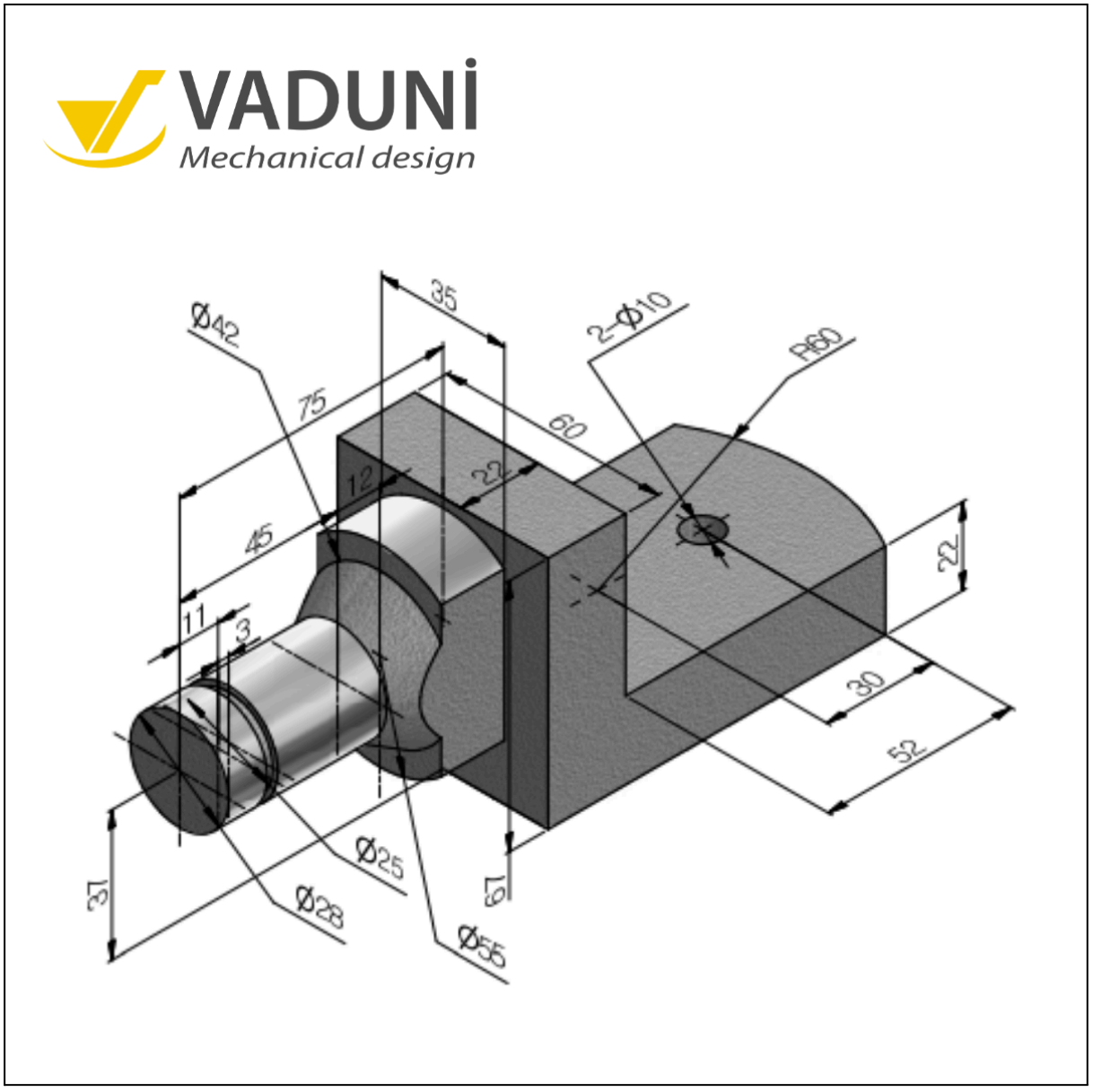
Bài tập 433



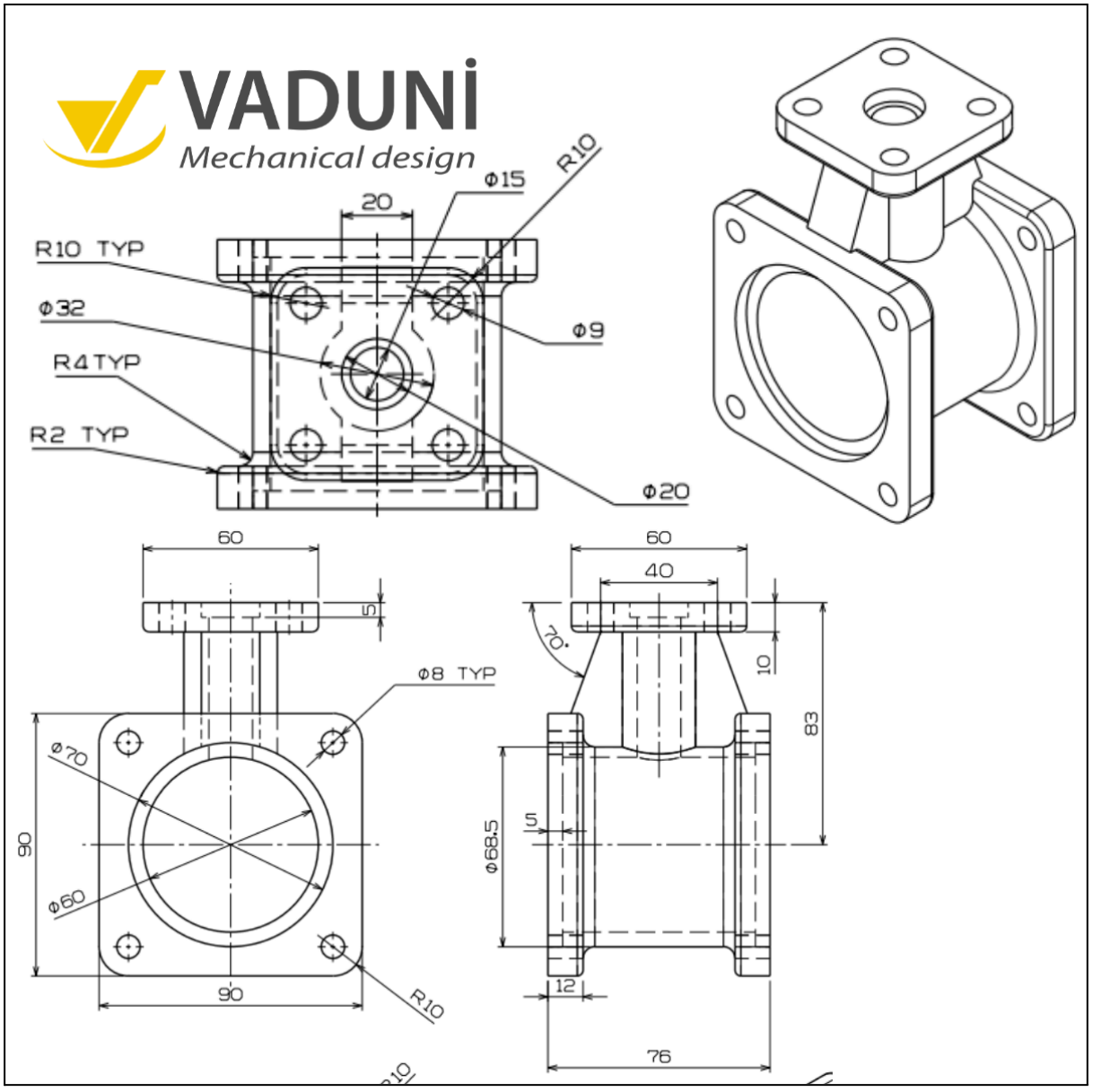
Bài tập 434


VADUNİ
Mechanical design
40
10
20
R21
2-Φ16
75
2-Φ10
R15
40
21
10
45
25
15
7.5
30
10.5
60
82
Φ11
4-Φ11
150

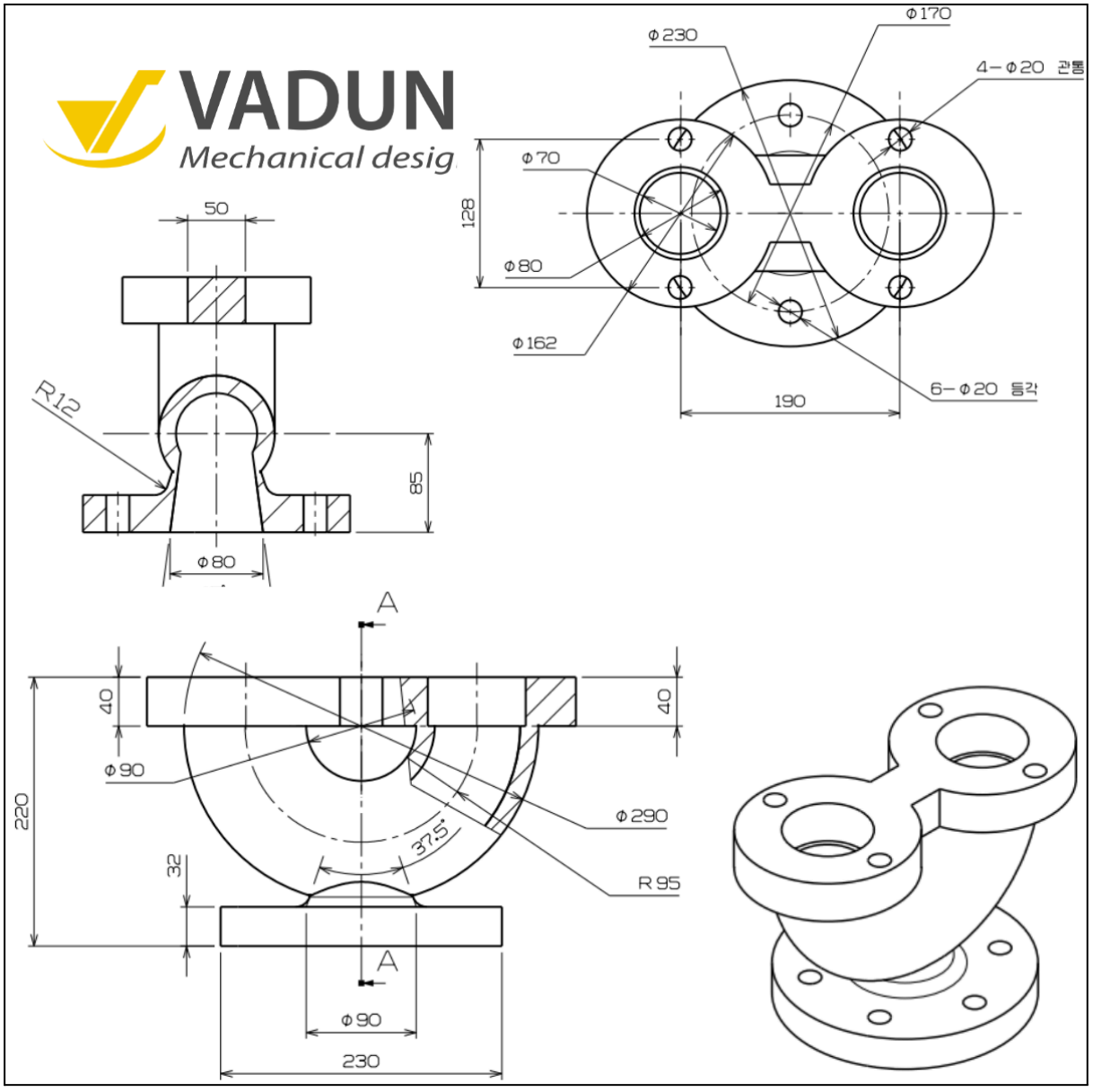
Bài tập 435


VADUNİ
Mechanical design
Ø42
35
2-Ø10
R60
75
60
12
22
45
11
3
22
30
52
37
Ø25
Ø28
19
Ø55

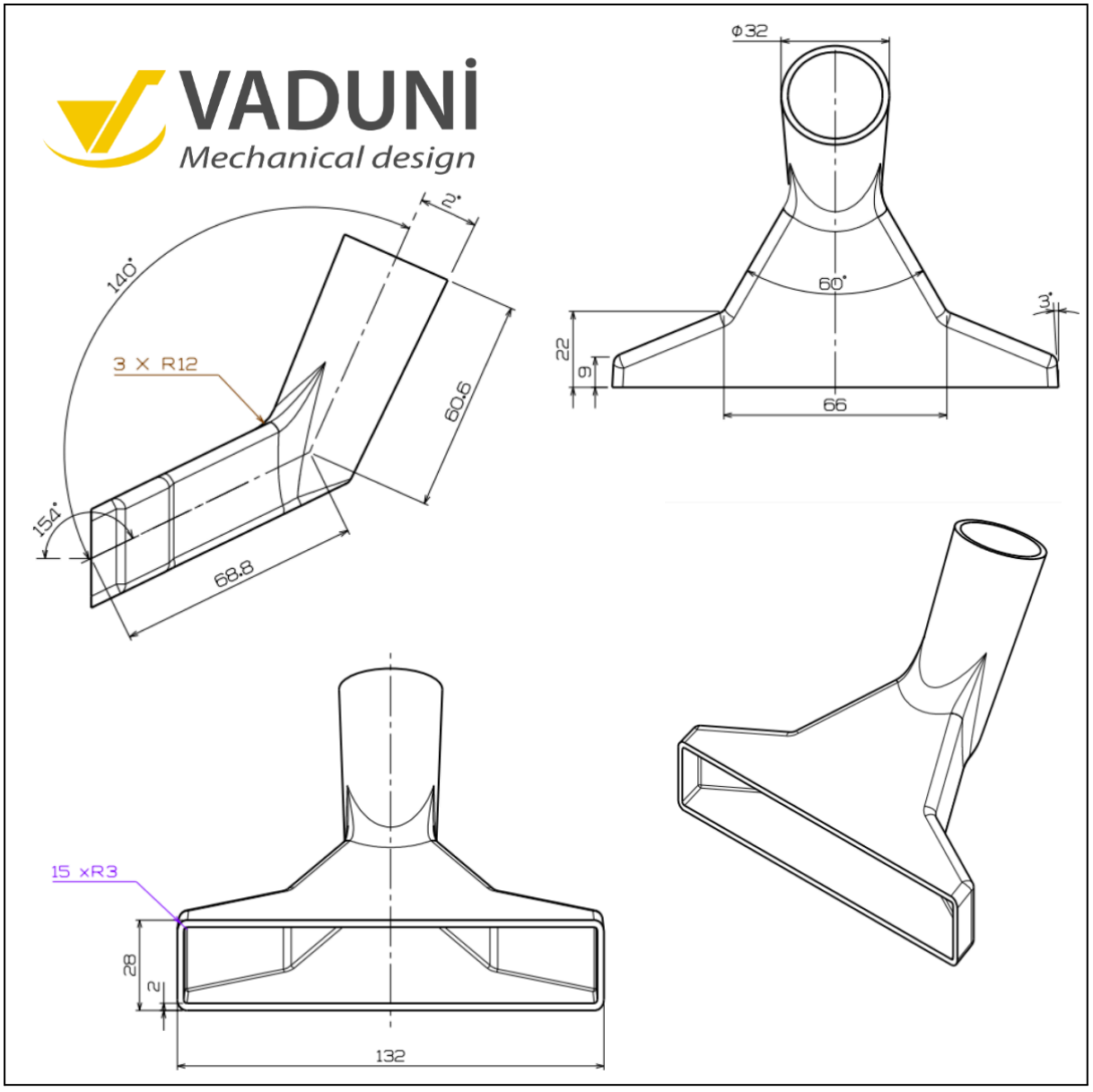
Bài tập 436


VADUNİ
Mechanical design
R10
Φ15
20
R10 TYP
Φ32
Φ9
R4 TYP
R2 TYP
Φ20
60
5
Φ8 TYP
Φ70
Φ60
90
90
R10
60
40
70°
10
83
Φ68.5
5
12
76

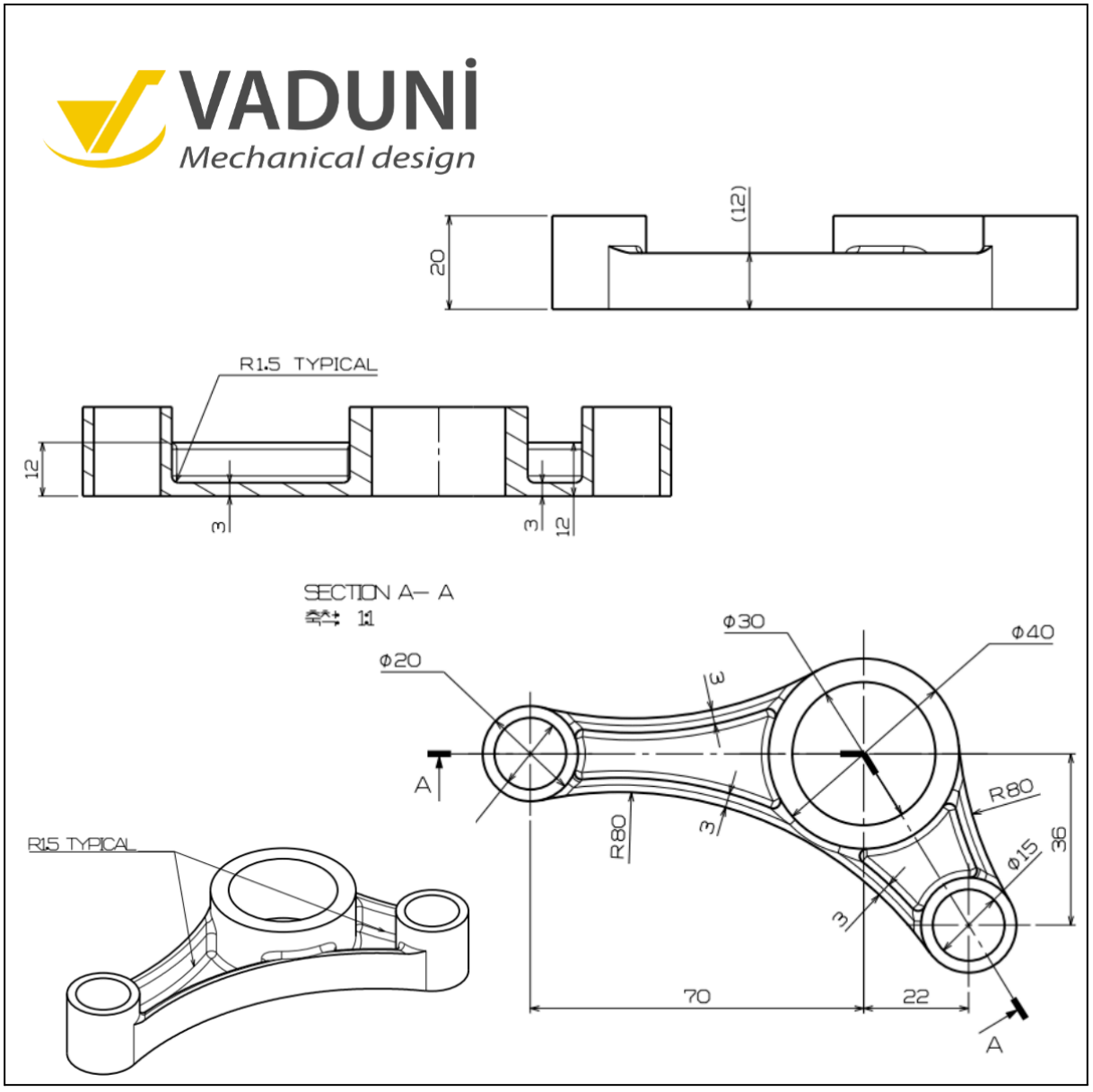
Bài tập 437


VADUN
Mechanical desig
Φ230
Φ170
4−Φ20 관통
Φ70
128
Φ80
Φ162
190
6−Φ20 등각
50
R12
85
Φ80
A
40
40
Φ90
Φ290
220
37.5°
32
R95
A
Φ90
230

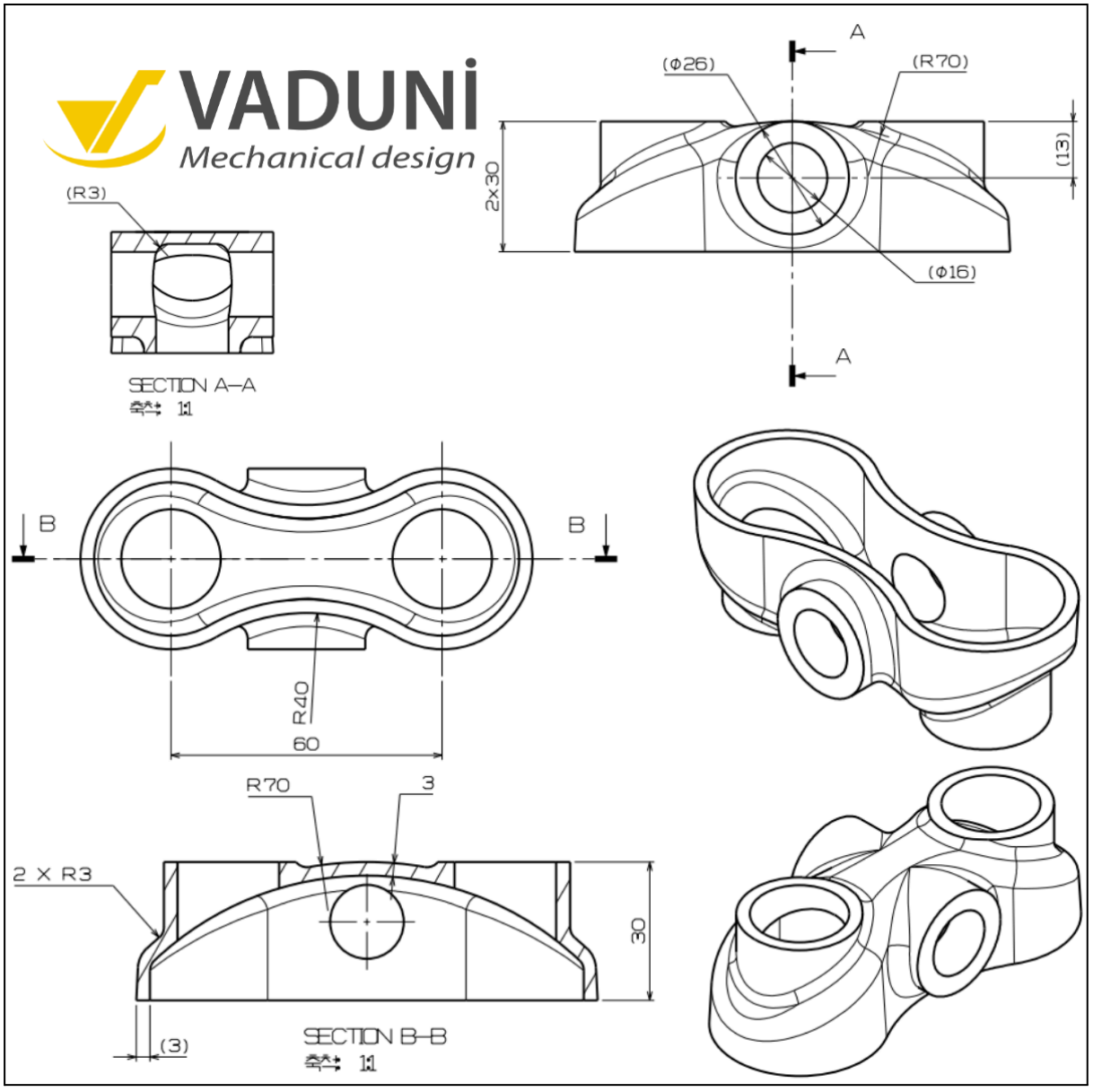
Bài tập 438


VADUNİ
Mechanical design
Φ32
2°
140°
3 X R12
60.6
154°
68.8
60°
3°
22
9
66
15 xR3
28
2
132

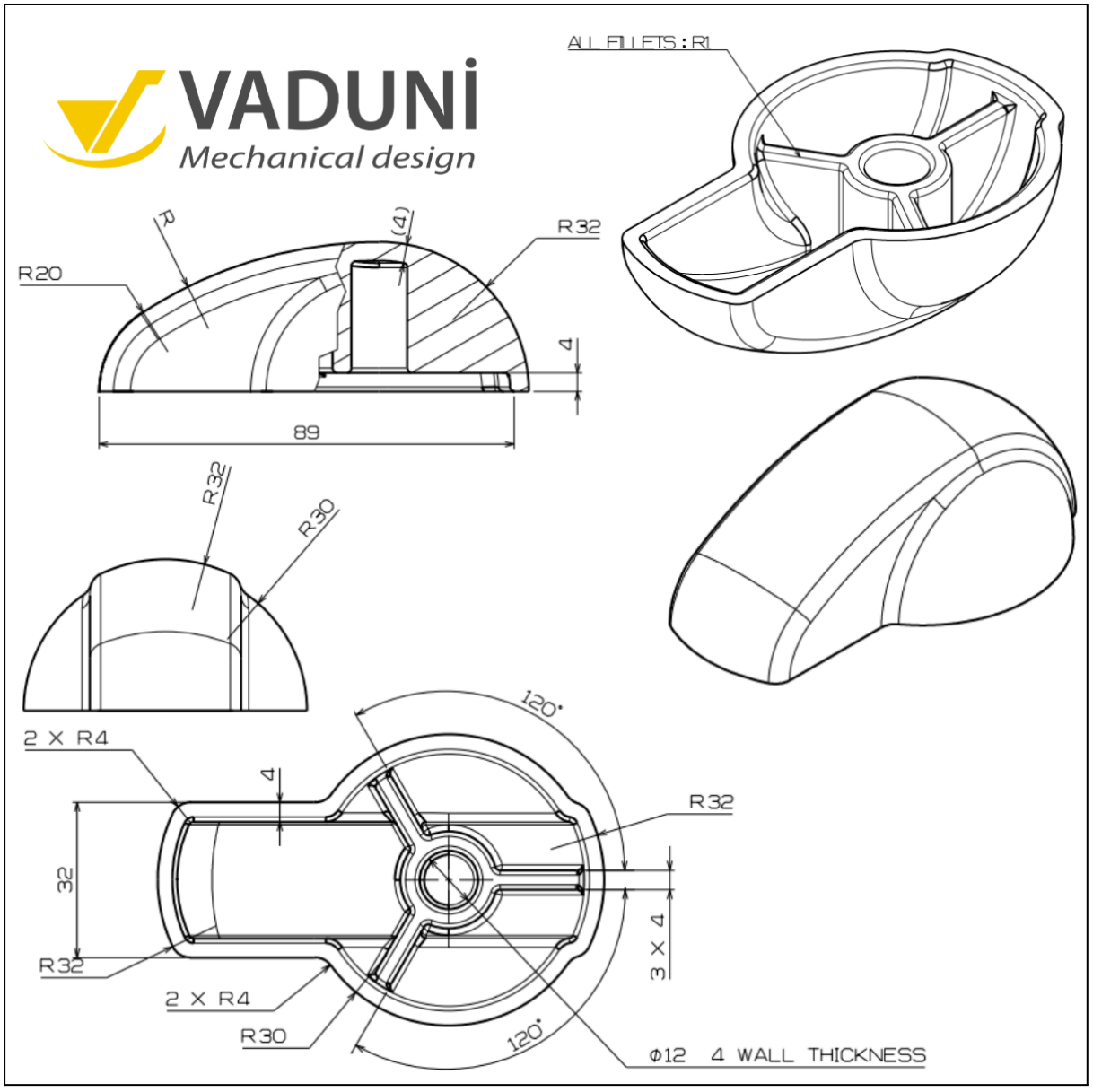
Bài tập 439


VADUNİ
Mechanical design
20
(12)
R1.5 TYPICAL
12
3
3
12
SECTION A– A
SCALE 1:1
Φ20
Φ30
Φ40
3
A
R80
3
R80
Φ15
36
3
70
22
A
R1.5 TYPICAL

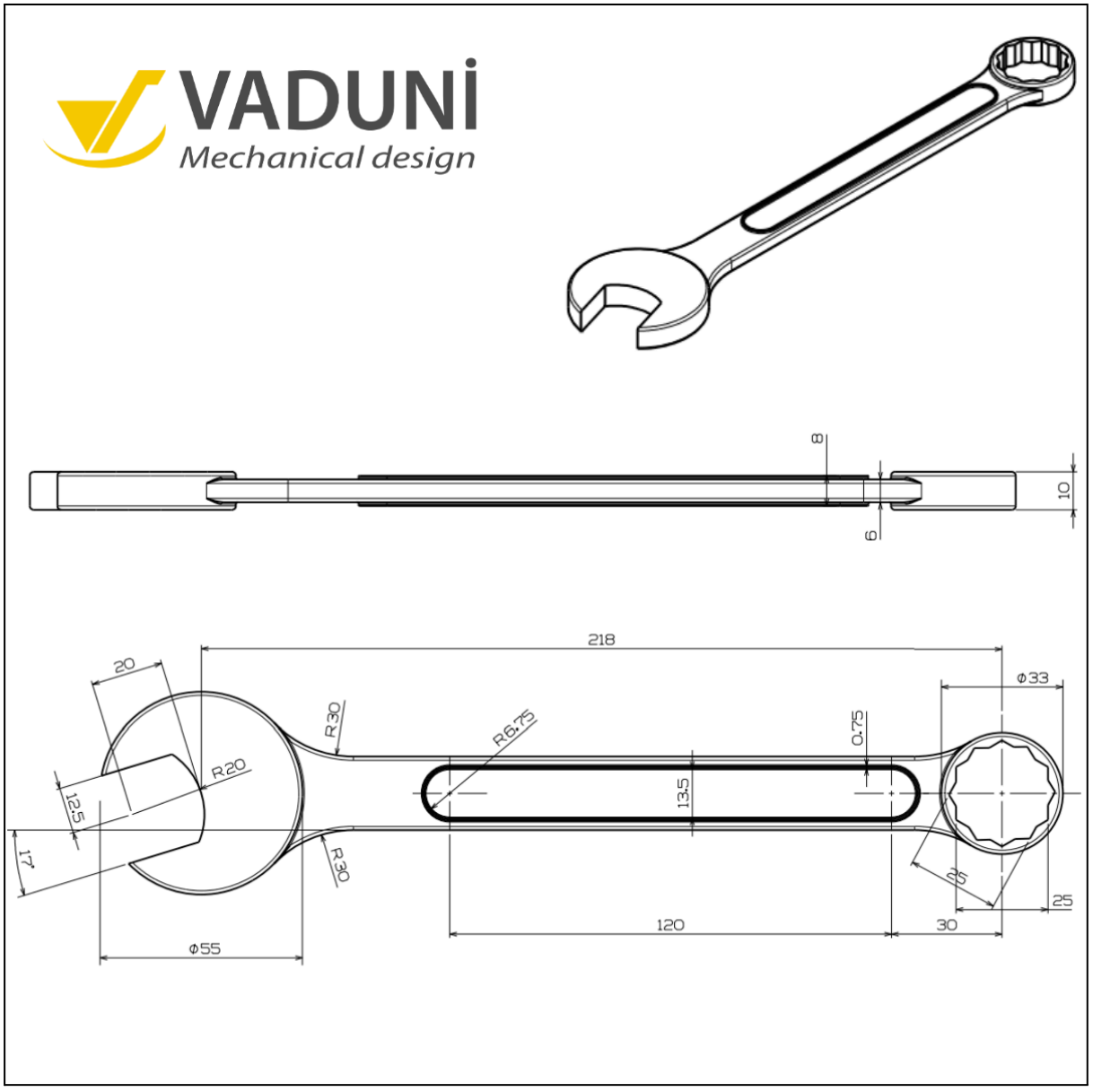
Bài tập 440


VADUNİ
Mechanical design
A
(Φ26)
(R70)
(13)
2x30
(Φ16)
A
(R3)
SECTION A–A
척도 1:1
B
B
R40
60
R70
3
2 X R3
30
(3)
SECTION B–B
척도 1:1

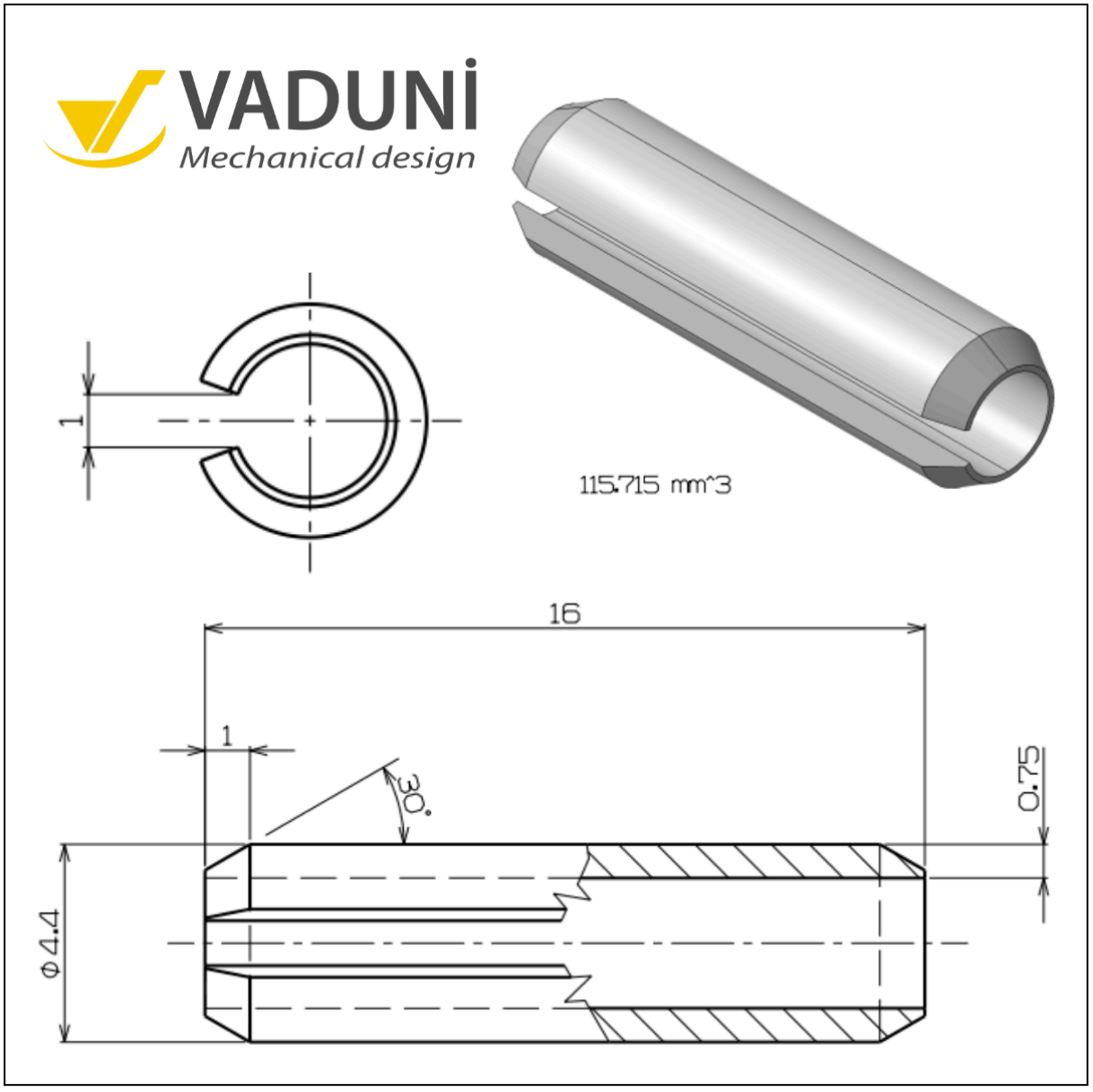
Bài tập 441


VADUNI
Mechanical design
ALL FILLETS : R1
R20
R32
4
89
R32
R30
120°
2 X R4
4
R32
32
3 X 4
R32
2 X R4
R30
120°
Φ12 4 WALL THICKNESS

Bài tập 442

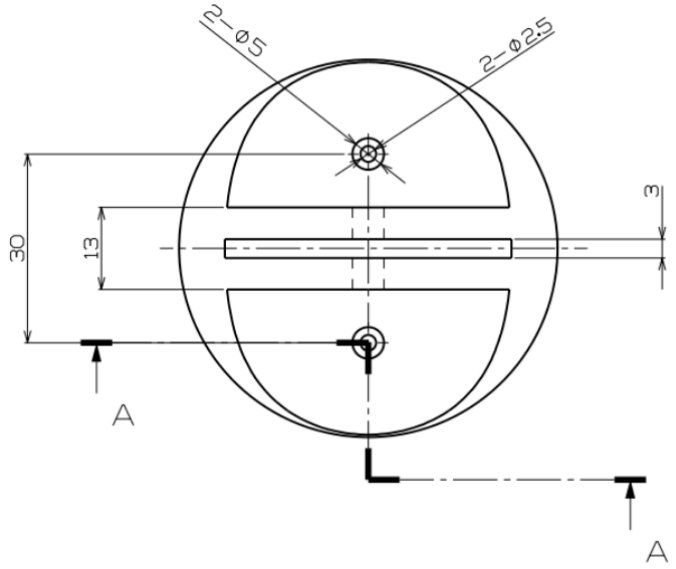

VADUNİ
Mechanical design
8
6
10
218
20
R30
R6.75
0.75
Φ33
R20
12.5
13.5
17
R30
25
25
120
30
Φ55

Bài tập 443

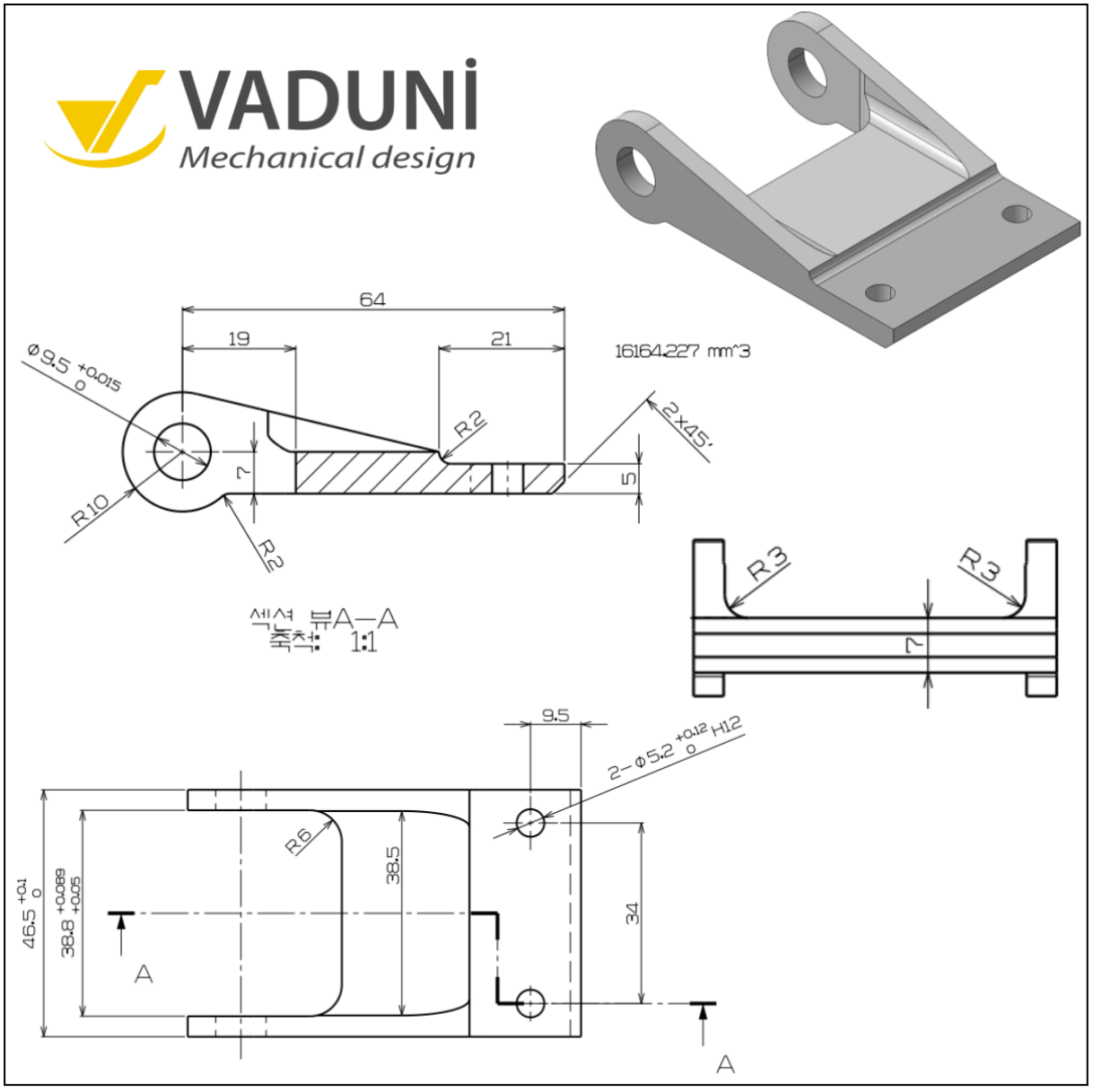


Bài tập 444

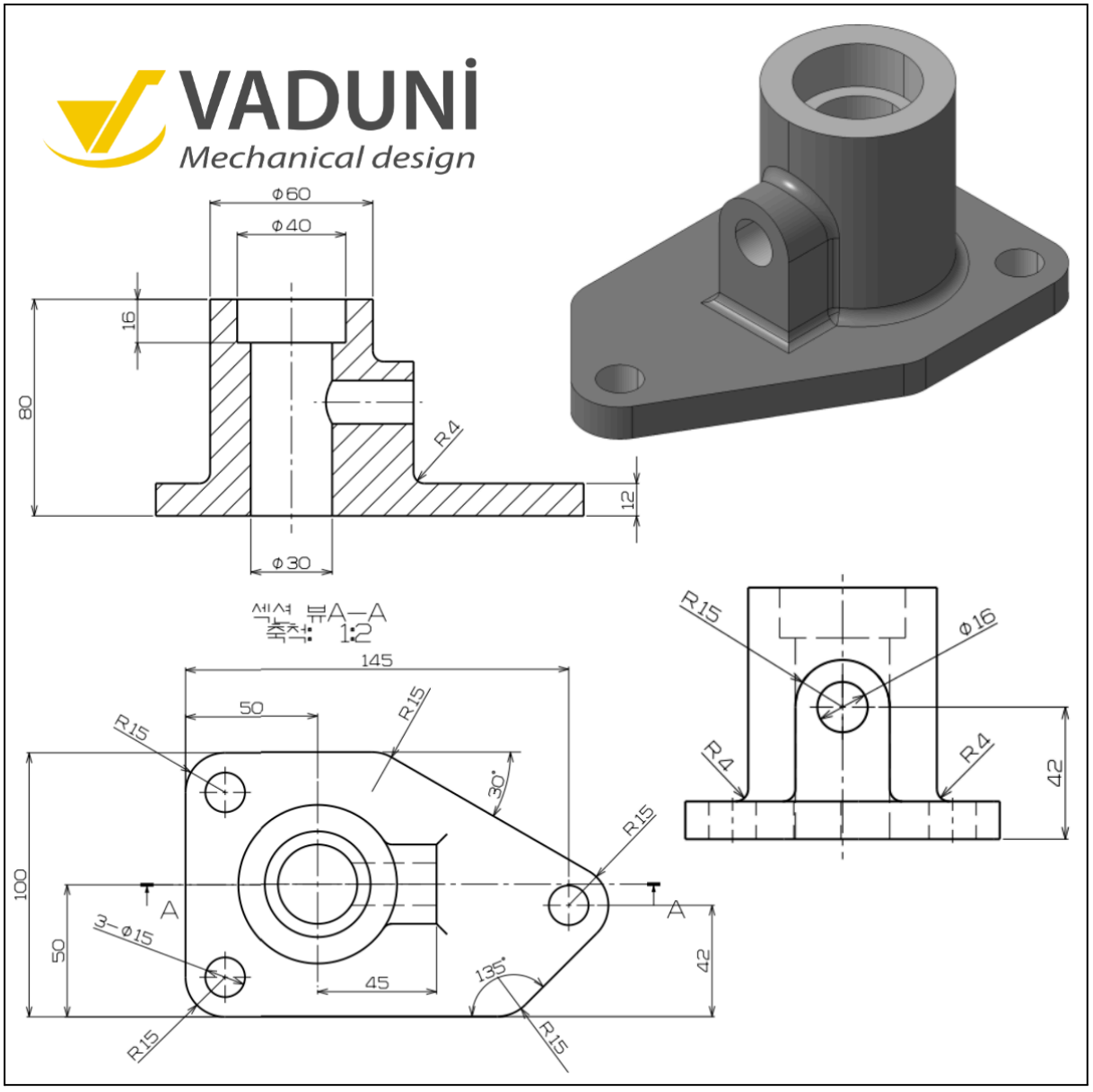
VADUNİ
Mechanical design



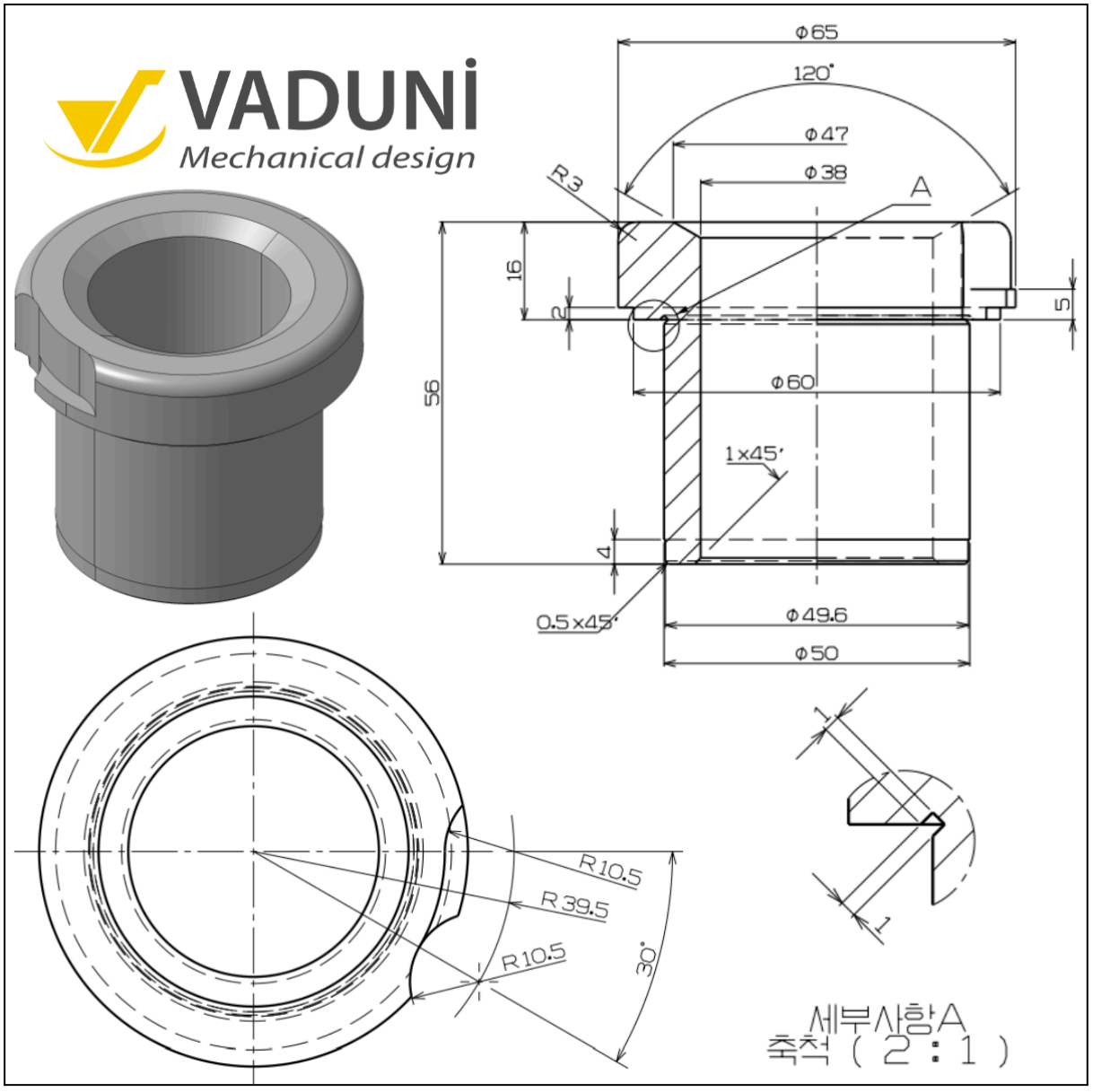
Bài tập 445


VADUNİ
Mechanical design
64
19
21
16164.227 mm^3
Ø9.5 +0.015 0
R2
2x45°
R10
R2
7
5
섹션 뷰A—A
축척: 1:1
R3
R3
7
9.5
2— Ø5.2 +0.12 0 H12
R6
38.5
34
46.5 +0.1 0
38.8 +0.089 +0.05
A
A

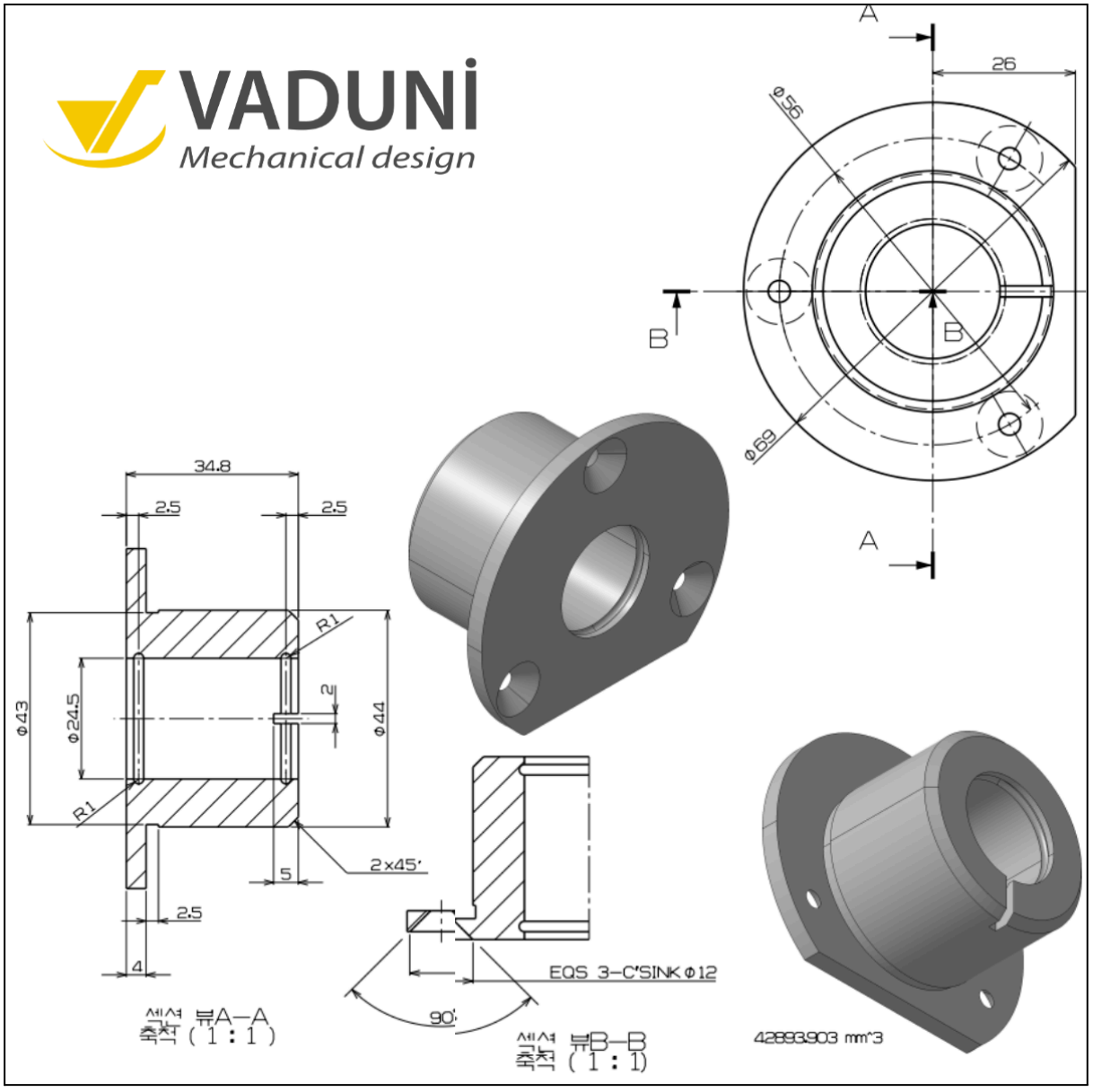
Bài tập 446


VADUNI
Mechanical design
ϕ60
ϕ40
16
80
R4
12
ϕ30
섹션 뷰A—A
축척: 1:2
145
50
R15
R15
30°
R15
100
A
A
3-ϕ15
50
45
135°
42
R15
R15
R15
ϕ16
R4
R4
42

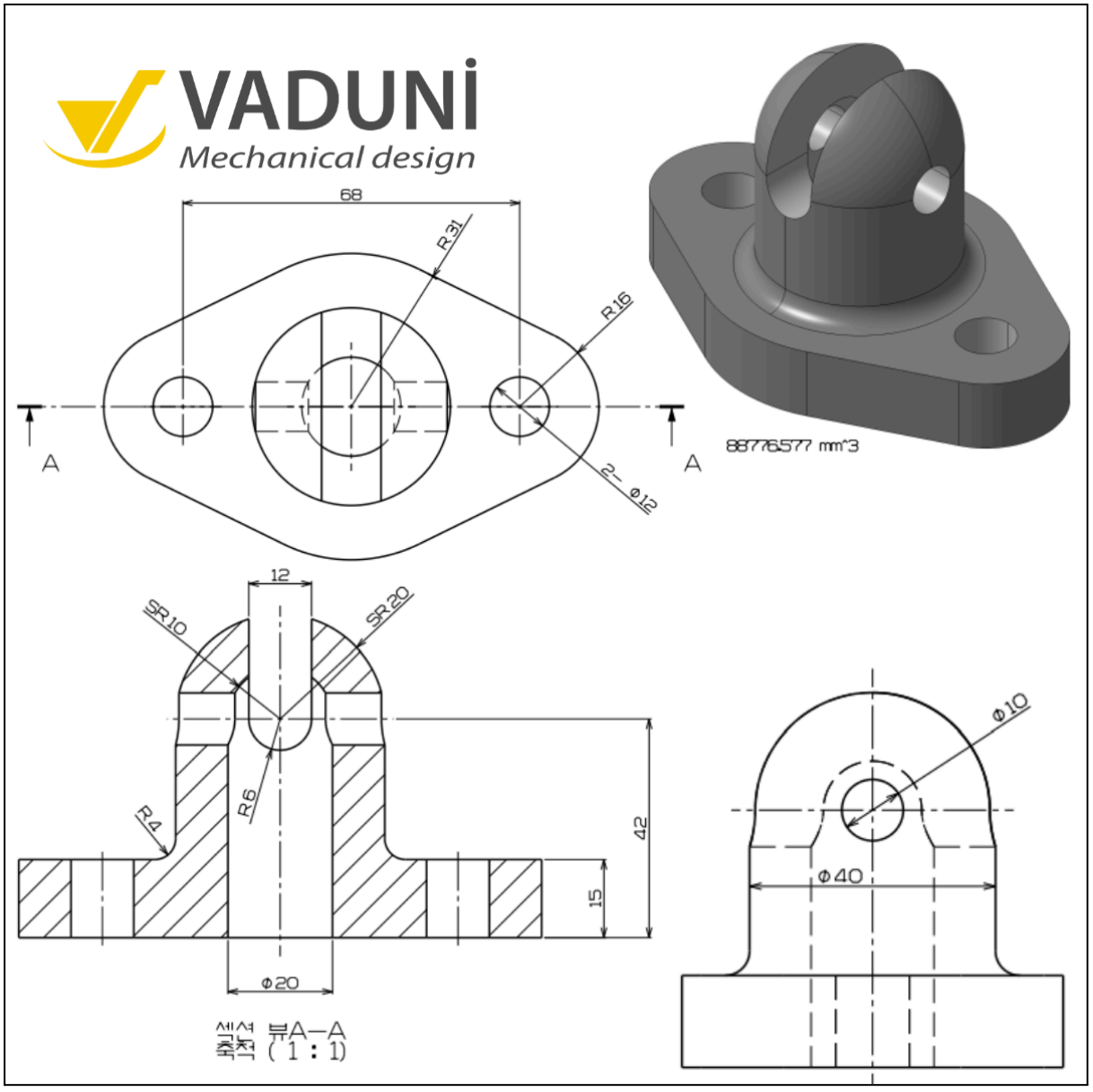
Bài tập 447


VADUNI
Mechanical design
Φ65
120°
Φ47
Φ38
R3
A
16
2
5
56
Φ60
1x45°
4
0.5x45°
Φ49.6
Φ50
R10.5
R39.5
R10.5
30°
1
1
세부사항A
축척 (2 : 1)

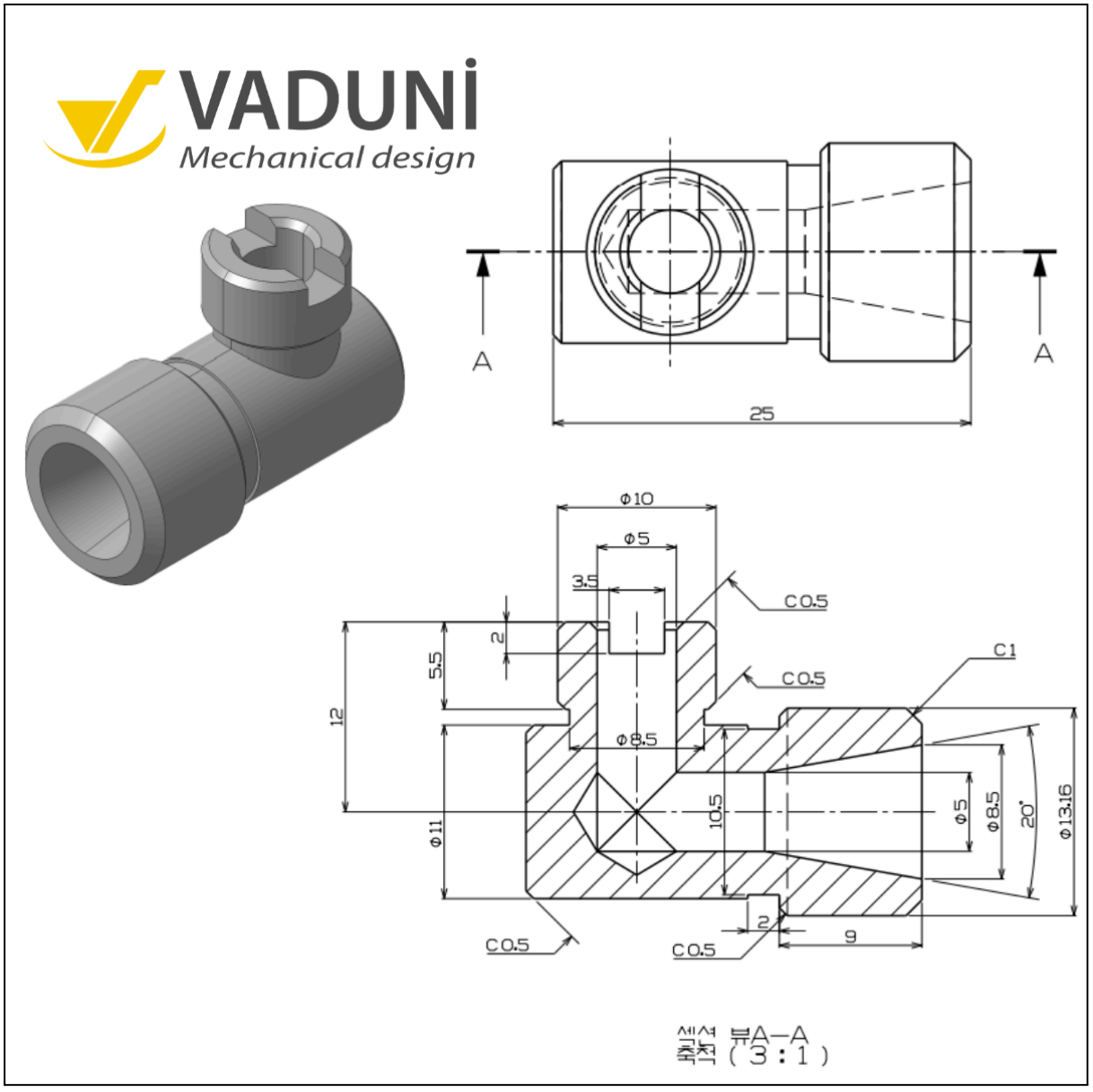
Bài tập 448


VADUNİ
Mechanical design
A
26
ø56
B
B
ø69
A
34.8
2.5
2.5
R1
ø43
ø24.5
2
ø44
R1
5
2×45°
2.5
4
EQS 3-C'SINK ø12
90°
42893903 mm^3

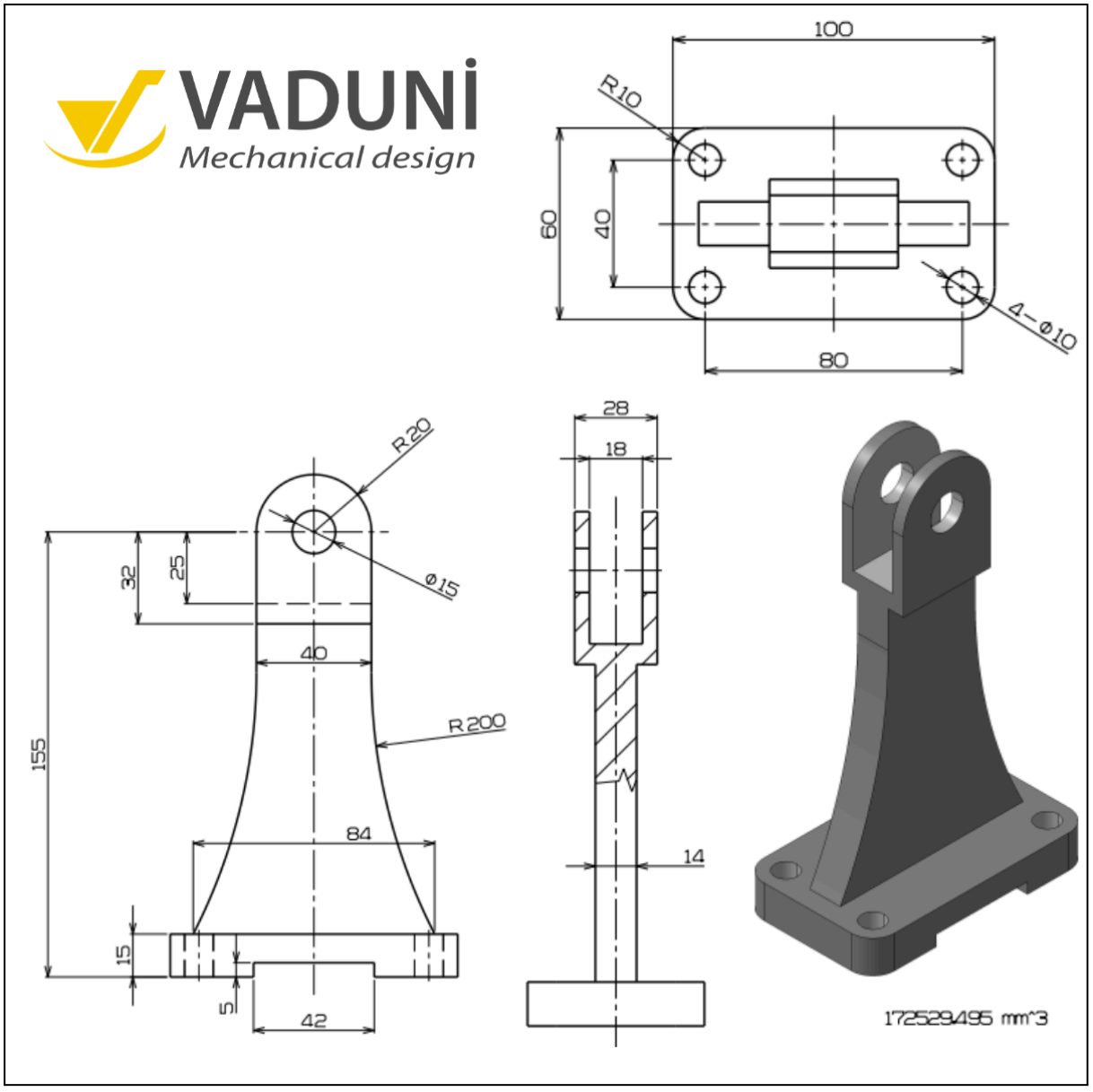
Bài tập 449


VADUNİ
Mechanical design
68
R31
R16
2- Ø12
A
A
88776577 mm^3
12
SR10
SR20
R4
R6
42
15
Φ20
Φ10
Φ40
섹션 뷰A-A
축척 (1 : 1)

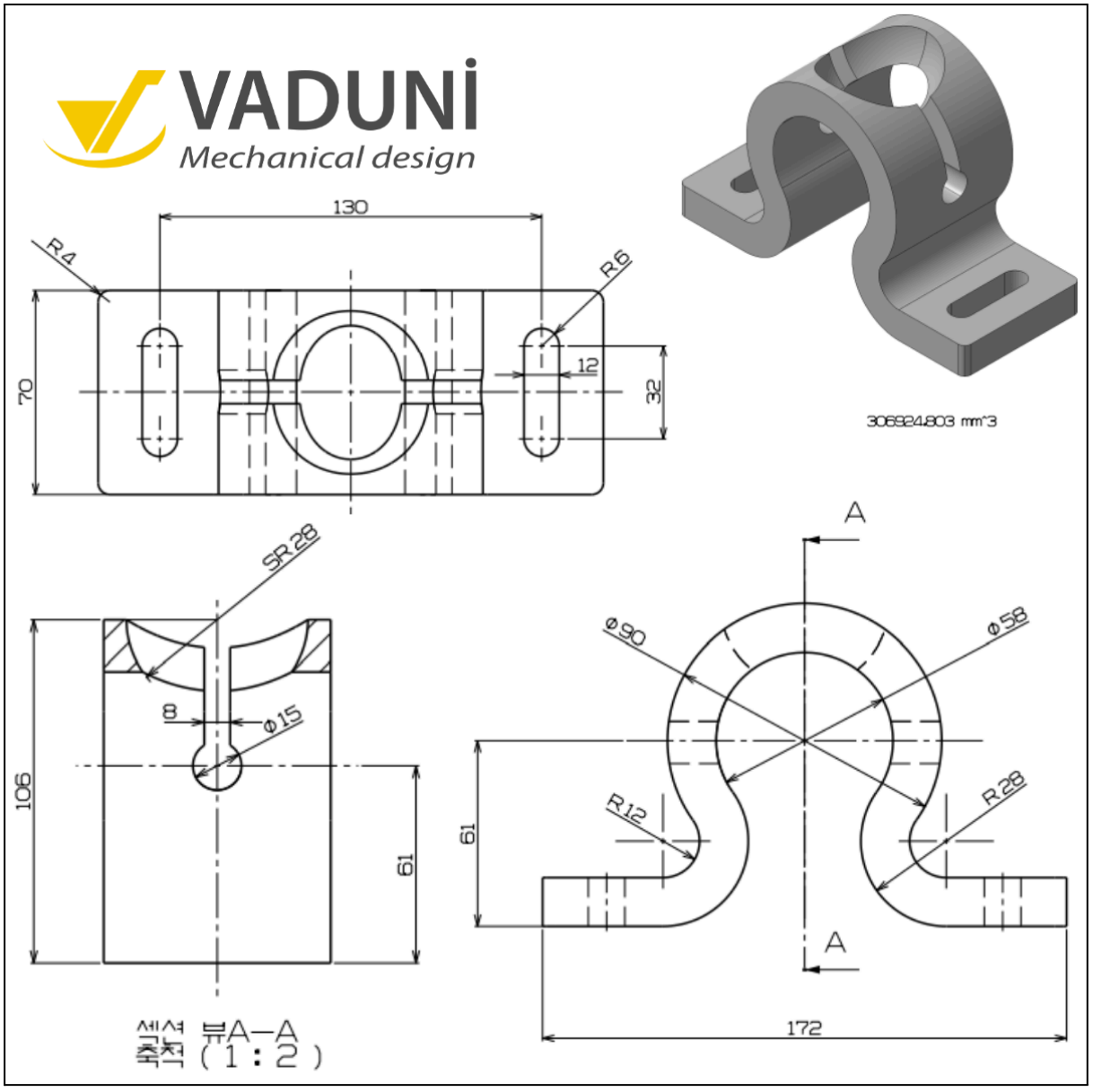
Bài tập 450


VADUNİ
Mechanical design
A
A
25
Φ10
Φ5
3.5
C0.5
2
5.5
12
C0.5
C1
Φ8.5
10.5
Φ11
Φ5
Φ8.5
20°
Φ13.16
C0.5
C0.5
2
9
부품 번호 A-A
척도 (3 : 1)

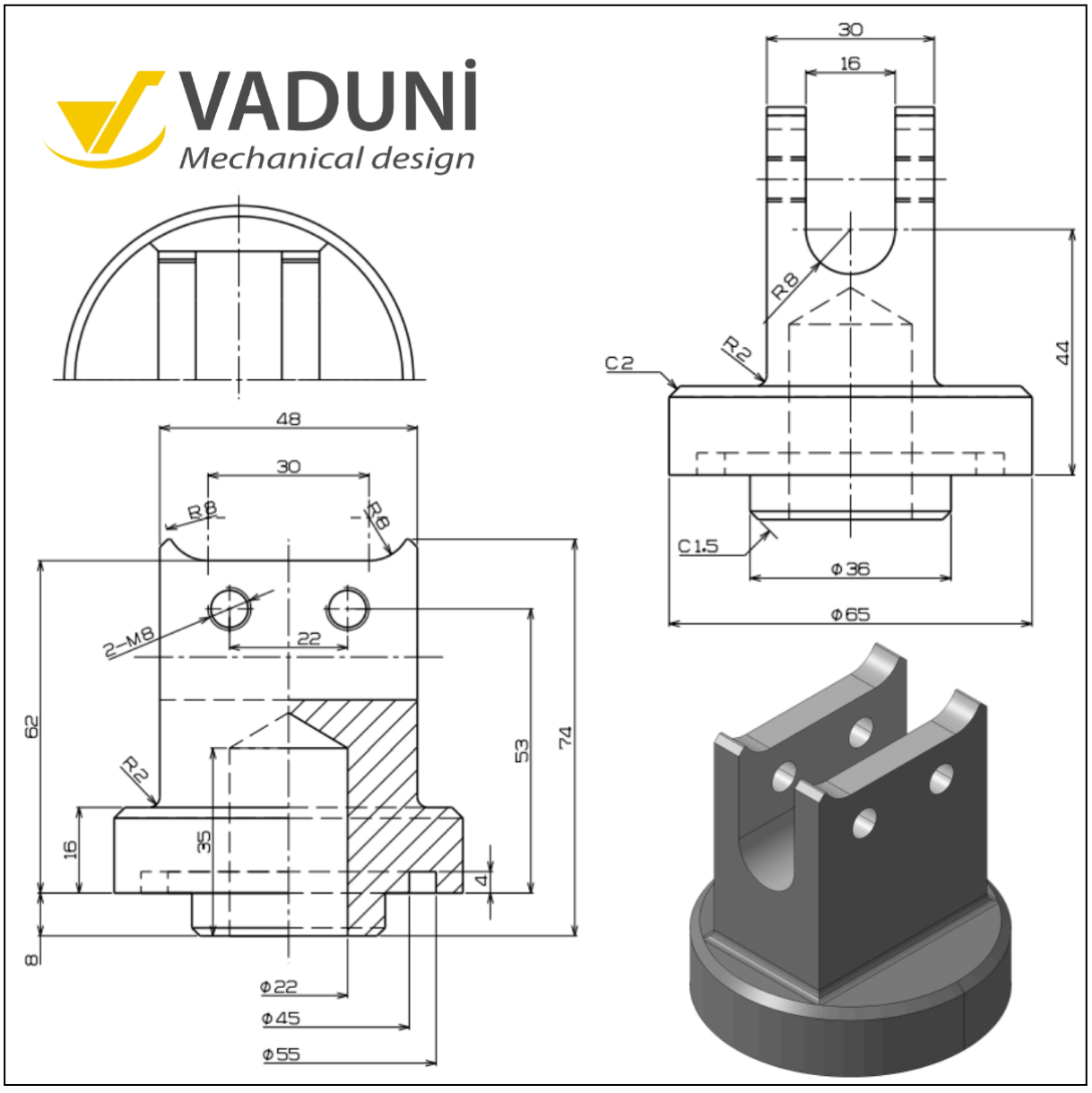
Bài tập 451


VADUNİ
Mechanical design
100
R10
60
40
4−ø10
80
28
18
R20
ø15
32
25
40
R200
155
84
14
15
5
42
172529495 mm^3

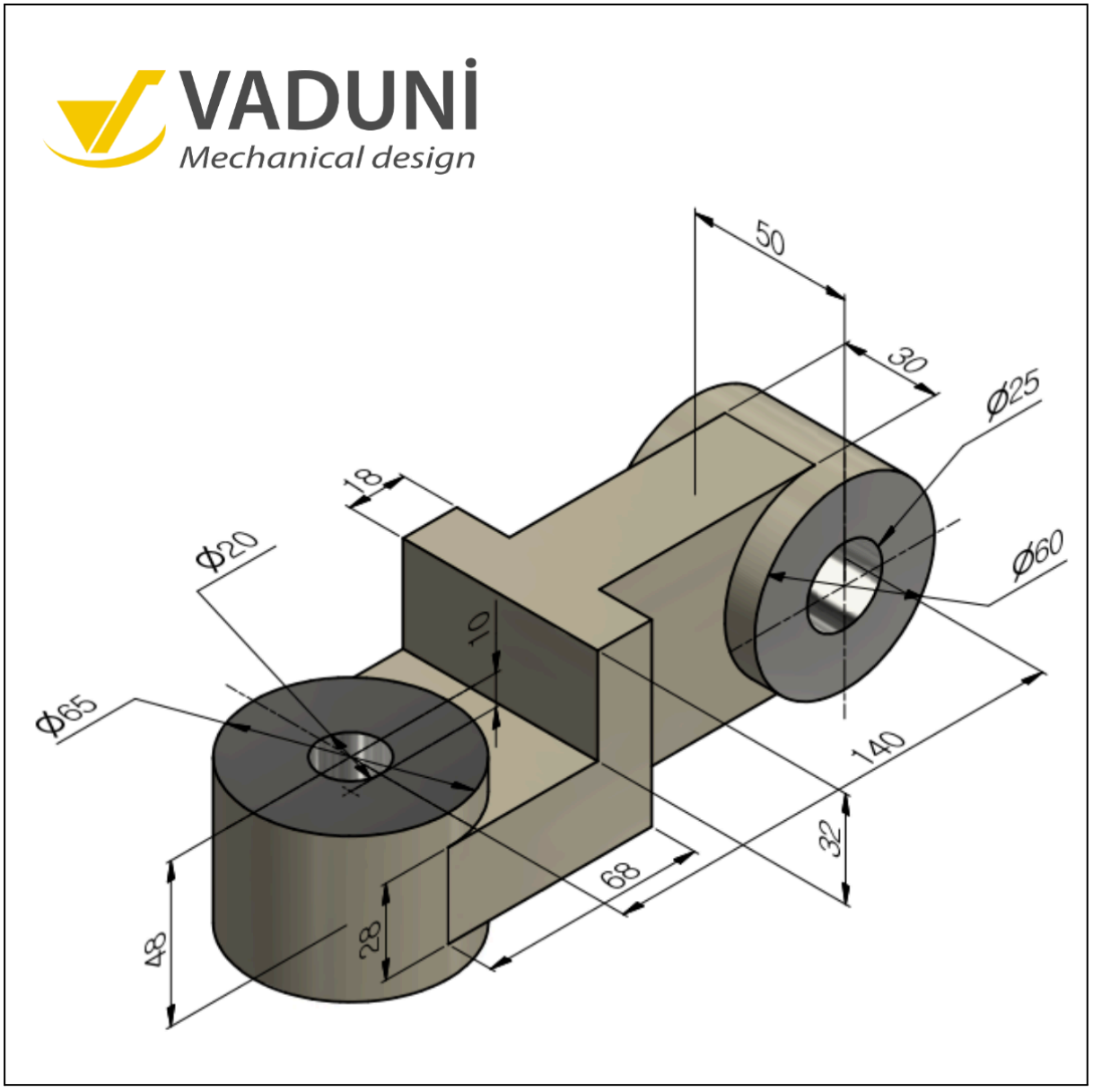
Bài tập 452


VADUNİ
Mechanical design
130
R4
R6
70
12
32
306924803 mm^3
SR28
8
ø15
106
61
A
ø90
ø58
R12
R28
61
A
172
A–A
(1 : 2)

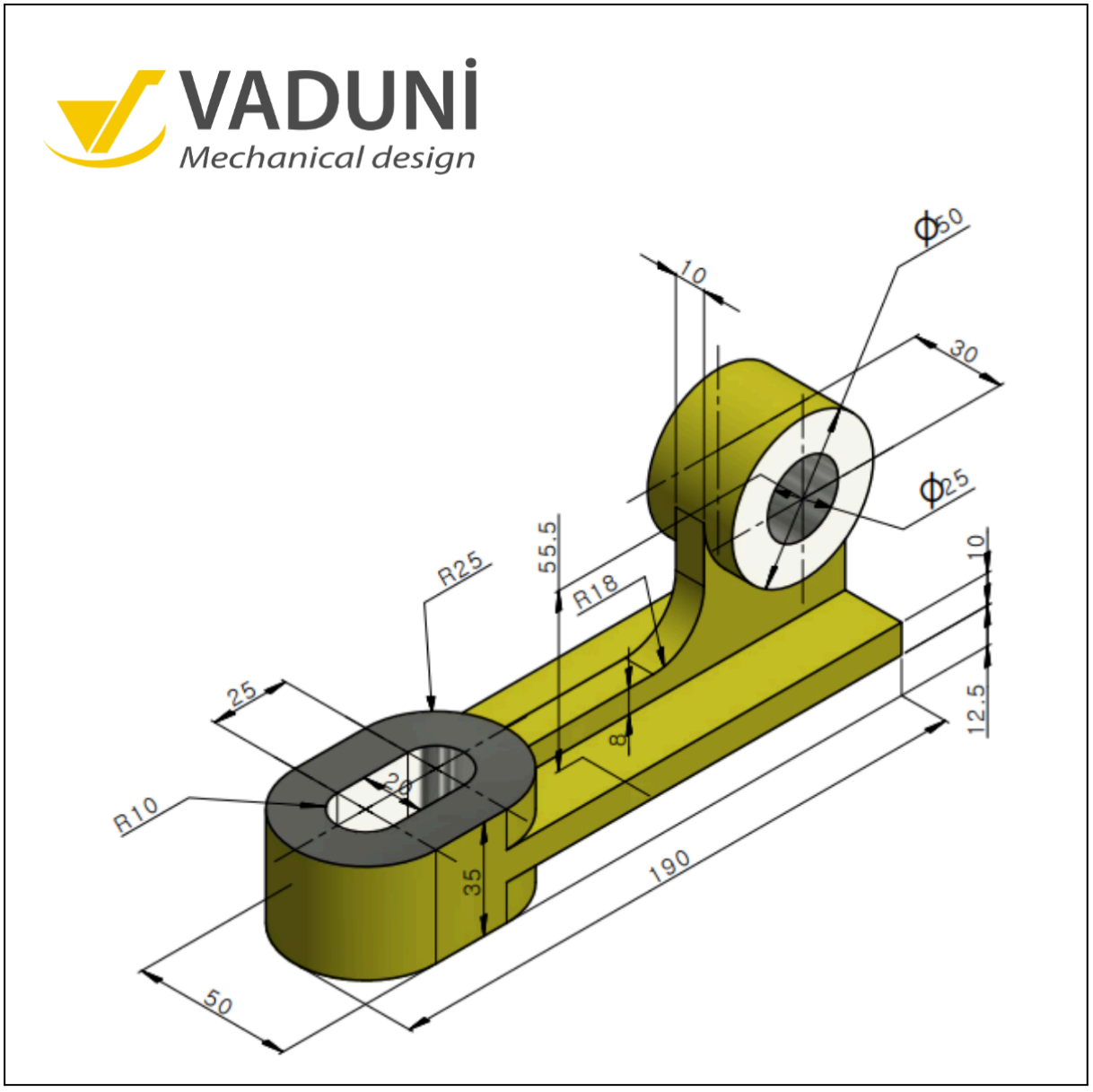
Bài tập 453


VADUNI
Mechanical design
30
16
R8
R2
C2
44
C1.5
Φ36
Φ65
48
30
R8
R8
2-M8
22
62
R2
16
35
53
74
4
8
Φ22
Φ45
Φ55

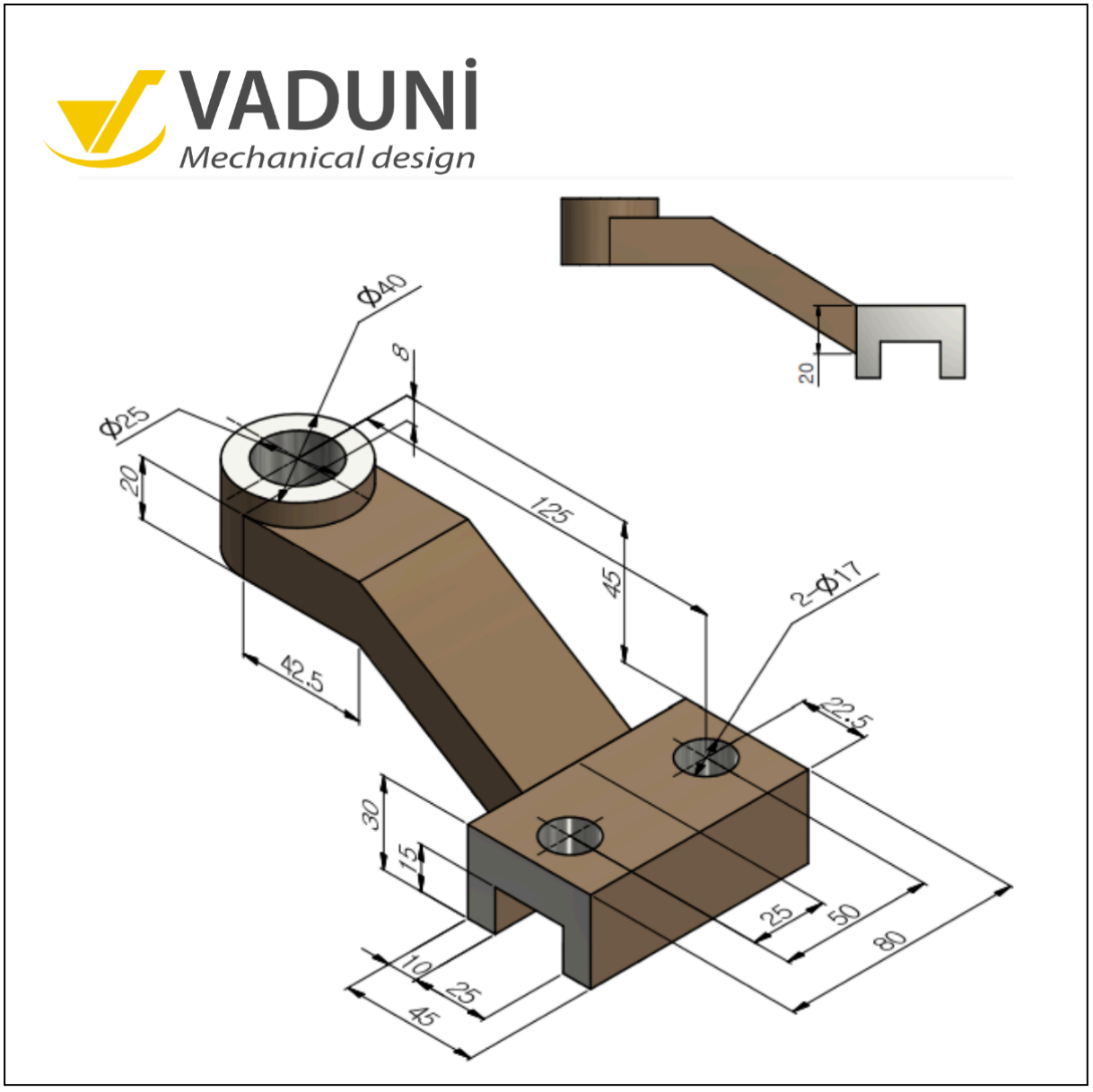
Bài tập 454


VADUNİ
Mechanical design
50
30
Ø25
18
Ø20
Ø60
10
Ø65
140
32
68
48
28

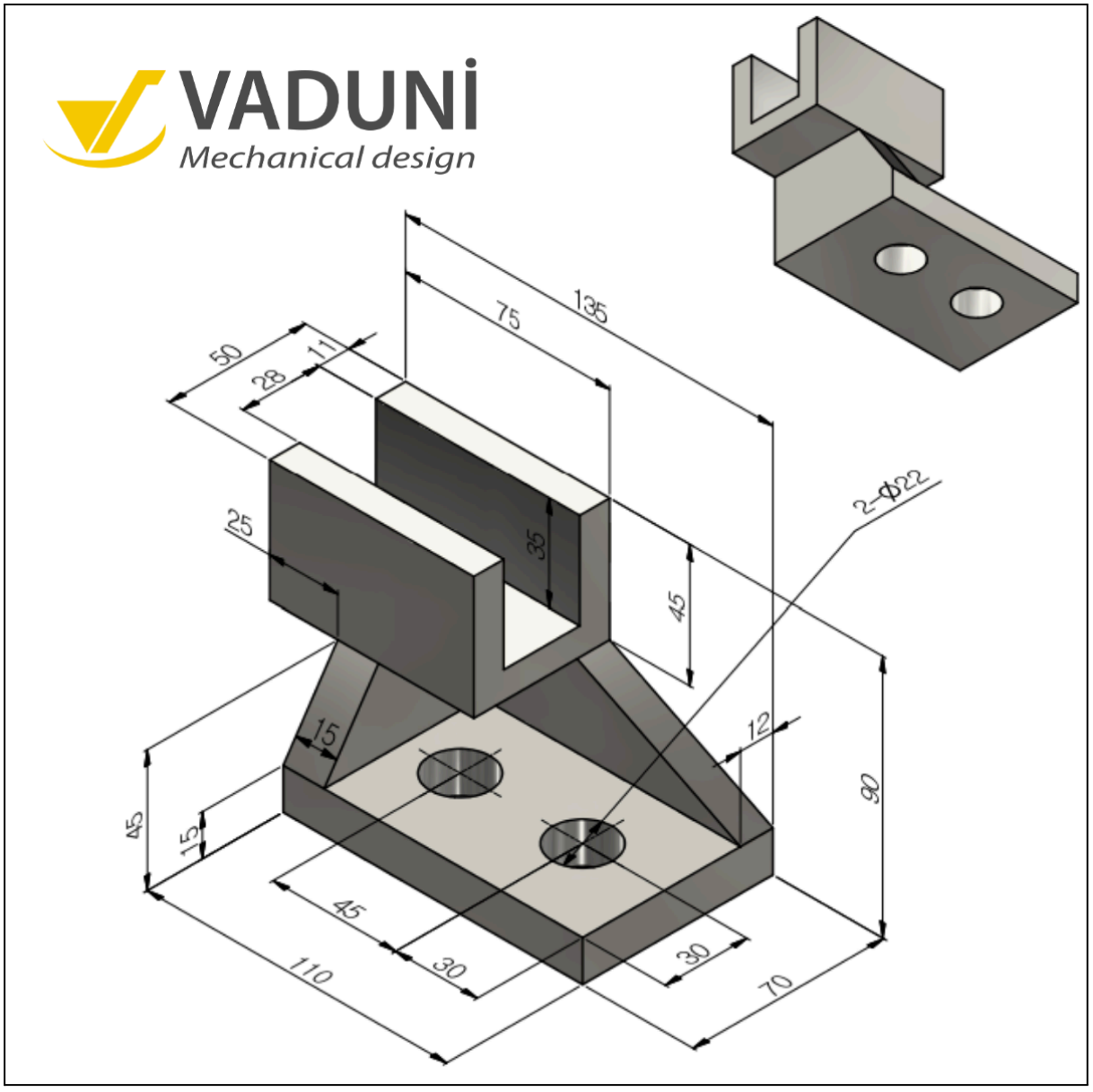
Bài tập 455


VADUNİ
Mechanical design
ϕ50
10
30
ϕ25
55.5
R25
R18
10
12.5
25
8
R10
20
35
190
50

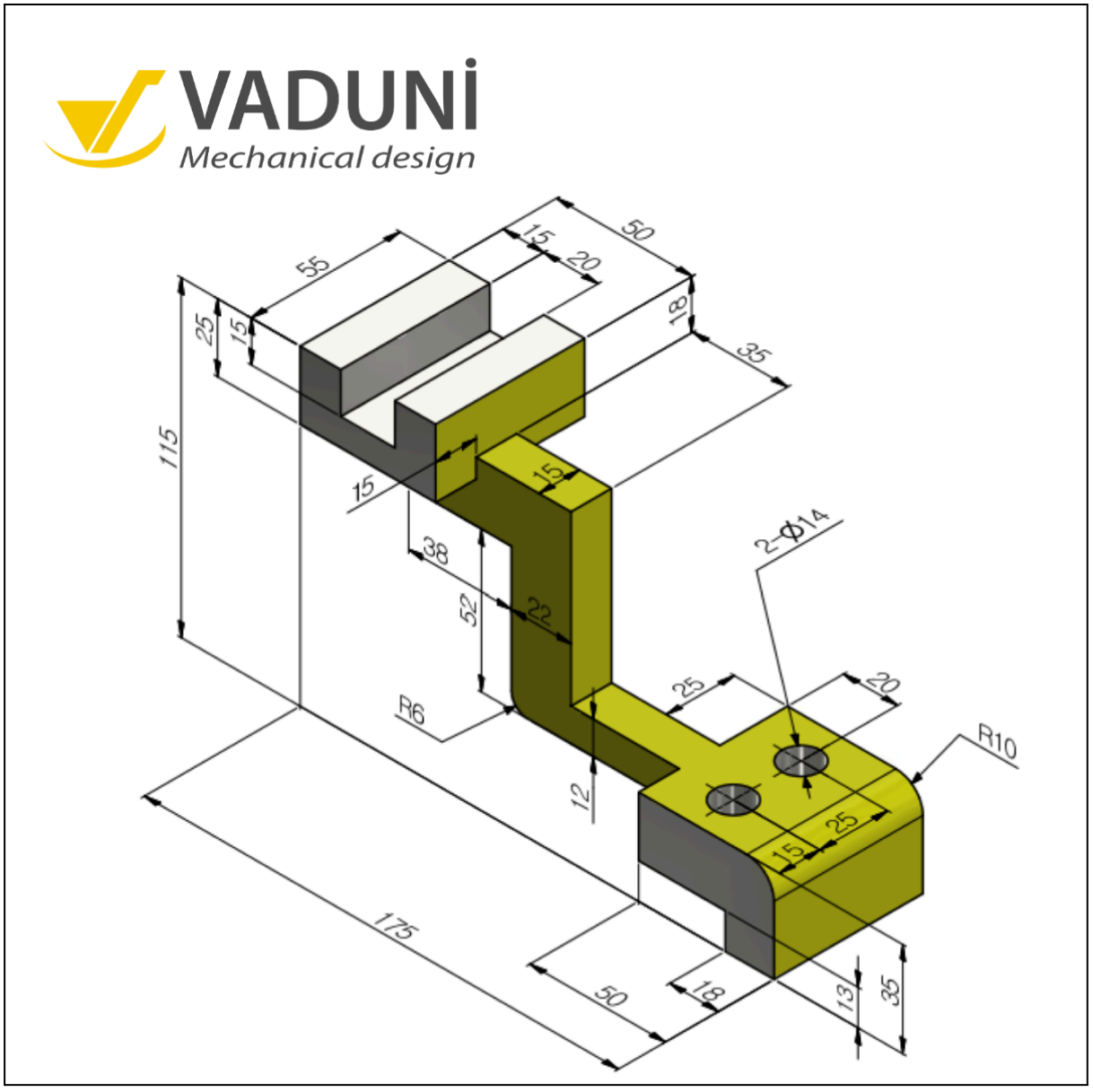
Bài tập 456


VADUNI
Mechanical design
Φ40
8
Φ25
20
125
45
42.5
2-Φ17
22.5
30
15
10
25
45
25
50
80
20

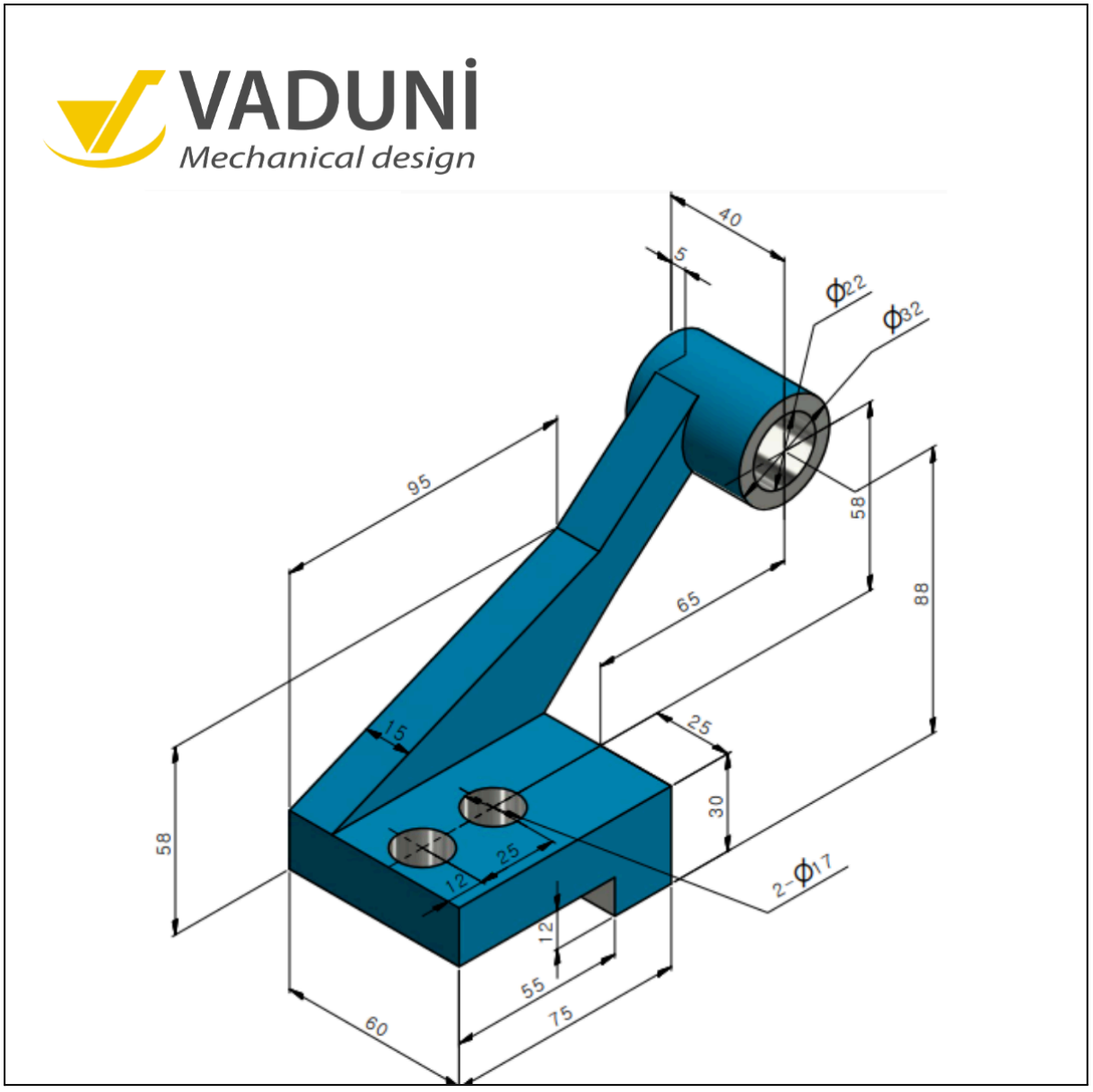
Bài tập 457


VADUNİ
Mechanical design
135
75
50
28
11
25
35
45
2-Φ22
15
12
90
45
15
45
30
110
30
70

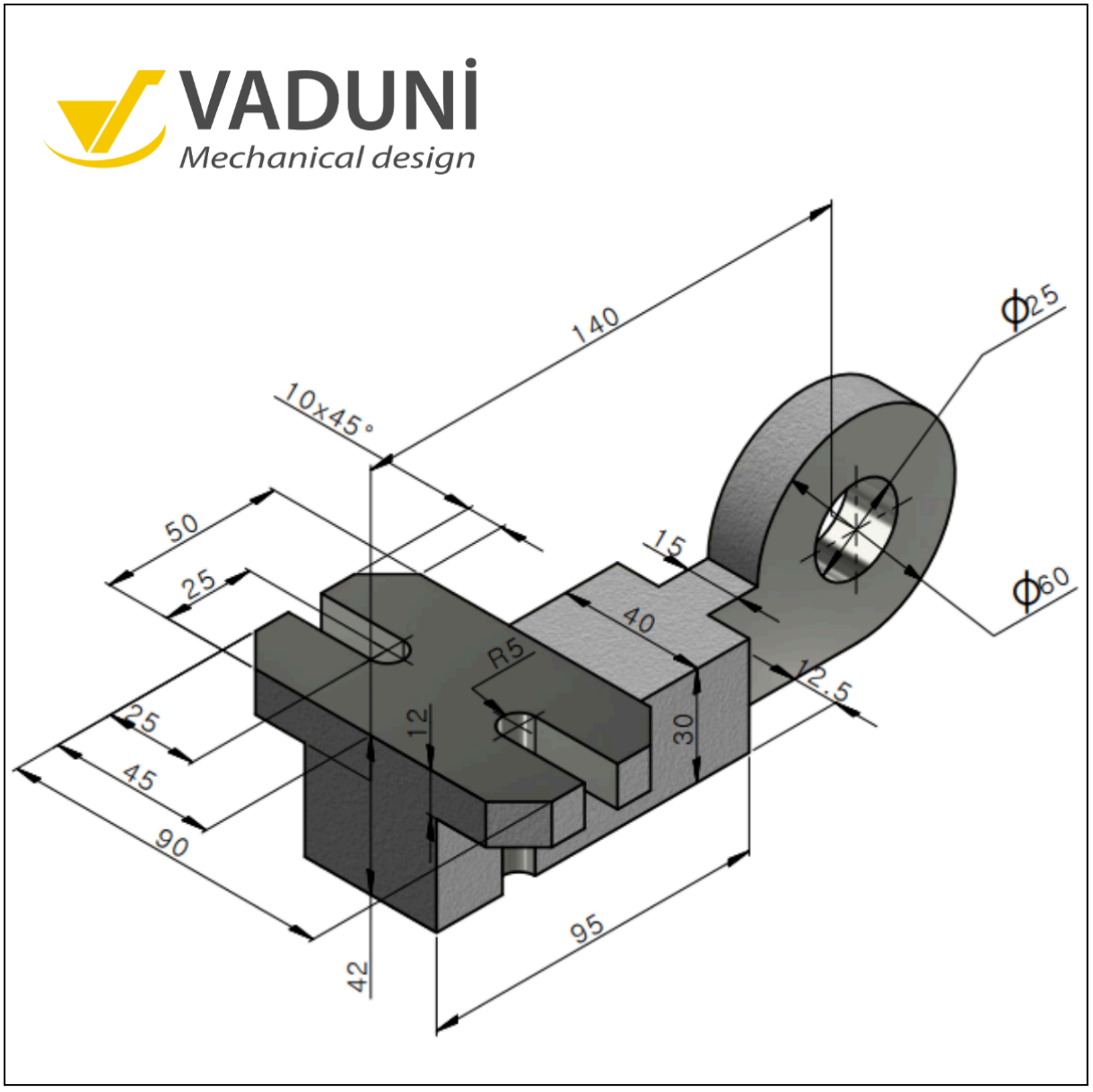
Bài tập 458


VADUNİ
Mechanical design
55
15
20
50
25
15
18
35
115
15
15
38
52
22
2-Ø14
R6
25
20
R10
12
25
15
175
50
18
13
35

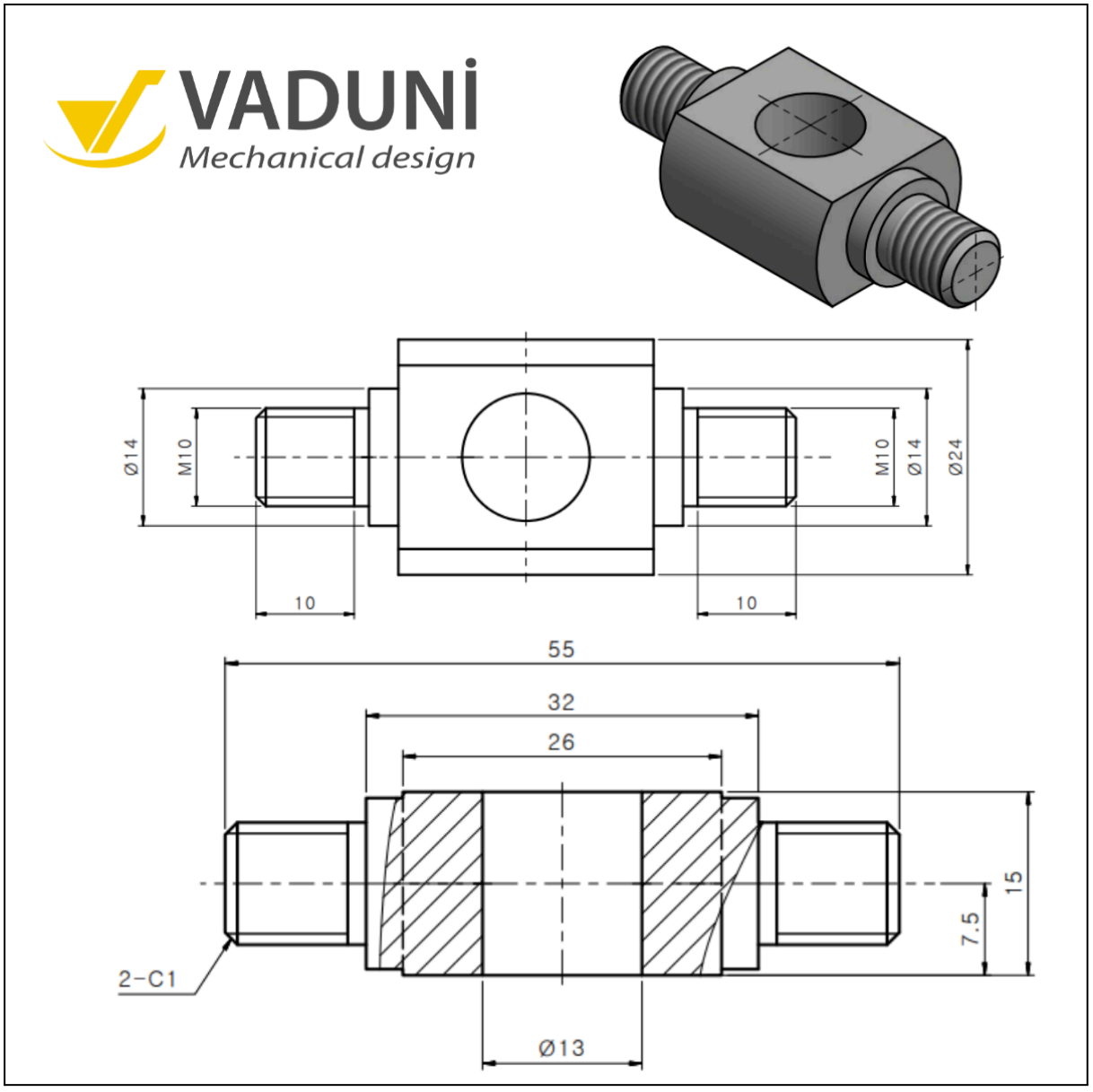
Bài tập 459


VADUNİ
Mechanical design
40
5
ϕ22
ϕ32
95
58
65
88
15
25
30
58
25
12
2-ϕ17
12
55
75
60

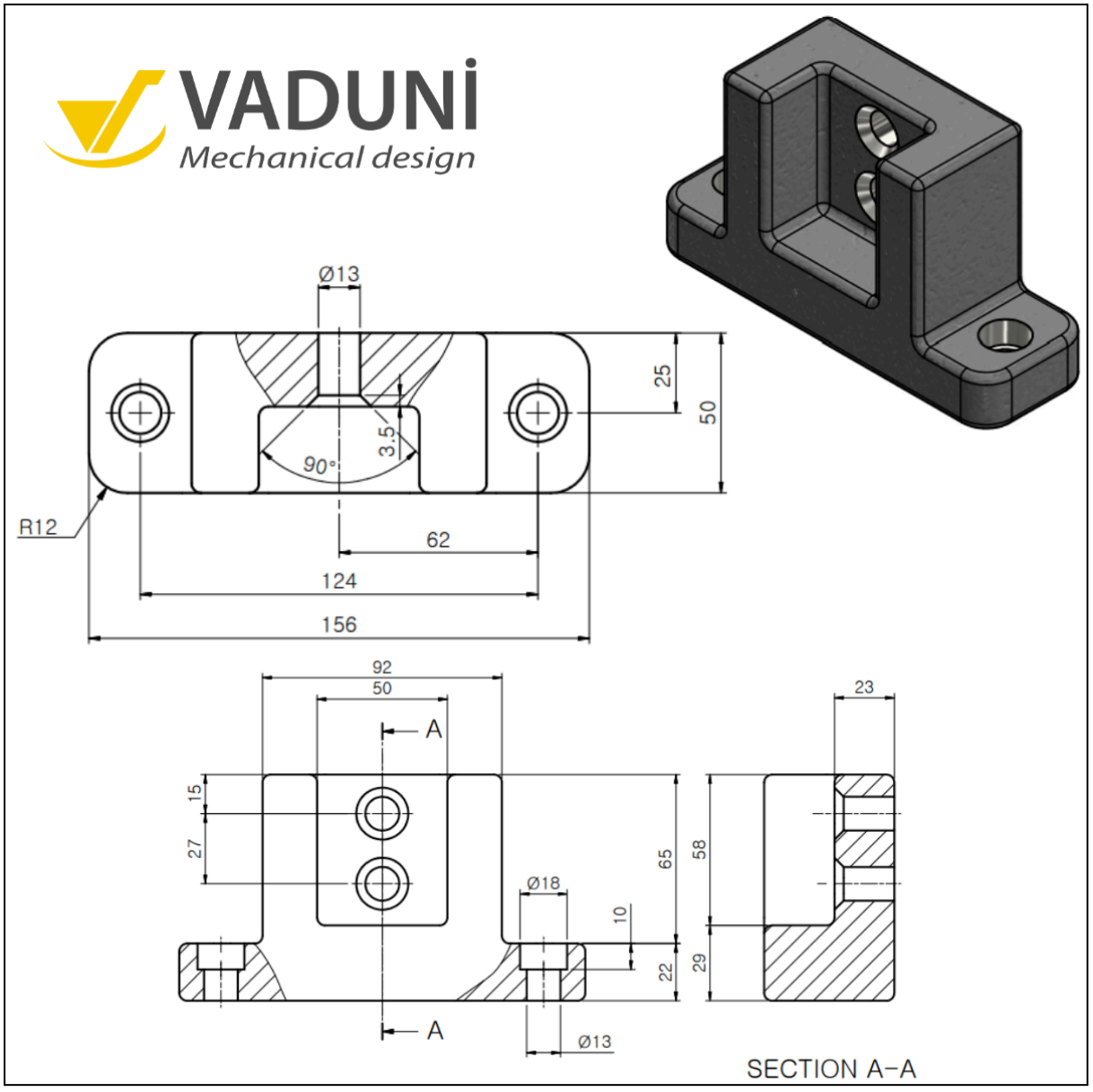
Bài tập 460


VADUNİ
Mechanical design
140
10x45°
50
25
25
45
90
42
95
12
30
40
15
12.5
R5
ϕ25
ϕ60

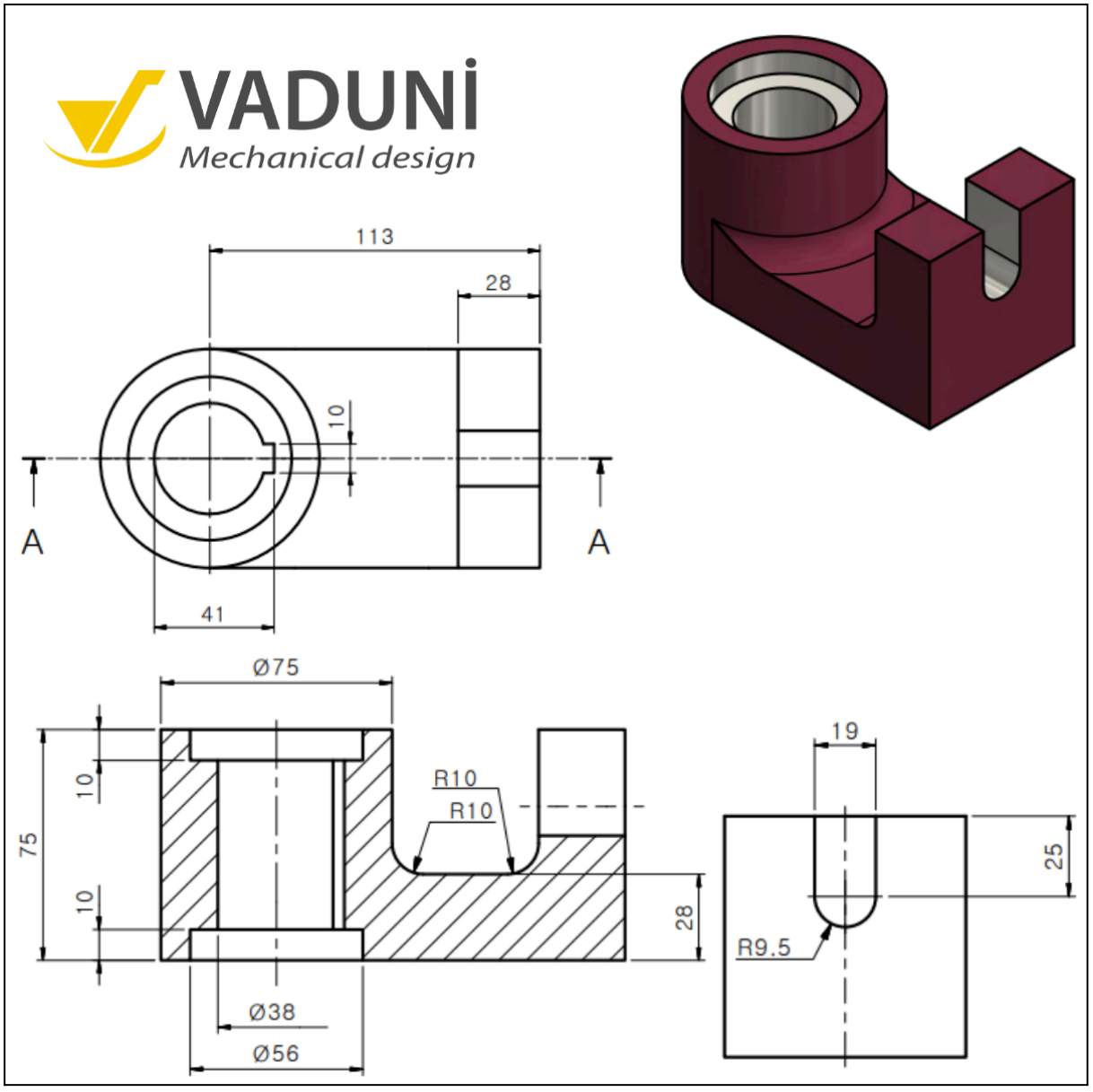
Bài tập 461


VADUNİ
Mechanical design
Ø14
M10
10
10
M10
Ø14
Ø24
55
32
26
15
7.5
2-C1
Ø13

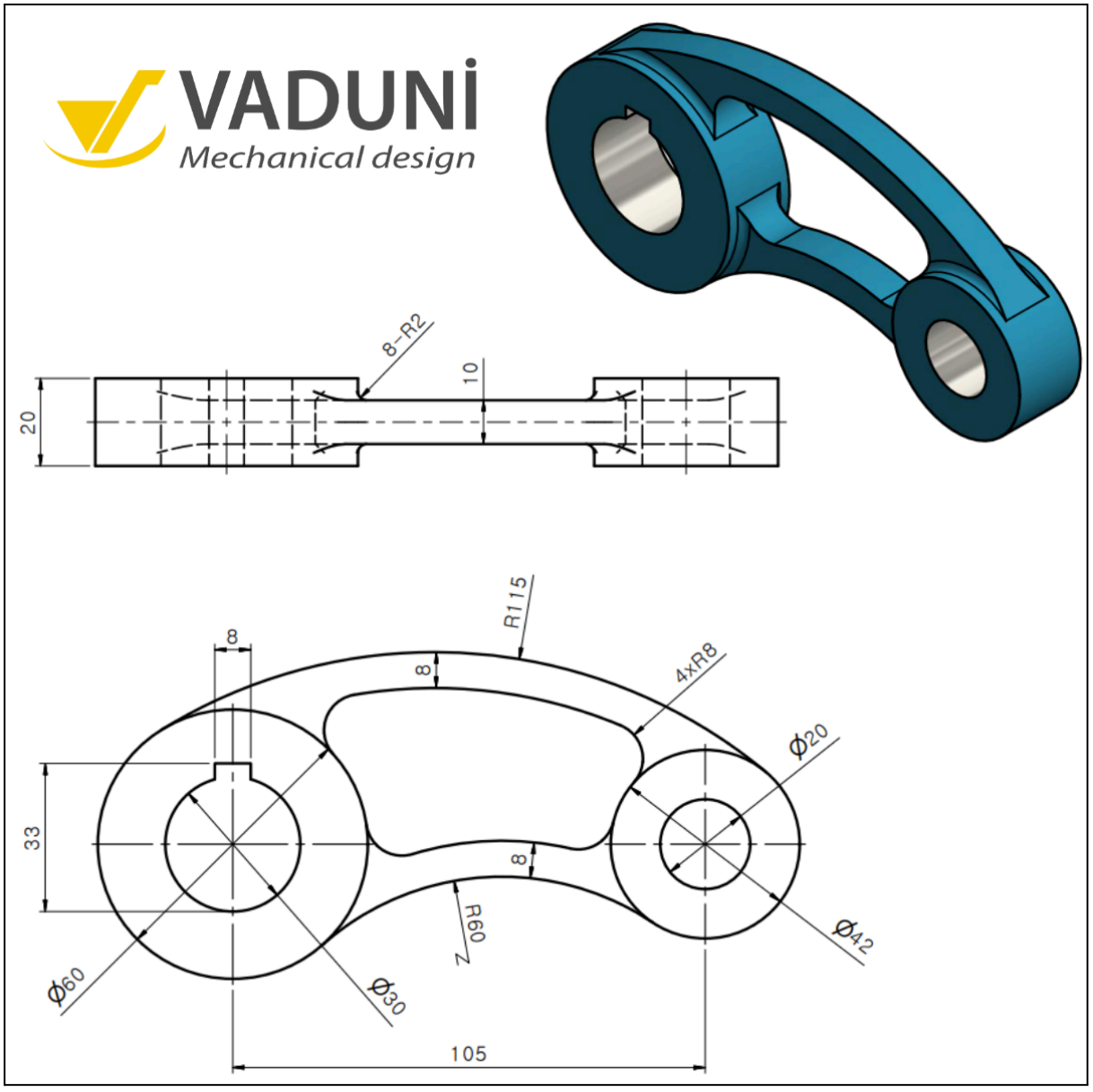
Bài tập 462


VADUNİ
Mechanical design
Ø13
25
50
3.5
90°
R12
62
124
156
92
50
A
15
27
65
58
Ø18
10
22
29
23
A
Ø13
SECTION A–A

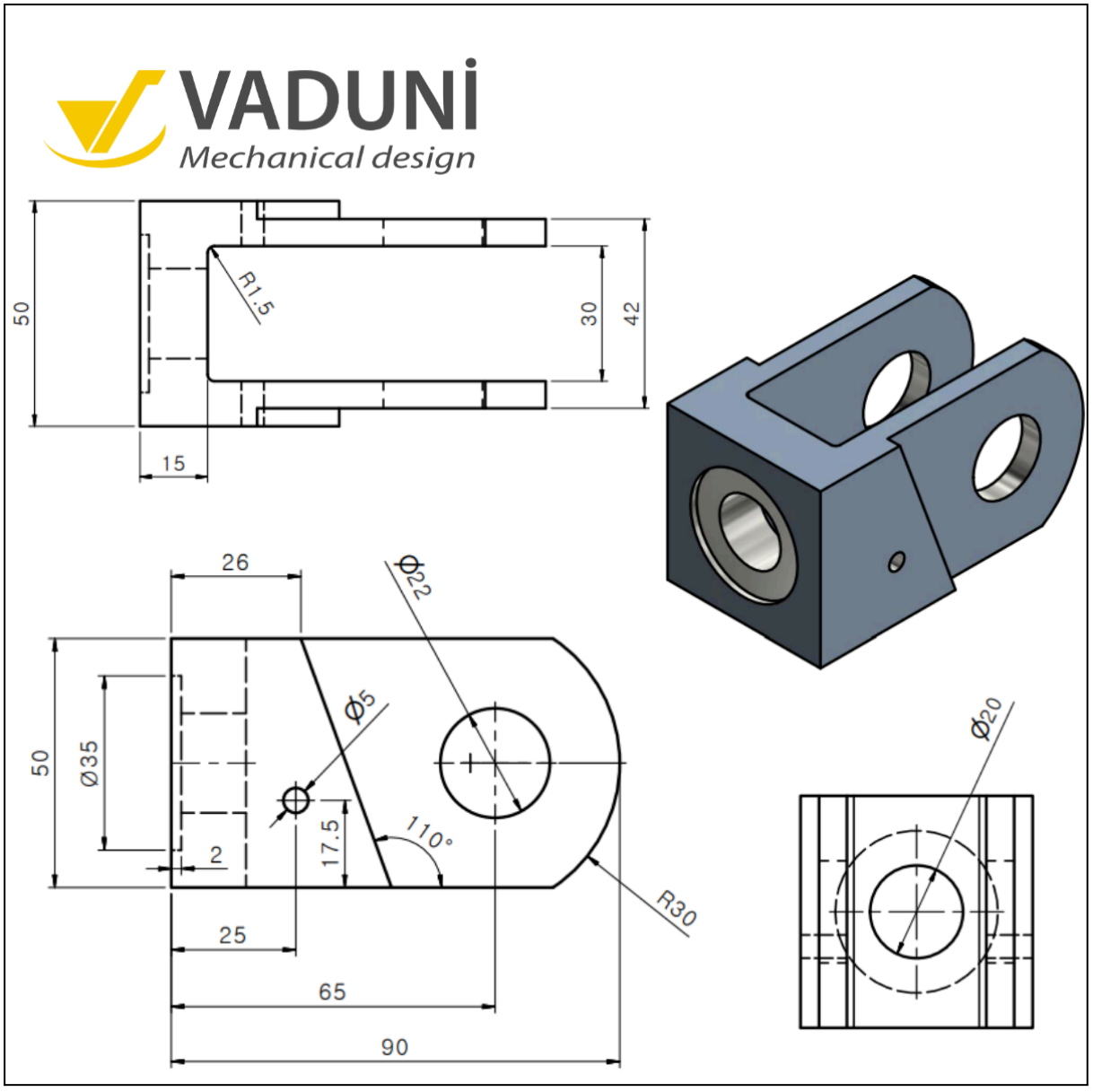
Bài tập 463


VADUNİ
Mechanical design
113
28
10
A
A
41
Ø75
10
10
75
R10
R10
28
Ø38
Ø56
19
25
R9.5

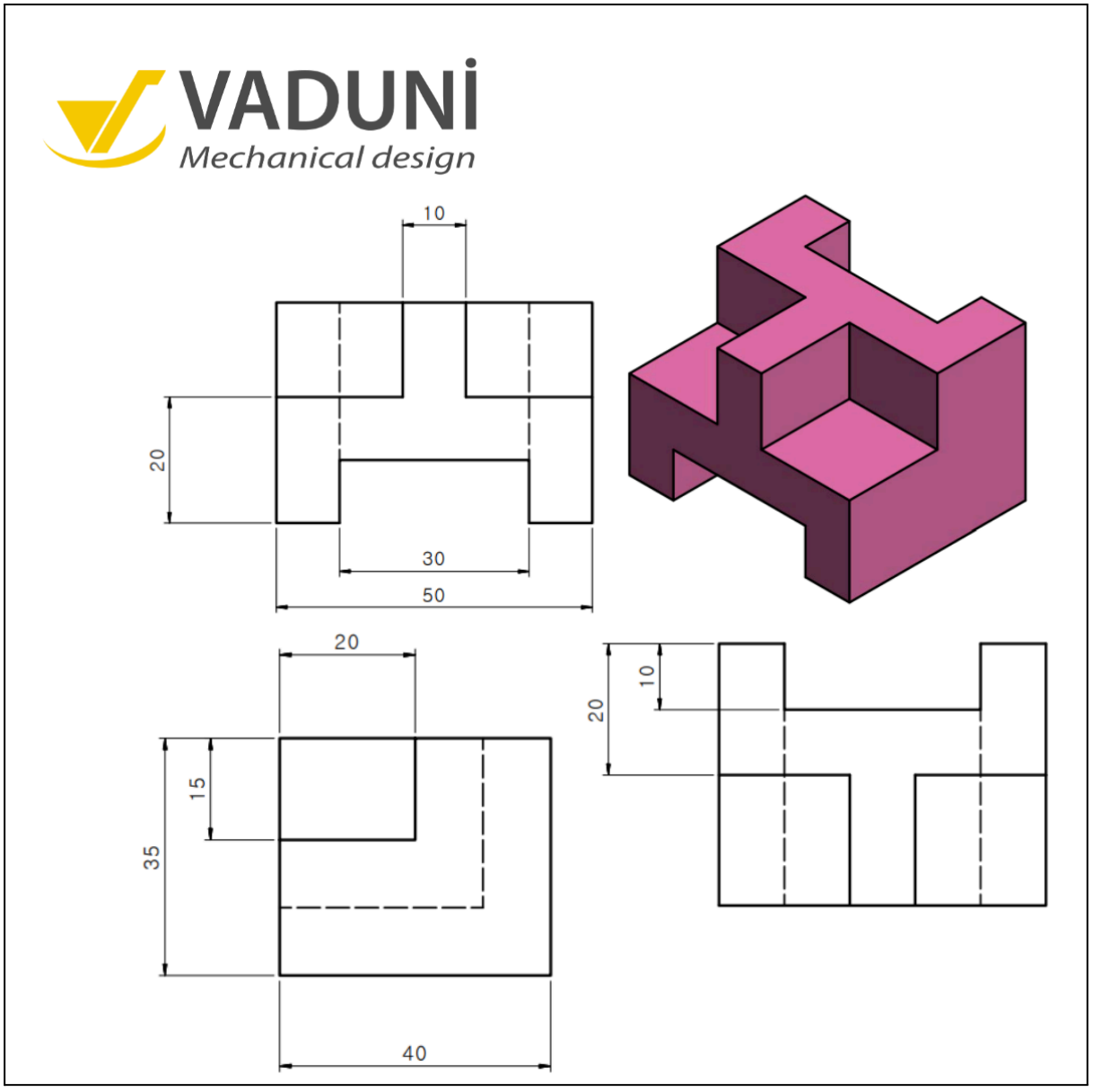
Bài tập 464


VADUNİ
Mechanical design
8-R2
10
20
R115
8
8
4xR8
Φ20
33
8
R60
Φ60
Φ30
Φ42
105

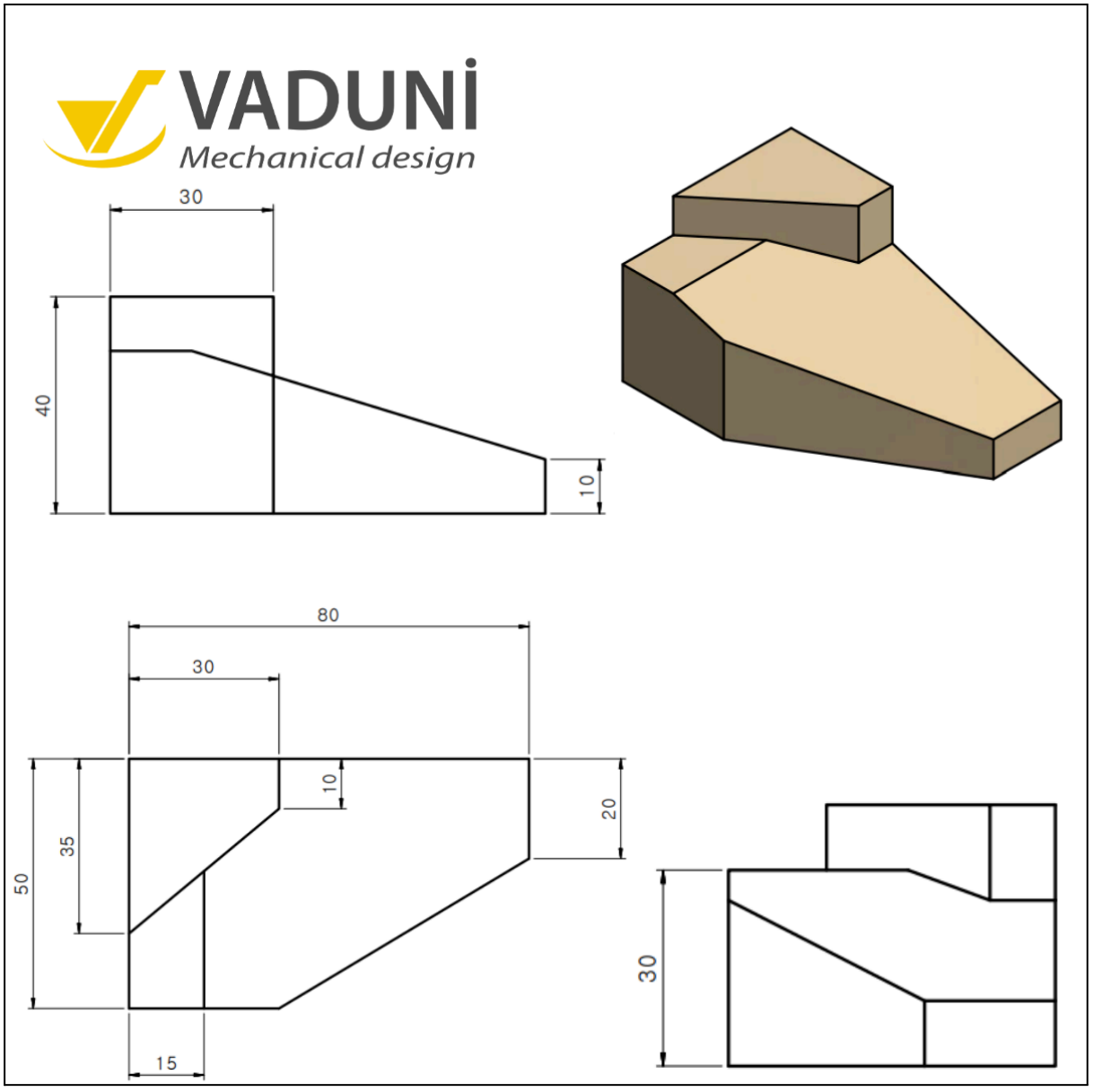
Bài tập 465


VADUNİ
Mechanical design
50
R1.5
30
42
15
26
Ø22
Ø5
50
Ø35
2
17.5
110°
R30
25
65
90
Ø20

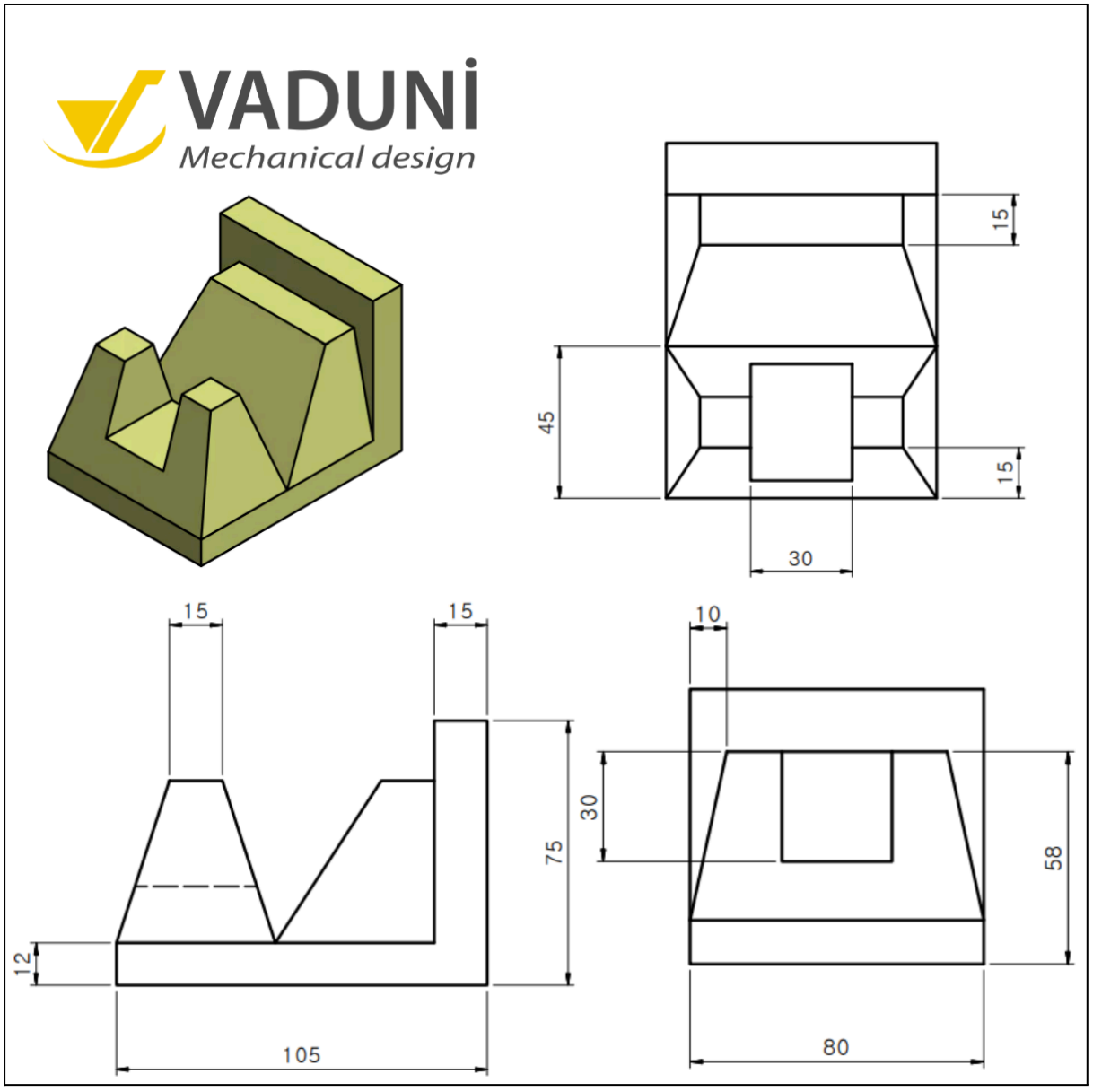
Bài tập 466



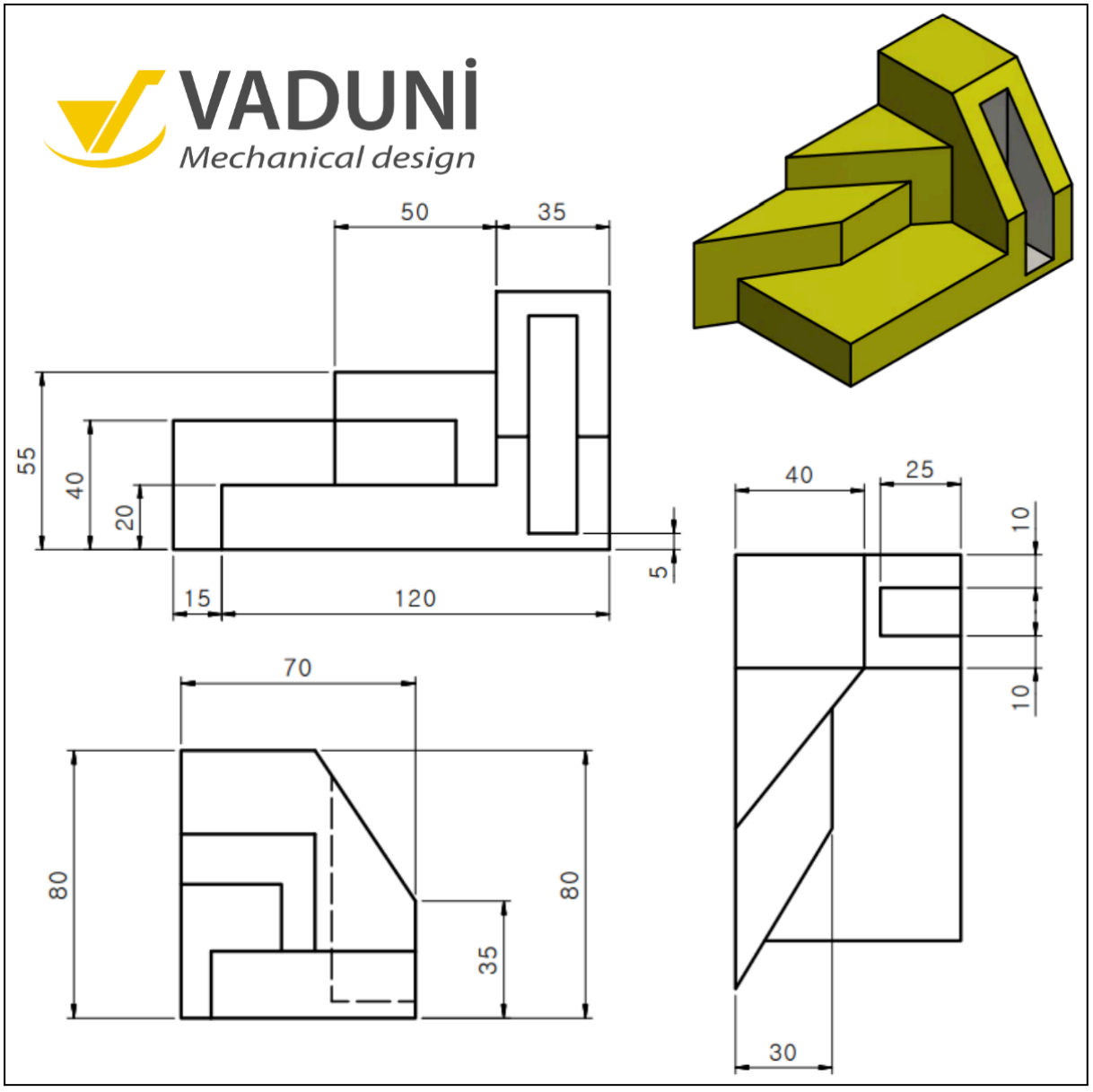
Bài tập 467



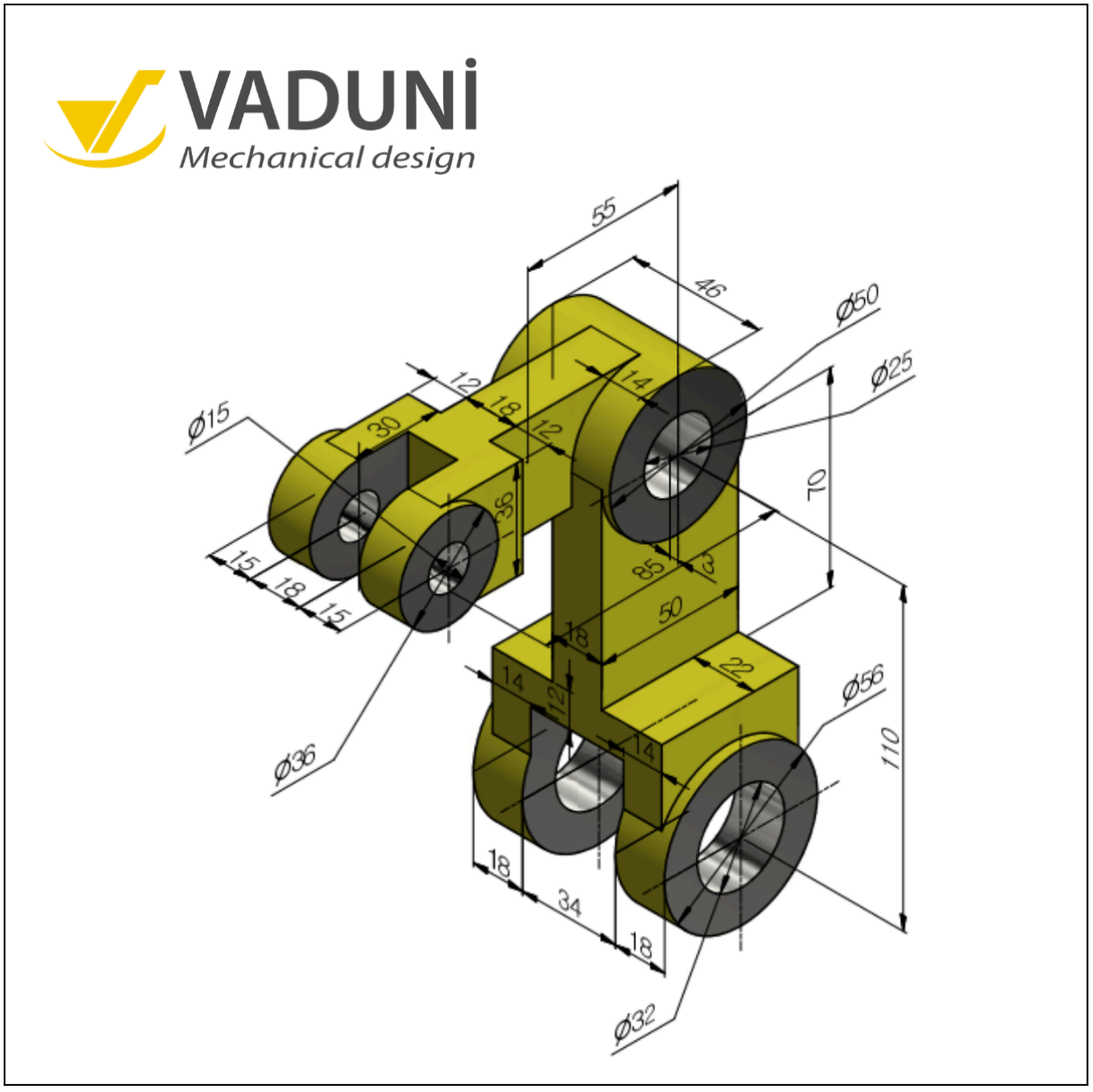
Bài tập 468



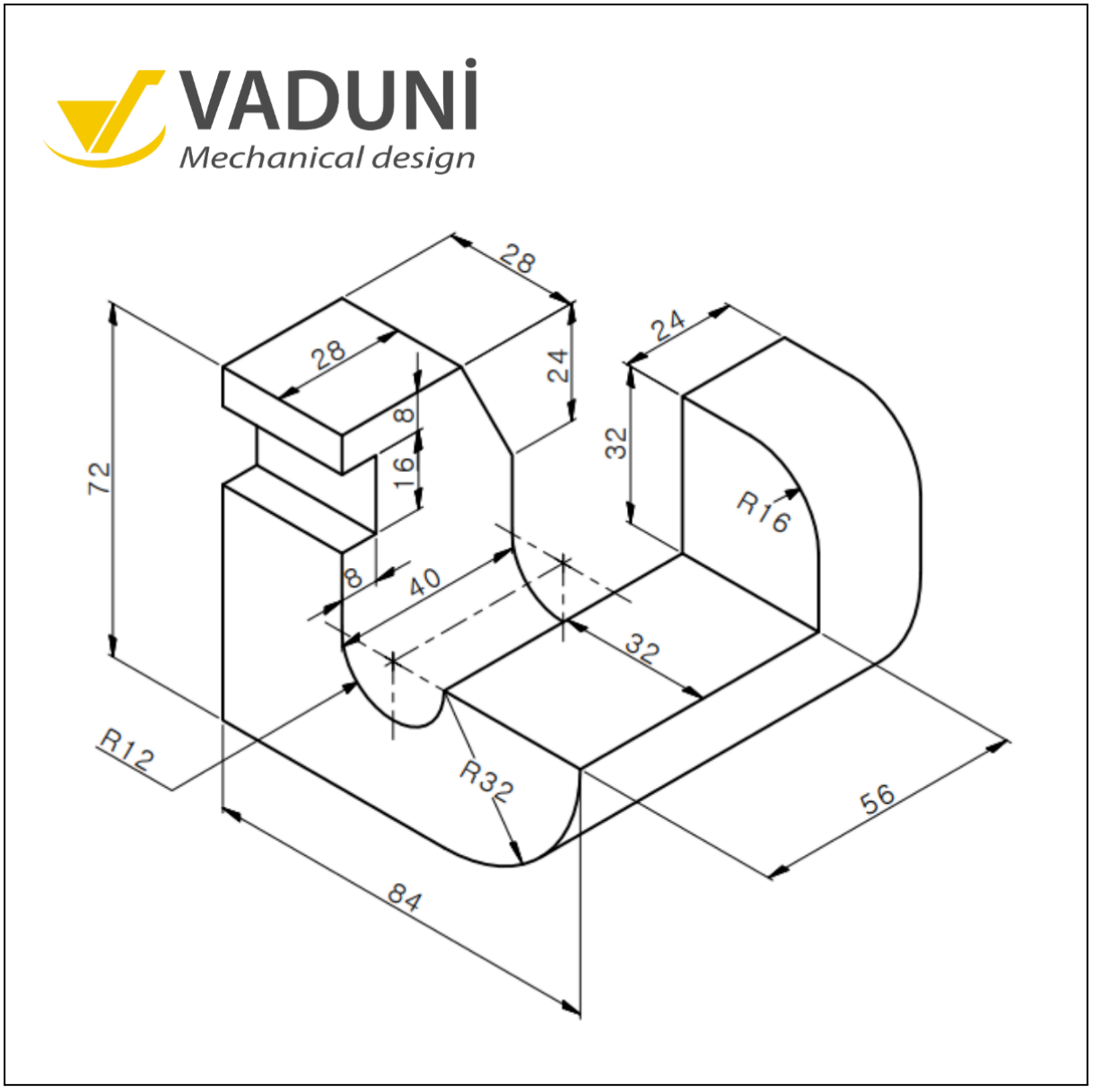
Bài tập 469


VADUNİ
Mechanical design
50
35
55
40
20
15
120
5
70
80
80
35
40
25
10
10
30

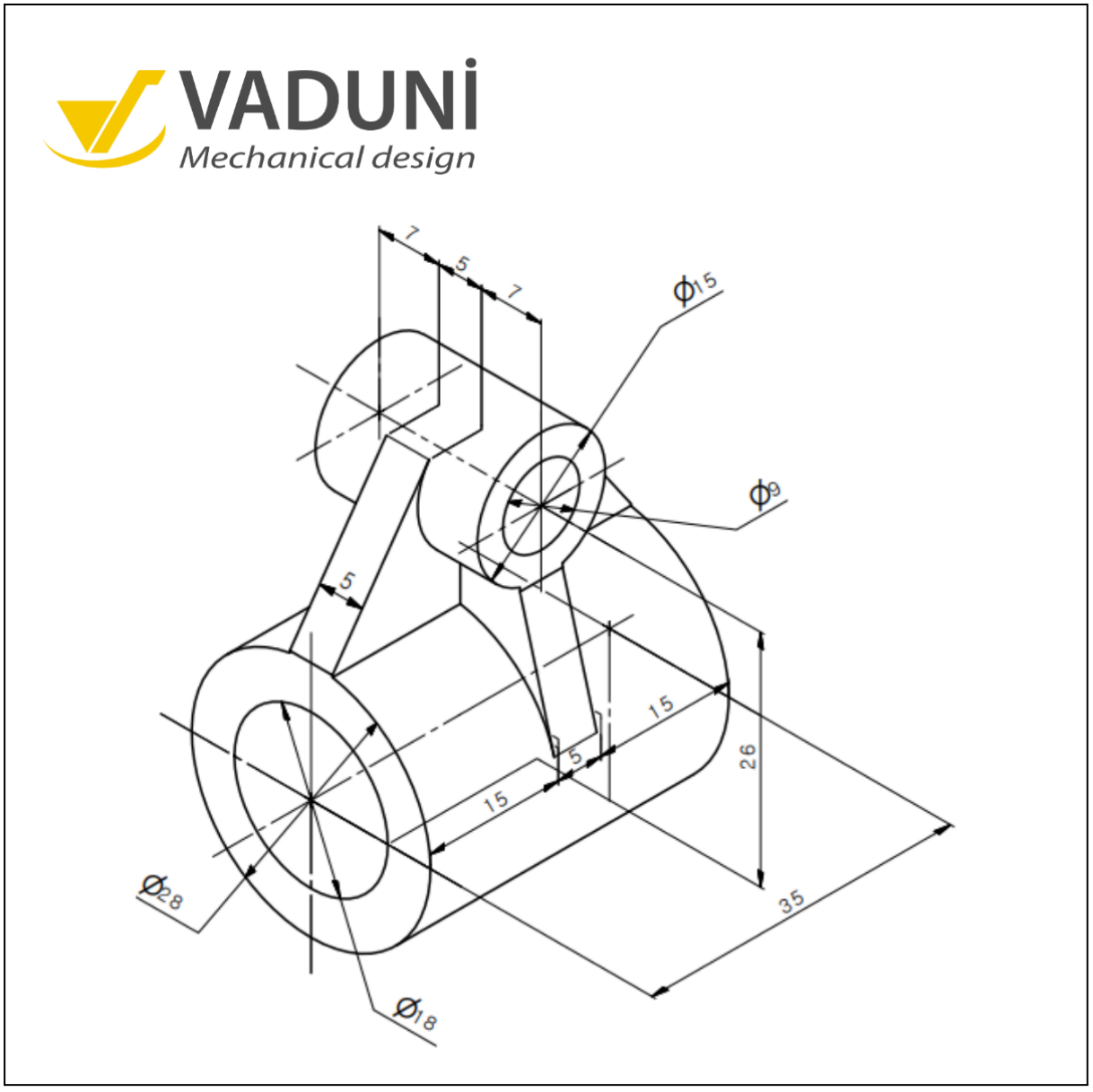
Bài tập 470


VADUNİ
Mechanical design
55
46
Ø50
Ø25
Ø15
12
18
14
30
12
70
35
15
18
15
85
3
50
18
22
14
12
14
Ø56
110
Ø36
18
34
18
Ø32

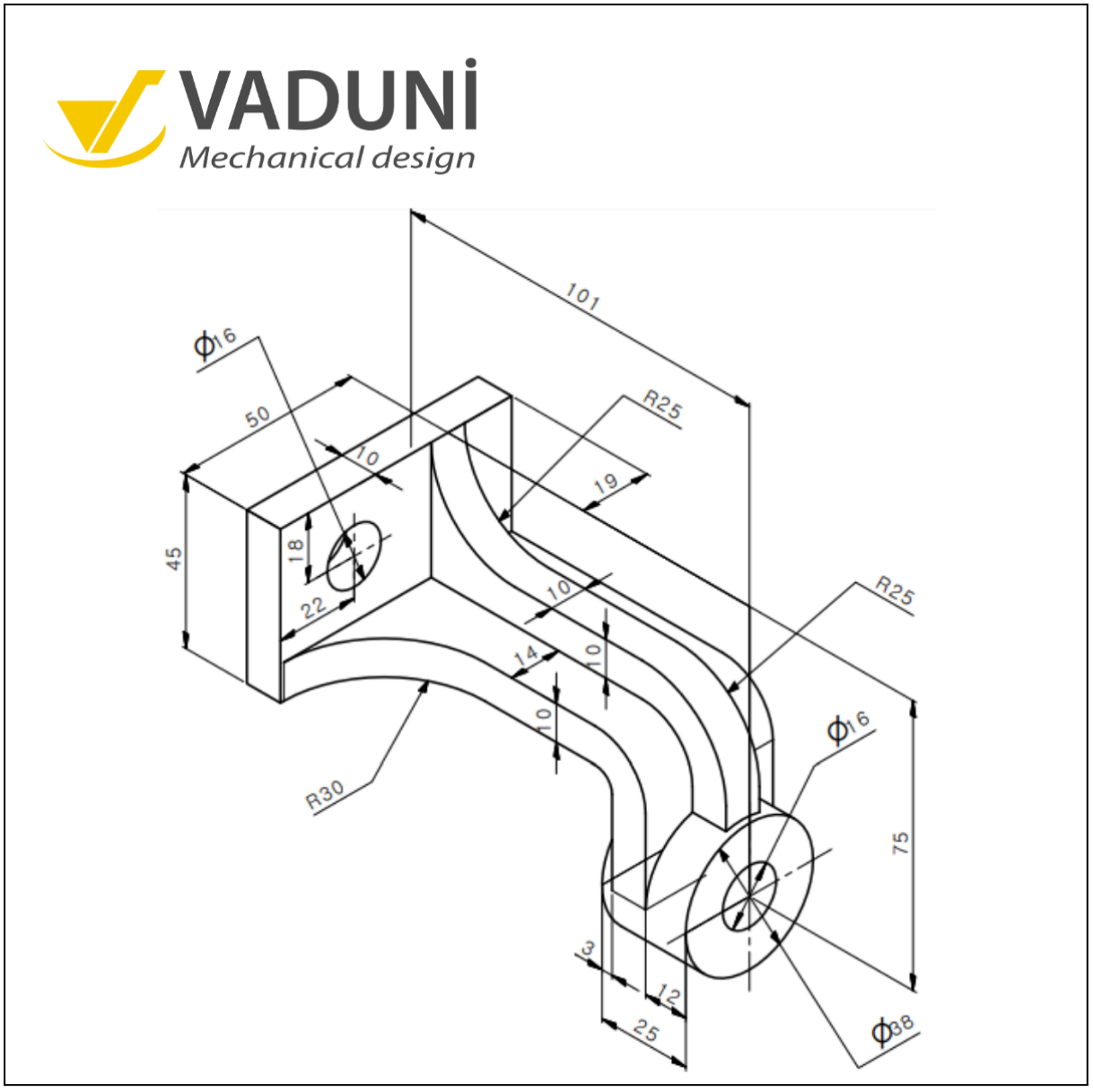
Bài tập 471


VADUNI
Mechanical design
28
28
24
24
8
16
72
8
40
32
32
R16
R12
R32
56
84

Bài tập 472

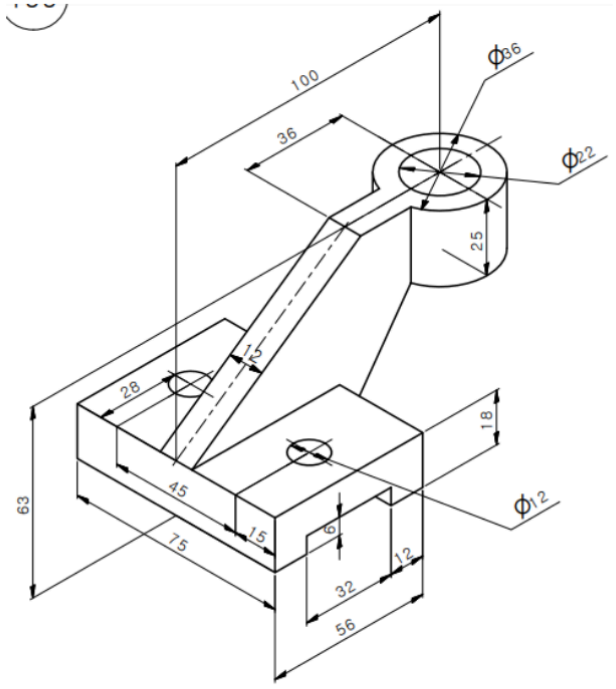


Bài tập 473

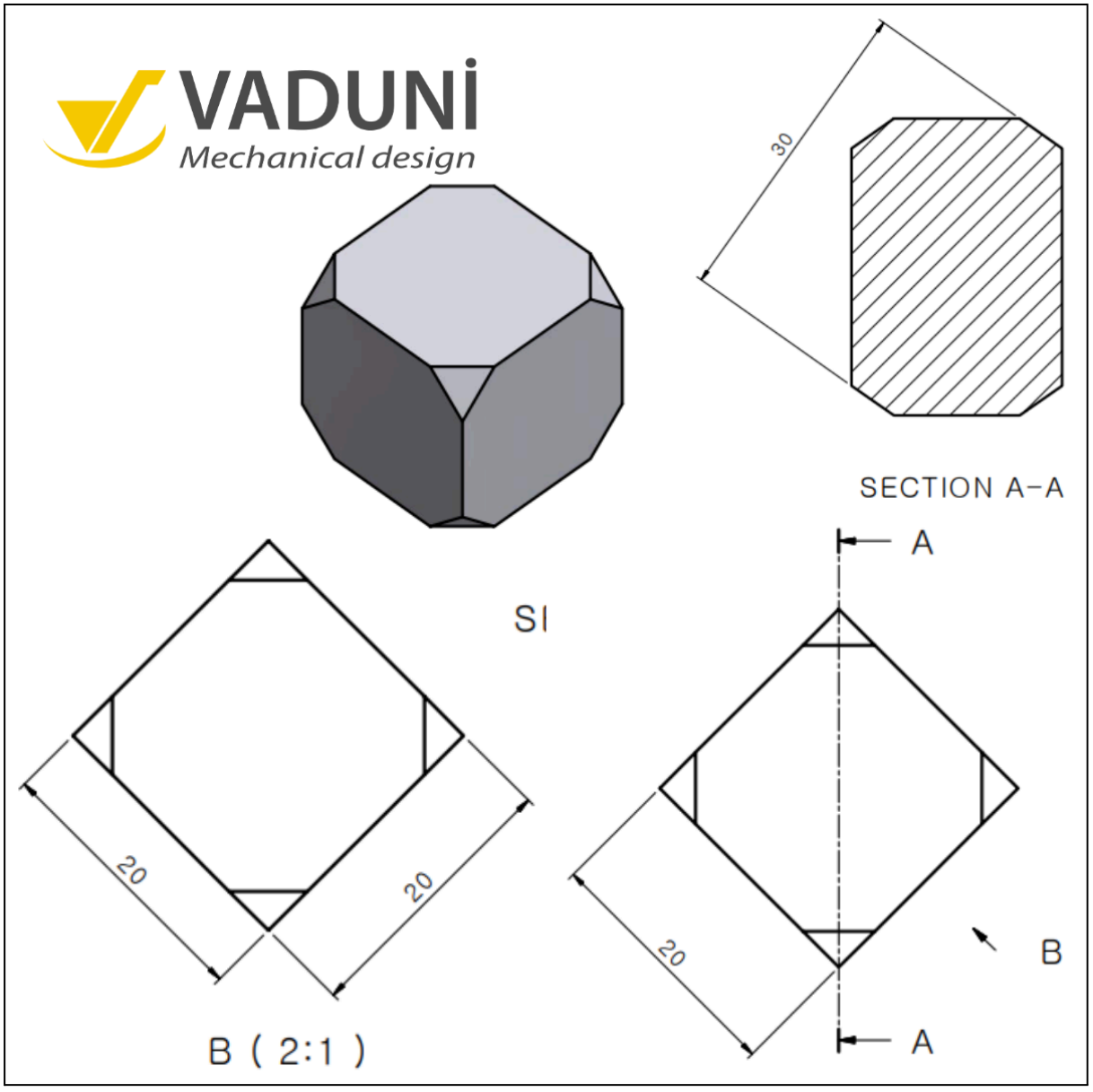

VADUNİ
Mechanical design
101
ϕ16
50
10
R25
19
45
18
22
10
R25
14
10
10
R30
ϕ16
75
3
12
25
ϕ38

Bài tập 474

VADUNI
Mechanical design

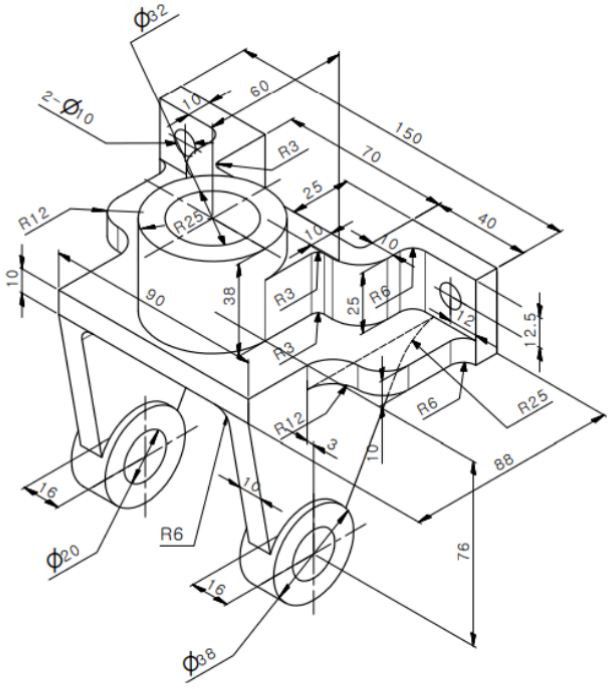


Bài tập 475

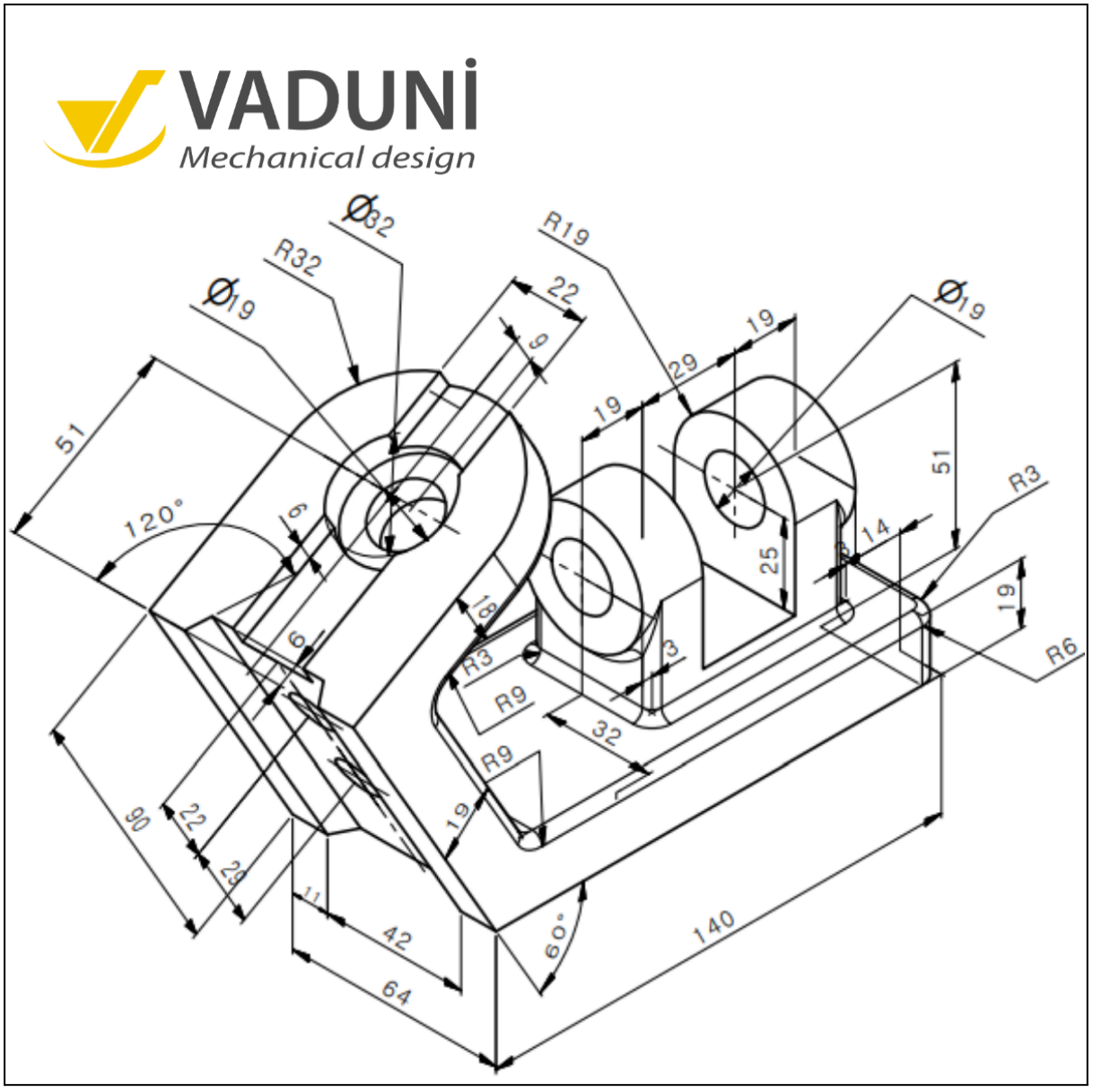


Bài tập 476

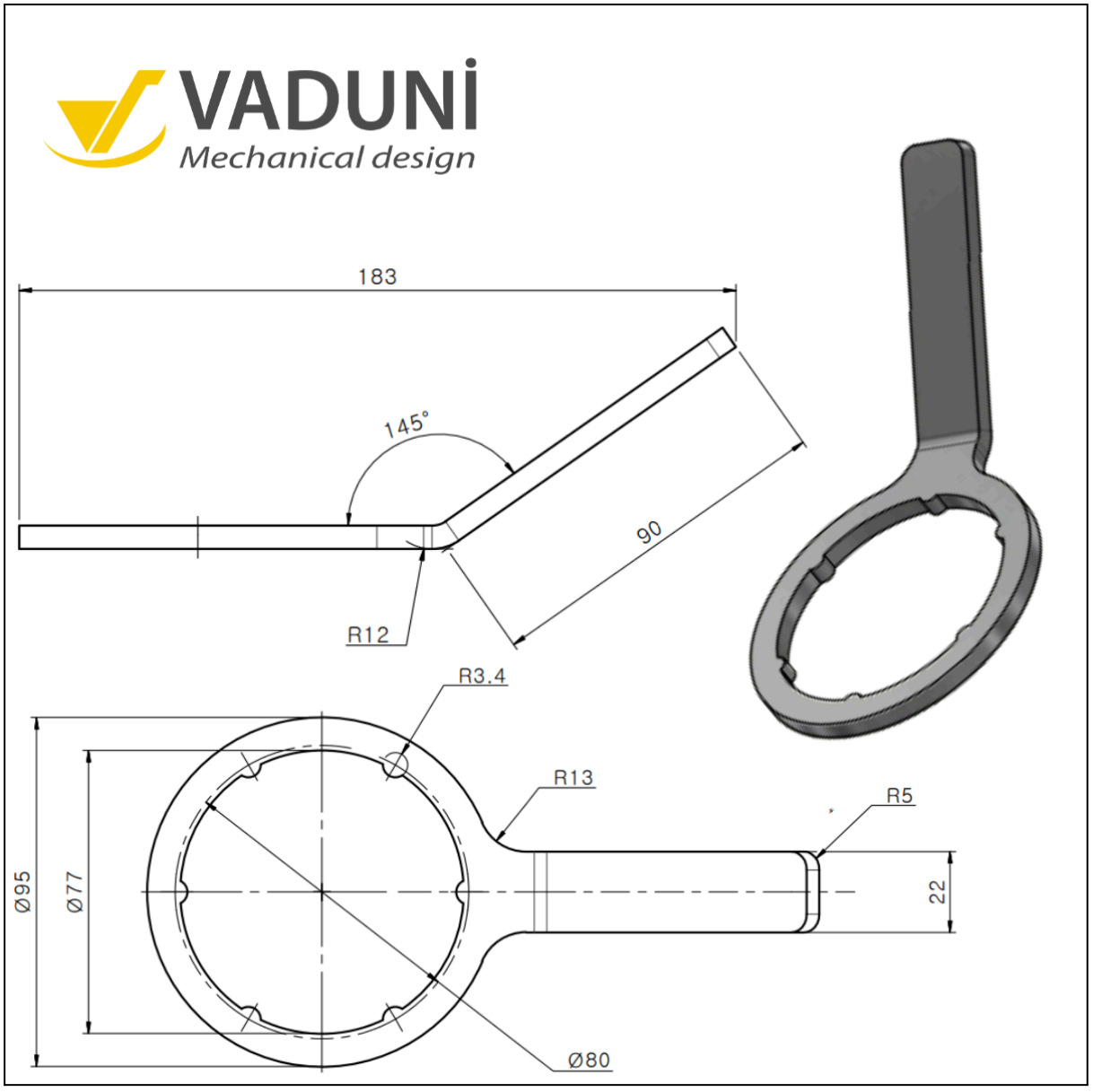
VADUNI
Mechanical design



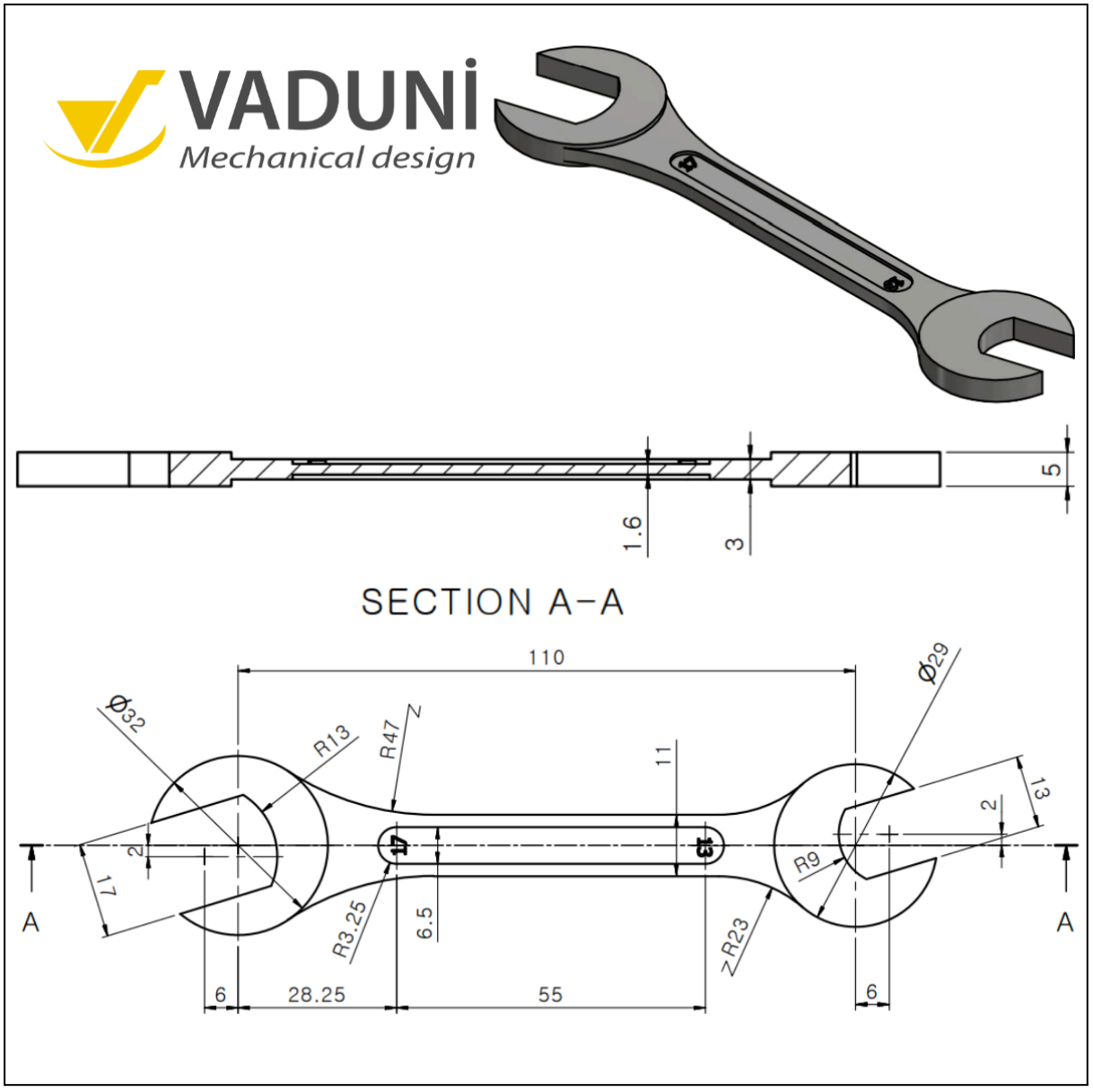
Bài tập 477


VADUNİ
Mechanical design
Ø32
R32
Ø19
R19
22
9
19
29
19
Ø19
51
120°
6
6
18
R3
R9
R9
32
3
25
14
51
R3
19
R6
90
22
29
11
42
64
60°
140

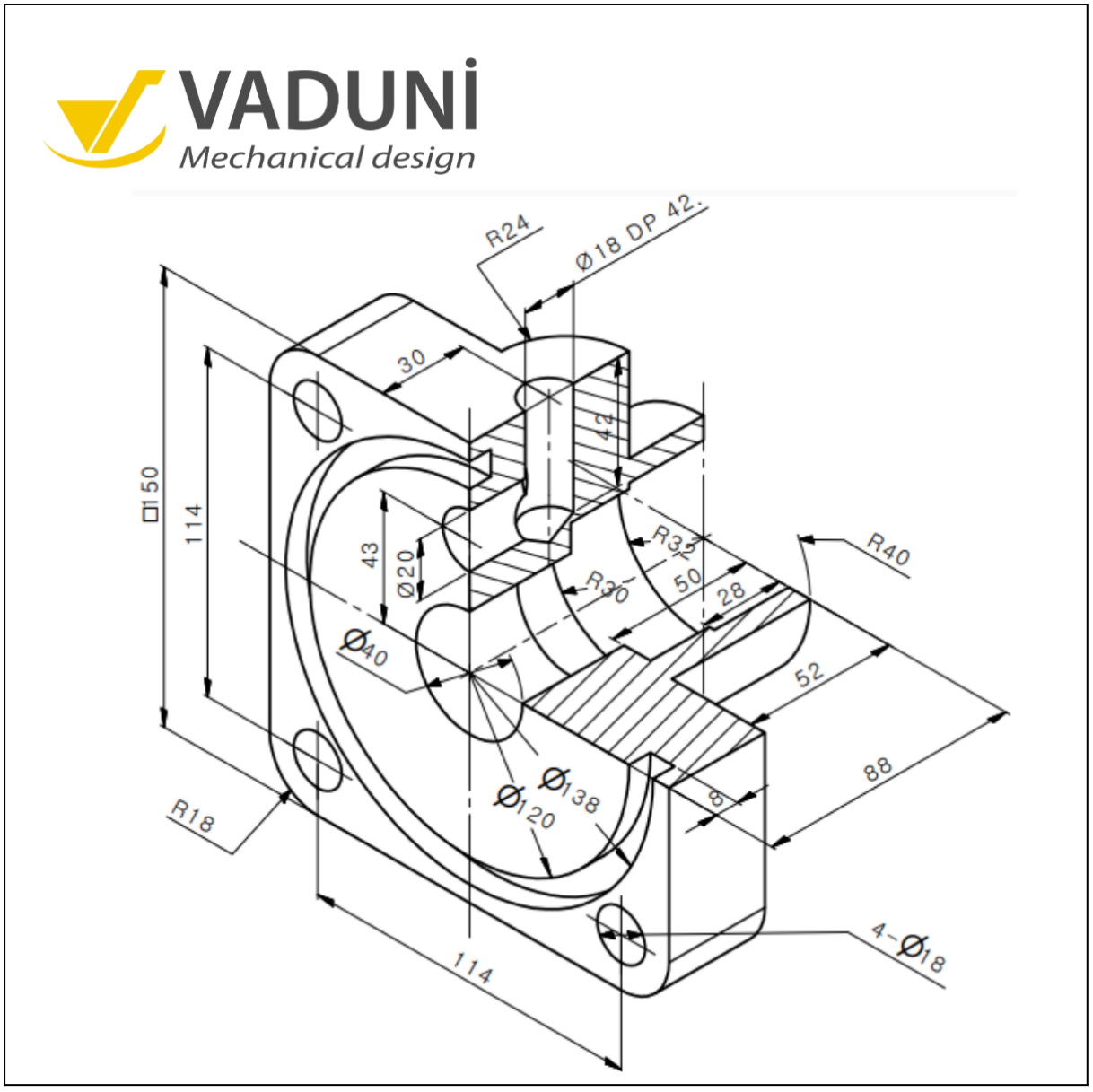
Bài tập 478


VADUNİ
Mechanical design
183
145°
90
R12
R3.4
R13
R5
22
Ø95
Ø77
Ø80

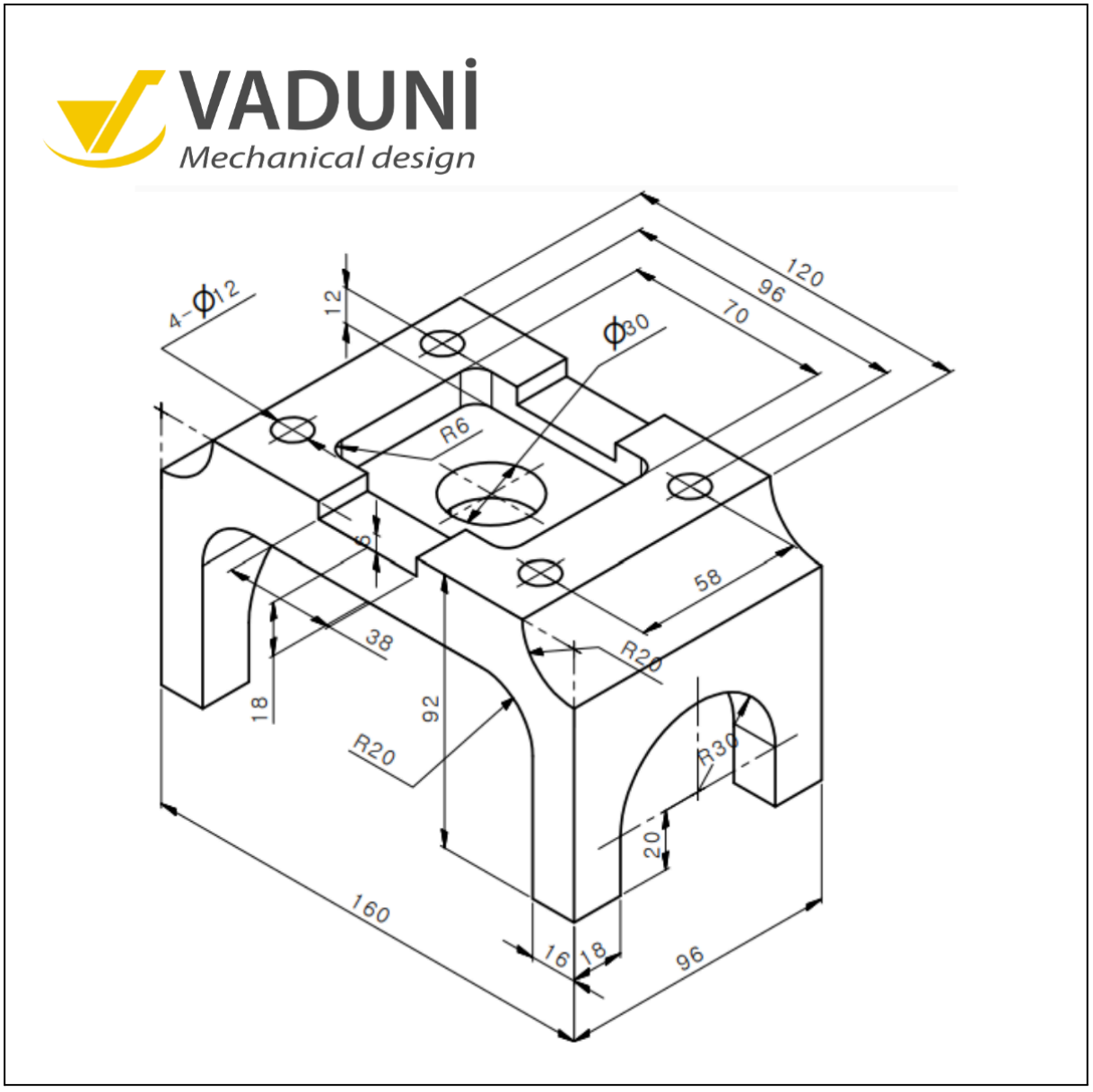
Bài tập 479


VADUNI
Mechanical design
5
1.6
3
SECTION A-A
110
Ø32
R13
R47
11
Ø29
13
2
17
17
13
R9
R3.25
6.5
R23
A
A
6
28.25
55
6

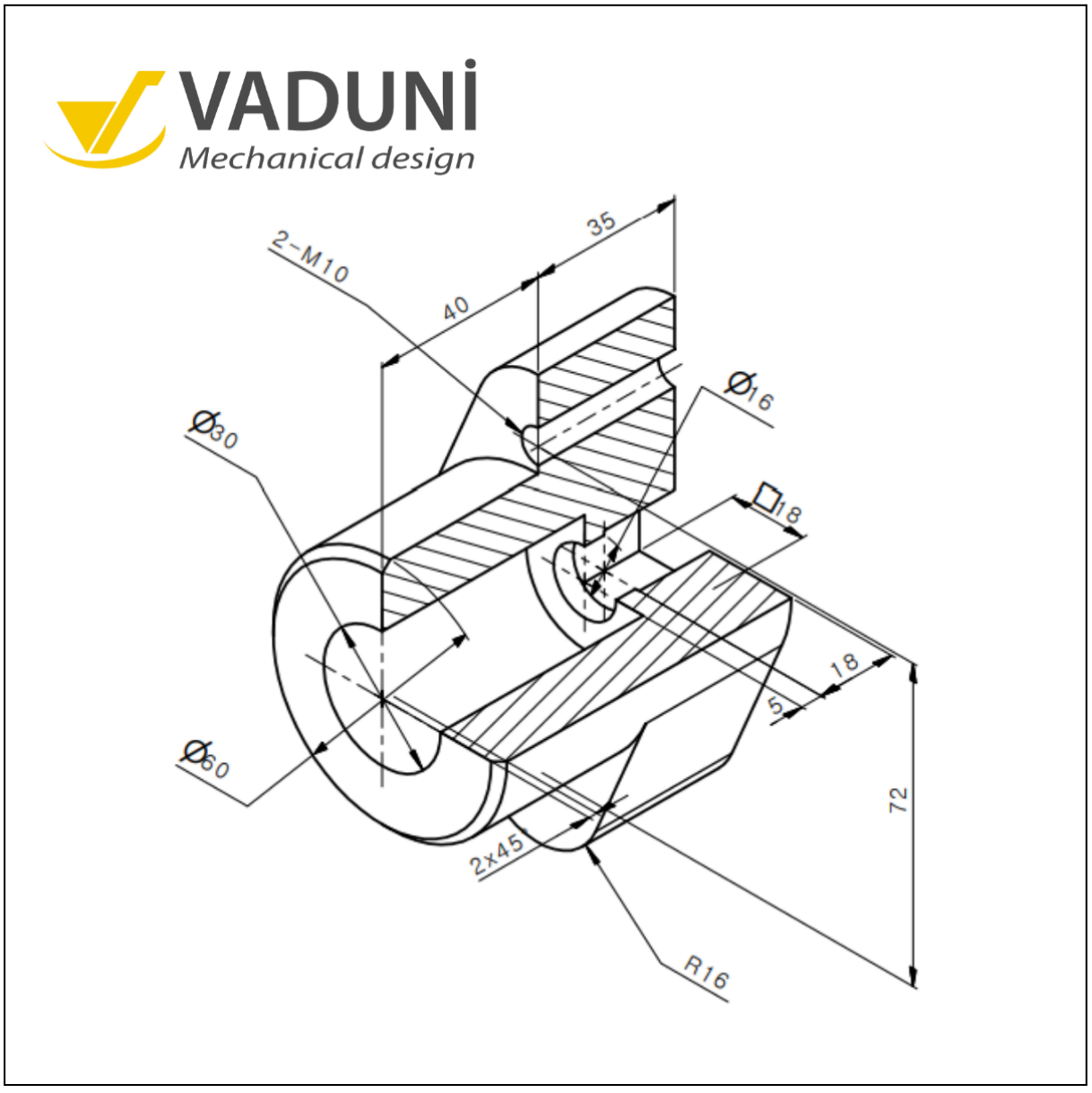
Bài tập 480


VADUNİ
Mechanical design
R24
Ø18 DP 42.
30
42
□150
114
43
Ø20
R32
R30
50
28
R40
Ø40
52
88
Ø138
Ø120
8
R18
114
4–Ø18

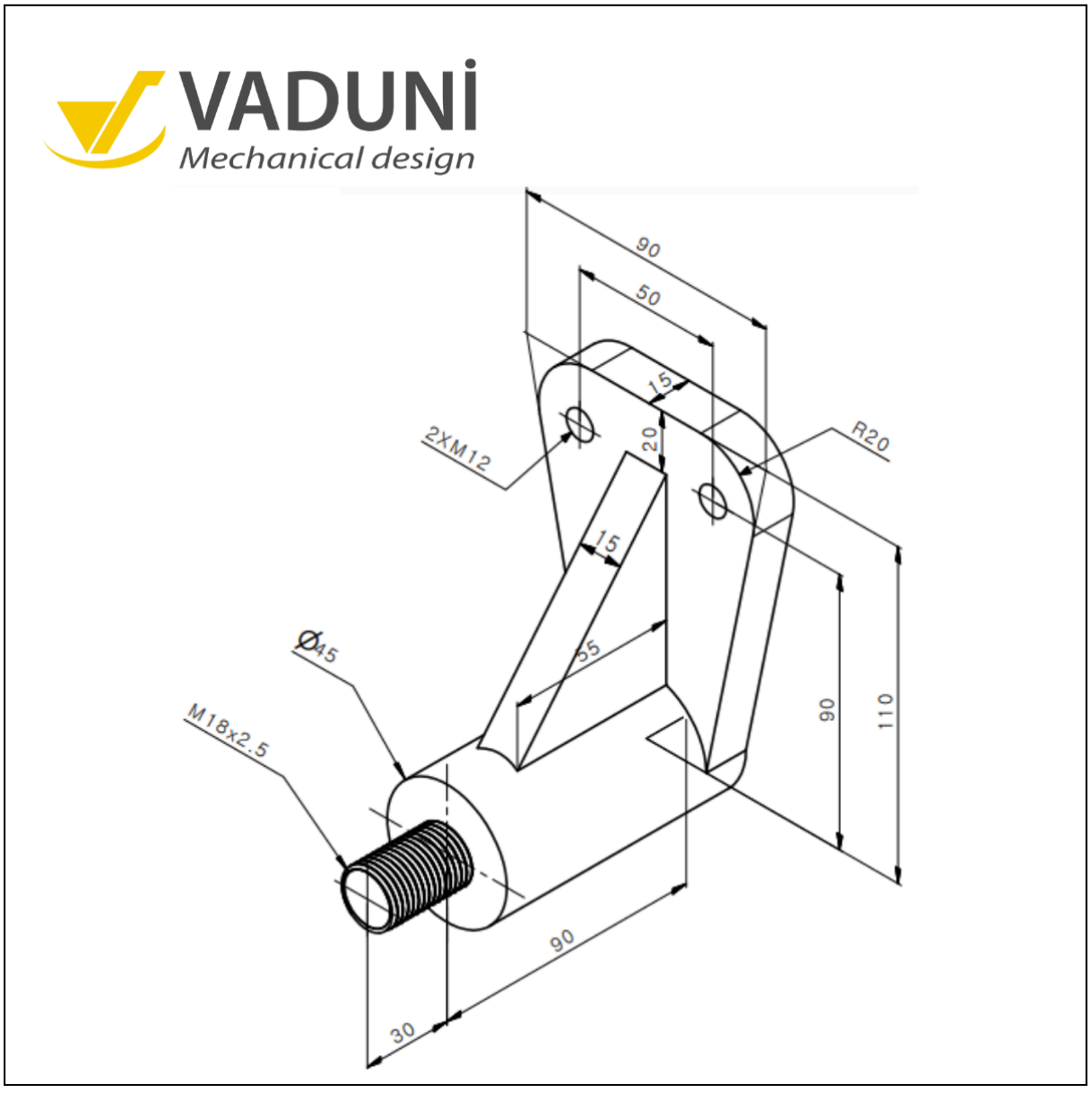
Bài tập 481


VADUNİ
Mechanical design
4-ϕ12
12
ϕ30
120
96
70
R6
58
38
18
92
R20
R20
R30
20
160
16
18
96

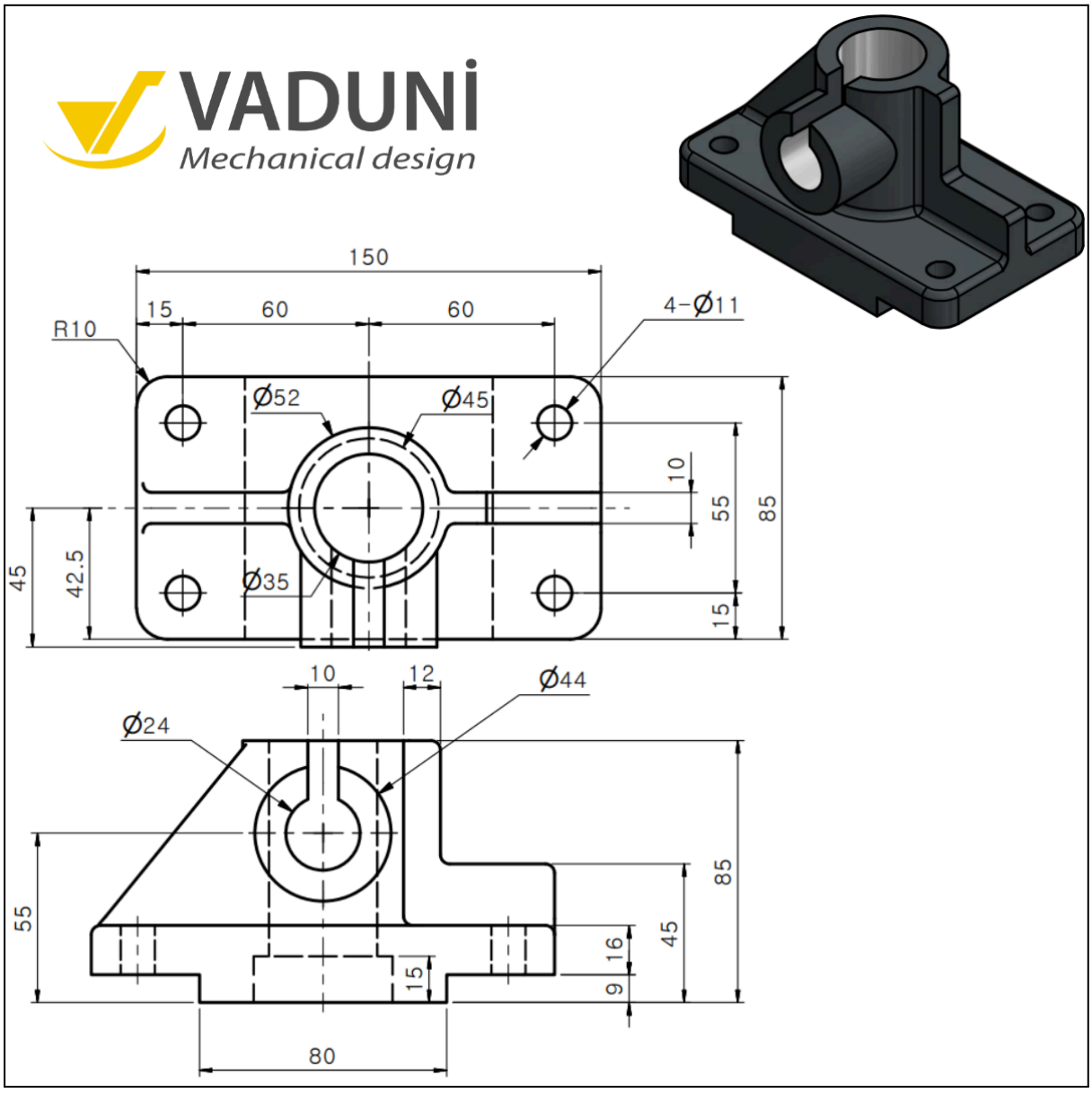
Bài tập 482


VADUNİ
Mechanical design
2-M10
40
35
Ø16
Ø30
□18
18
5
Ø60
2x45
72
R16

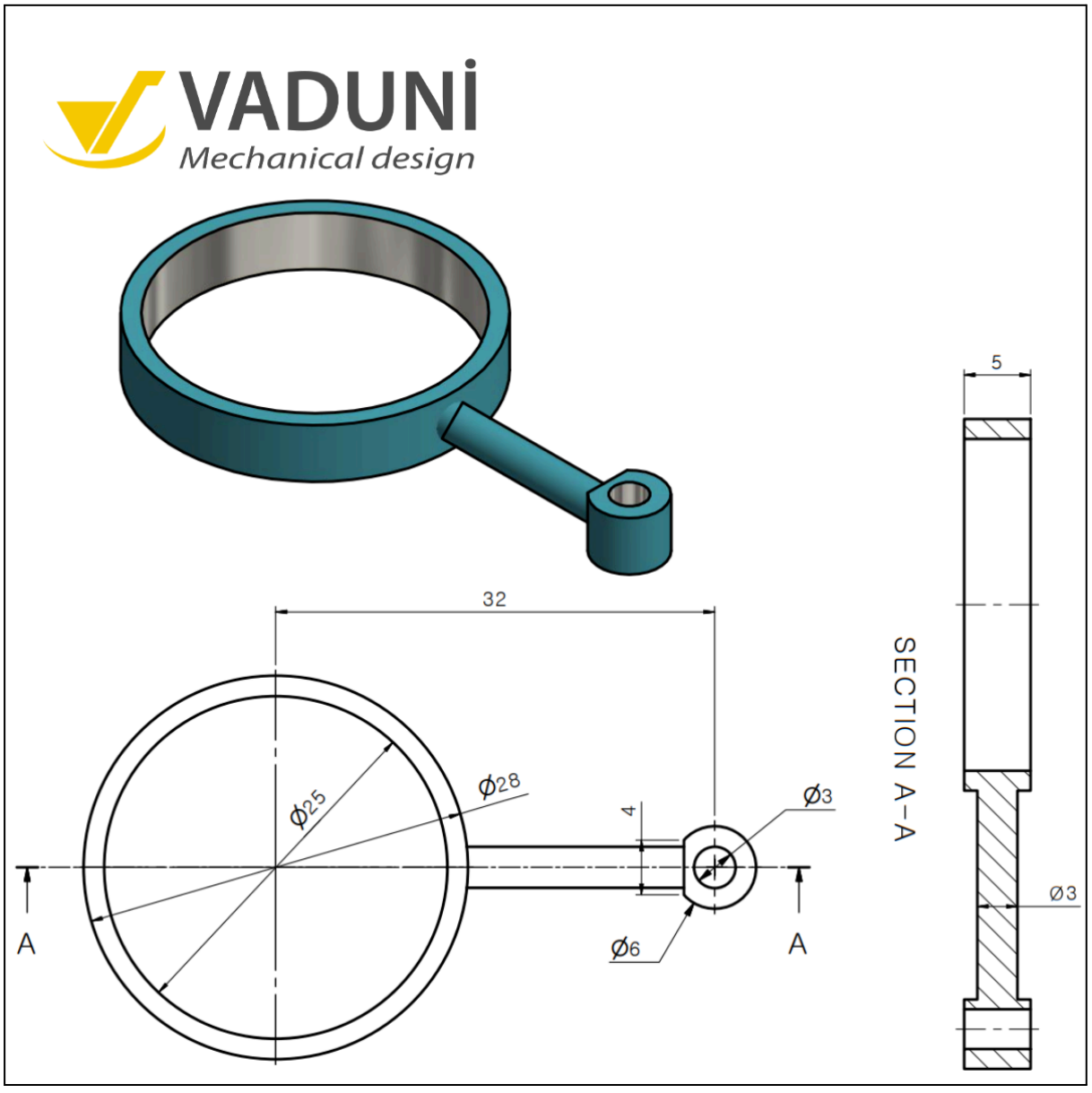
Bài tập 483


VADUNI
Mechanical design
90
50
15
20
2XM12
R20
15
55
Ø45
M18x2.5
90
110
90
30

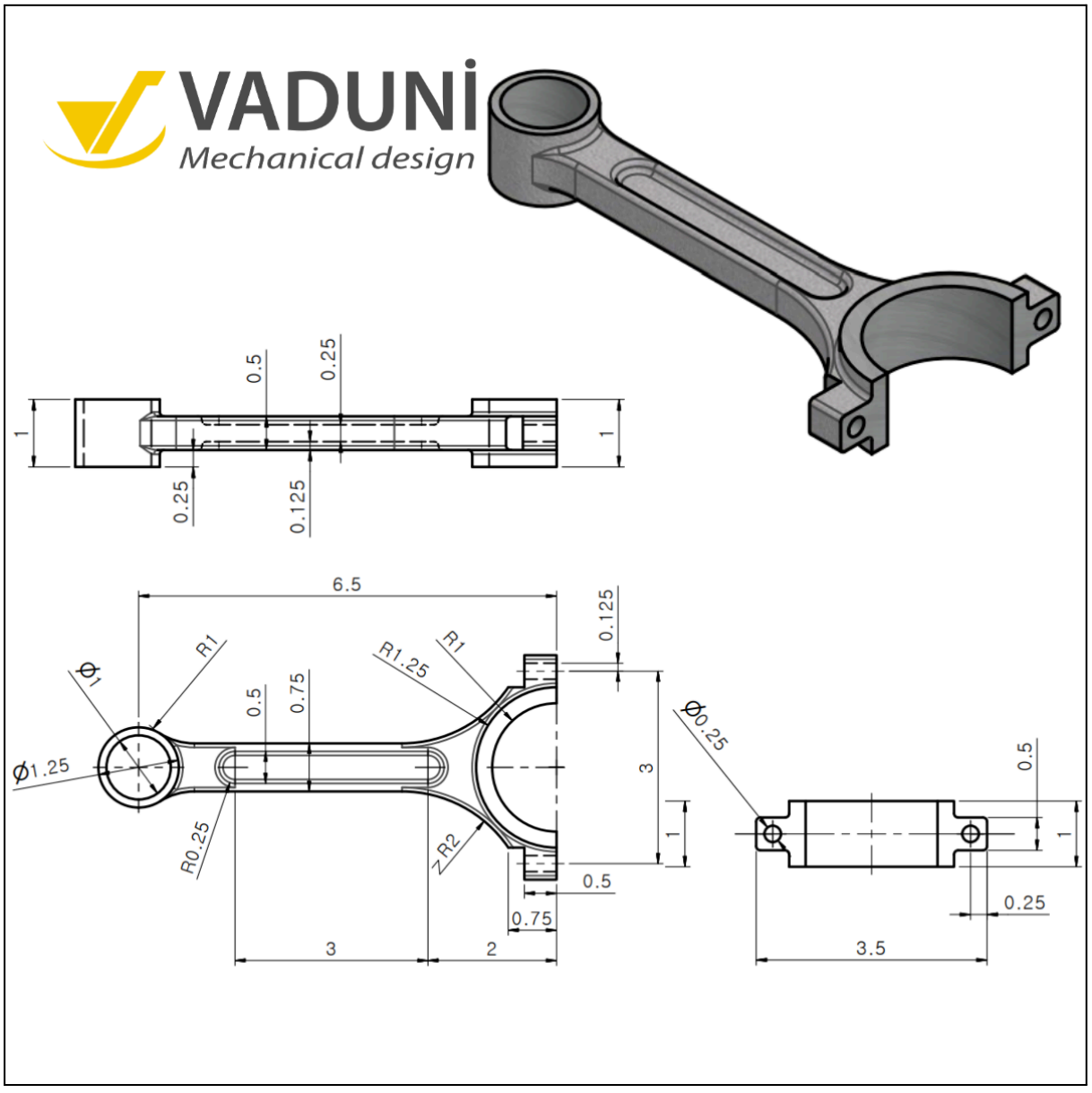
Bài tập 484


VADUNİ
Mechanical design
150
15
60
60
R10
4-Ø11
Ø52
Ø45
10
55
85
45
42.5
Ø35
15
10
12
Ø44
Ø24
55
85
45
16
9
15
80

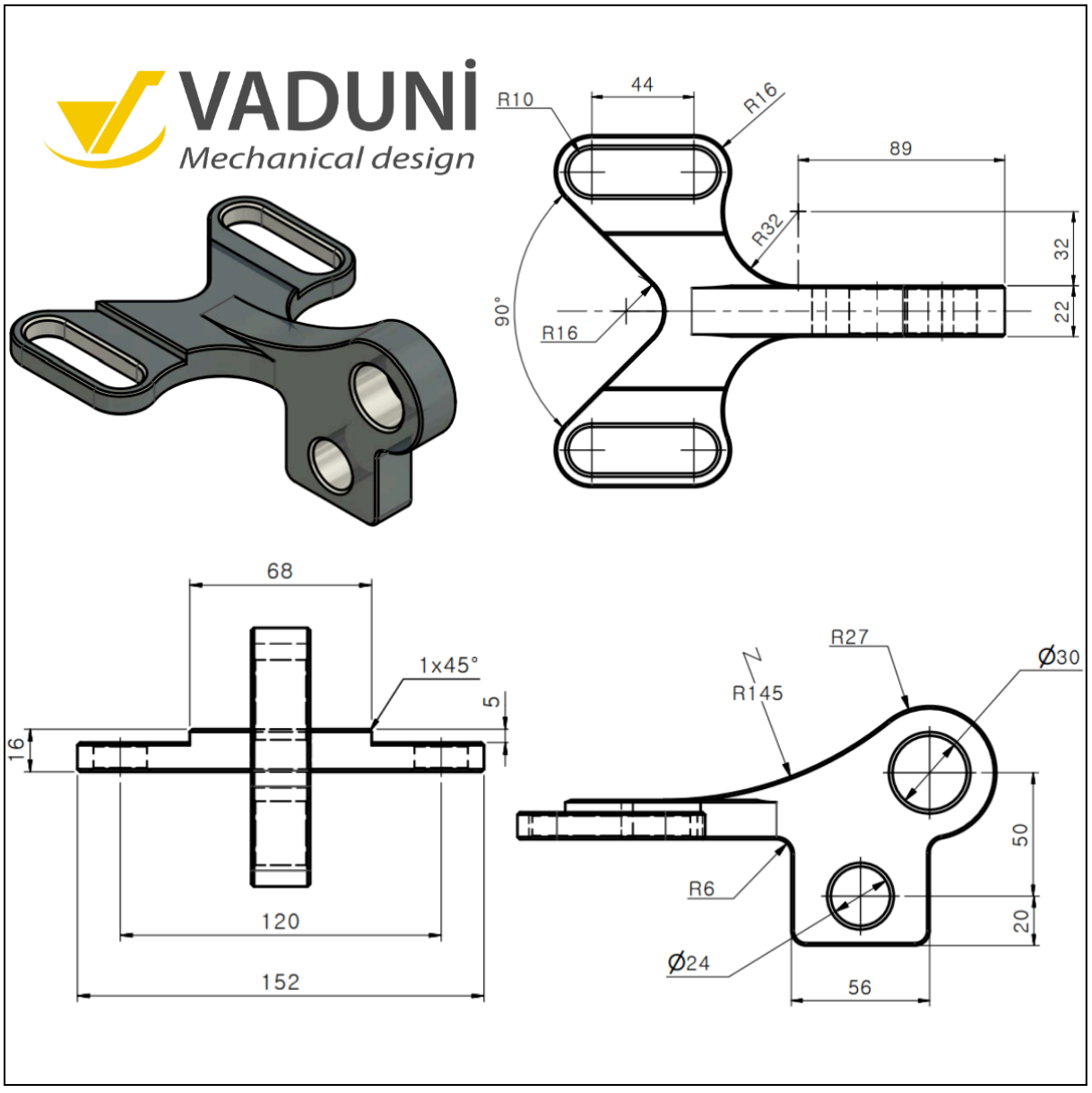
Bài tập 485



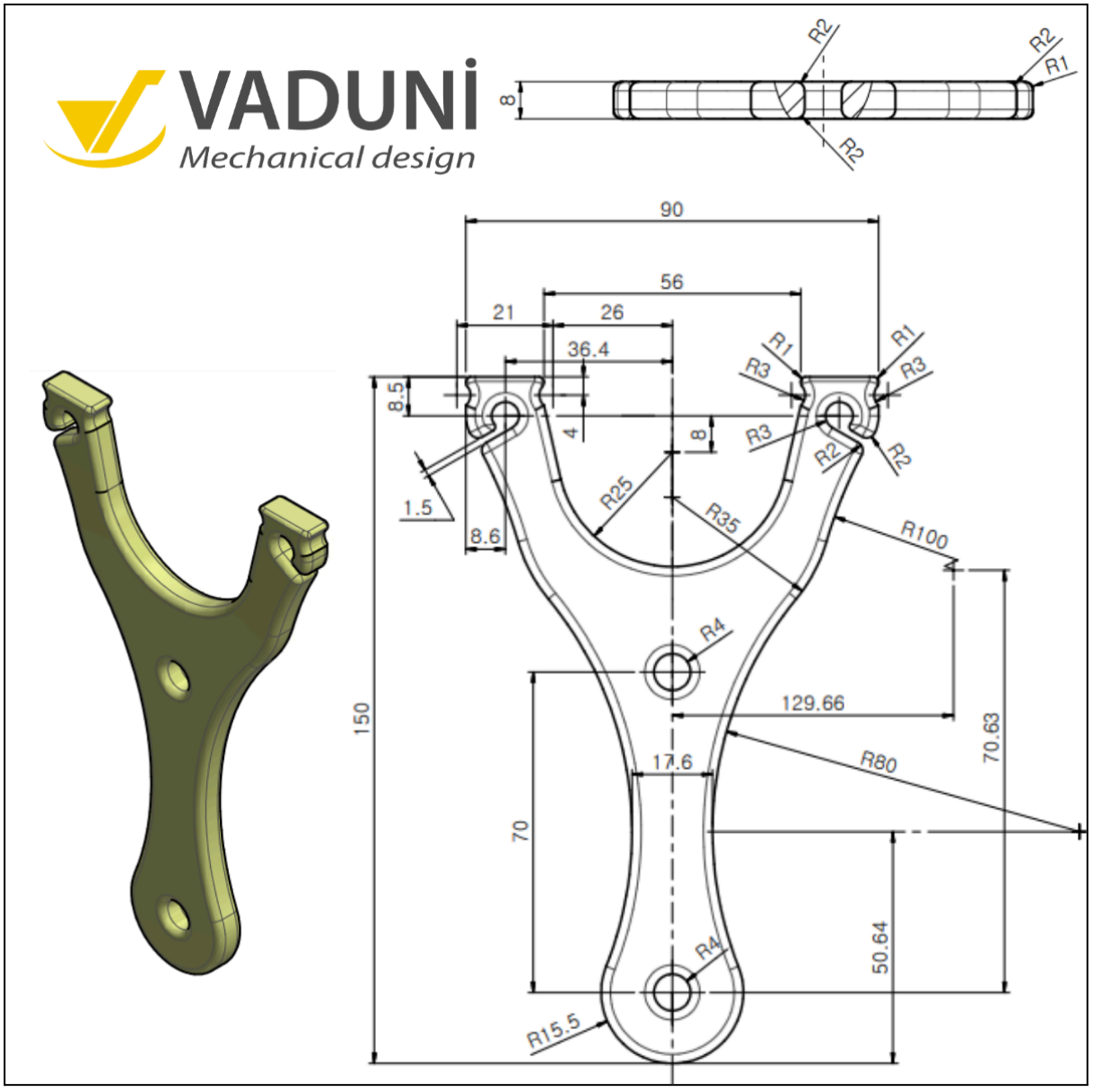
Bài tập 486


VADUNİ
Mechanical design
0.5
0.25
1
1
0.25
0.125
6.5
0.125
R1
R1.25
R1
ϕ1
ϕ1.25
0.5
0.75
3
1
R0.25
R2
0.5
0.75
3
2
ϕ0.25
0.5
1
0.25
3.5

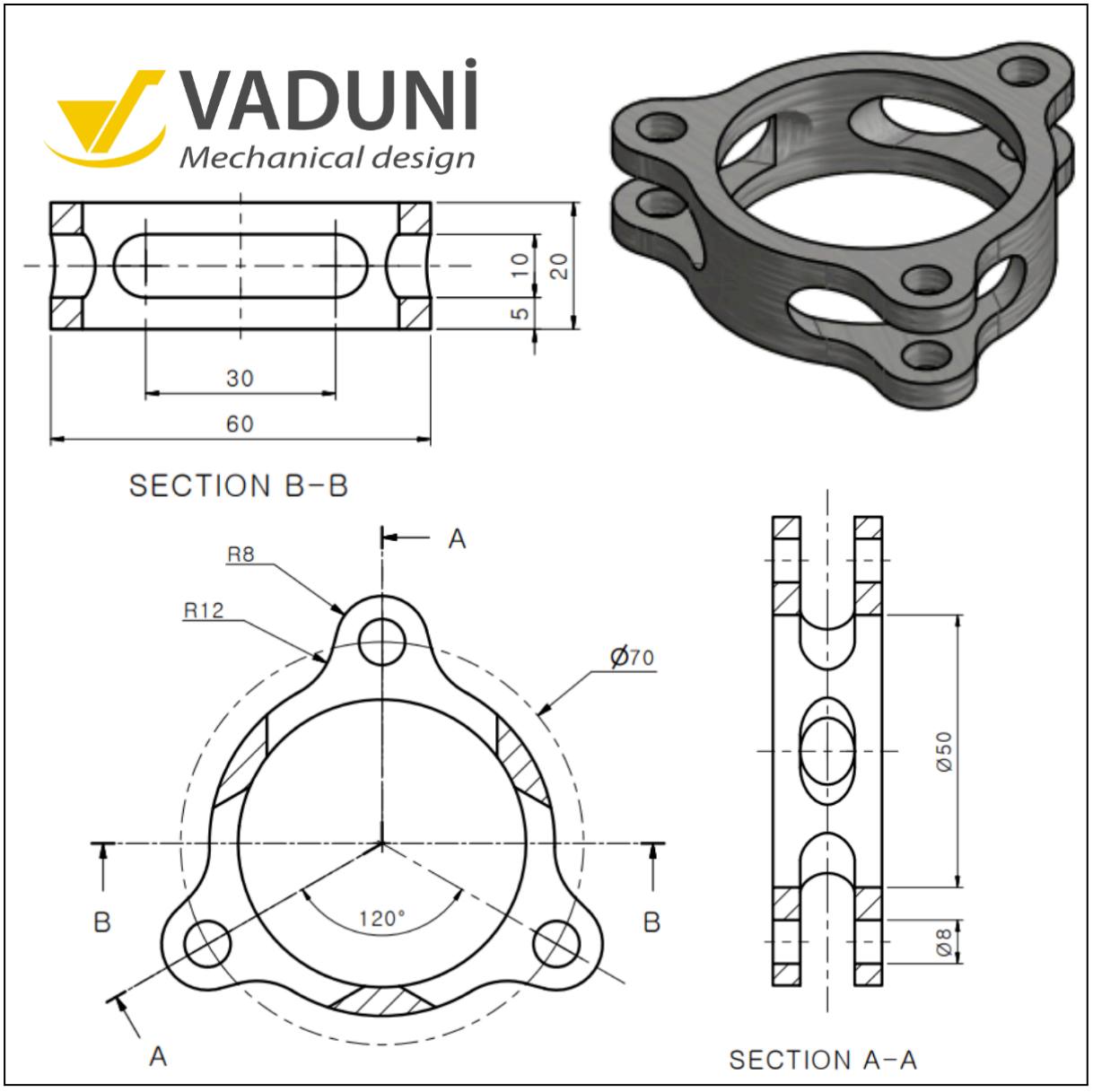
Bài tập 487


VADUNİ
Mechanical design
R10
44
R16
89
R32
32
22
90°
R16
68
1x45°
5
16
120
152
R27
Ø30
R145
R6
50
20
Ø24
56

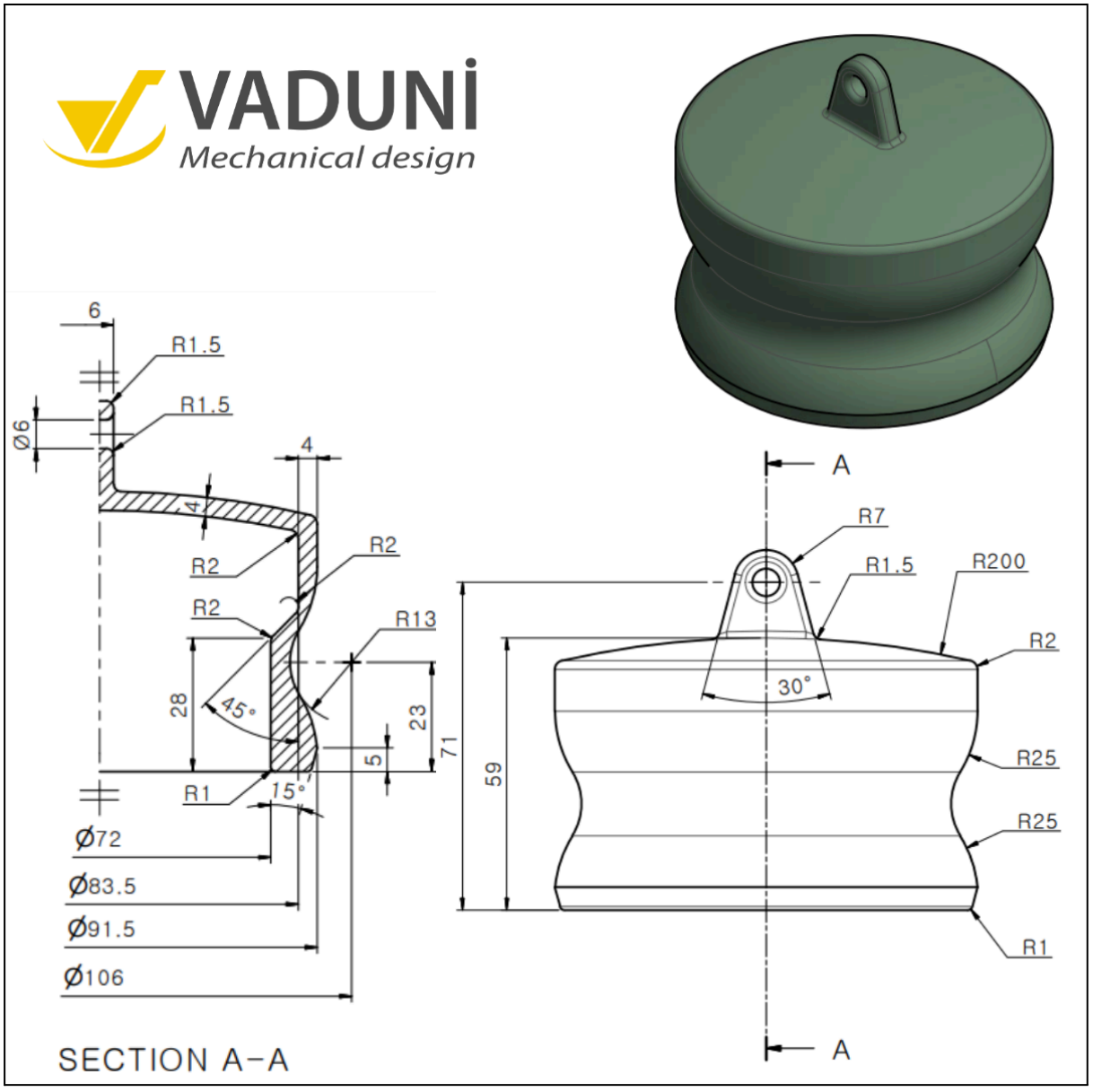
Bài tập 488


VADUNİ
Mechanical design
R2
R2
R1
8
R2
90
56
21
26
36.4
R1
R3
R1
R3
8.5
4
8
R3
R2
R2
1.5
R25
R35
R100
8.6
R4
129.66
150
70.63
17.6
R80
70
50.64
R4
R15.5

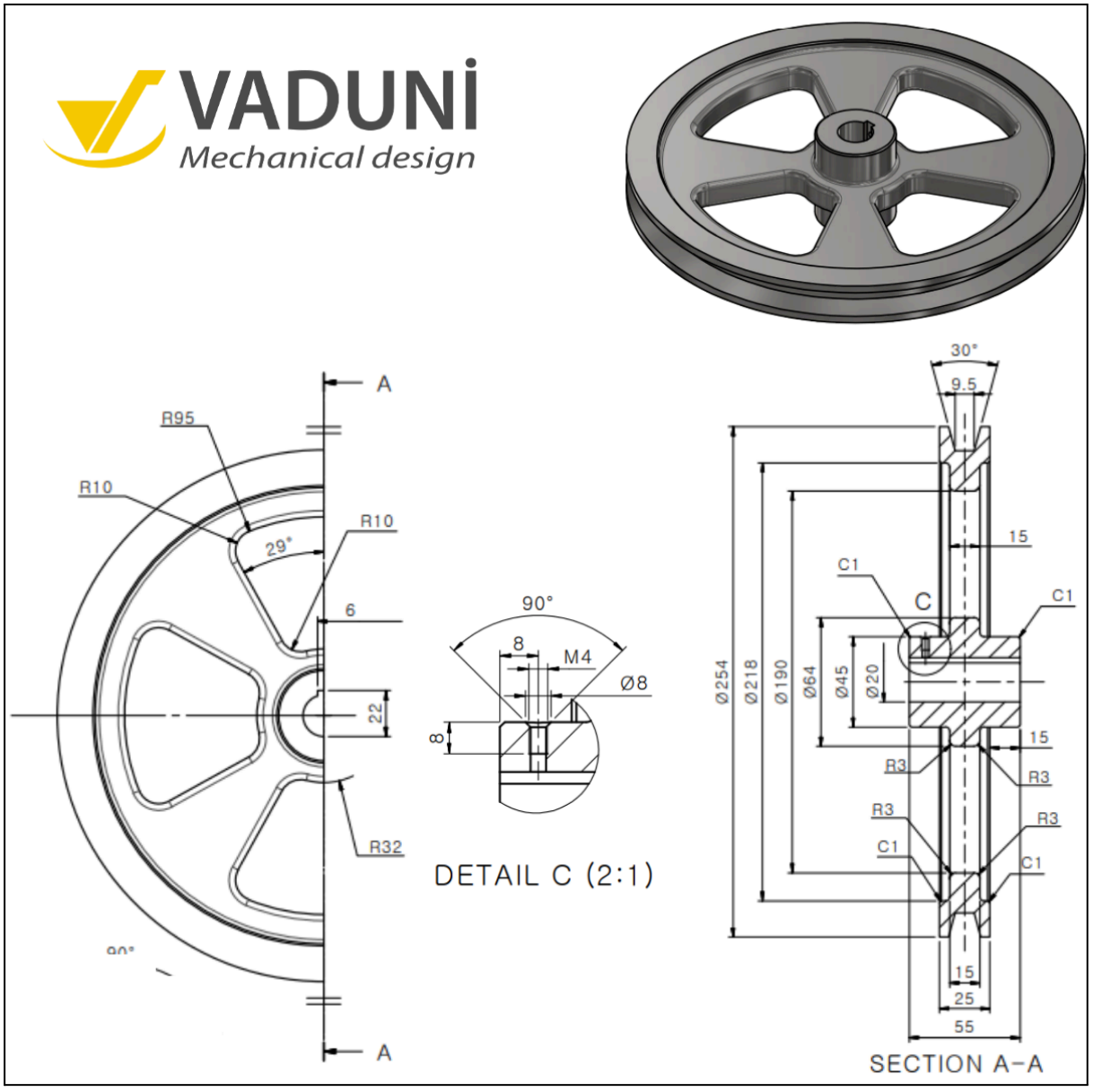
Bài tập 489


VADUNİ
Mechanical design
10
20
5
30
60
SECTION B-B
A
R8
R12
Ø70
B
B
120°
A
Ø50
Ø8
SECTION A-A

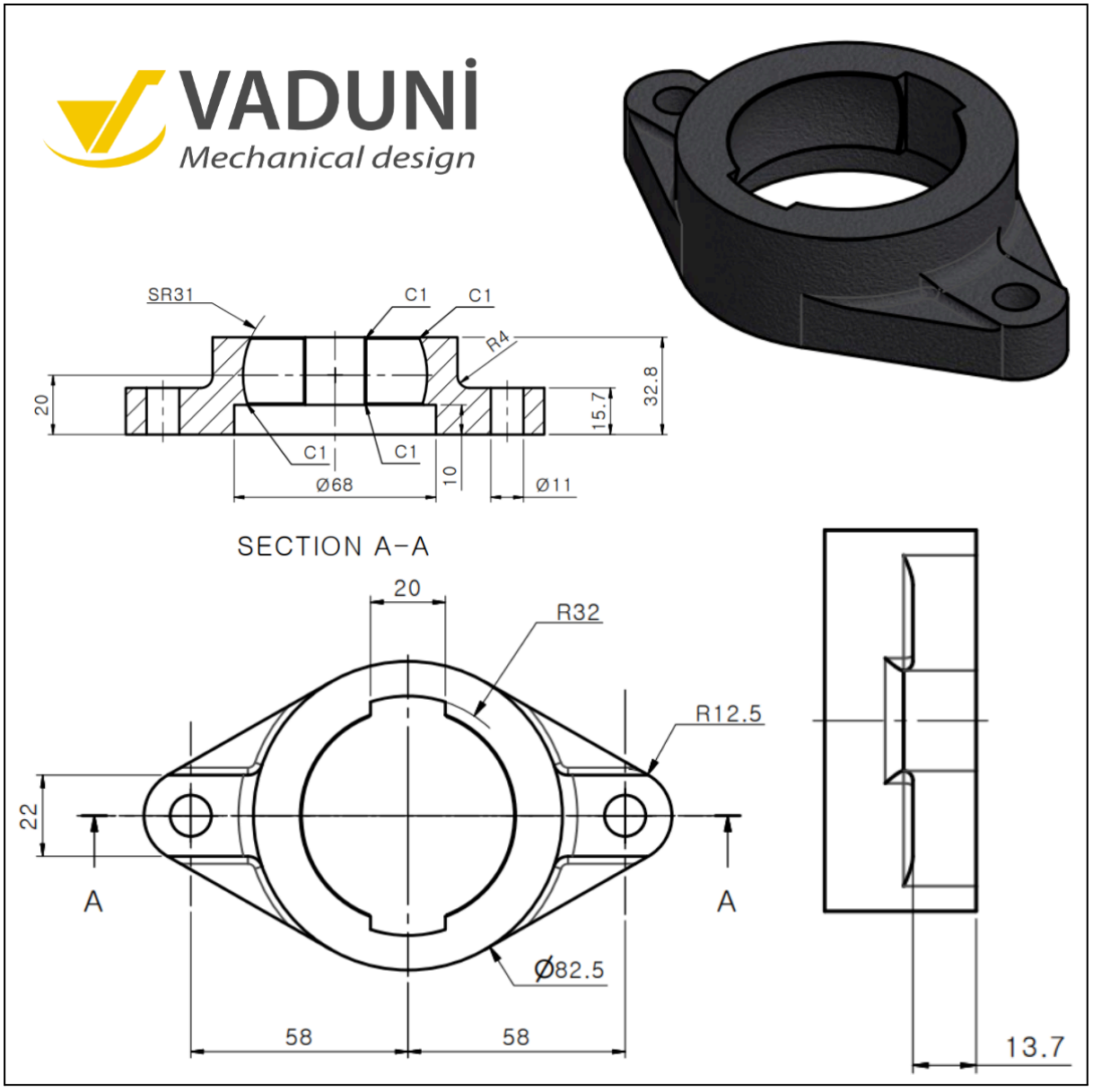
Bài tập 490


VADUNİ
Mechanical design
6
R1.5
R1.5
Ø6
4
4
R2
R2
R2
R13
28
45°
23
5
71
59
R1
15°
Ø72
Ø83.5
Ø91.5
Ø106
SECTION A–A
A
R7
R1.5
R200
R2
30°
R25
R25
R1
A

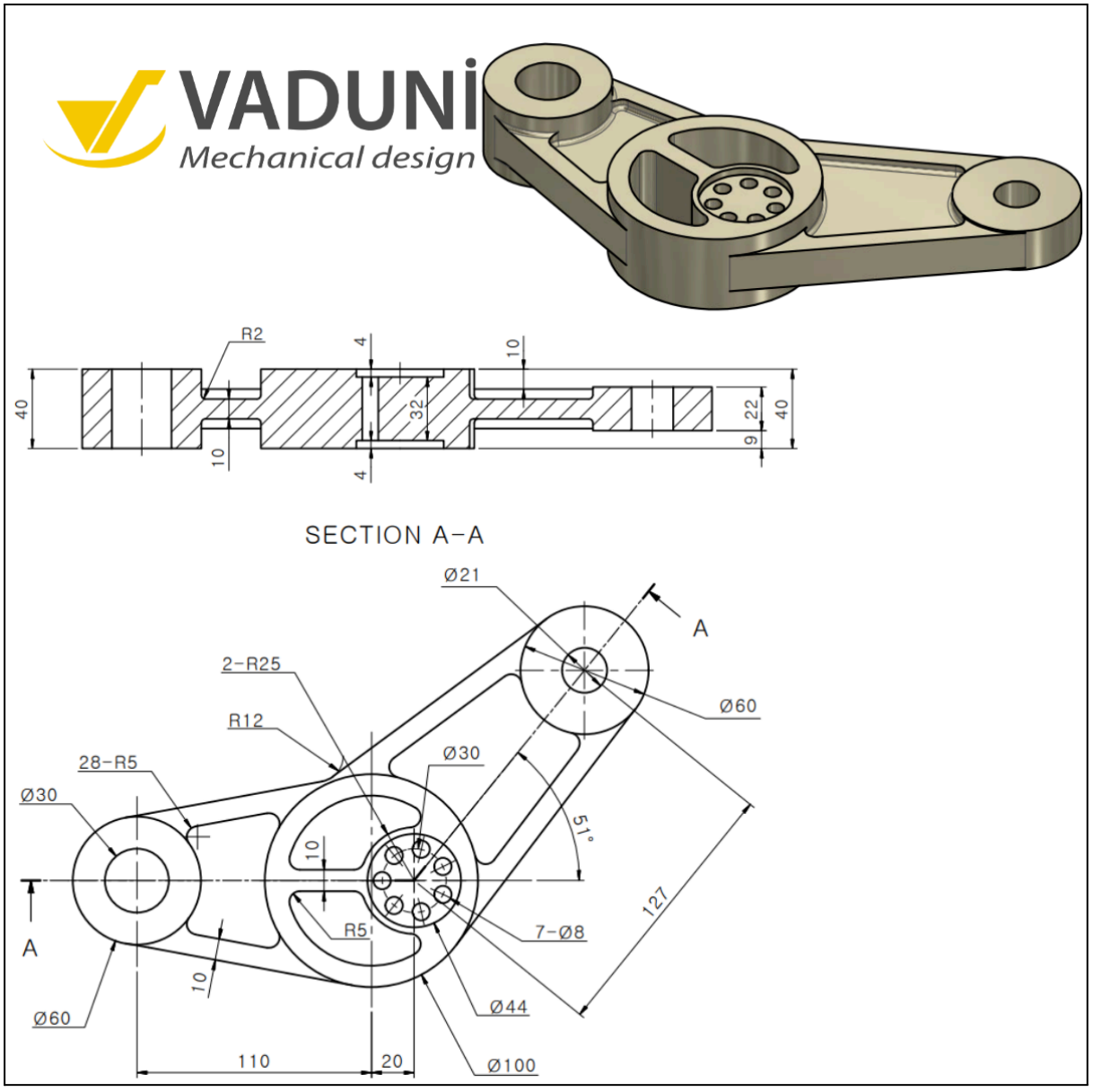
Bài tập 491


VADUNİ
Mechanical design
A
R95
R10
R10
29°
6
22
R32
A
90°
8
M4
Ø8
8
DETAIL C (2:1)
30°
9.5
15
C1
C
C1
Ø254
Ø218
Ø190
Ø64
Ø45
Ø20
15
R3
R3
R3
R3
C1
C1
15
25
55
SECTION A-A

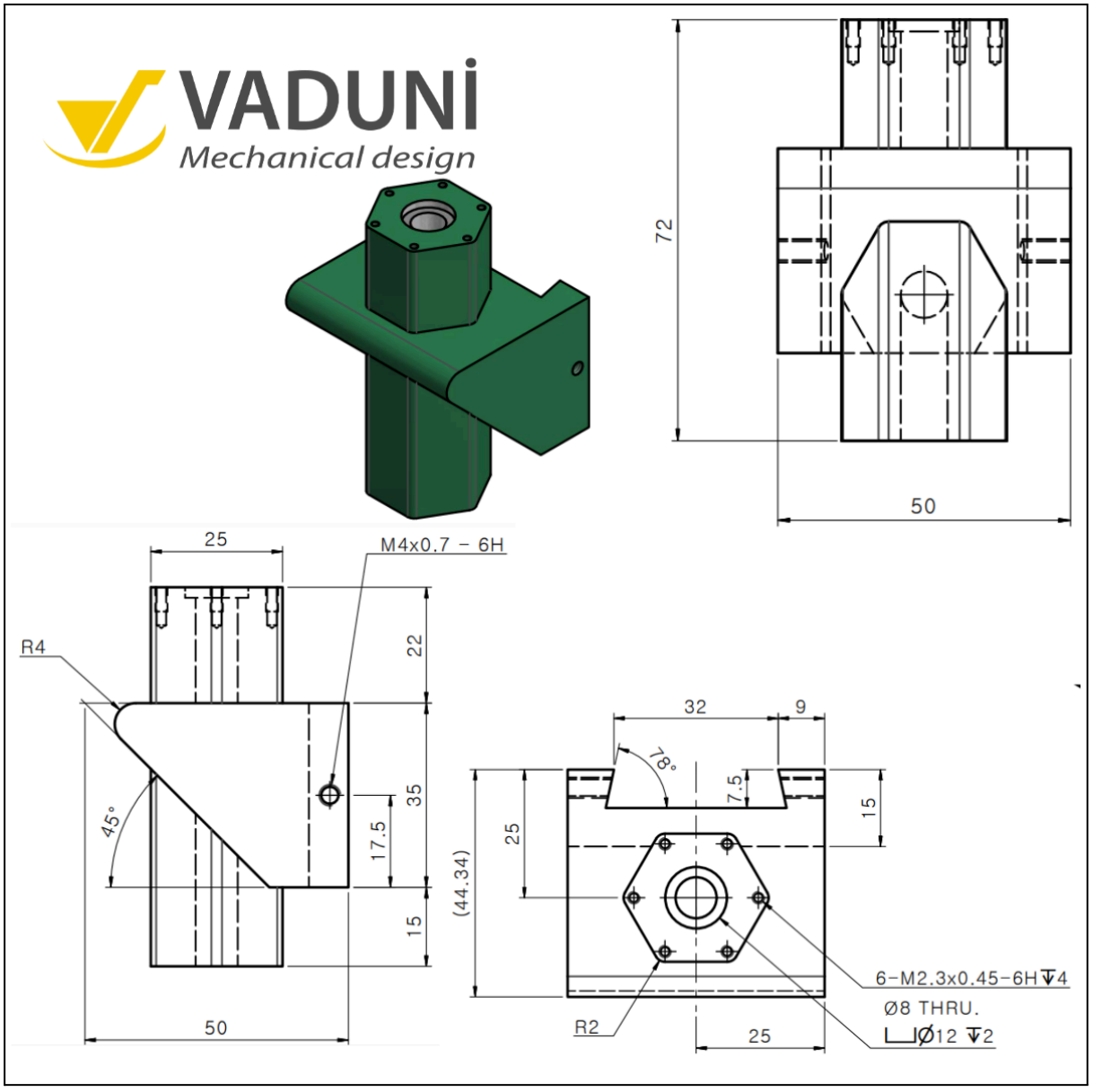
Bài tập 492


VADUNI
Mechanical design
SR31
C1
C1
R4
20
32.8
15.7
C1
C1
Ø68
10
Ø11
SECTION A-A
20
R32
R12.5
22
A
A
Ø82.5
58
58
13.7

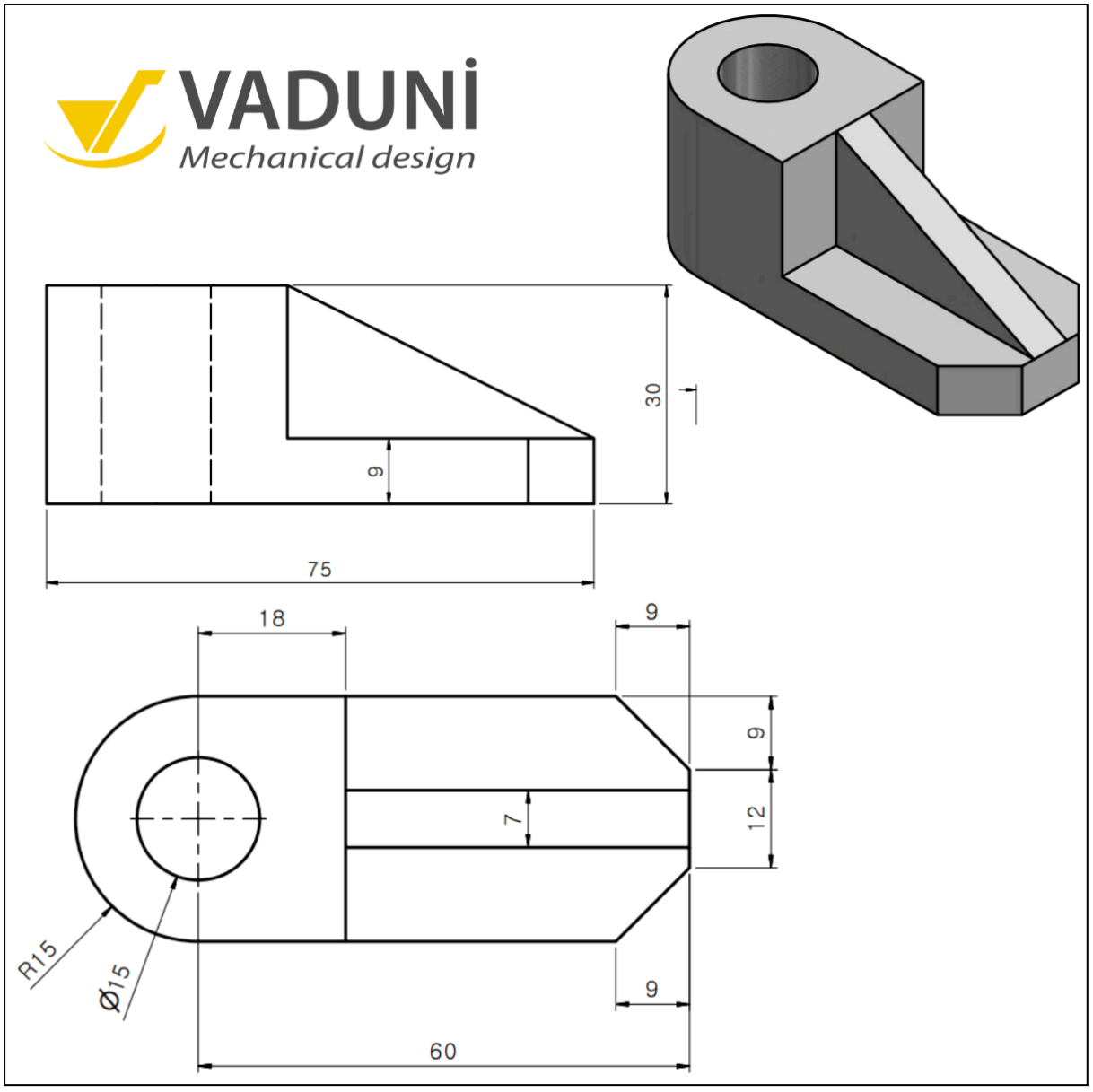
Bài tập 493


VADUNI
Mechanical design
R2
4
10
40
32
22
9
40
10
4
SECTION A-A
Ø21
A
2-R25
Ø60
R12
Ø30
28-R5
Ø30
51°
10
127
R5
7-Ø8
A
10
Ø60
Ø44
110
20
Ø100

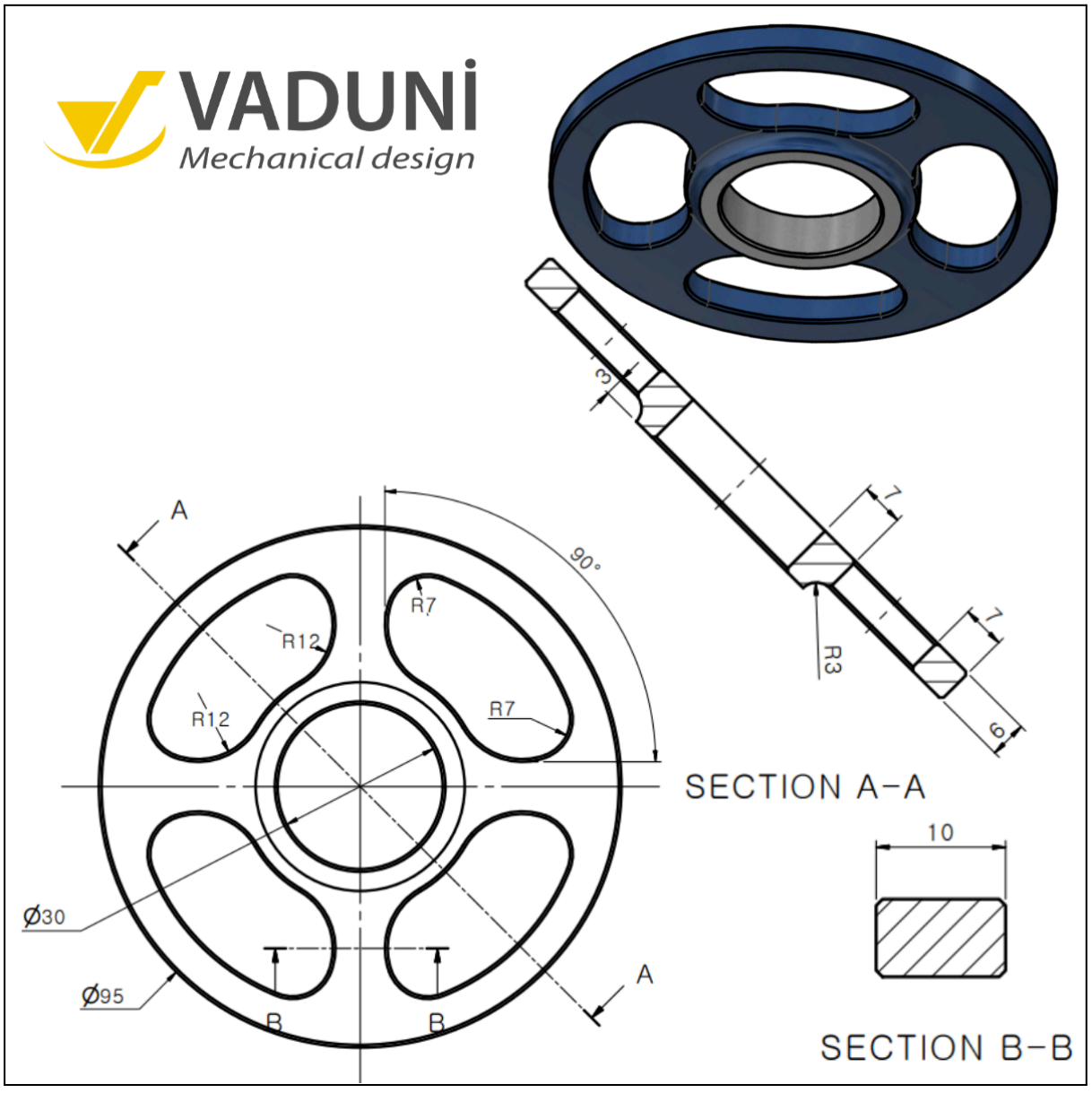
Bài tập 494


VADUNI
Mechanical design
72
50
25
M4x0.7 - 6H
R4
22
35
17.5
15
45°
50
32
9
18°
7.5
15
25
(44.34)
R2
25
6-M2.3x0.45-6H↧4
Ø8 THRU.
⌴Ø12 ↧2

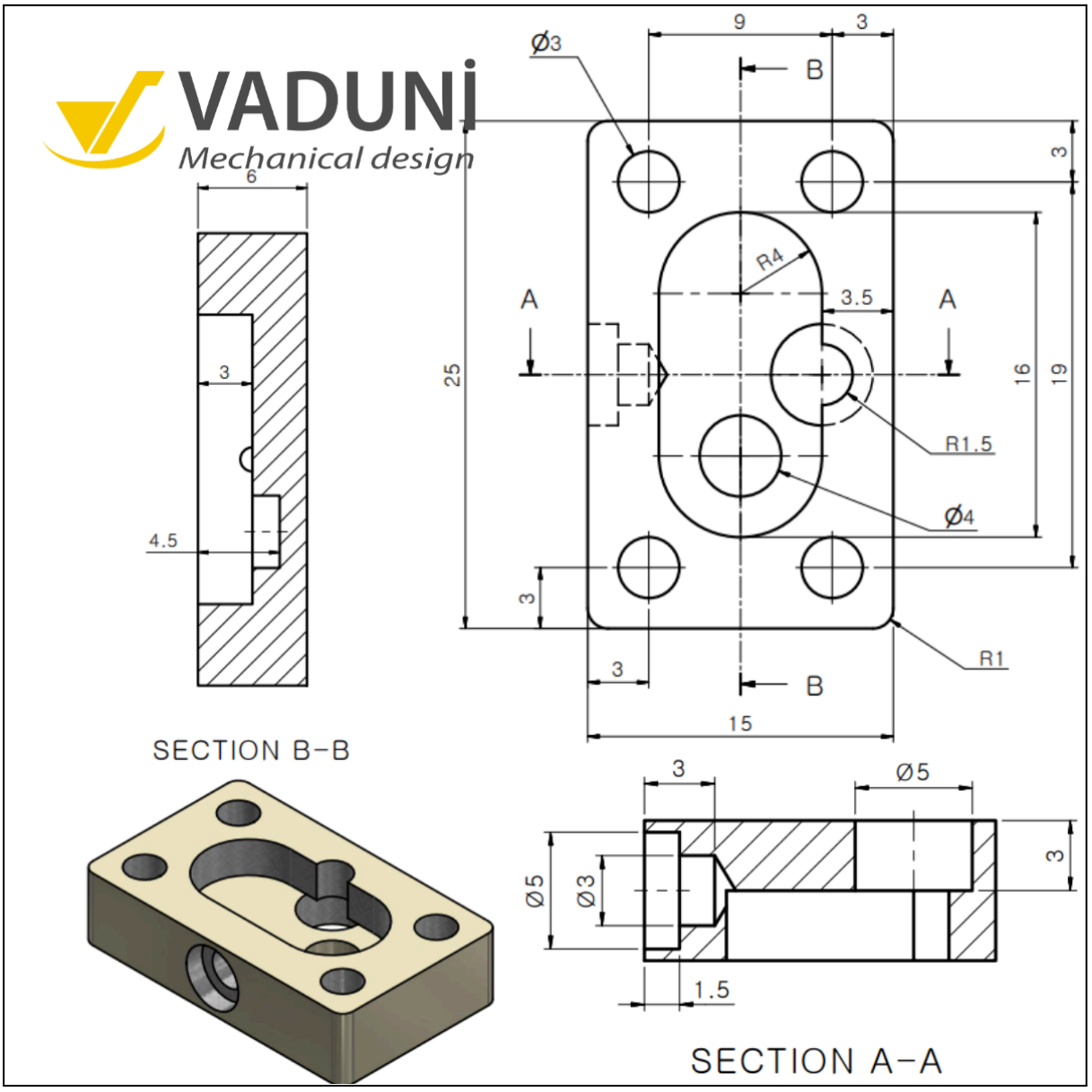
Bài tập 495



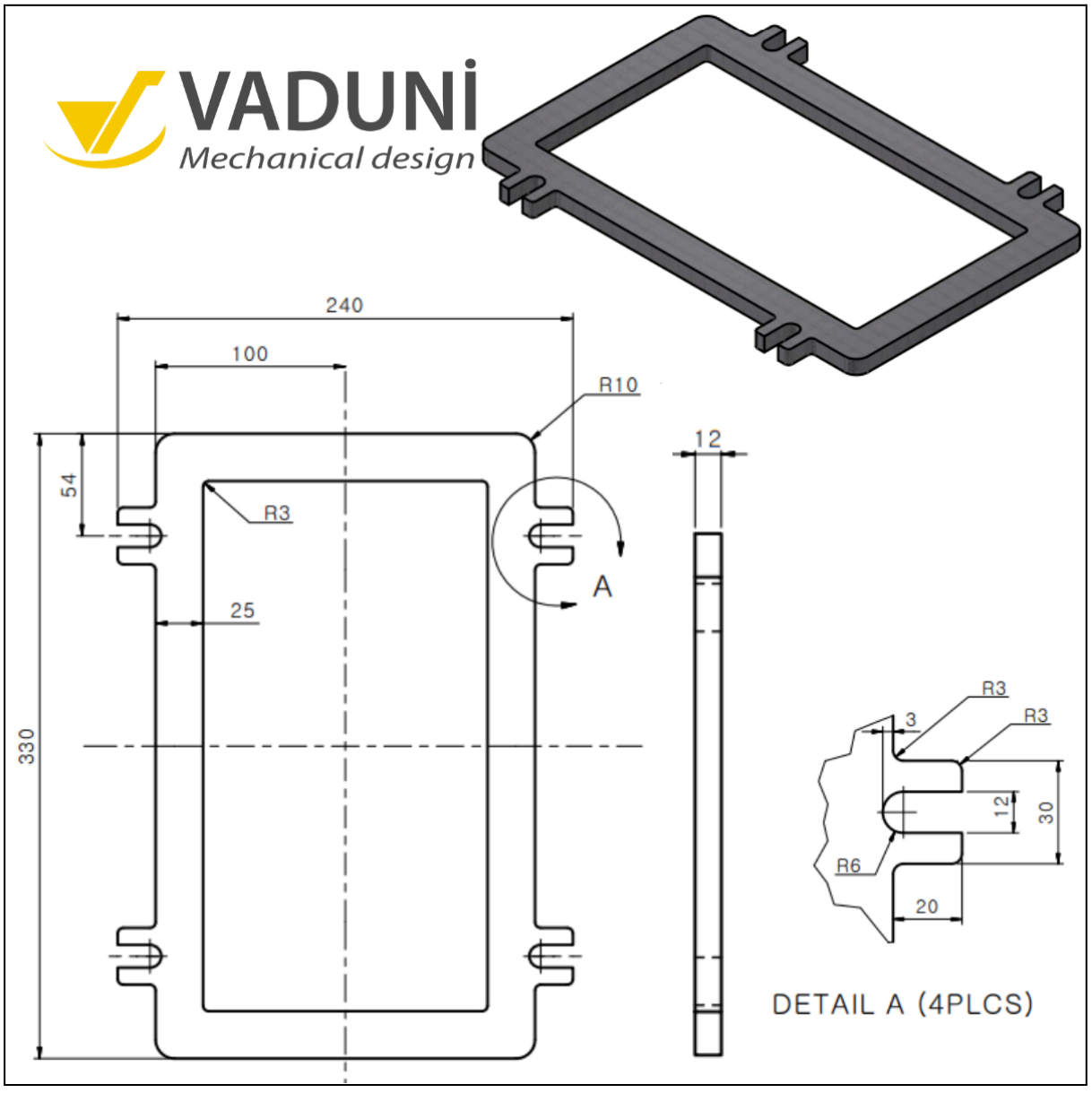
Bài tập 496


VADUNİ
Mechanical design
A
90°
R7
R12
R12
R7
Ø30
Ø95
B
B
A
3
7
R3
7
6
SECTION A-A
10
SECTION B-B

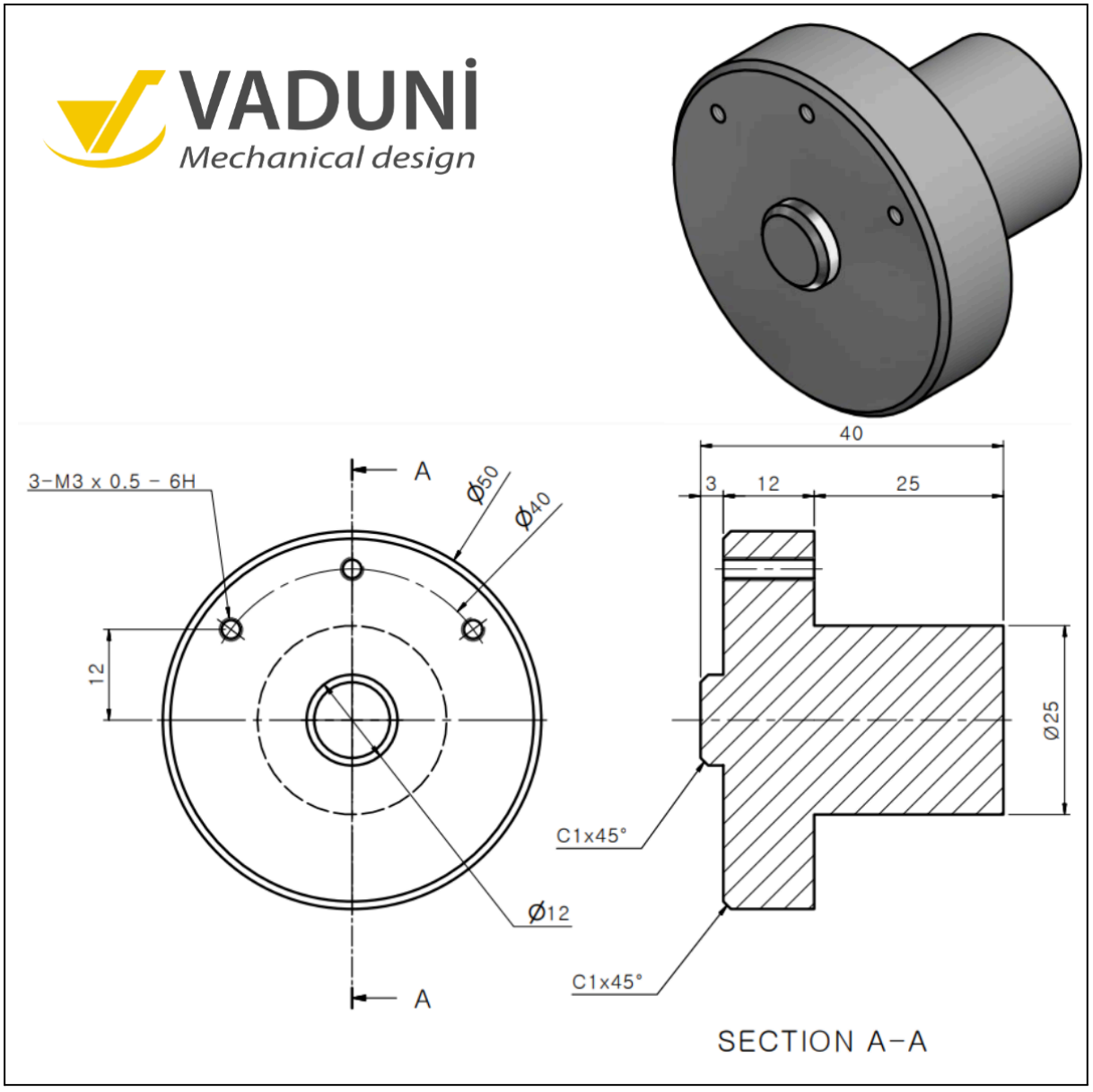
Bài tập 497


VADUNI
Mechanical design
Ø3
9
3
B
3
R4
A
3.5
A
25
16
19
R1.5
Ø4
3
R1
3
B
15
6
3
4.5
SECTION B-B
3
Ø5
Ø5
Ø3
3
1.5
SECTION A-A

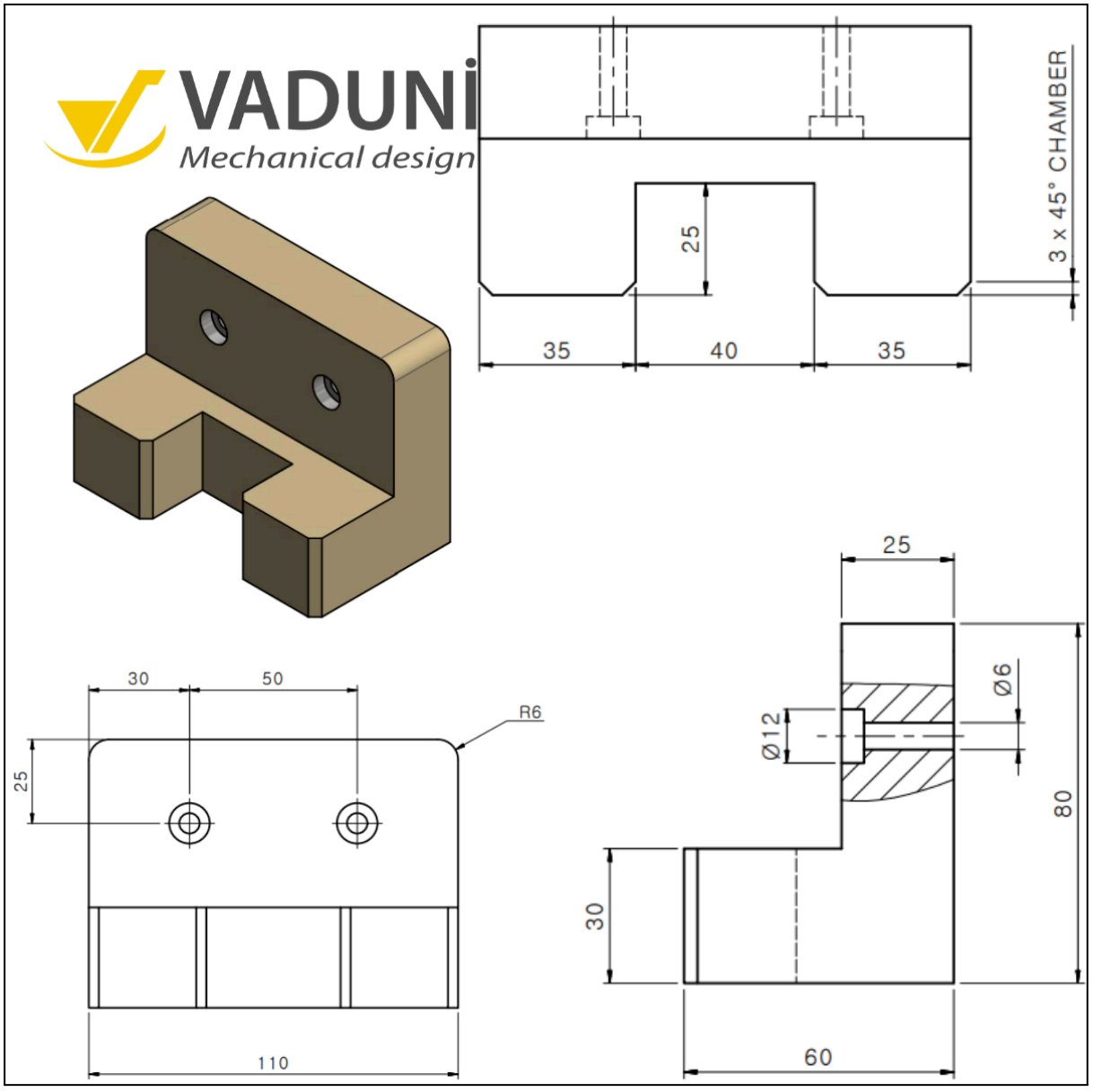
Bài tập 498


VADUNİ
Mechanical design
240
100
R10
54
R3
25
330
A
12
R3
3
R3
12
30
R6
20
DETAIL A (4PLCS)

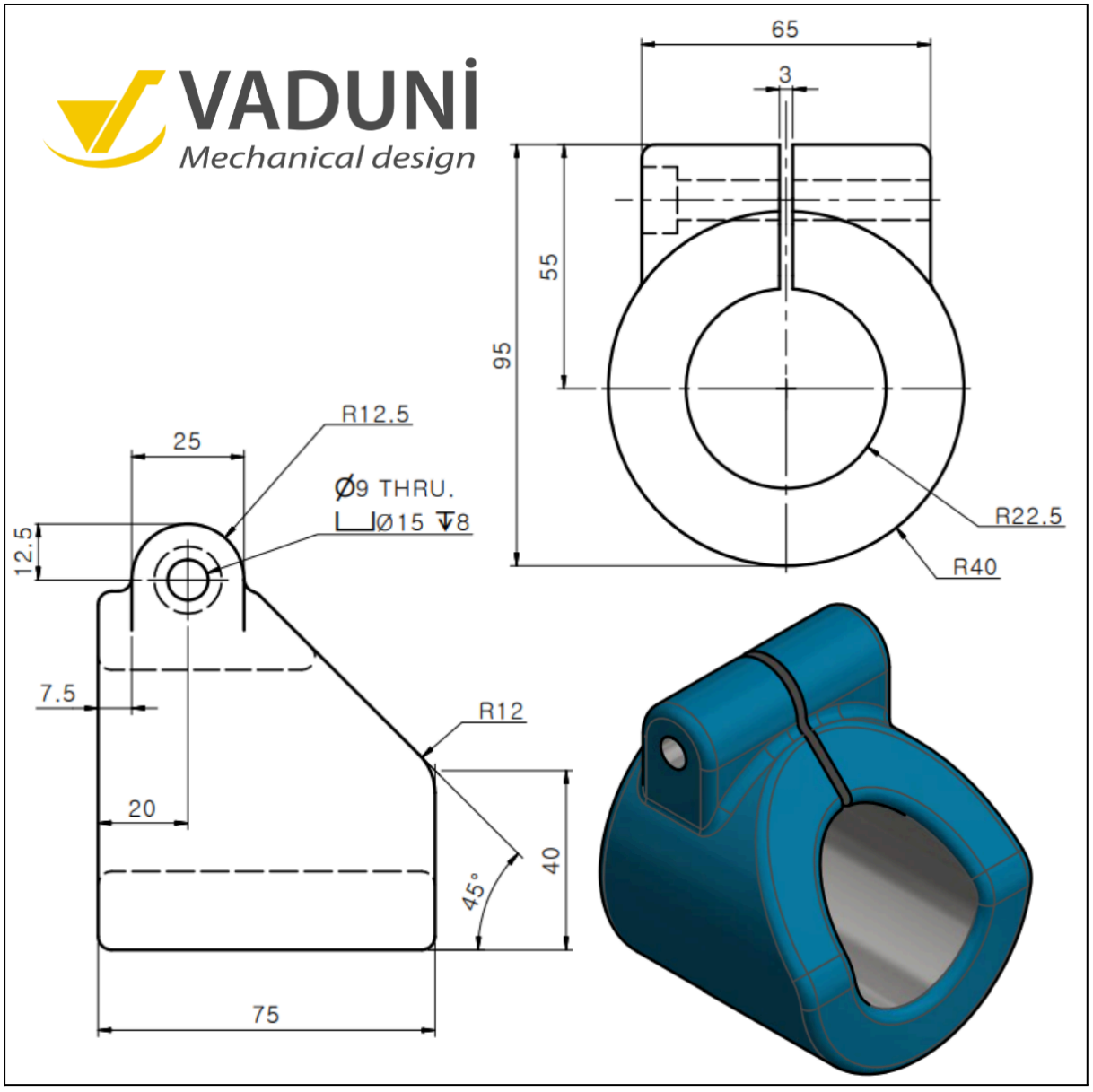
Bài tập 499


VADUNİ
Mechanical design
3-M3 x 0.5 - 6H
A
Ø50
Ø40
12
Ø12
A
40
3
12
25
Ø25
C1x45°
C1x45°
SECTION A-A

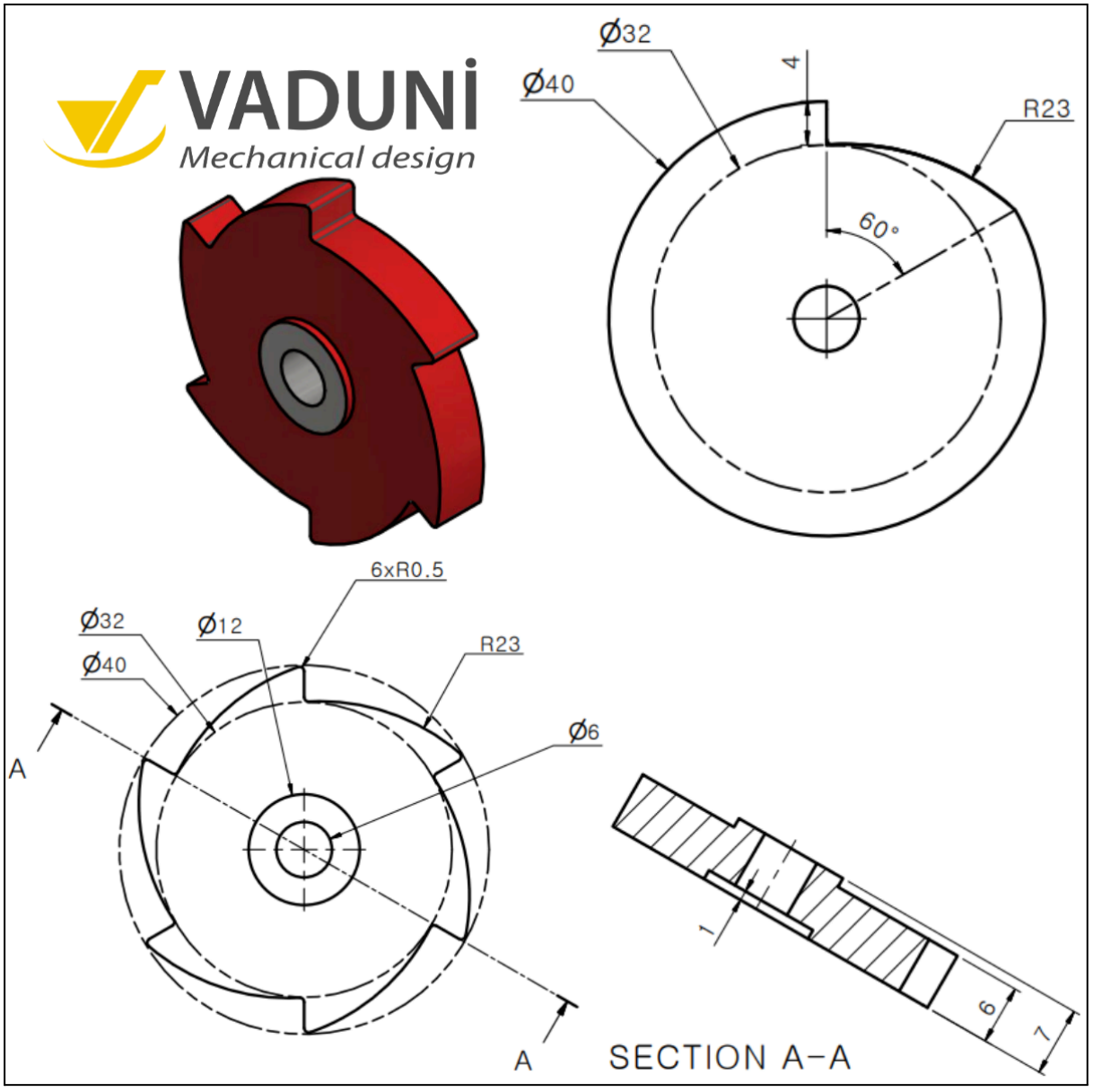
Bài tập 500


VADUNI
Mechanical design
3 x 45° CHAMBER
25
35
40
35
30
50
R6
25
110
25
Ø6
Ø12
80
30
60

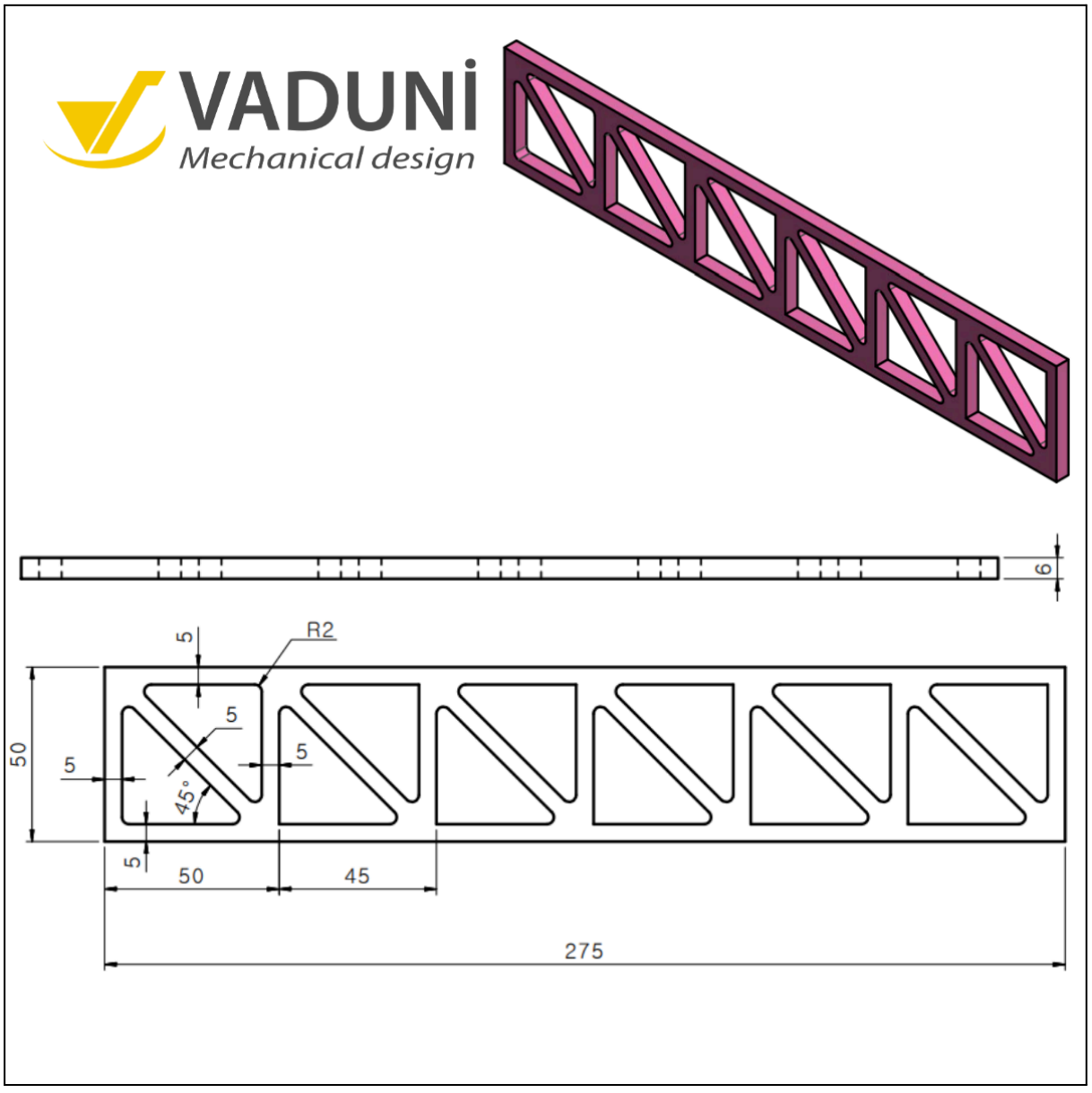
Bài tập 501


VADUNİ
Mechanical design
65
3
55
95
R22.5
R40
R12.5
25
Ø9 THRU.
⌴Ø15 ↧8
12.5
7.5
R12
20
40
45°
75

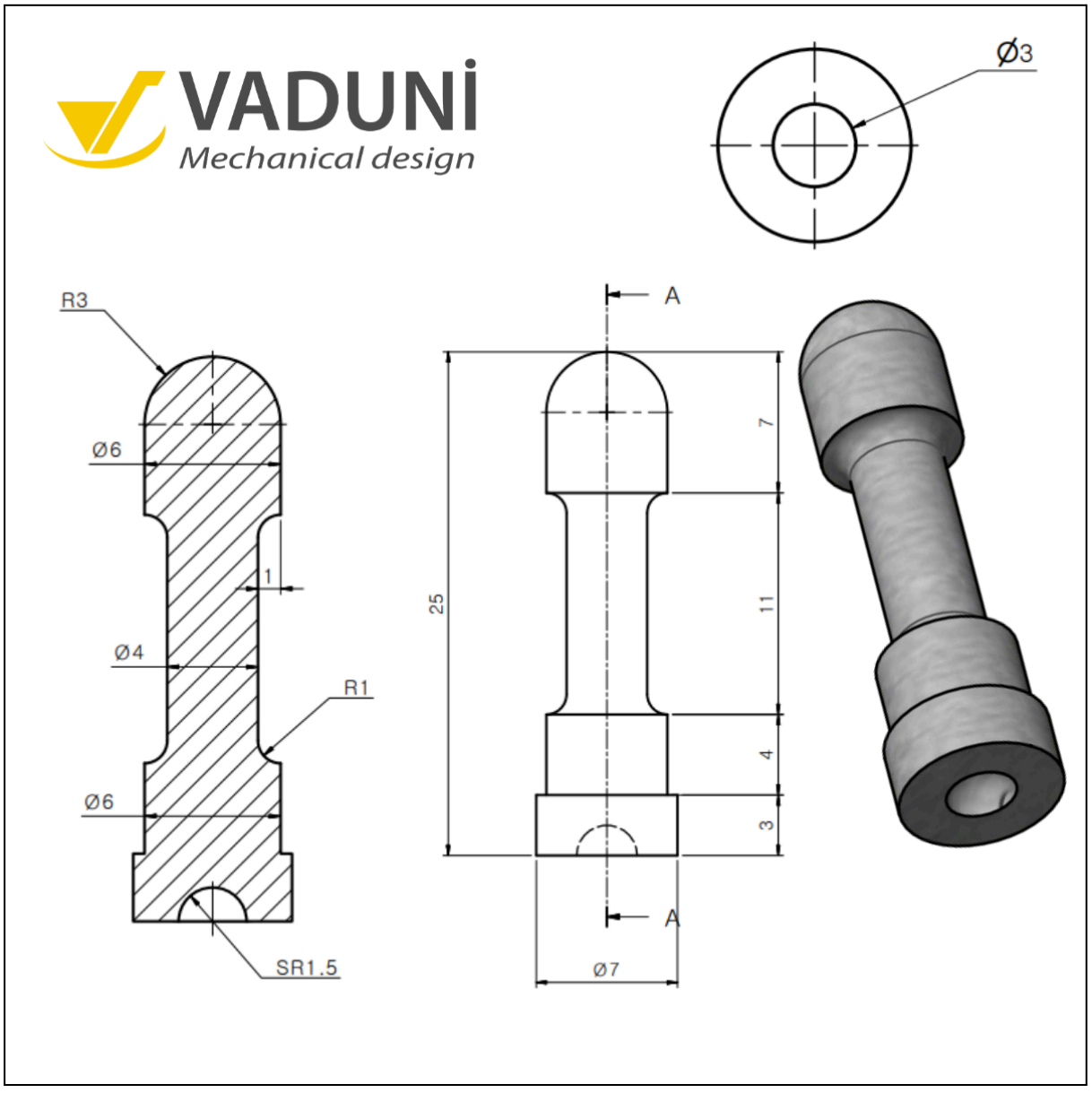
Bài tập 502


VADUNİ
Mechanical design
Ø32
Ø40
4
R23
60°
6xR0.5
Ø32
Ø12
Ø40
R23
Ø6
A
A
1
6
7
SECTION A-A

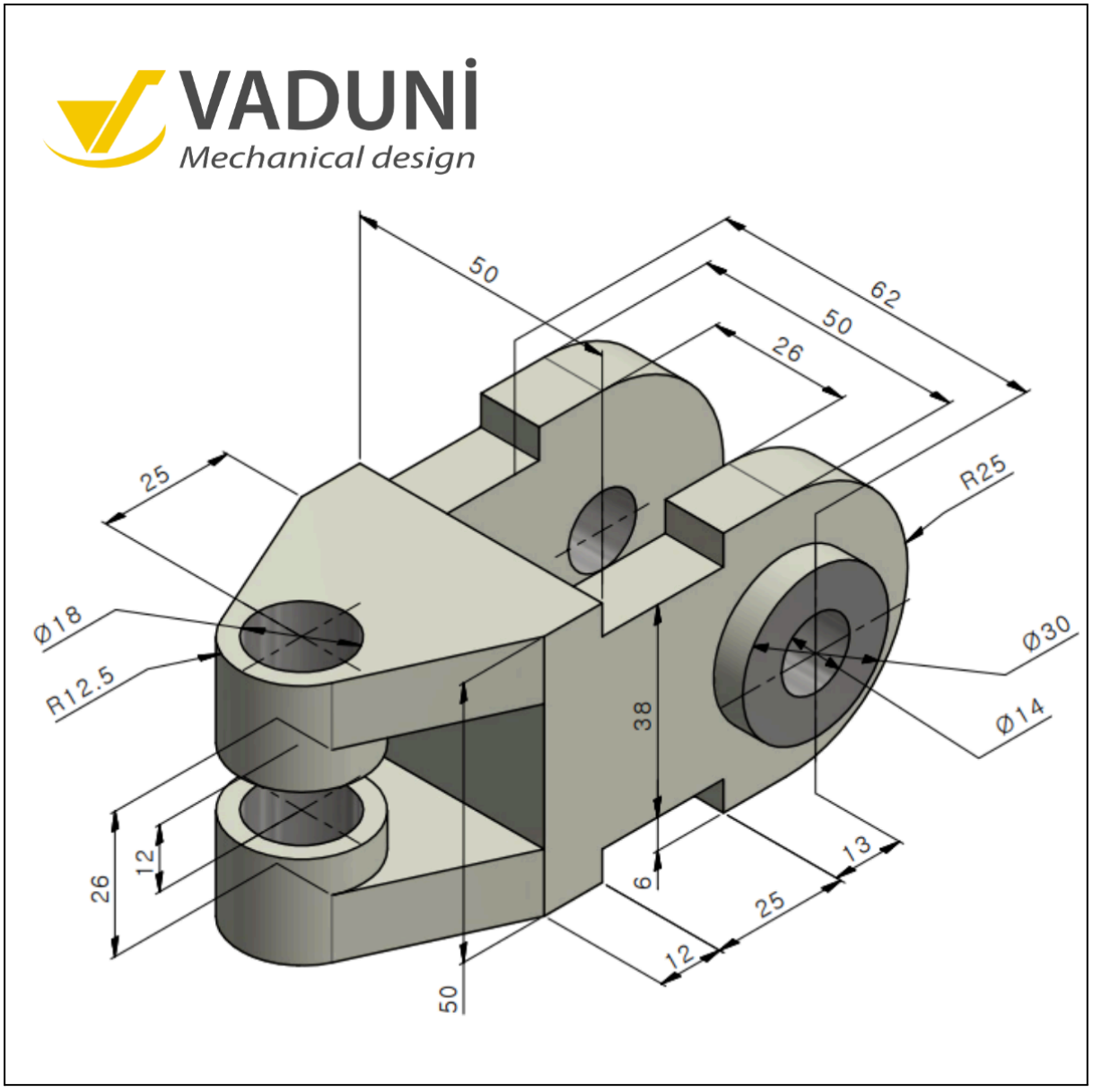
Bài tập 503



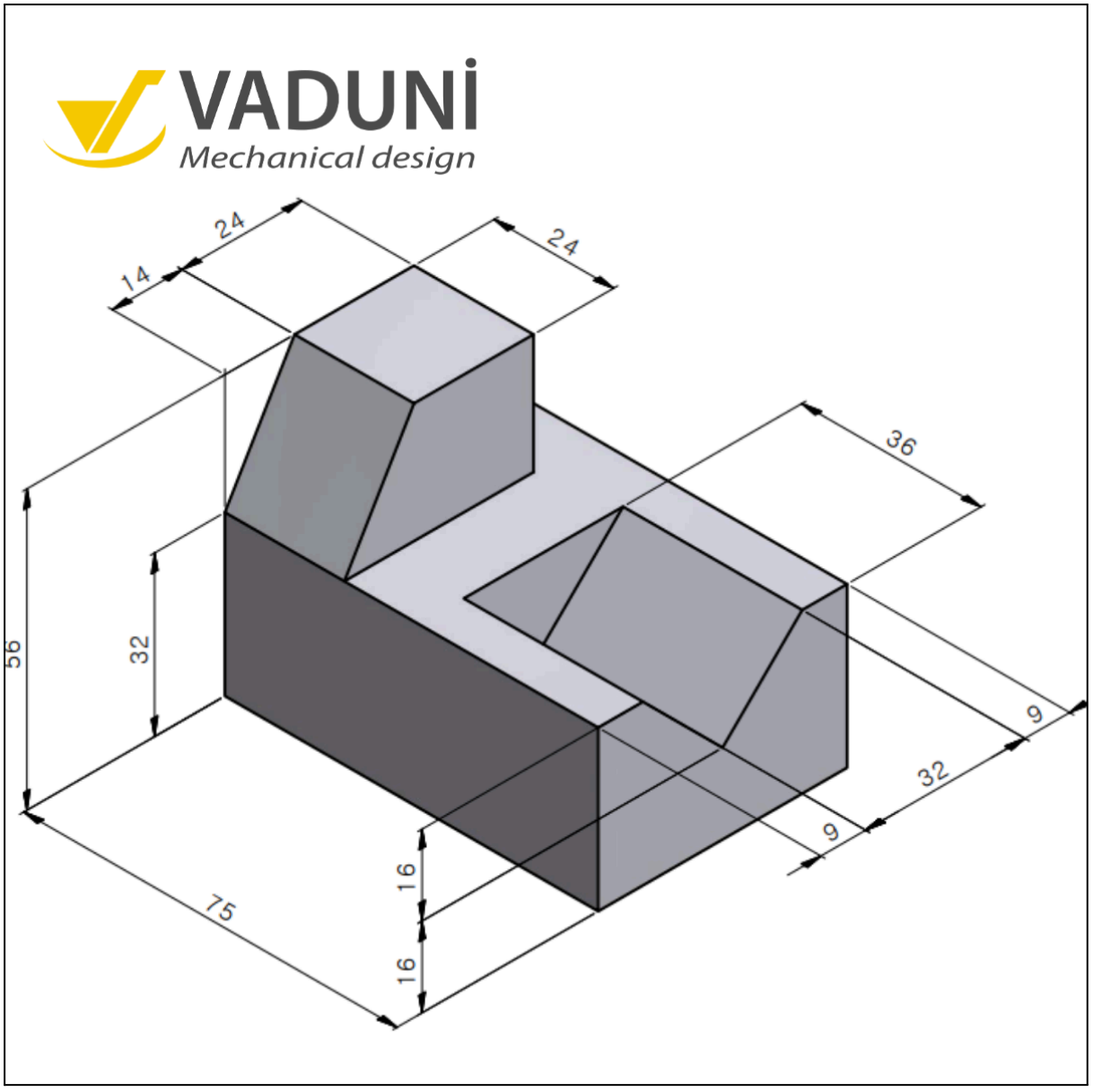
Bài tập 504


VADUNİ
Mechanical design
Ø3
R3
Ø6
1
Ø4
R1
Ø6
SR1.5
A
25
7
11
4
3
A
Ø7

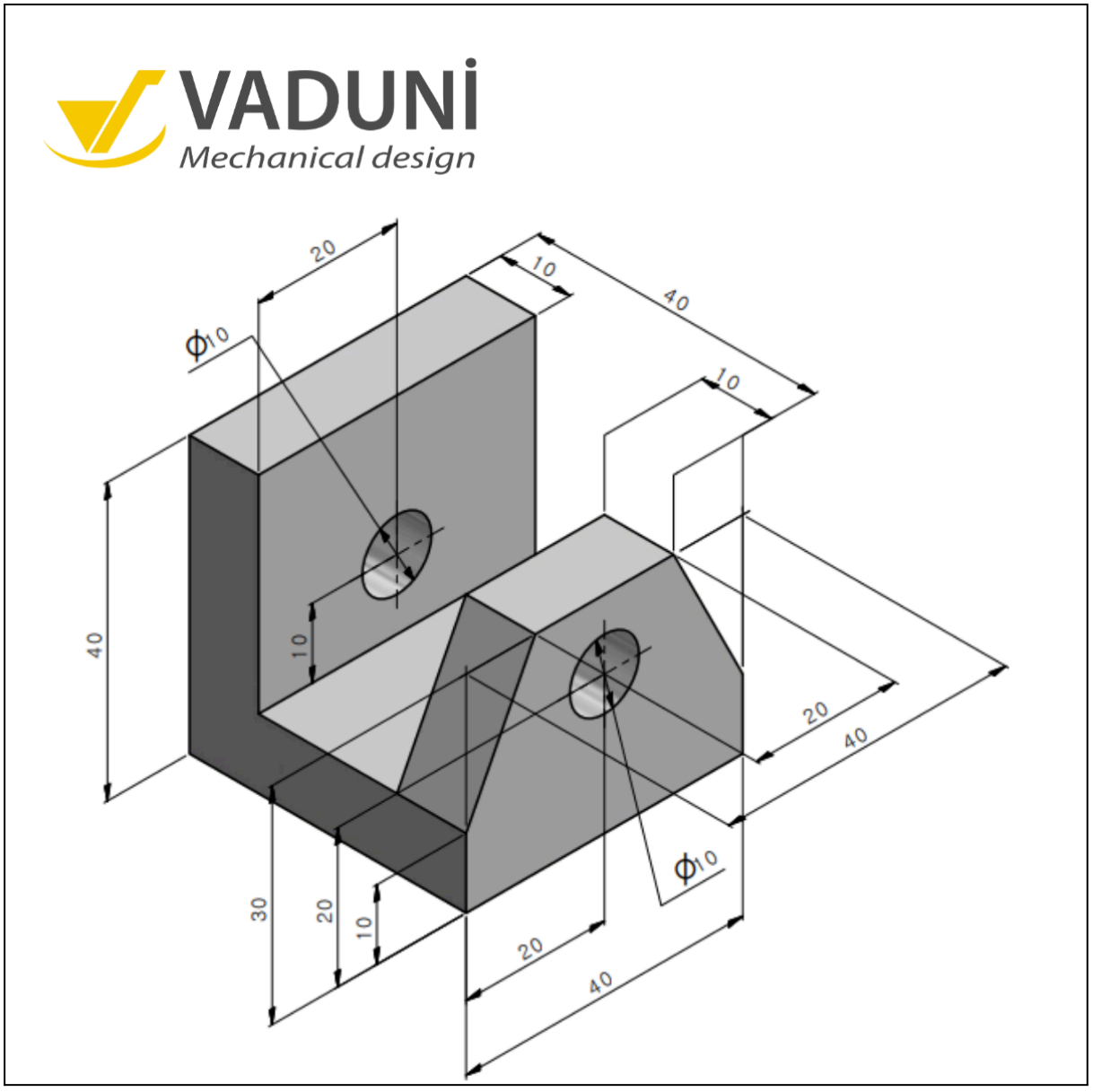
Bài tập 505


VADUNİ
Mechanical design
50
62
50
26
25
R25
Ø18
R12.5
Ø30
Ø14
38
26
12
6
25
13
12
50

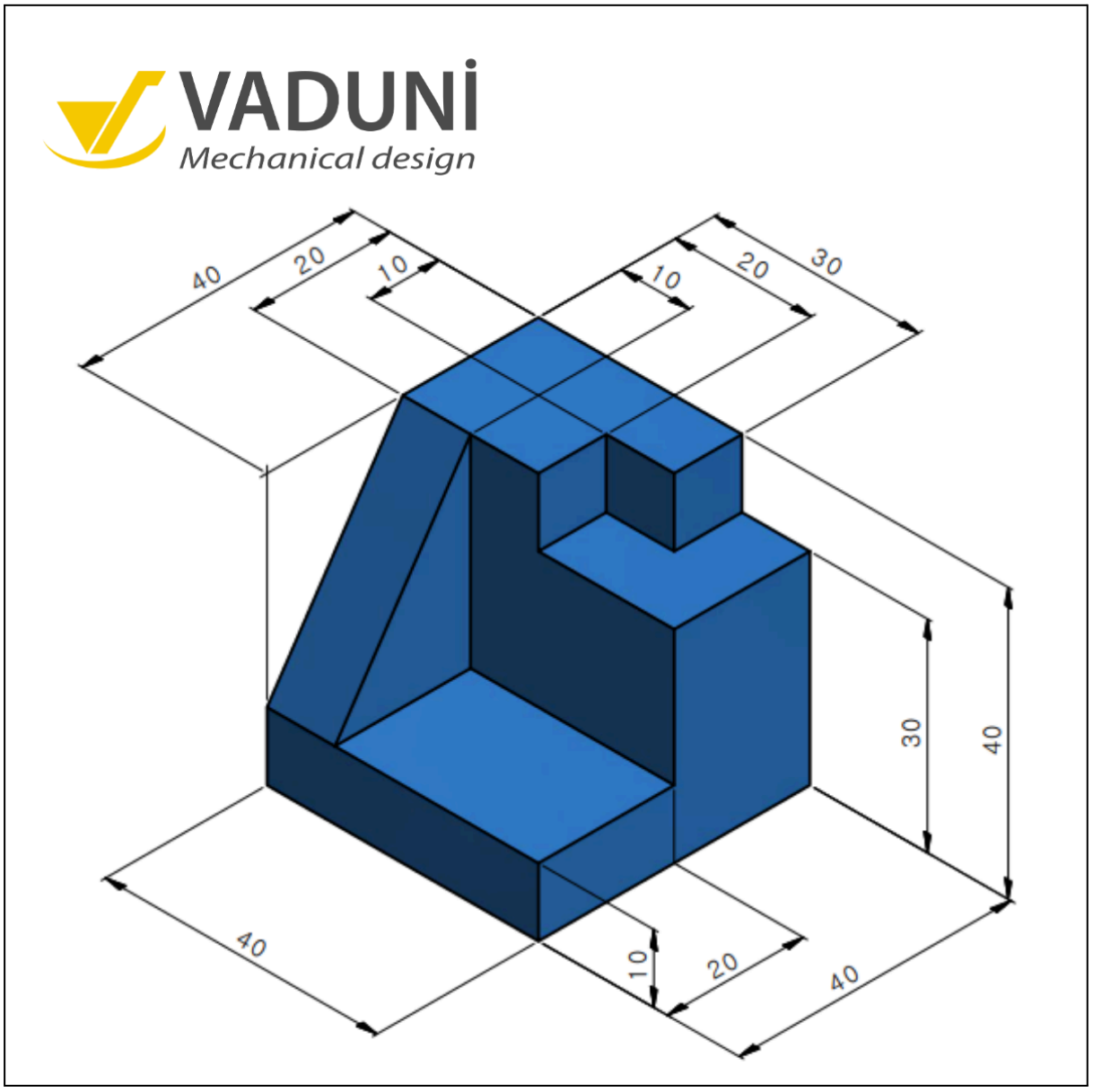
Bài tập 506



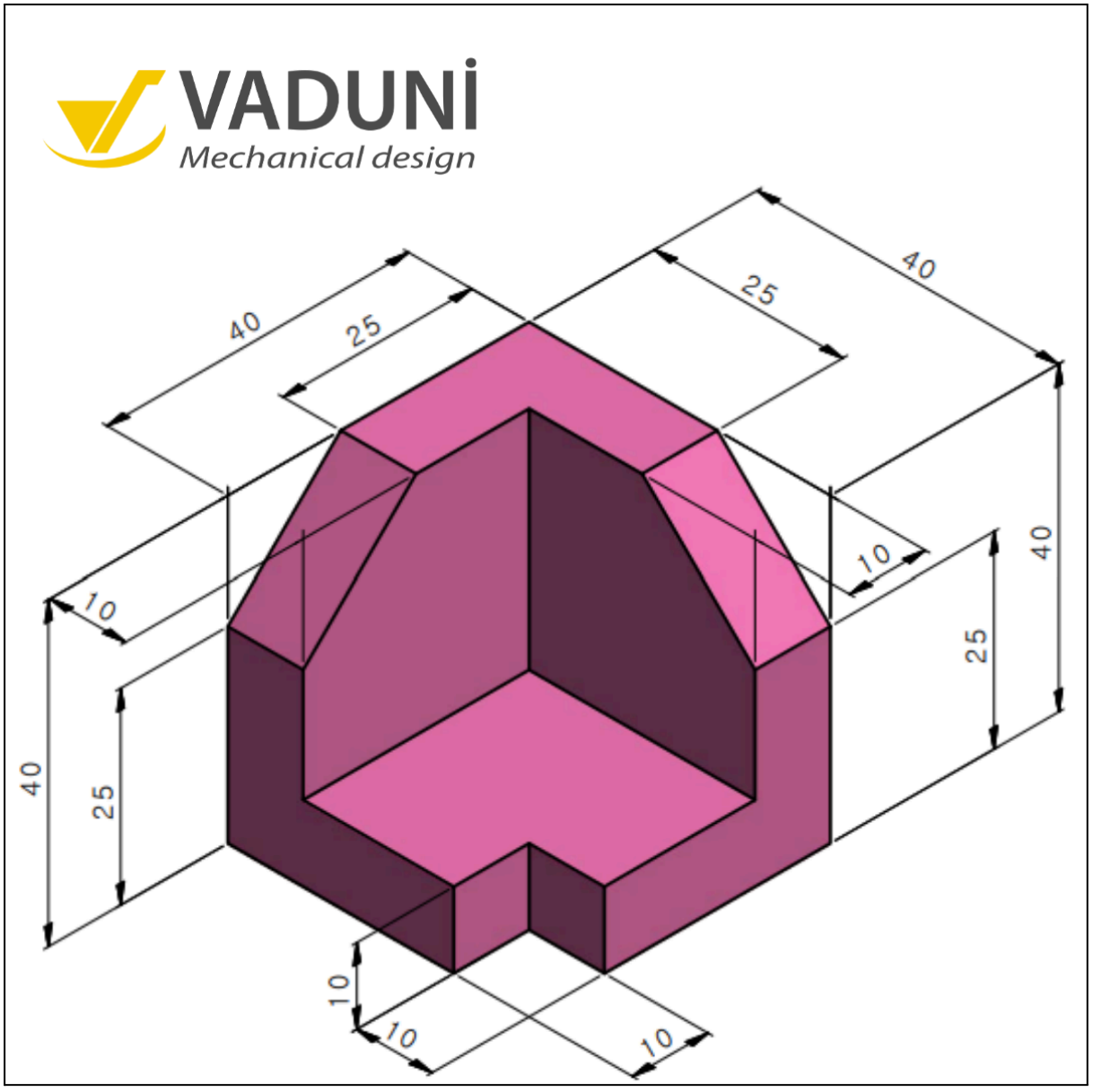
Bài tập 507


VADUNİ
Mechanical design
20
10
40
ϕ10
10
40
10
20
40
ϕ10
30
20
10
20
40

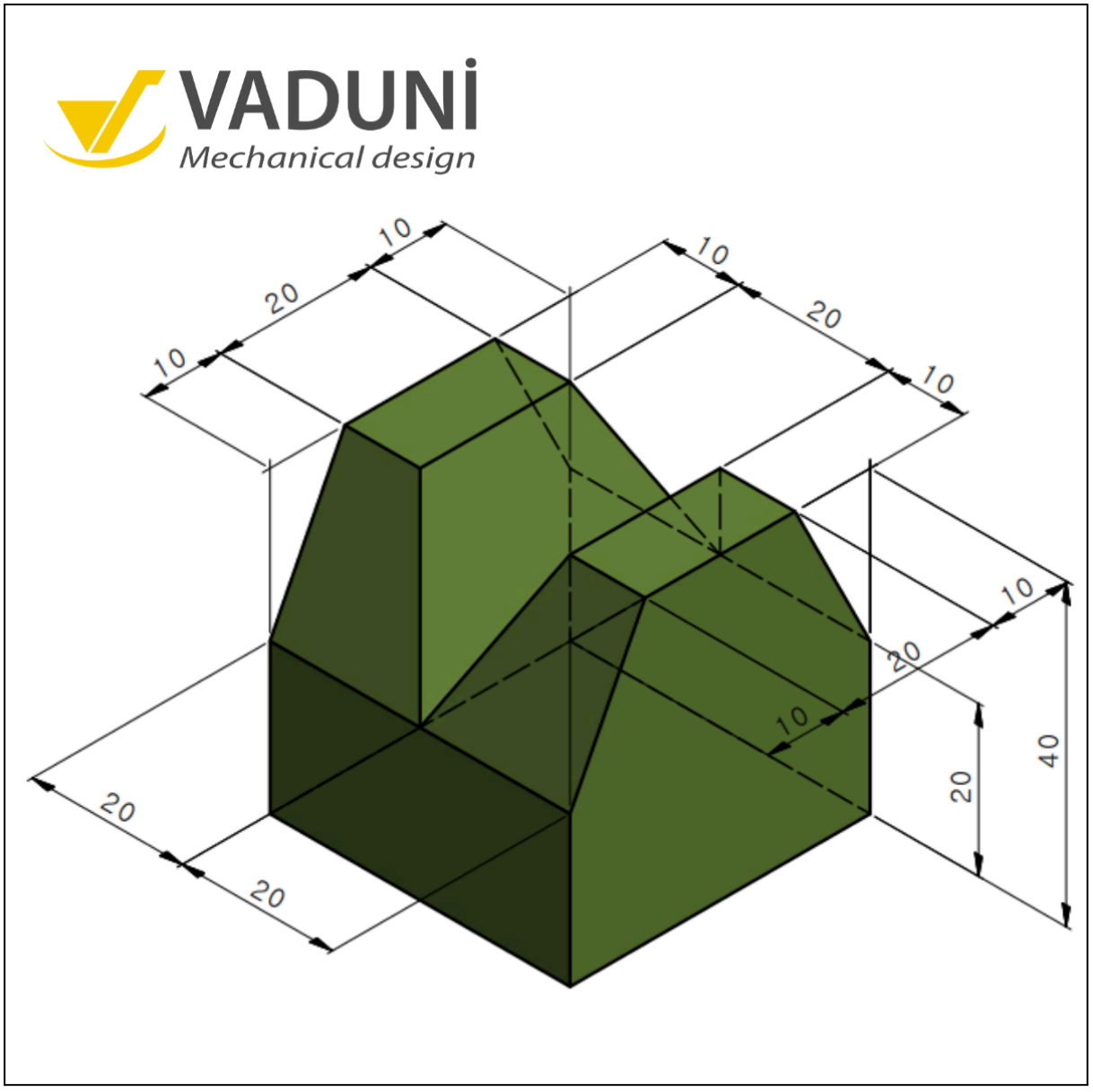
Bài tập 508



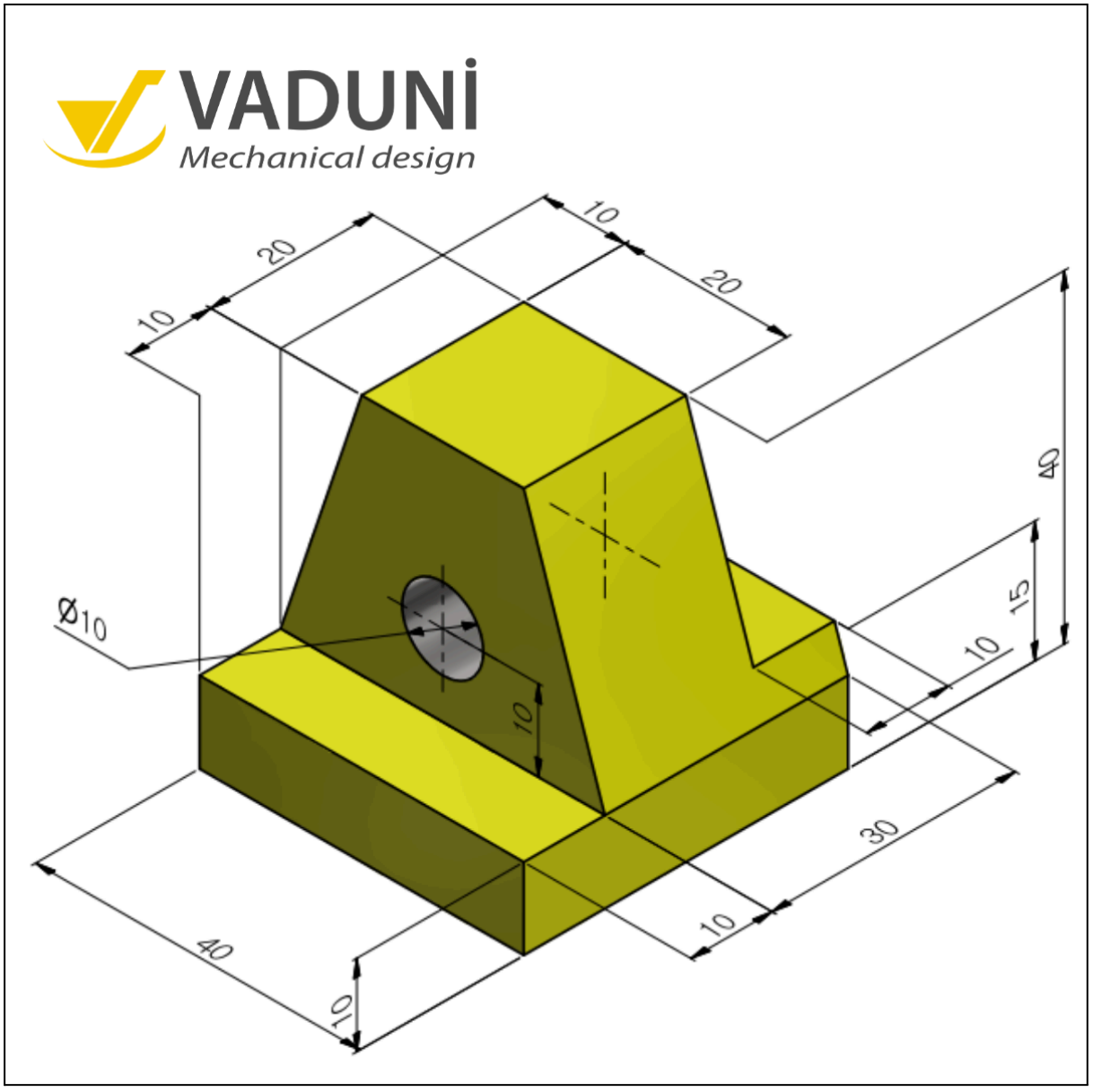
Bài tập 509



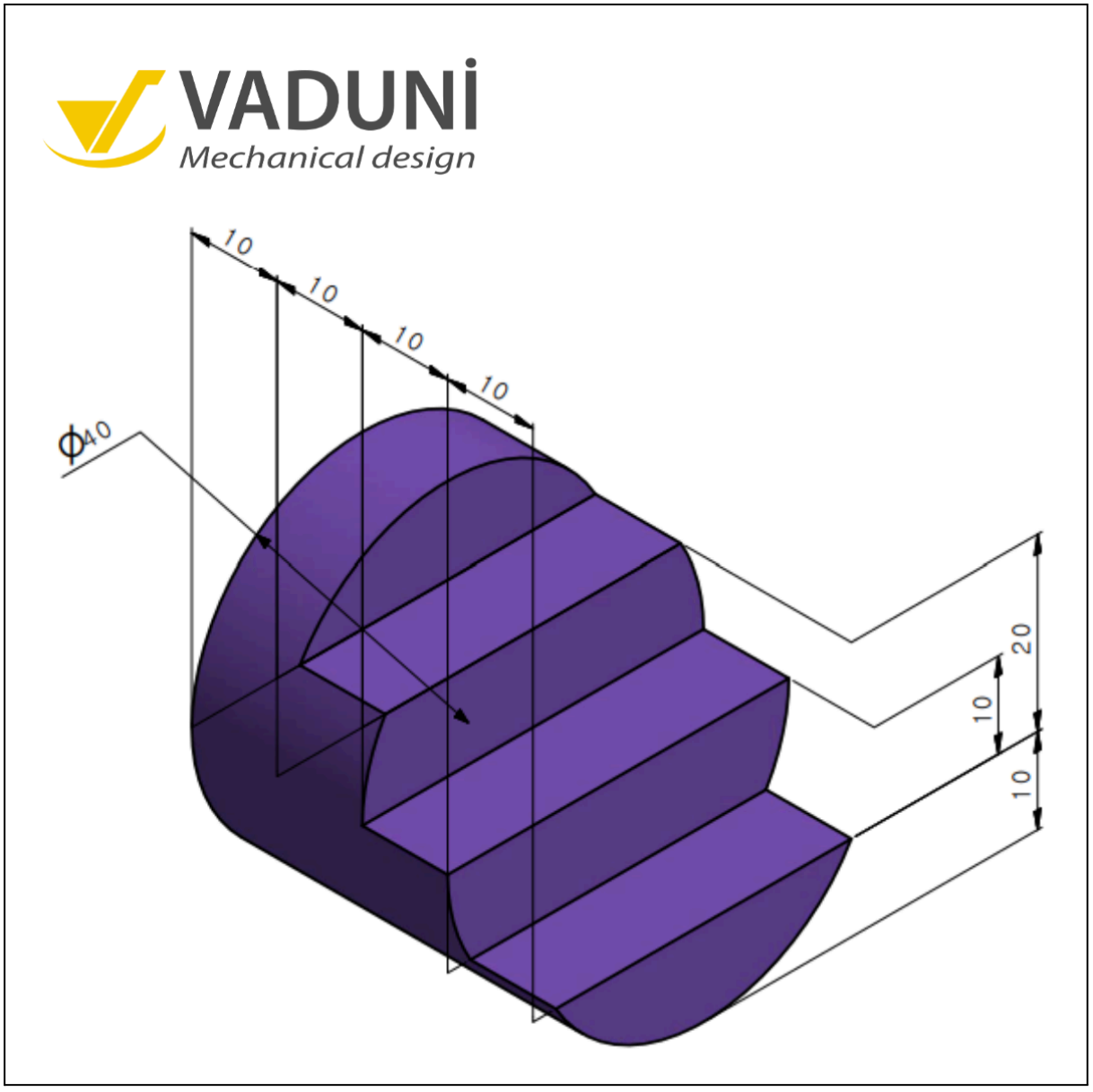
Bài tập 510


VADUNİ
Mechanical design
10
20
10
10
20
10
10
20
10
20
20
40
20
20

Bài tập 511



Bài tập 512



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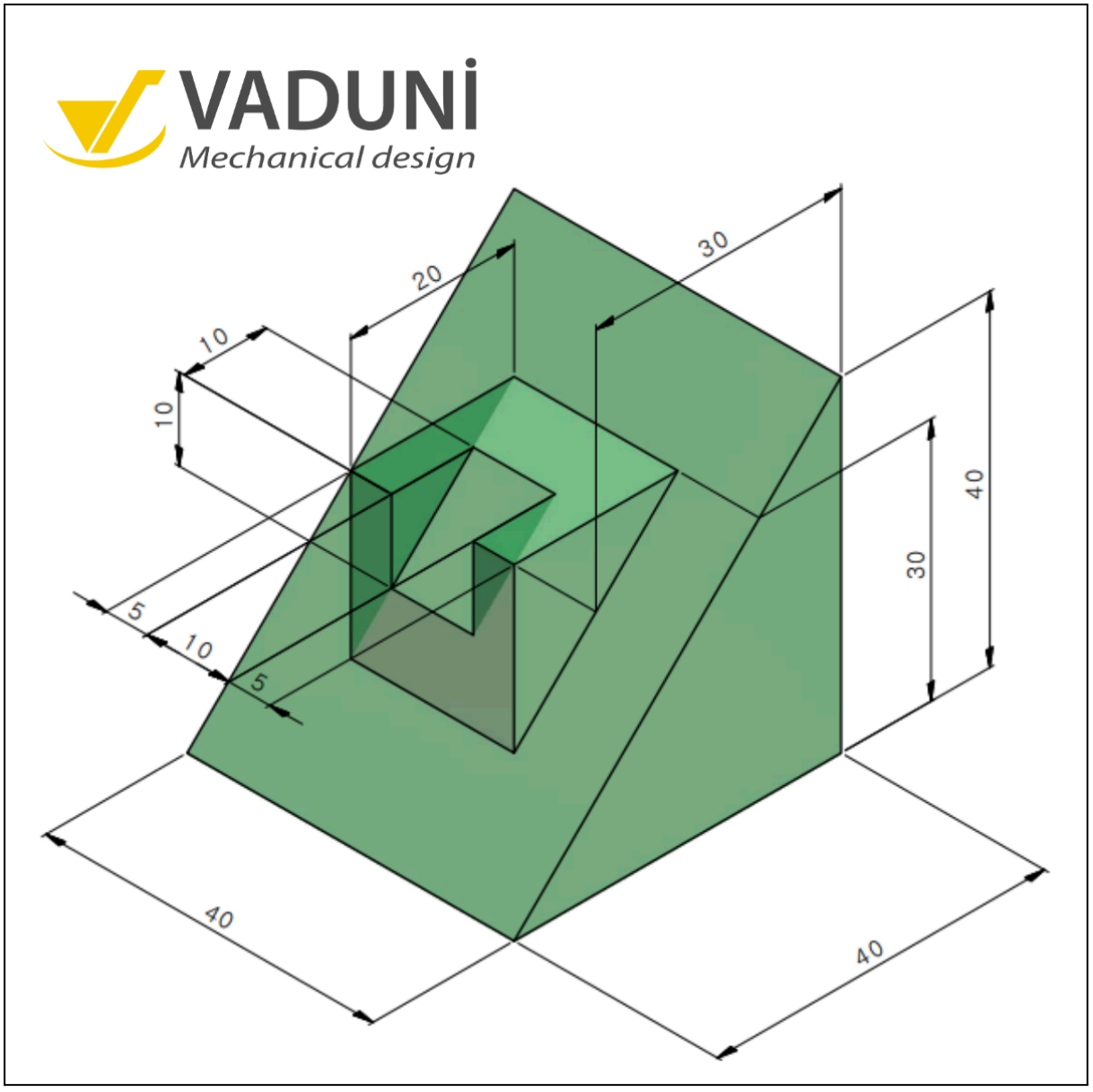

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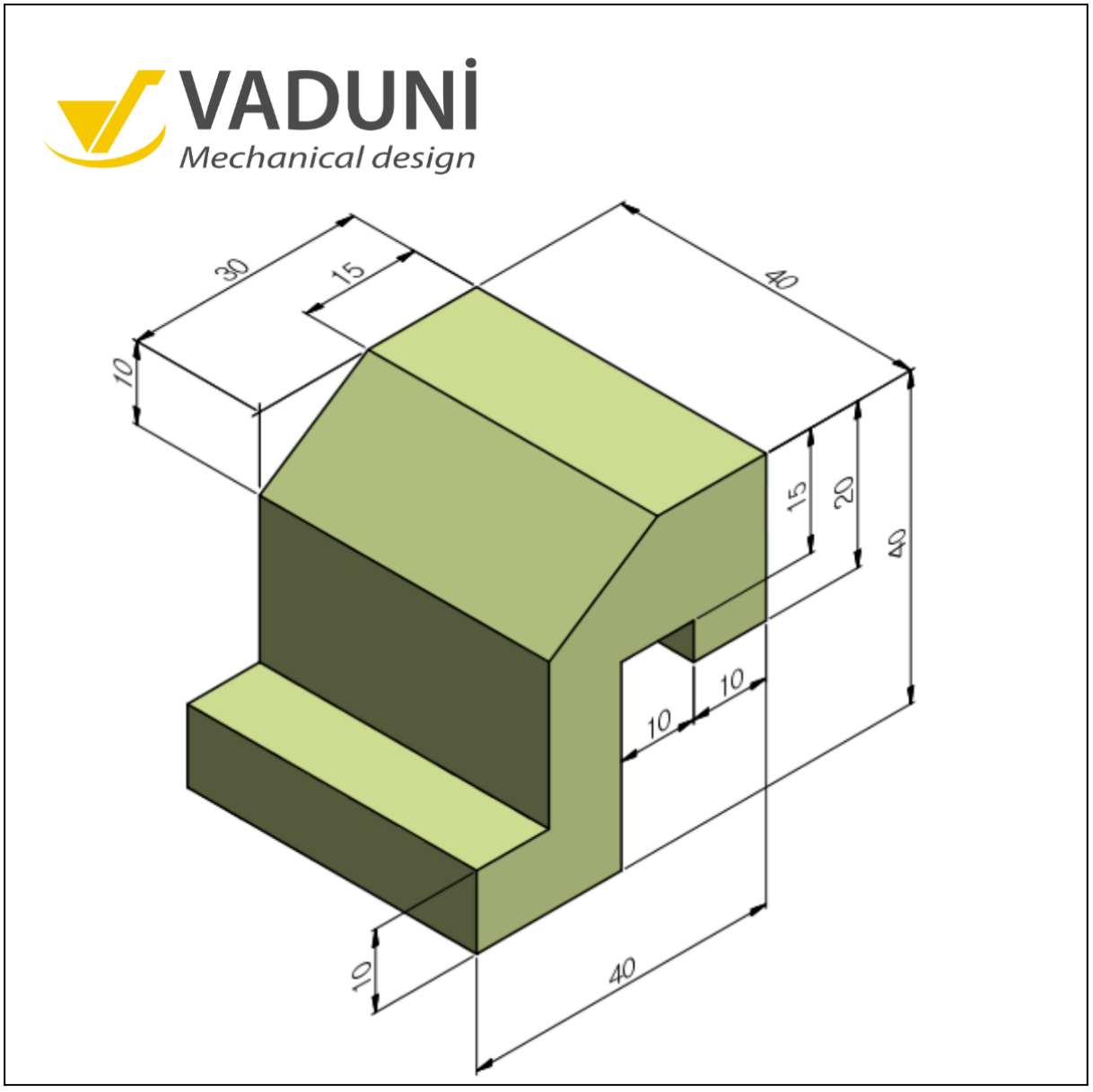

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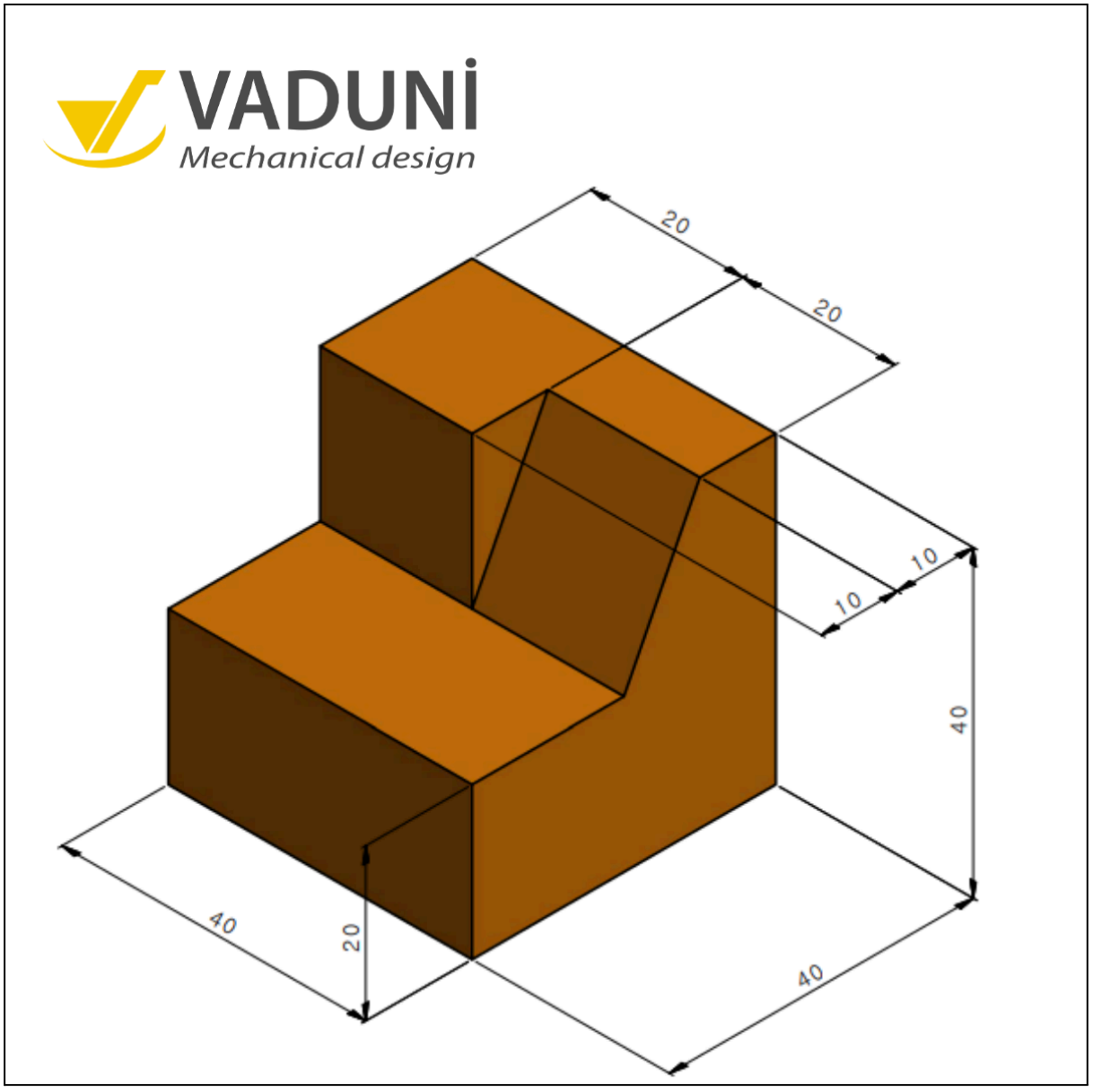
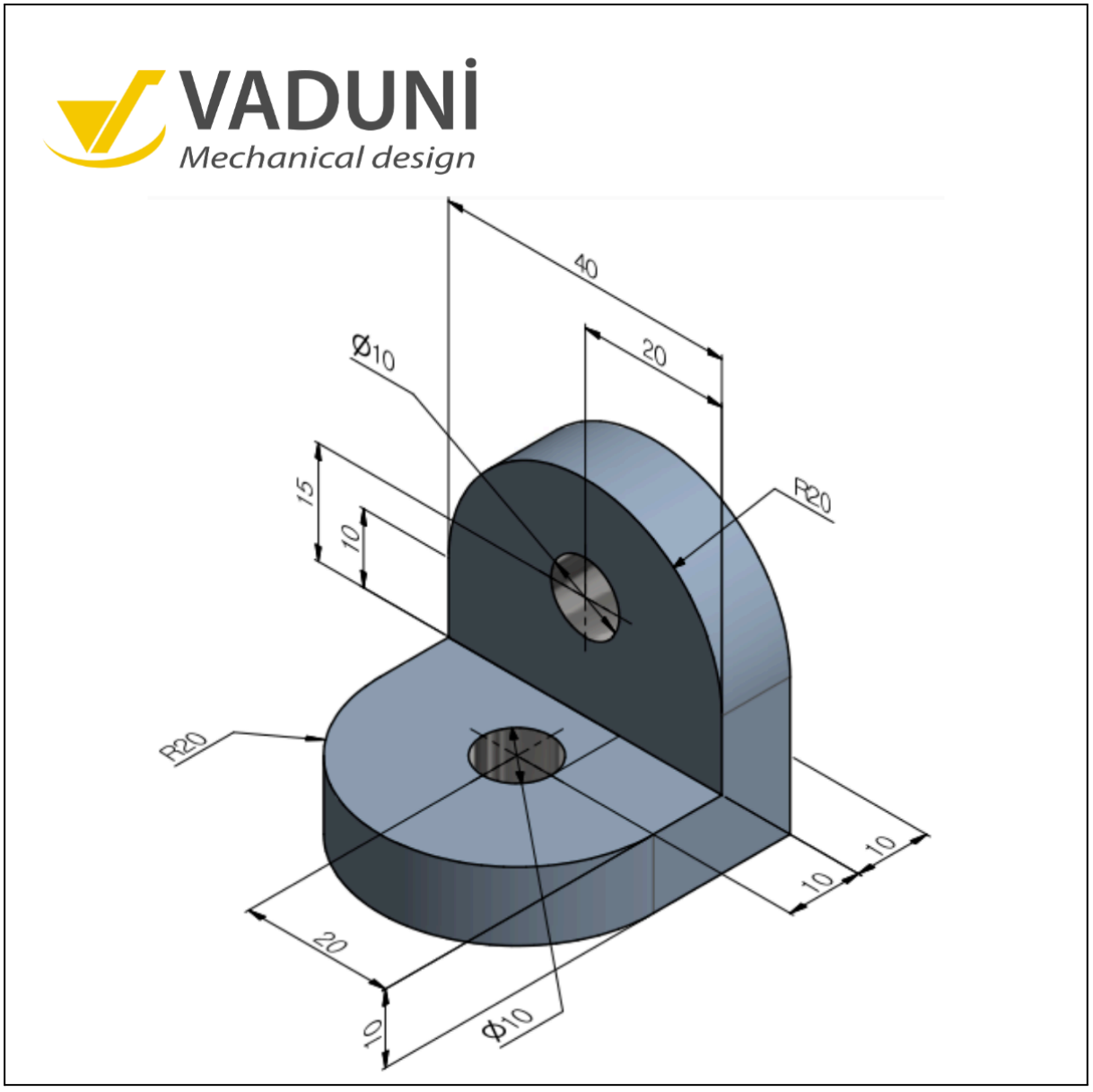
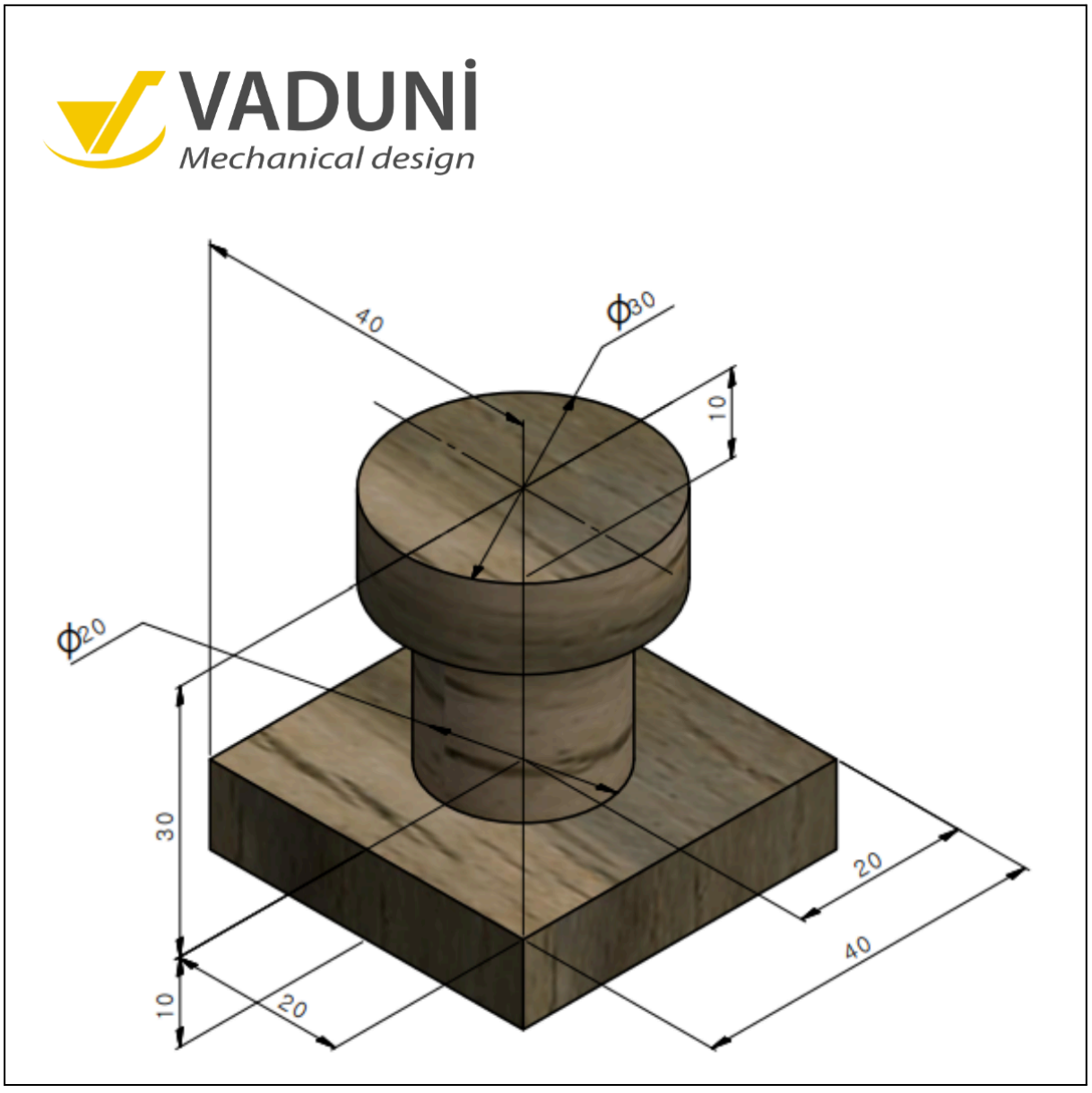


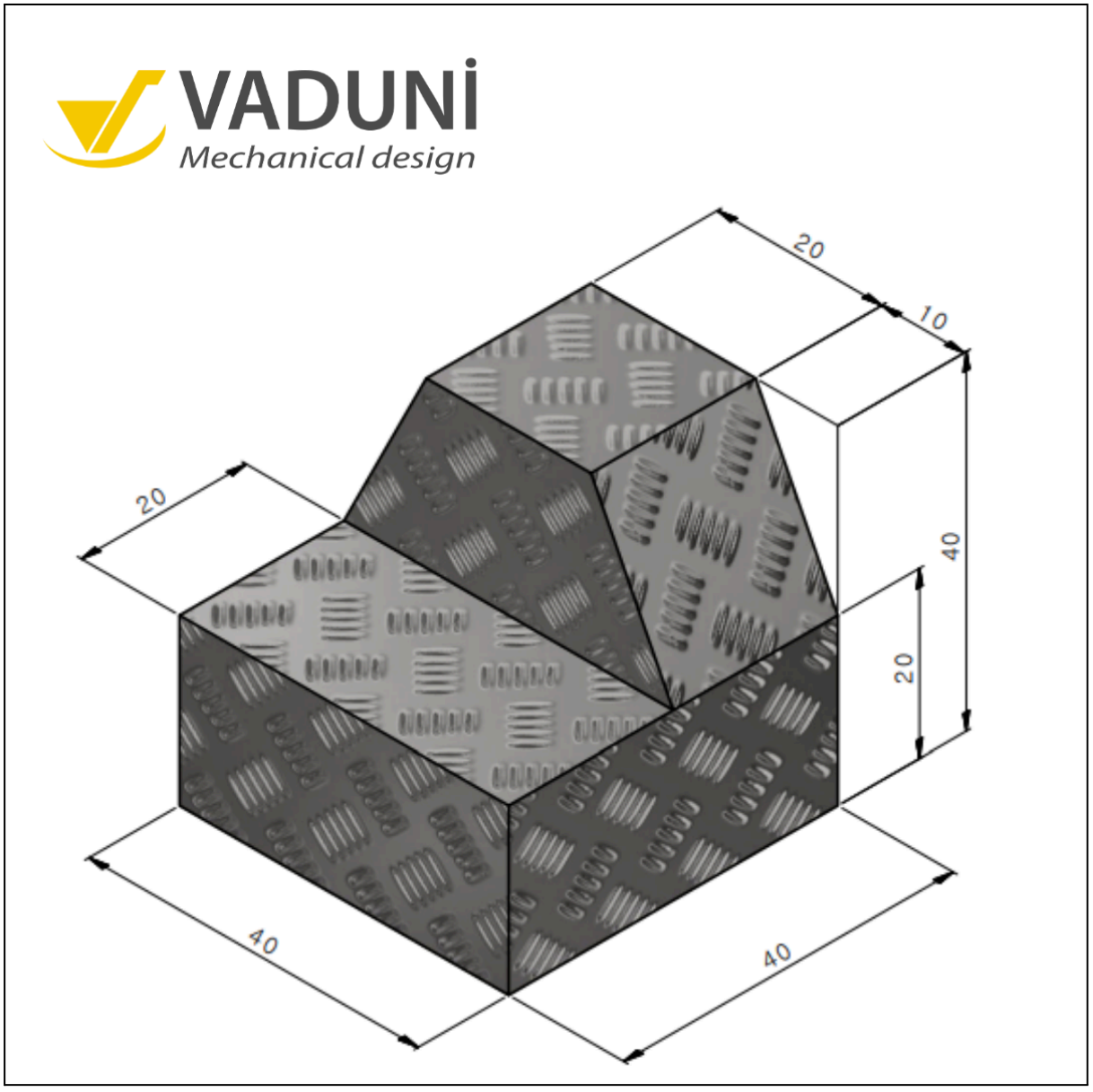
Bài tập 516


VADUNİ
Mechanical design
40
20
Ø10
15
10
R20
R20
10
10
20
10
Φ10

Bài tập 517



Bài tập 518



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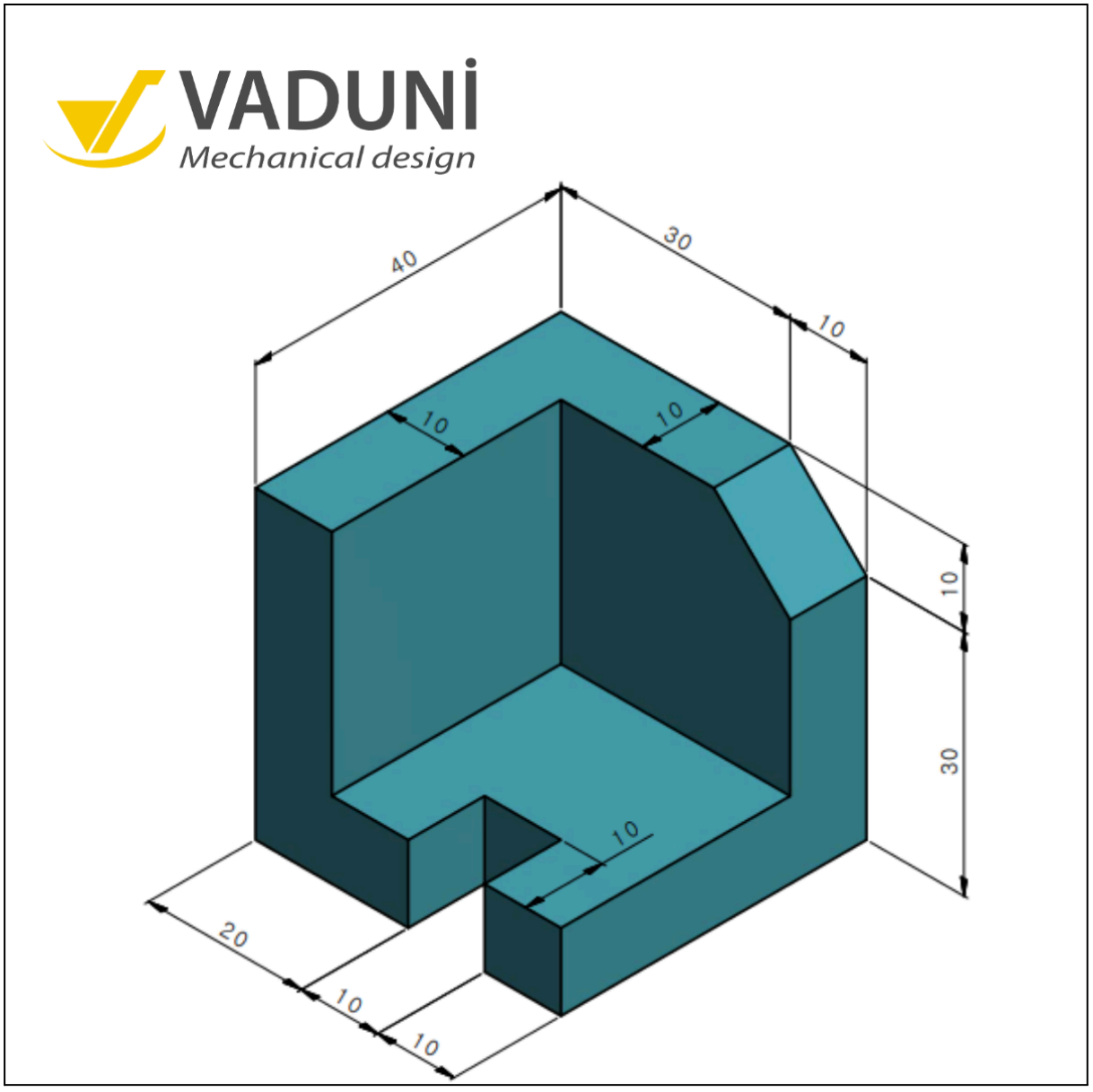
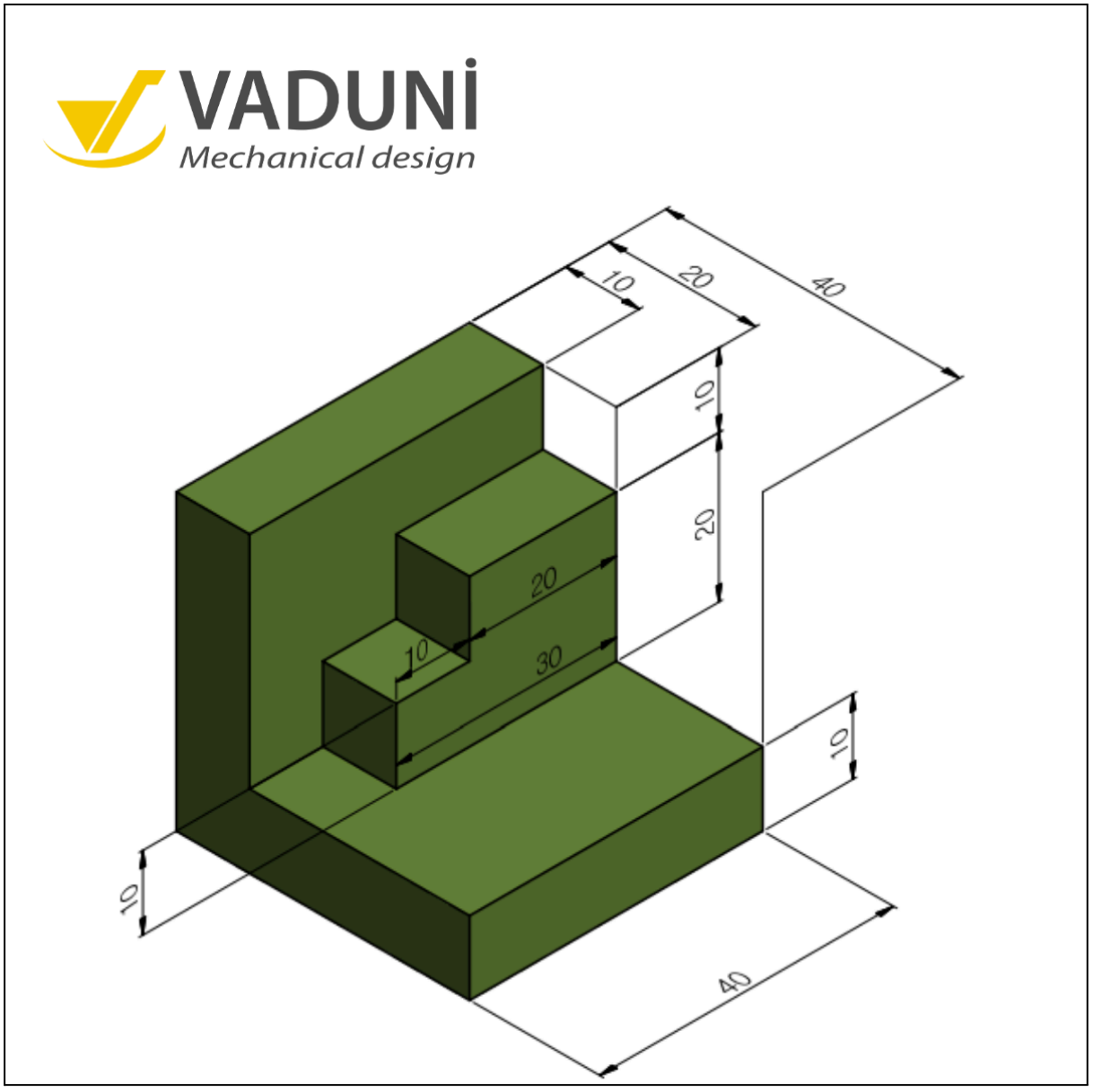
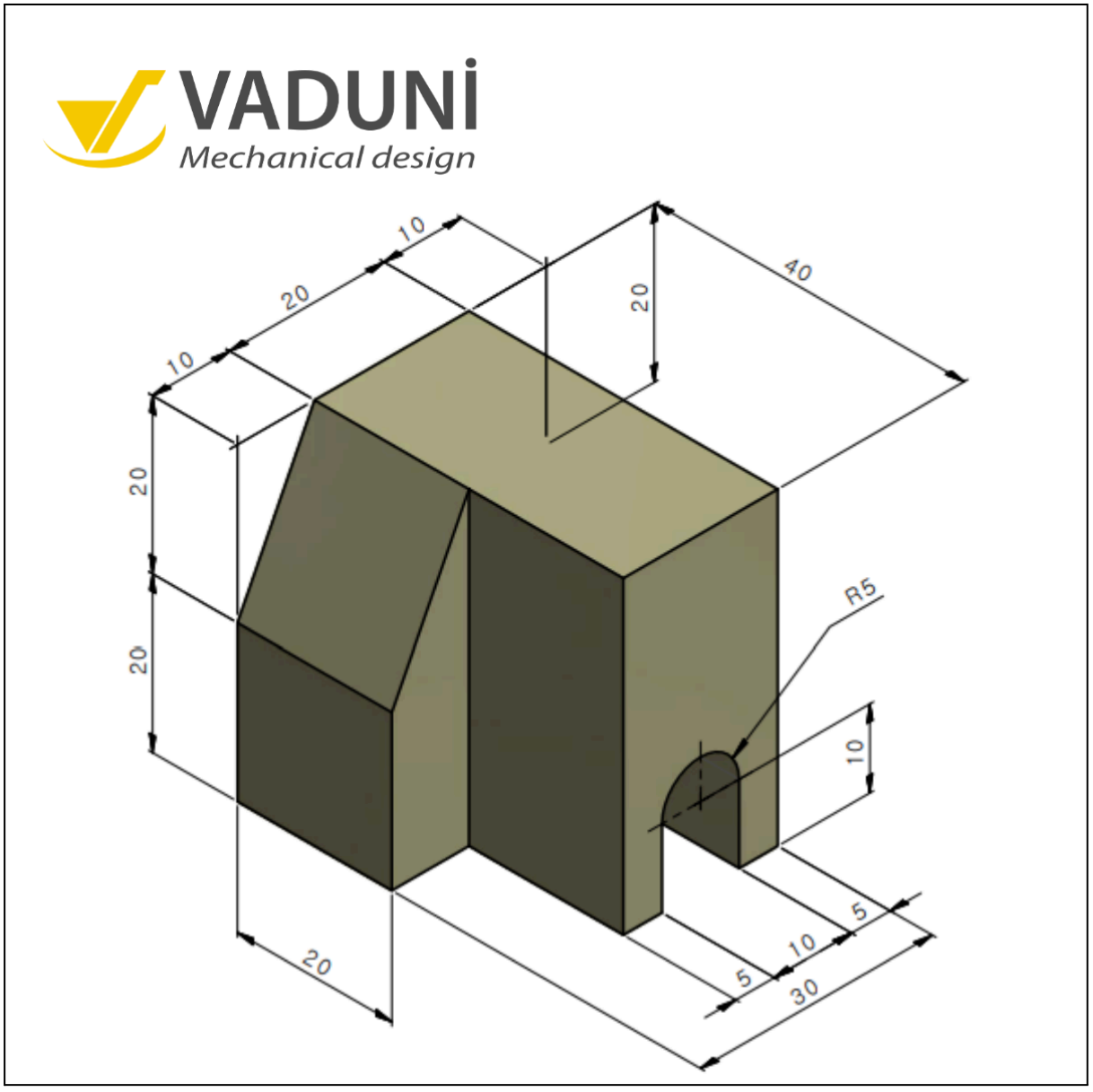


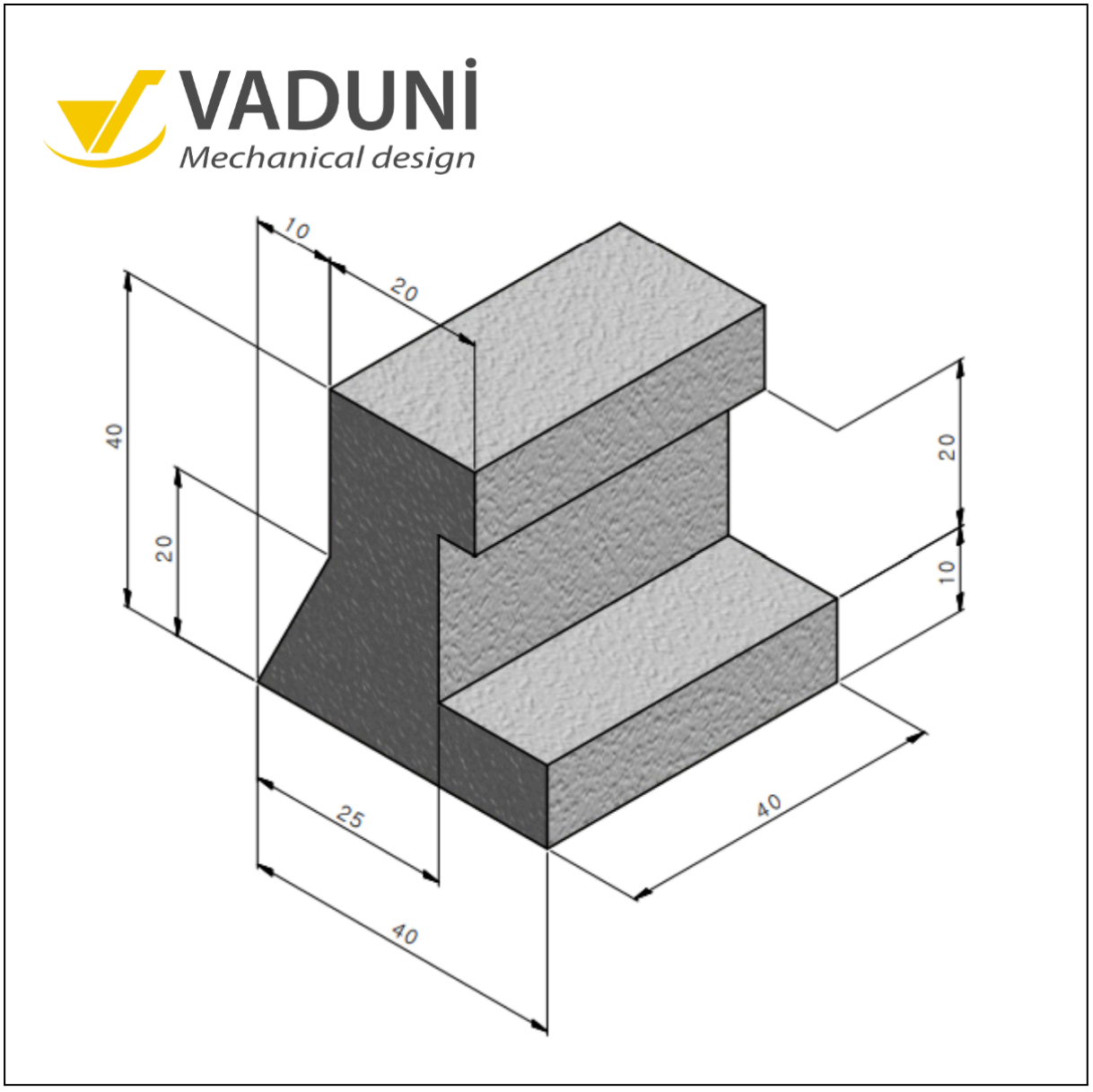
Bài tập 520



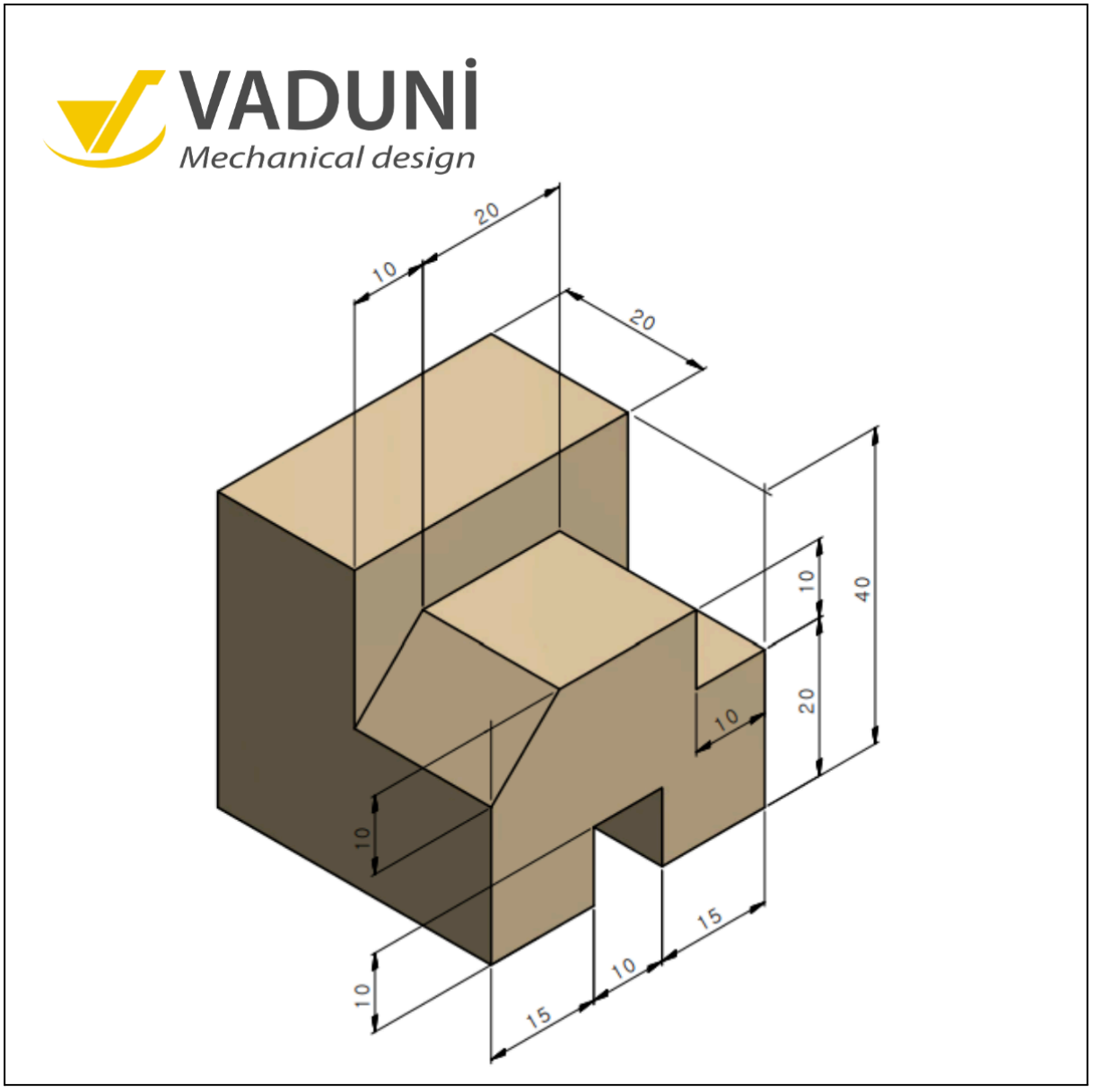
Bài tập 521



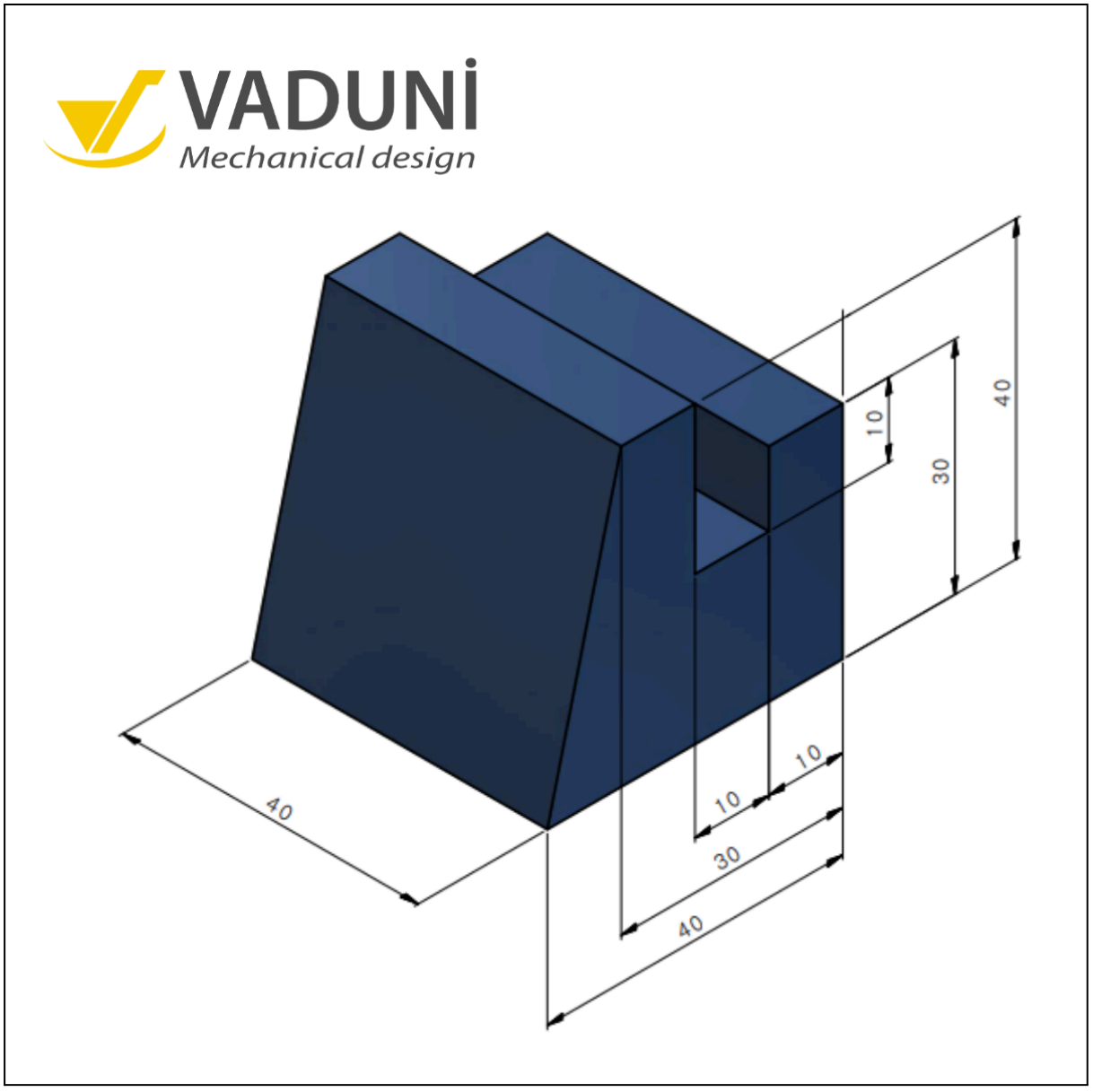
Bài tập 522



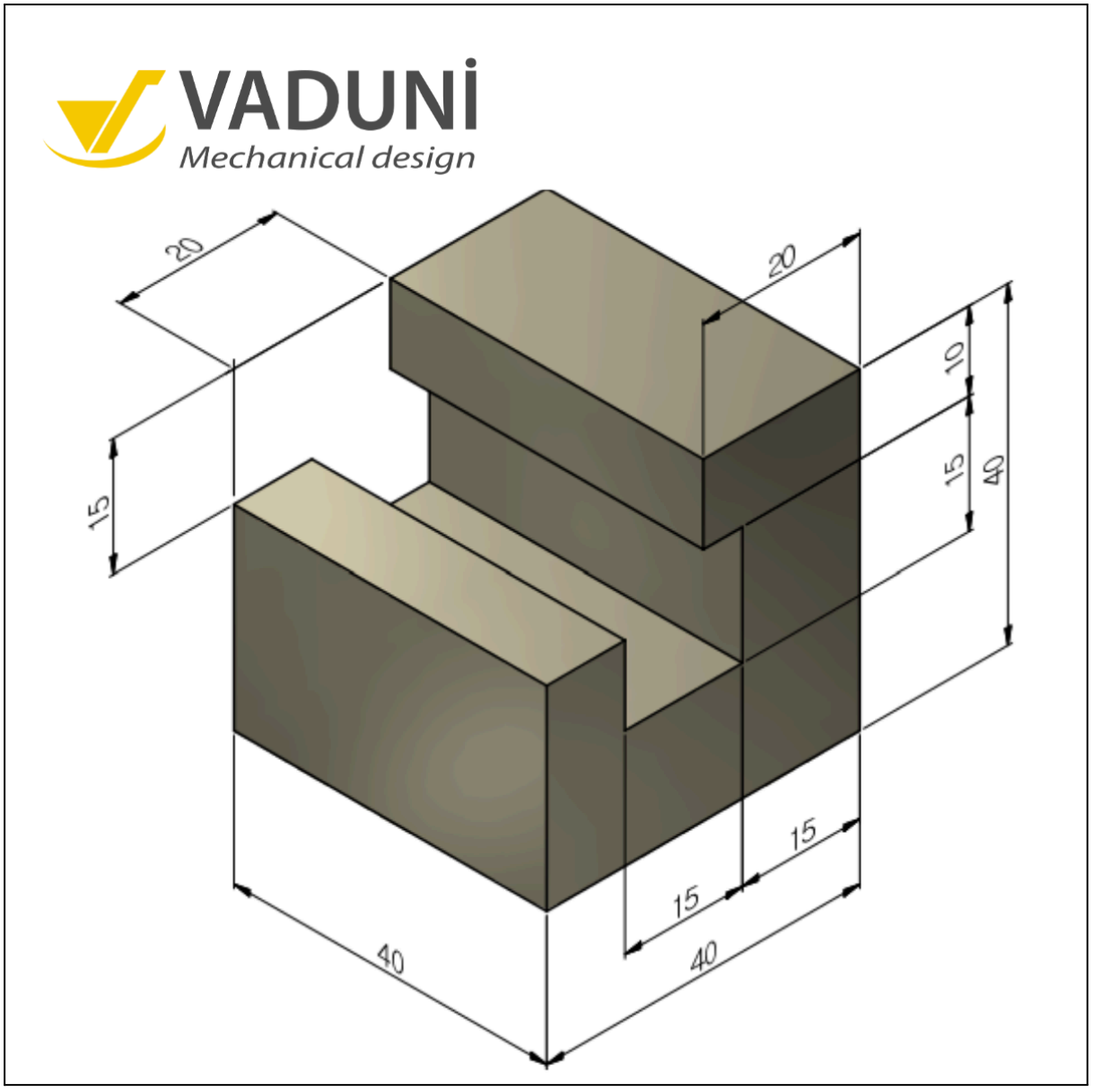
Bài tập 523



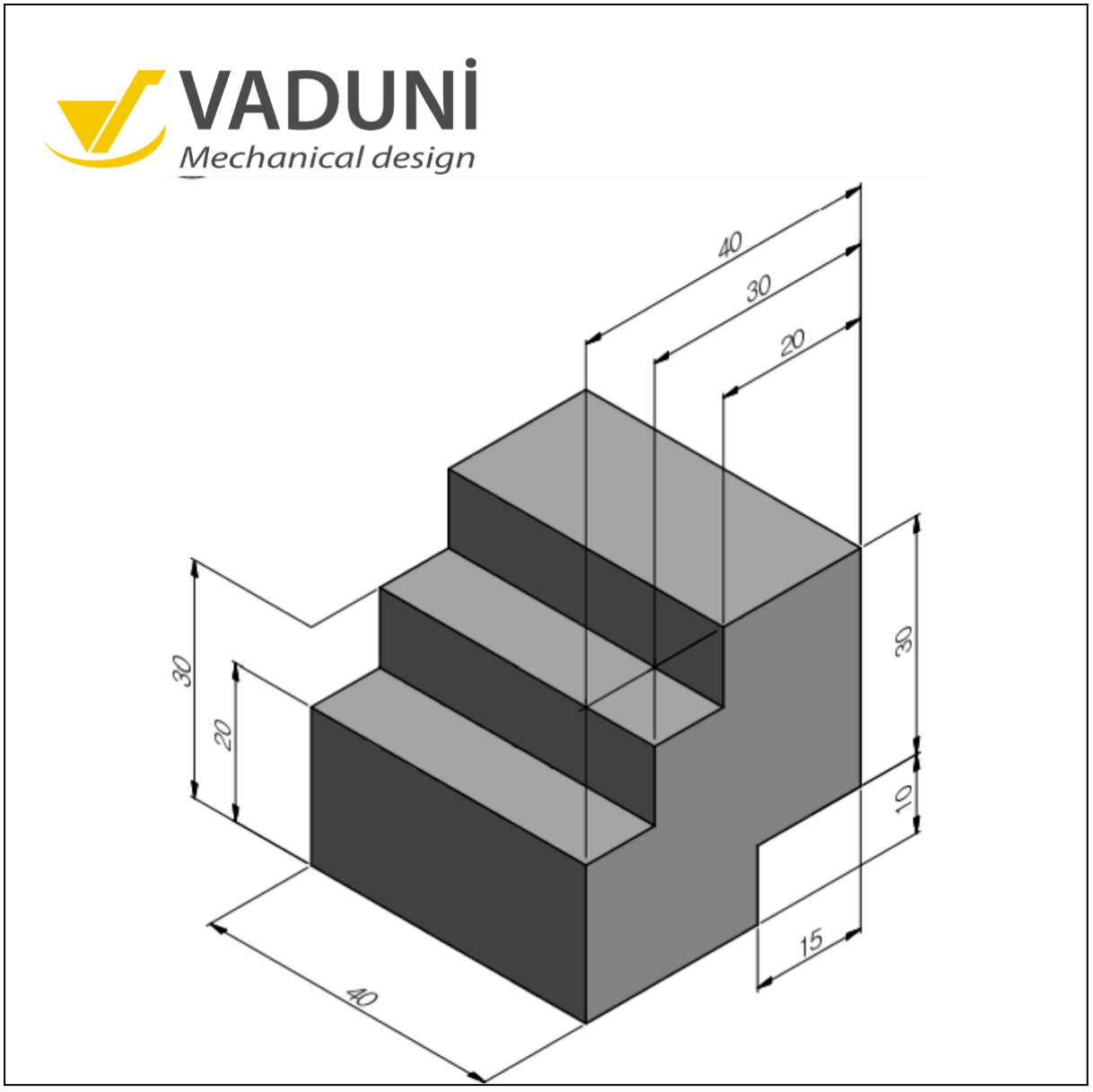
Bài tập 524



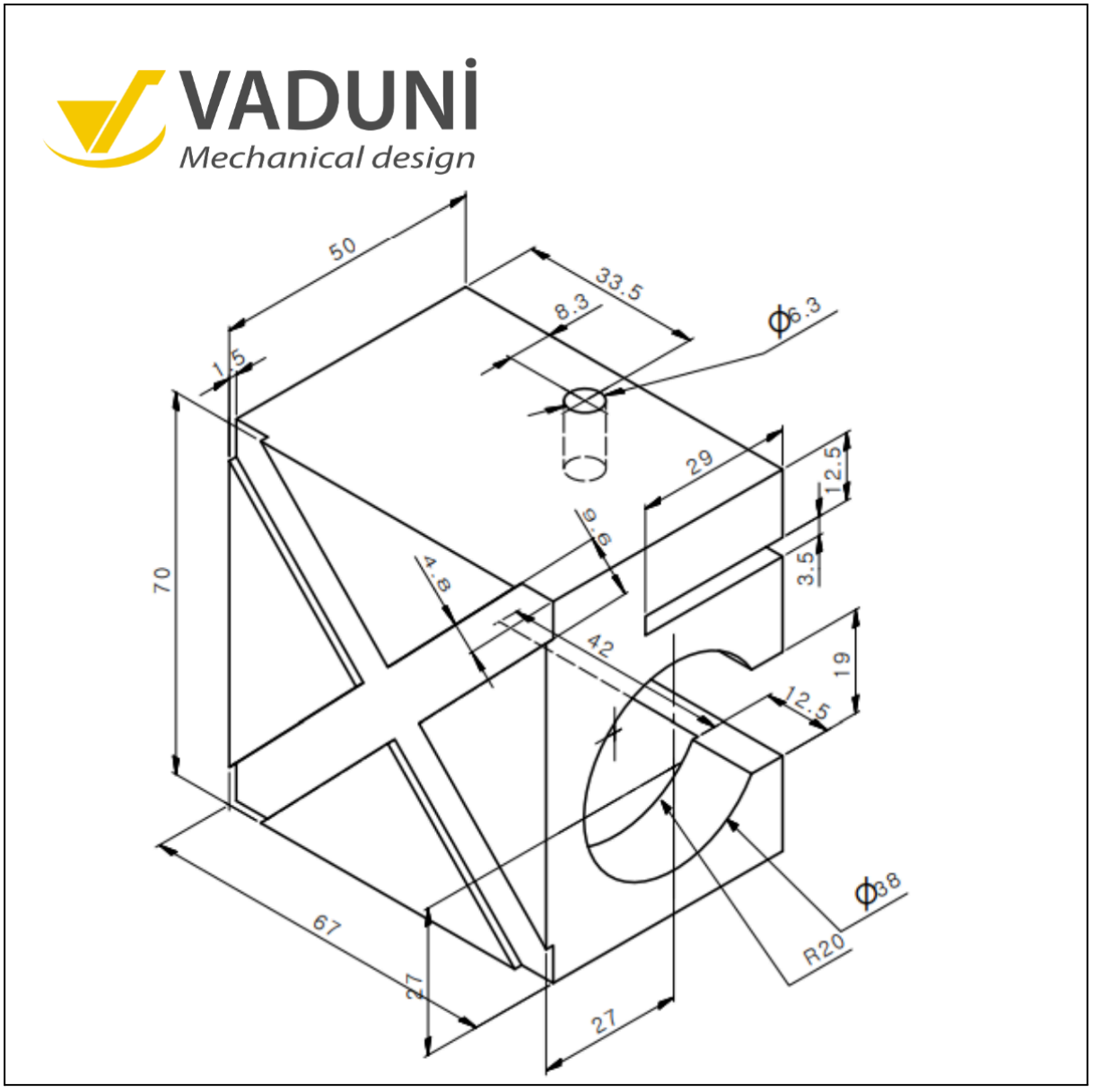
Bài tập 525



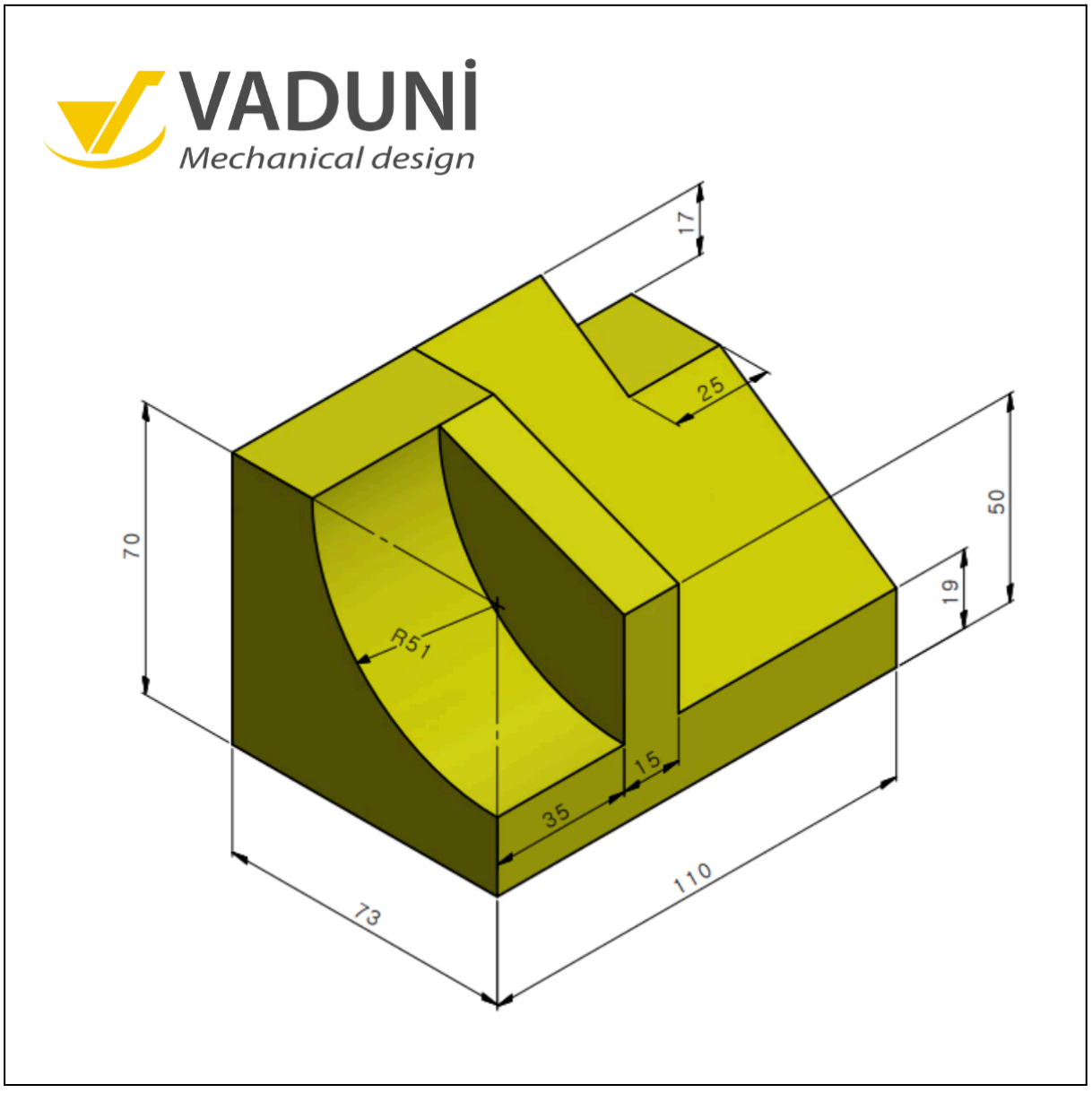
Bài tập 526



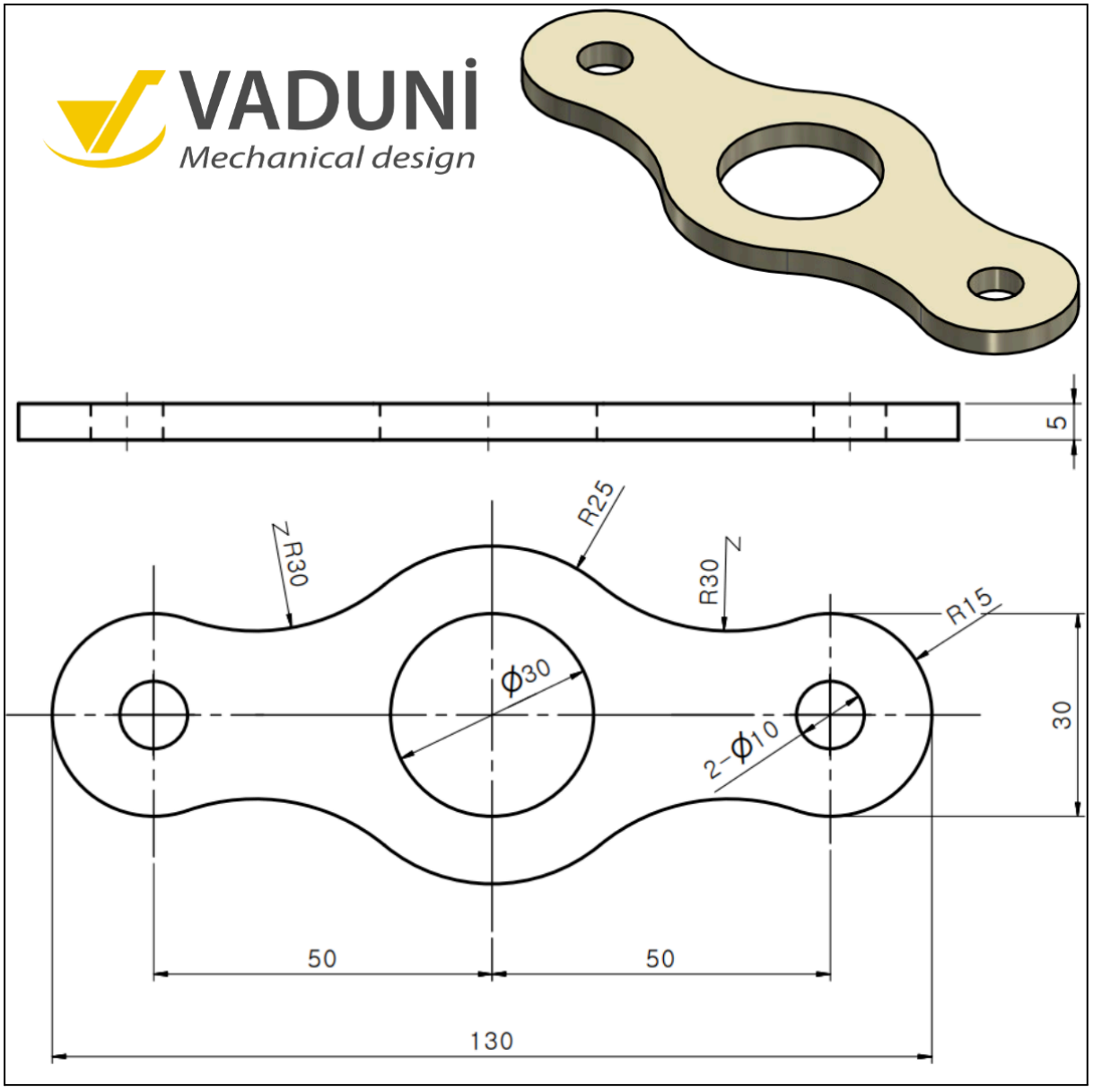
Bài tập 527


VADUNİ
Mechanical design
50
33.5
8.3
ϕ6.3
1.5
29
12.5
3.5
6.6
4.8
70
42
19
12.5
67
27
27
ϕ38
R20

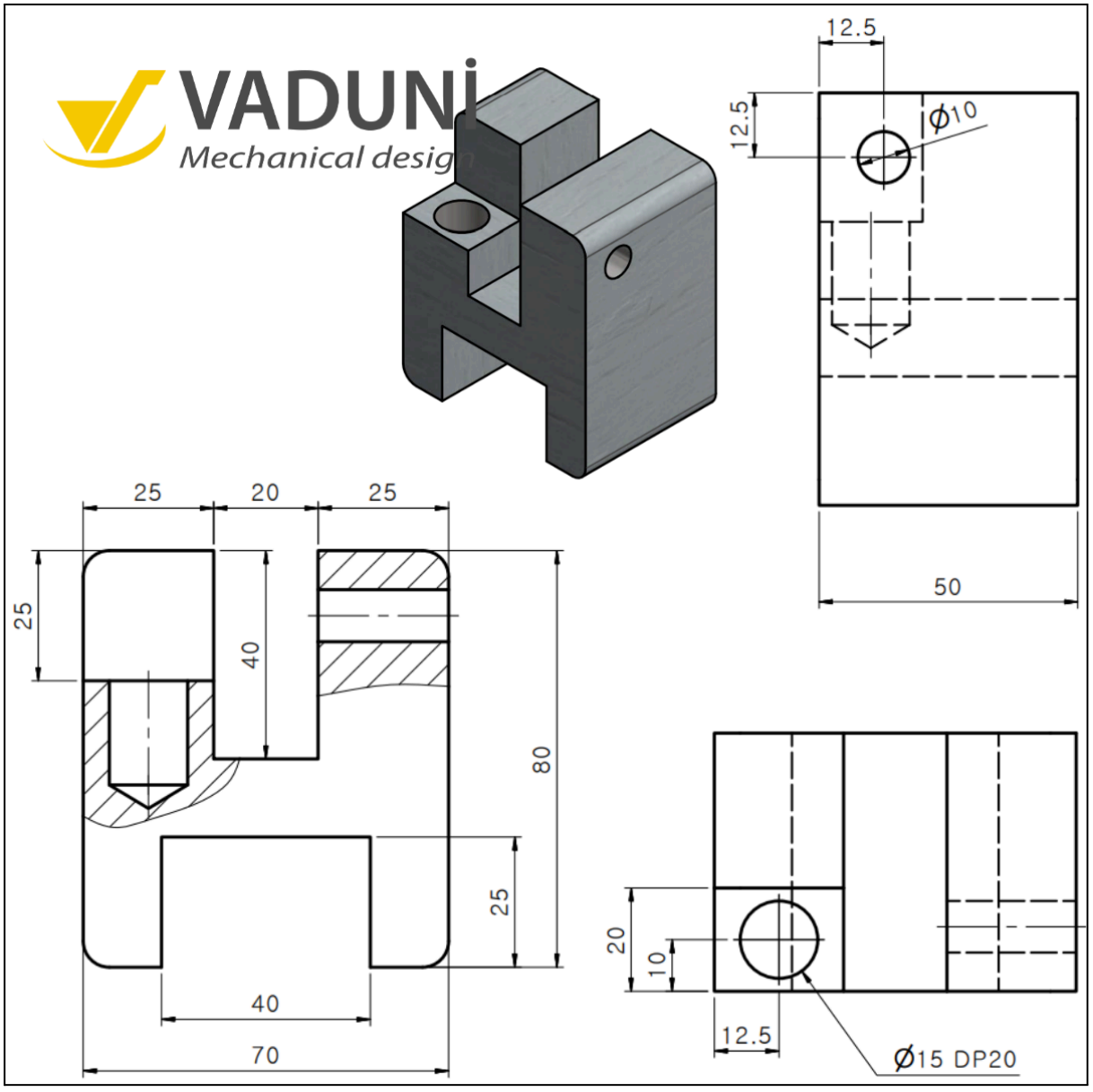
Bài tập 528



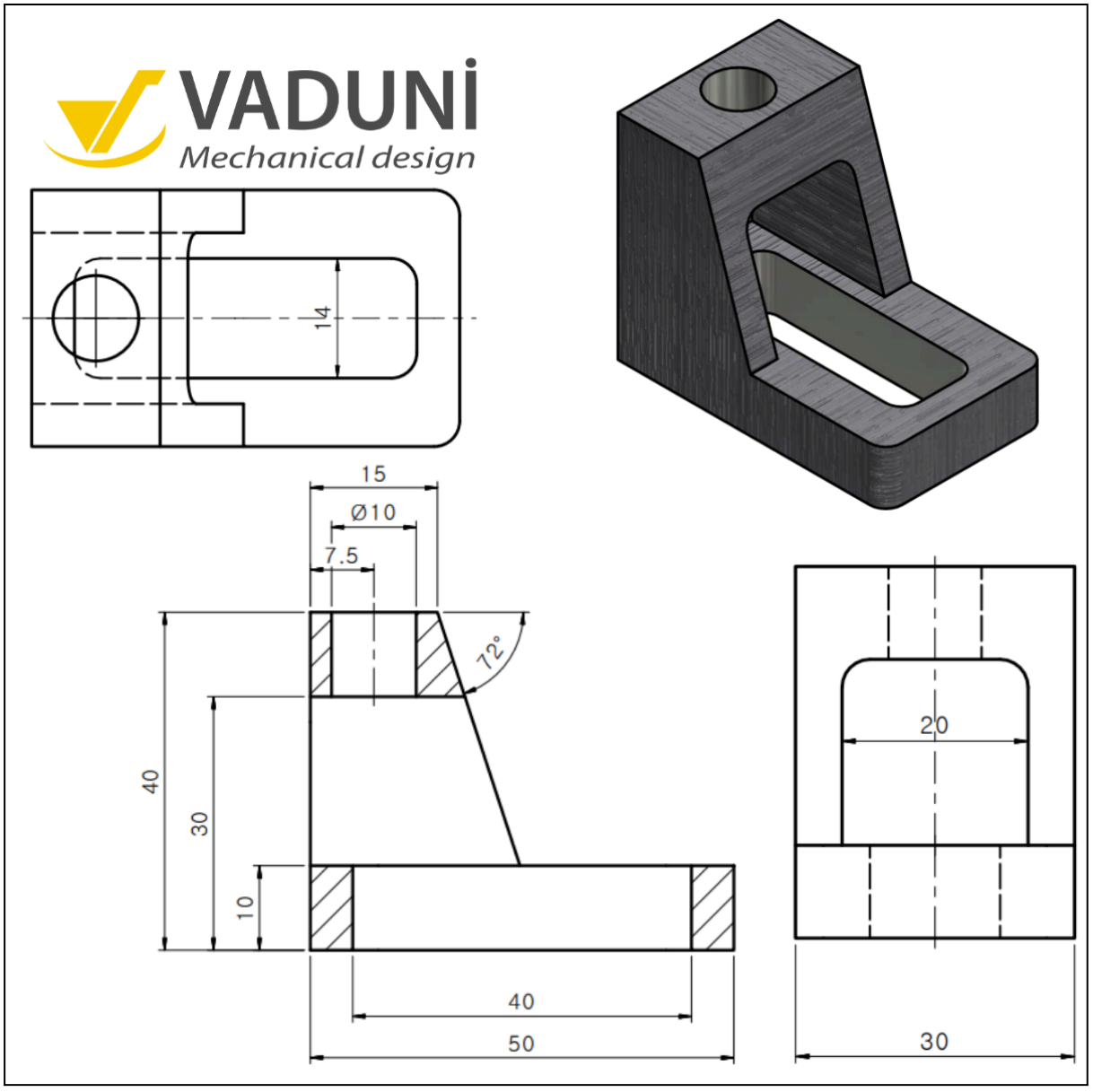
Bài tập 529


VADUNI
Mechanical design
5
R30
R25
R30
R15
ϕ30
2-ϕ10
30
50
50
130

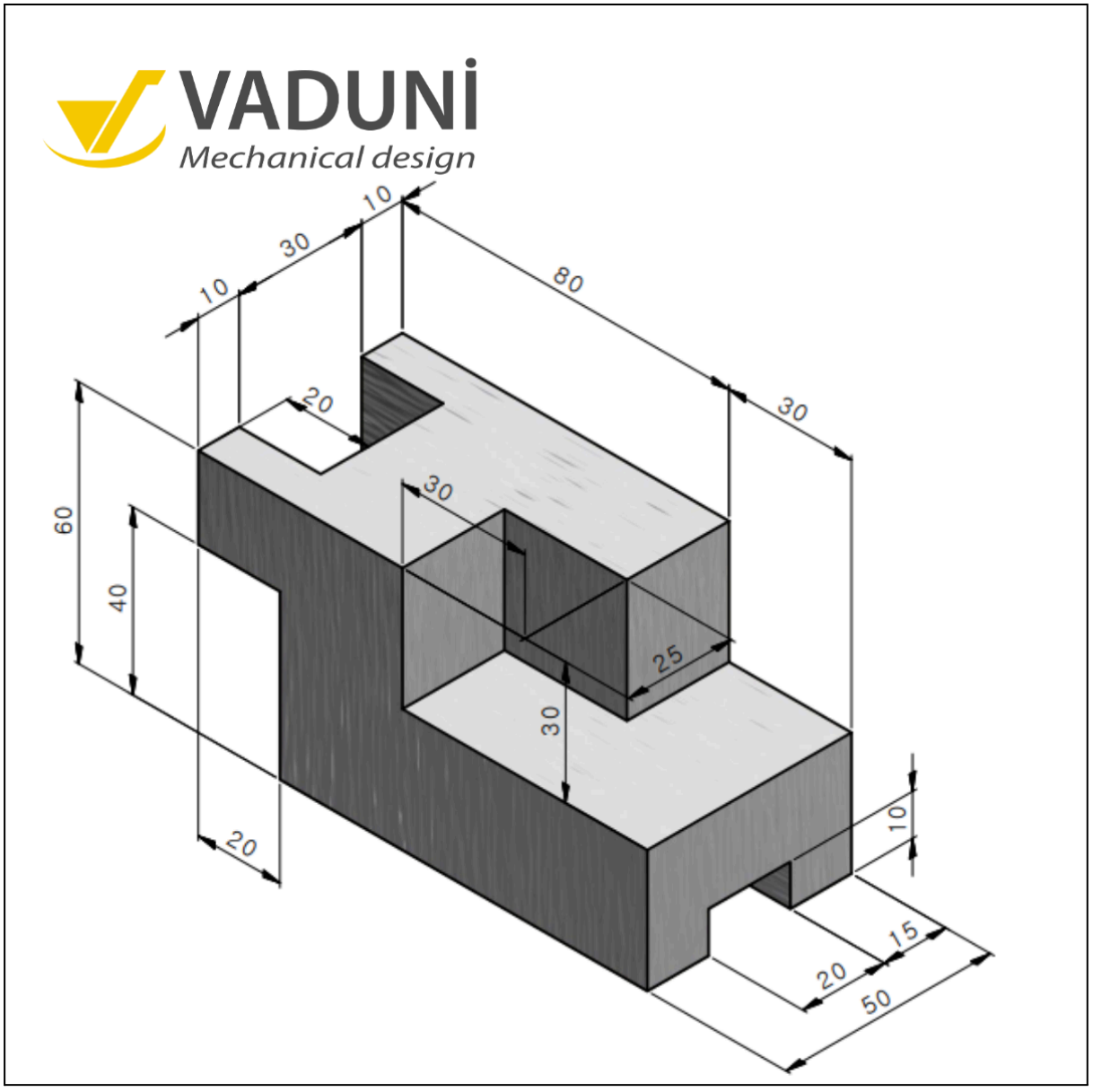
Bài tập 530


VADUNI
Mechanical design
12.5
12.5
ϕ10
50
25
20
25
25
40
80
25
40
70
20
10
12.5
Ø15 DP20

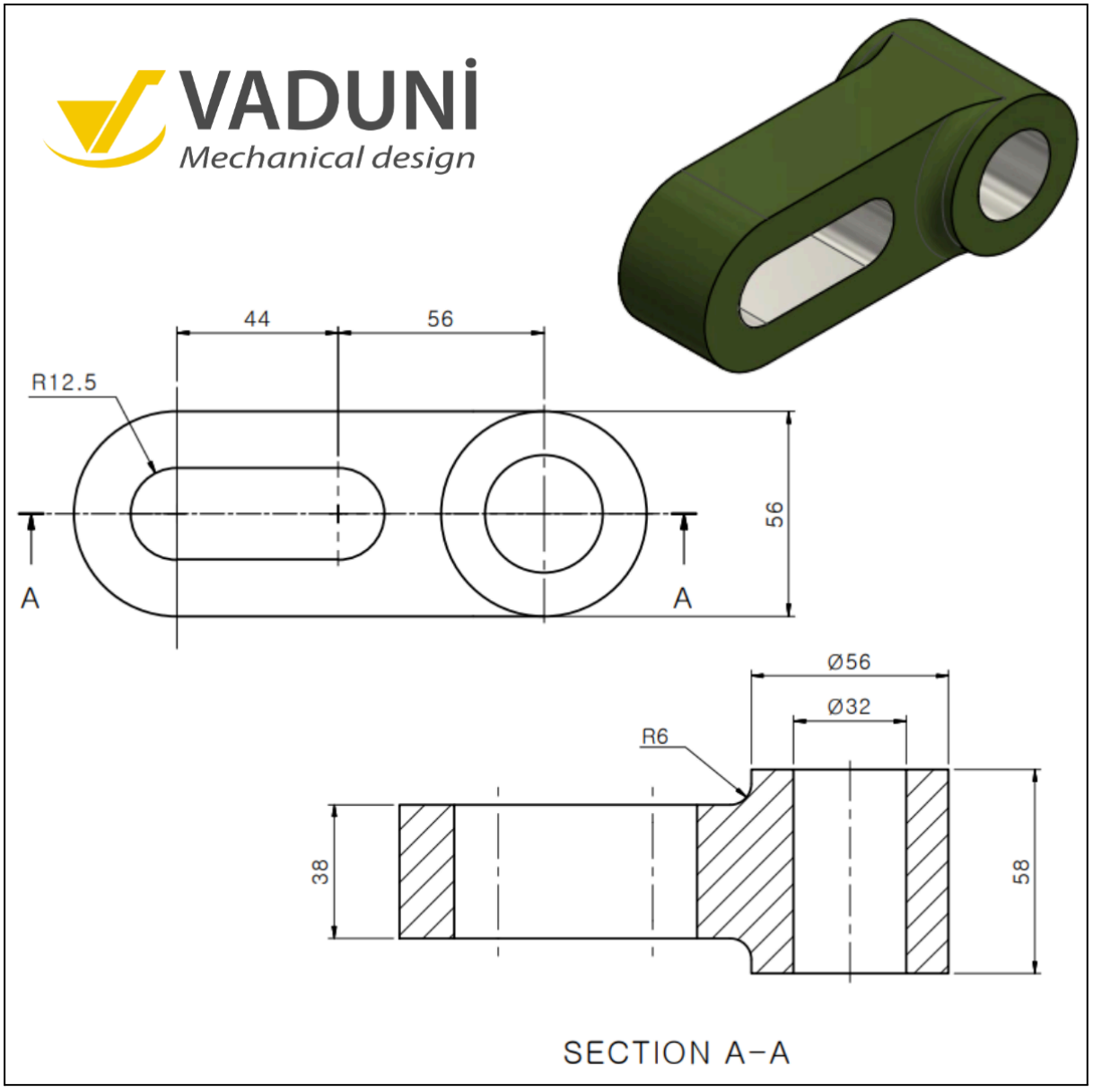
Bài tập 531



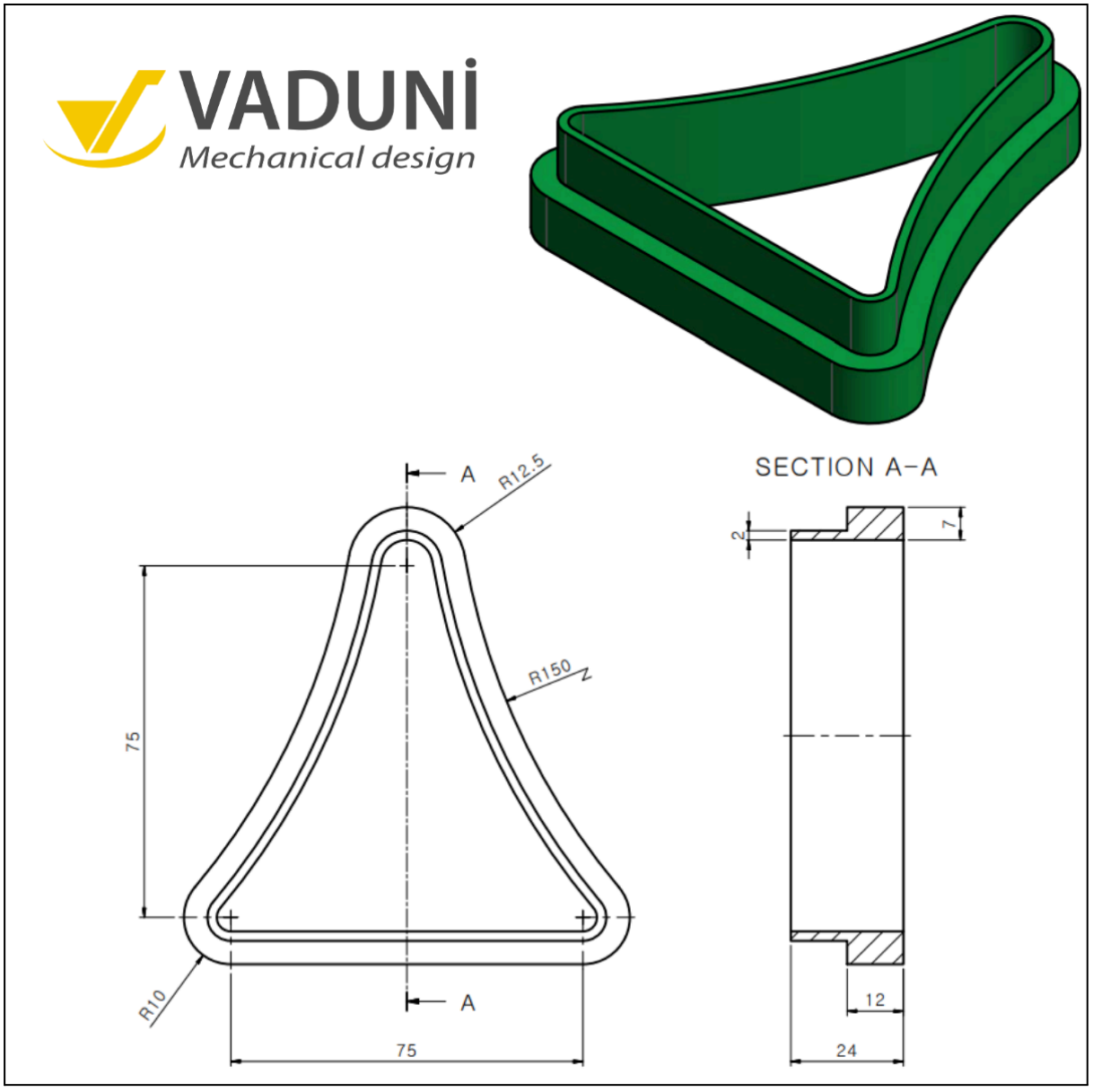
Bài tập 532


VADUNİ
Mechanical design
10
30
10
80
20
30
30
60
40
25
30
20
10
15
20
50

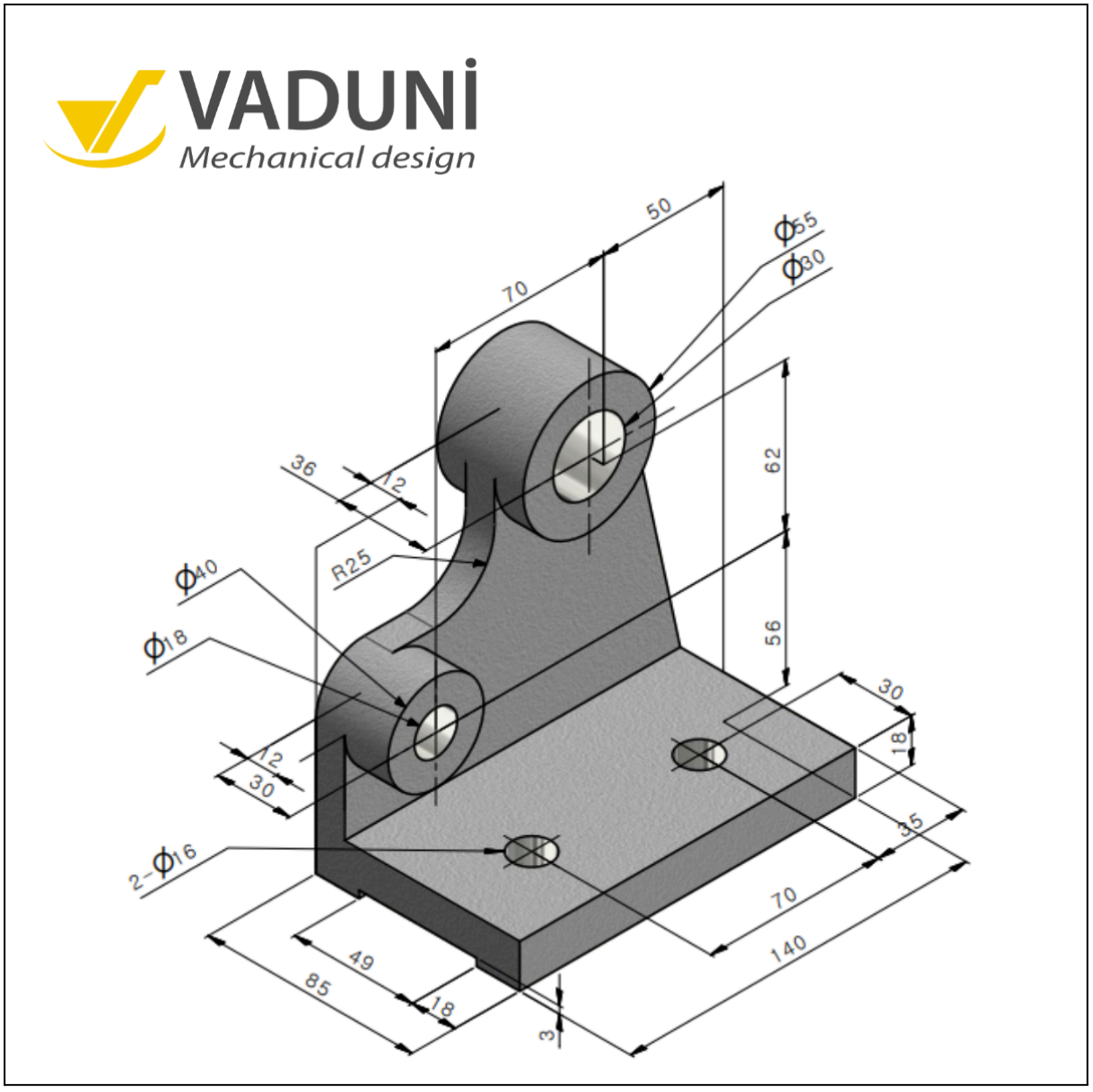
Bài tập 533


VADUNİ
Mechanical design
44
56
R12.5
56
A
A
Ø56
Ø32
R6
38
58
SECTION A-A

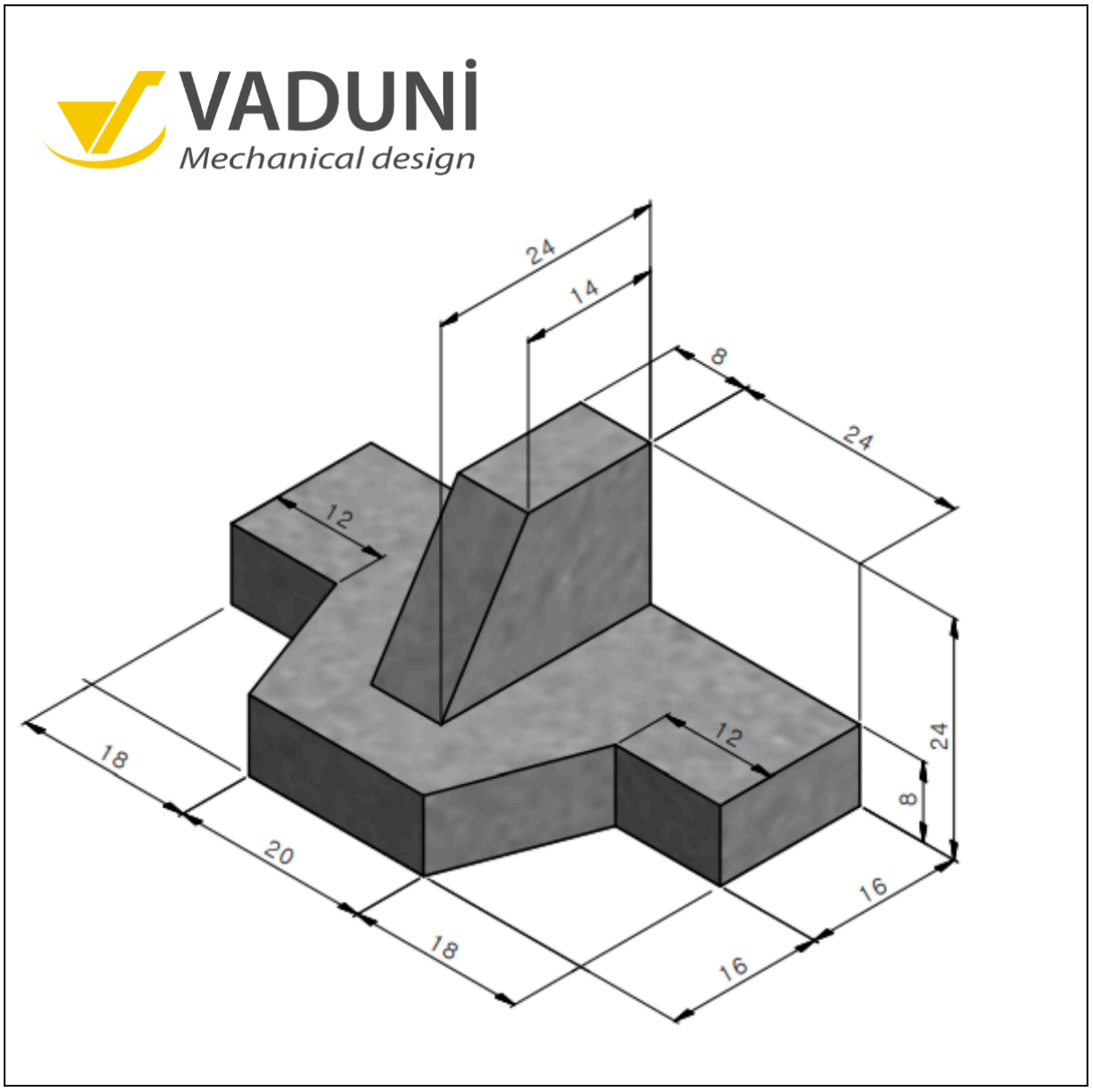
Bài tập 534


VADUNI
Mechanical design
A
R12.5
R150
75
R10
A
75
SECTION A–A
2
7
12
24

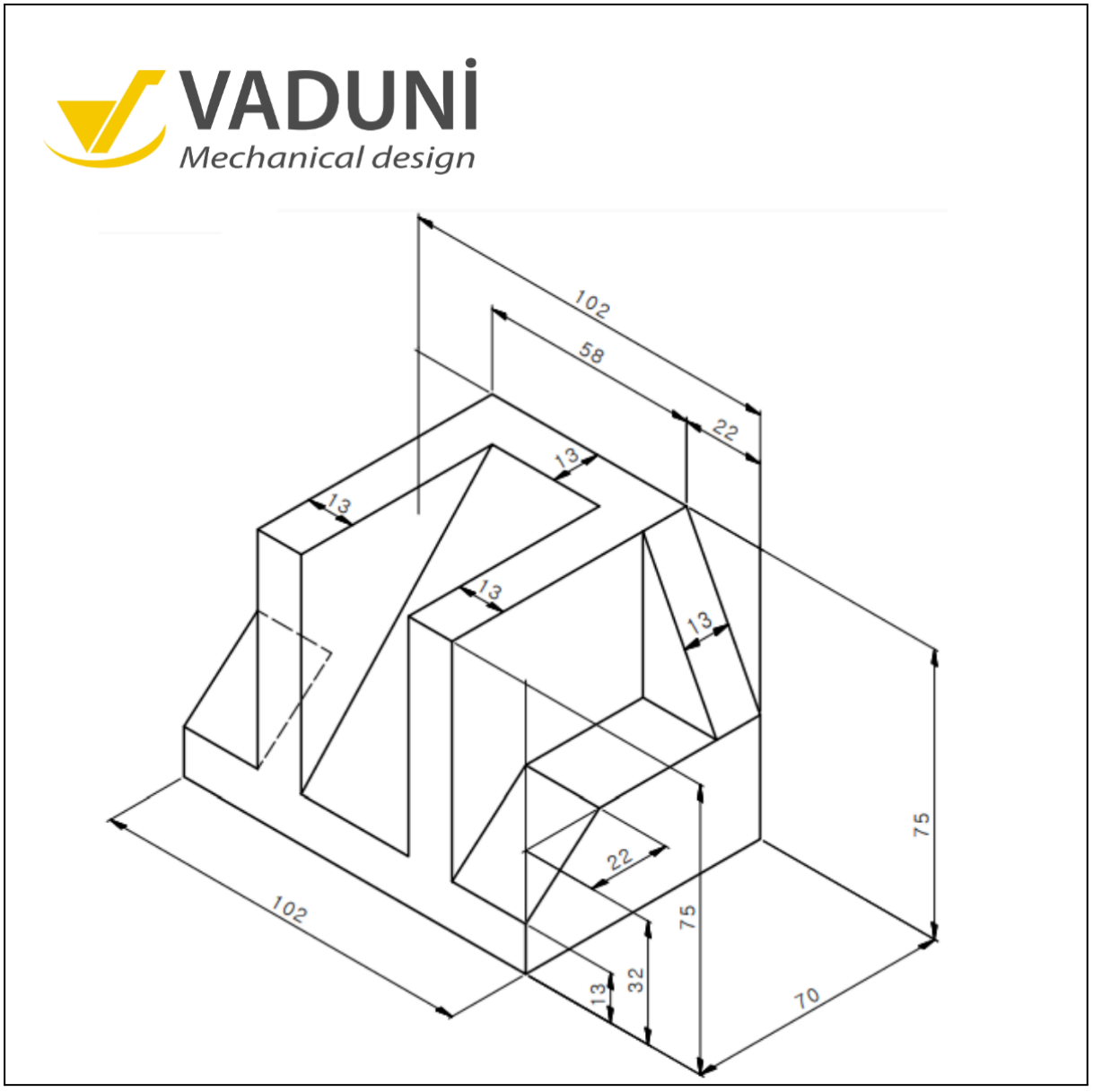
Bài tập 535


VADUNİ
Mechanical design
50
70
ϕ55
ϕ30
62
56
36
12
R25
ϕ40
ϕ18
12
30
2-ϕ16
30
18
35
70
140
49
85
18
3

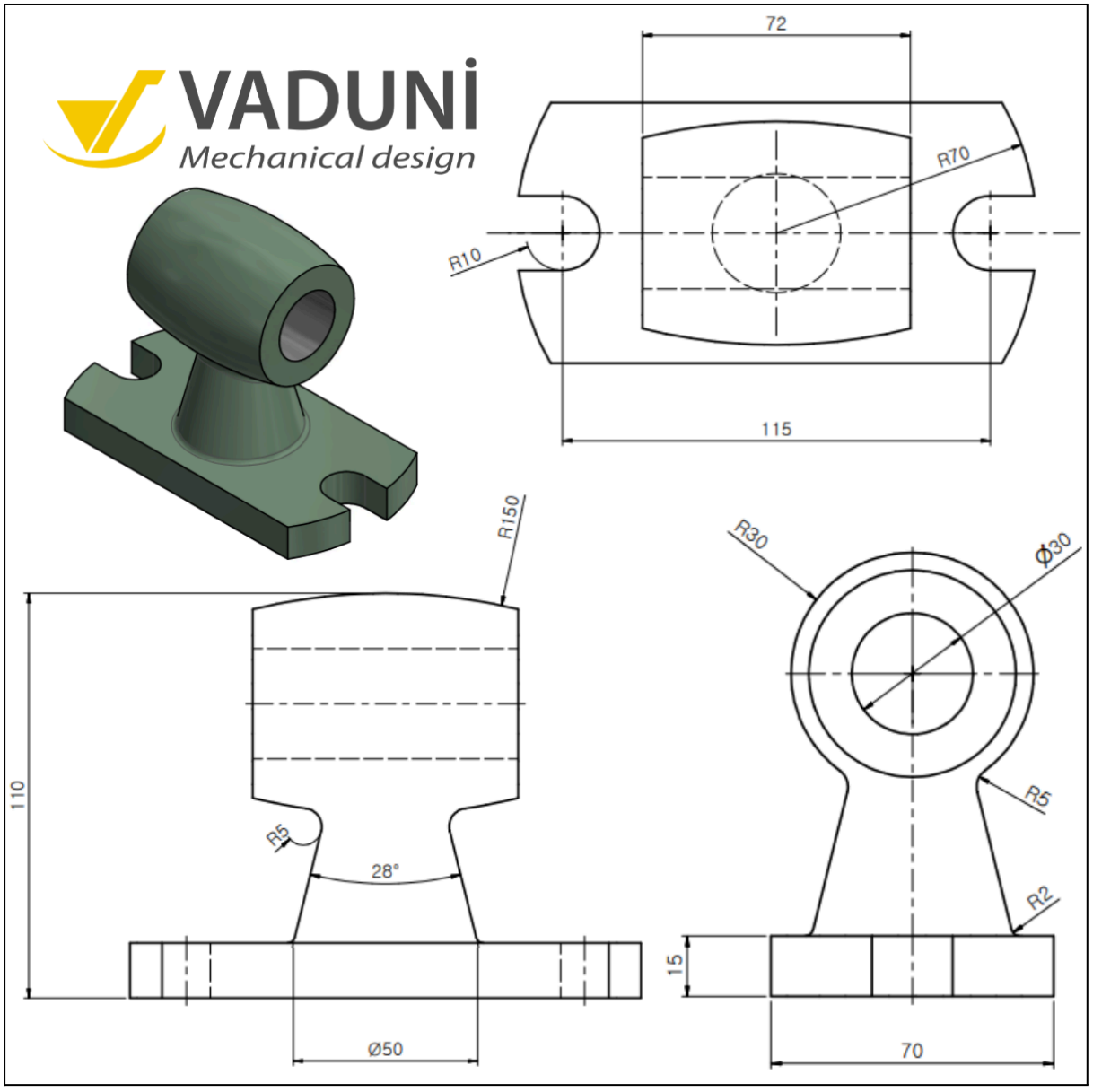
Bài tập 536



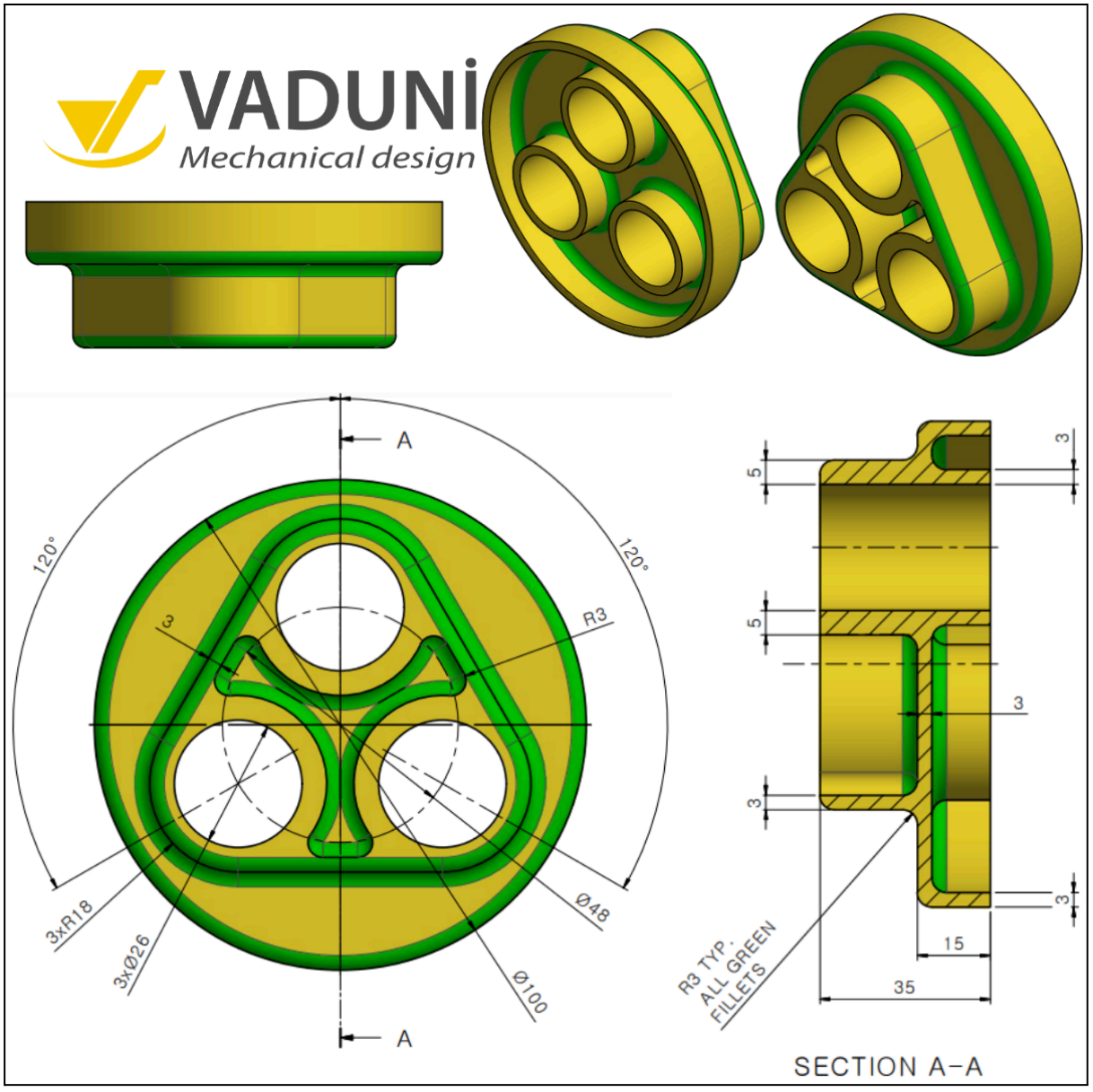
Bài tập 537


VADUNİ
Mechanical design
102
58
22
13
13
13
13
75
22
102
75
13
32
70

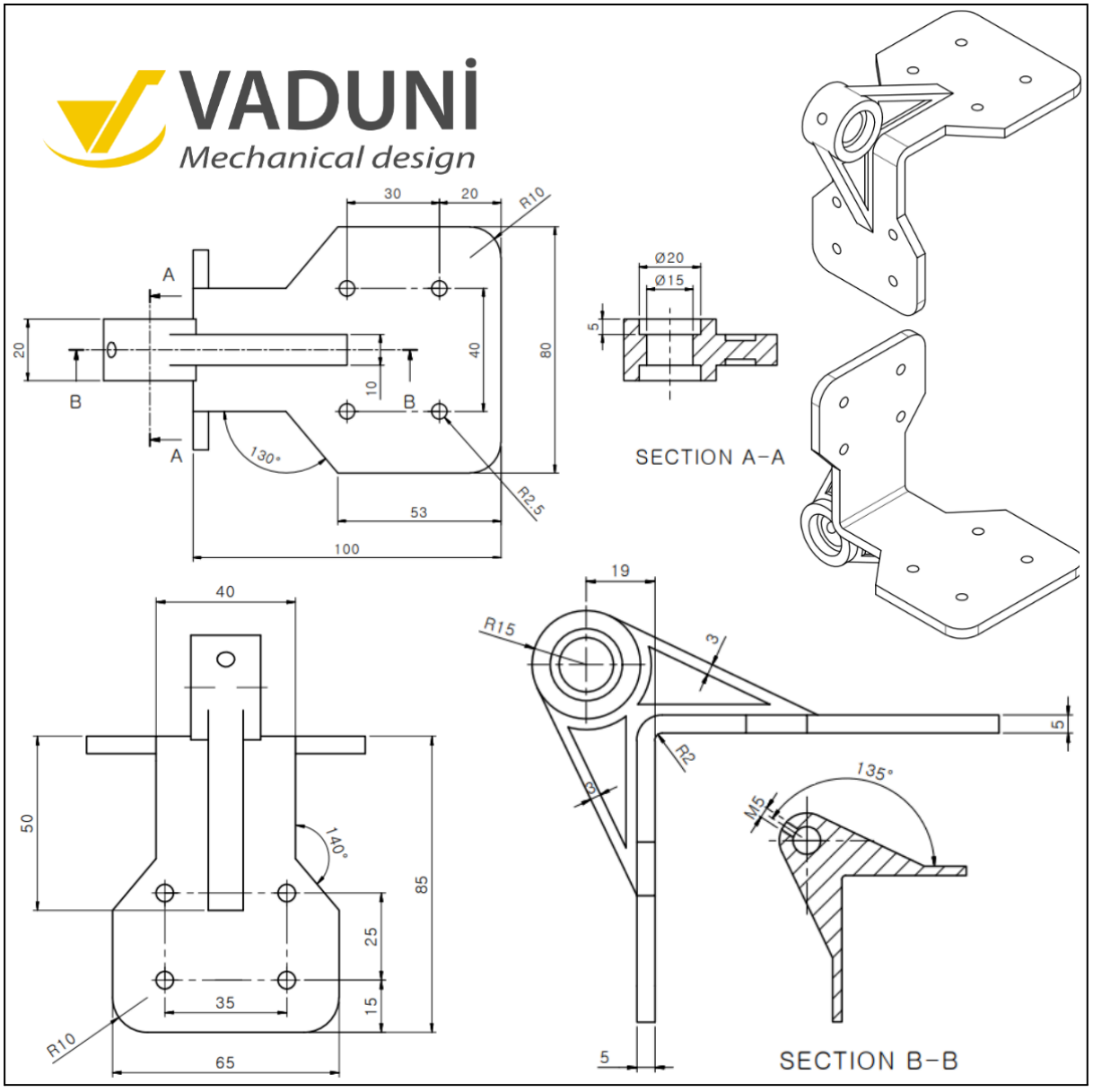
Bài tập 538


VADUNI
Mechanical design
72
R70
R10
115
R150
110
R5
28°
Ø50
R30
Ø30
R5
R2
15
70

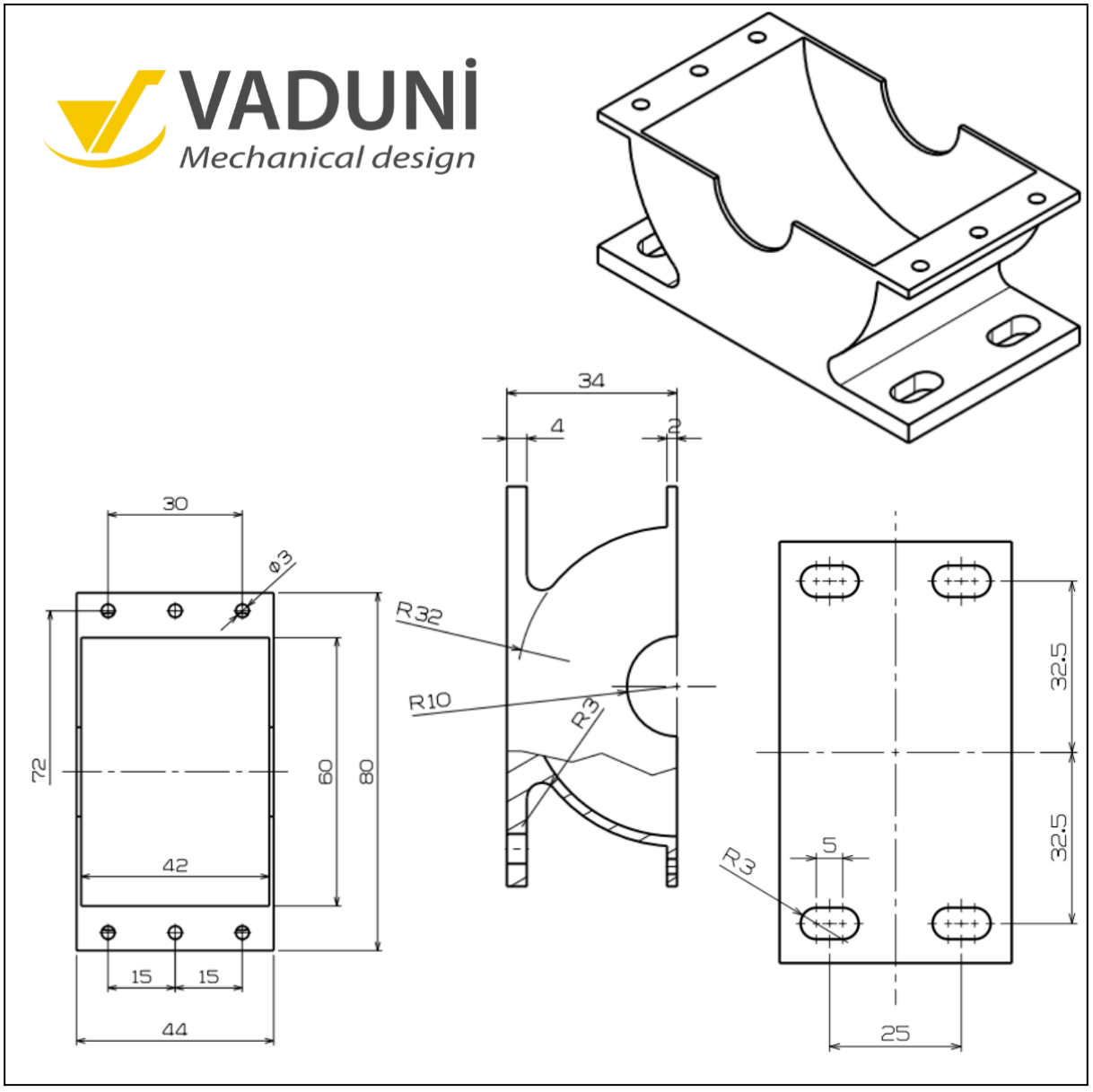
Bài tập 539


VADUNİ
Mechanical design
A
A
120°
120°
3
R3
3xR18
3xØ26
Ø48
Ø100
5
5
3
3
3
3
15
35
R3 TYP.
ALL GREEN
FILLETS
SECTION A-A

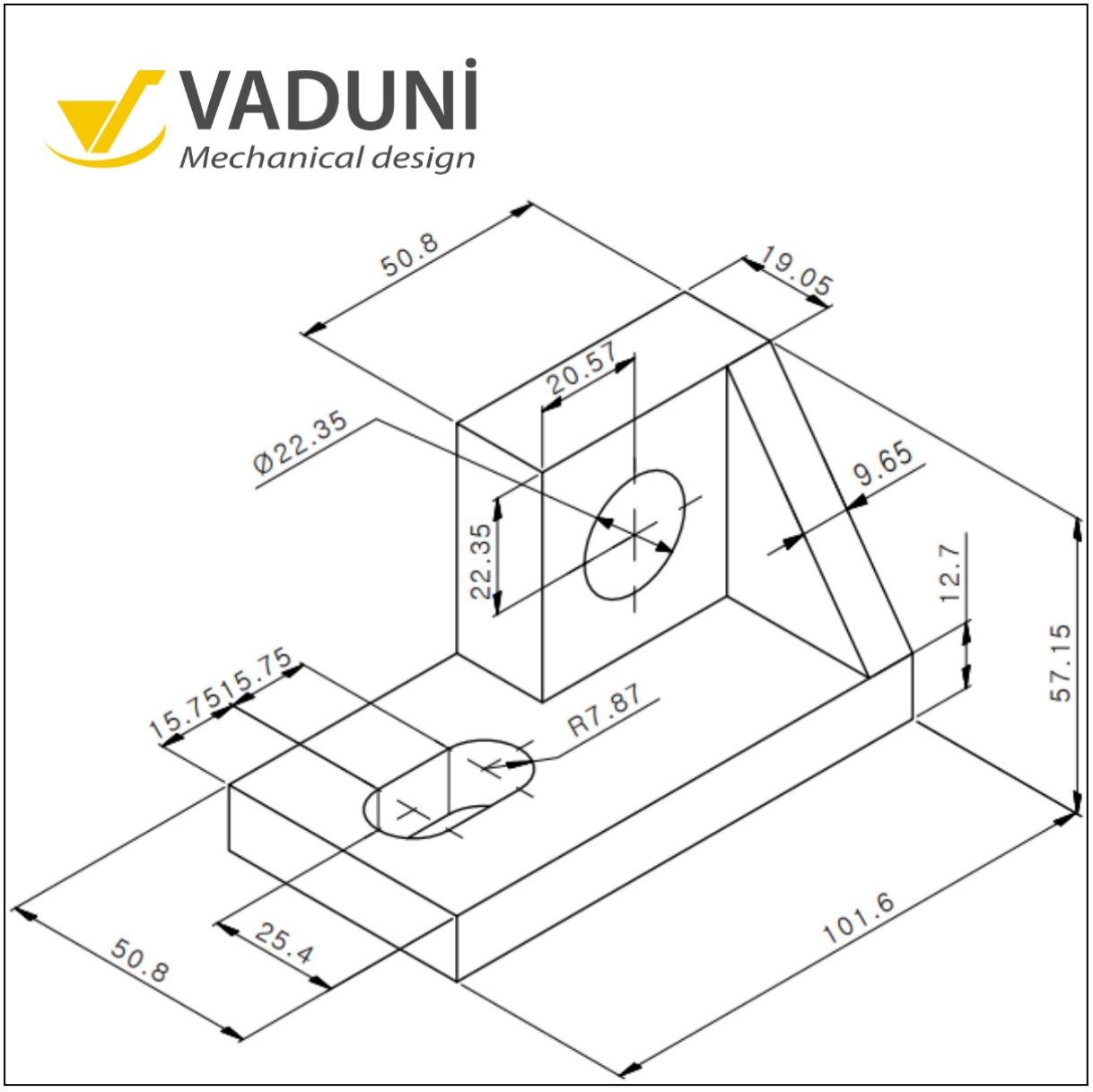
Bài tập 540


VADUNİ
Mechanical design
30
20
R10
A
20
B
10
40
80
B
A
130°
53
R2.5
100
Ø20
Ø15
5
SECTION A-A
40
50
140°
85
25
35
15
R10
65
19
R15
3
5
R2
135°
M5
5
SECTION B-B

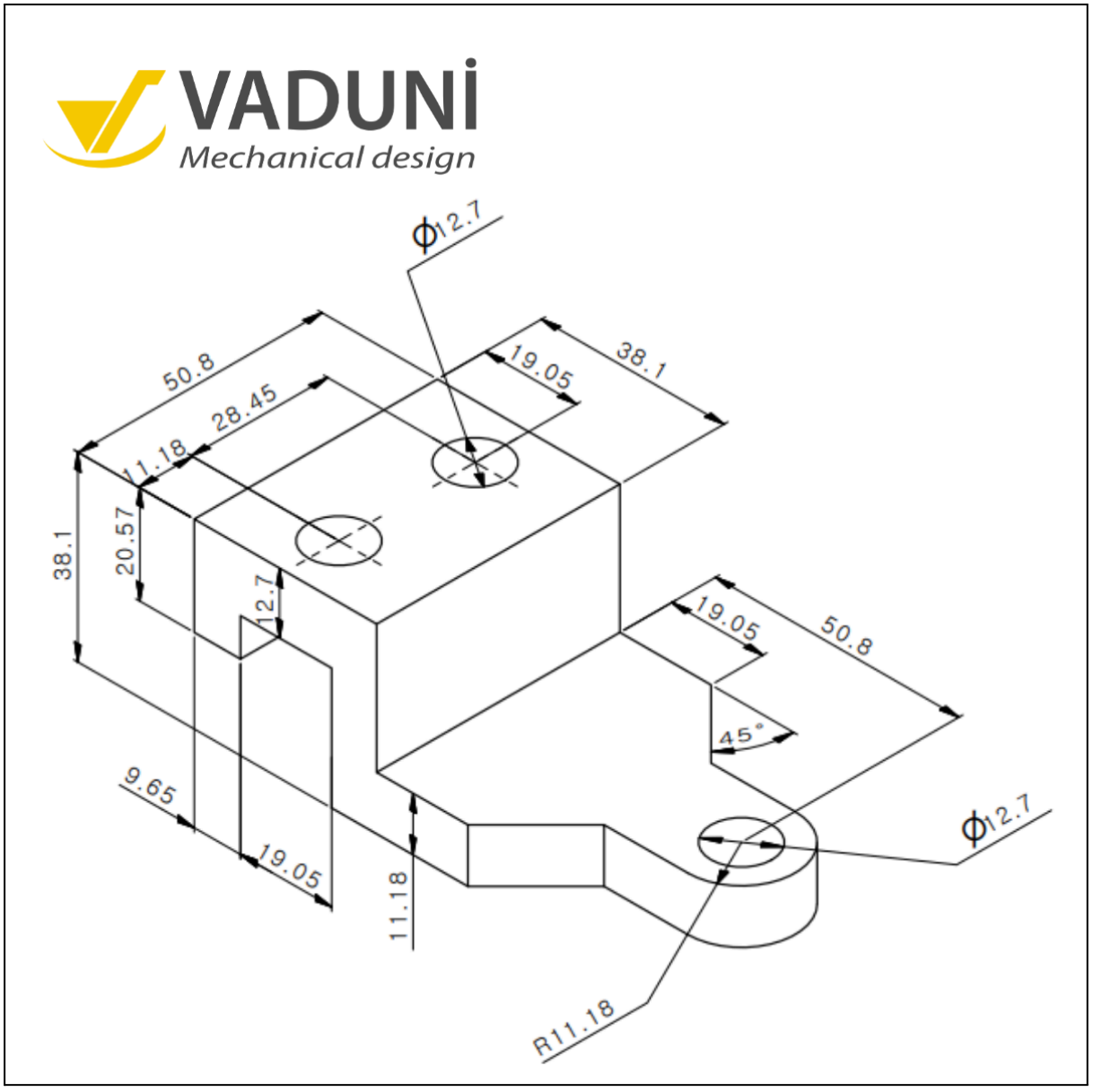
Bài tập 541


VADUNI
Mechanical design
34
4
2
30
Ø3
R32
R10
R3
72
60
80
42
15
15
44
32.5
32.5
5
R3
25

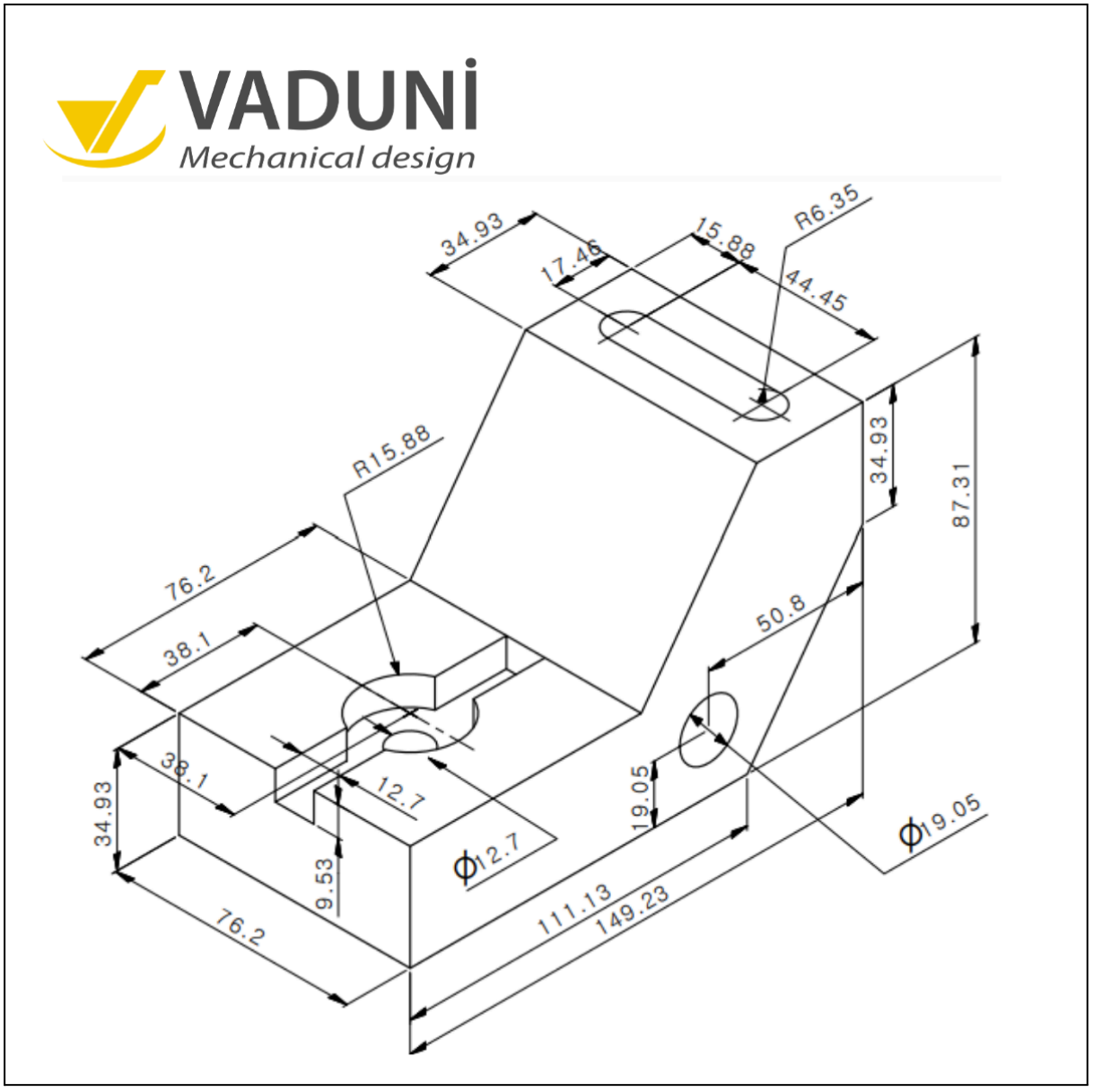
Bài tập 542


VADUNİ
Mechanical design
50.8
19.05
20.57
Ø22.35
9.65
22.35
12.7
57.15
15.75
15.75
R7.87
50.8
25.4
101.6

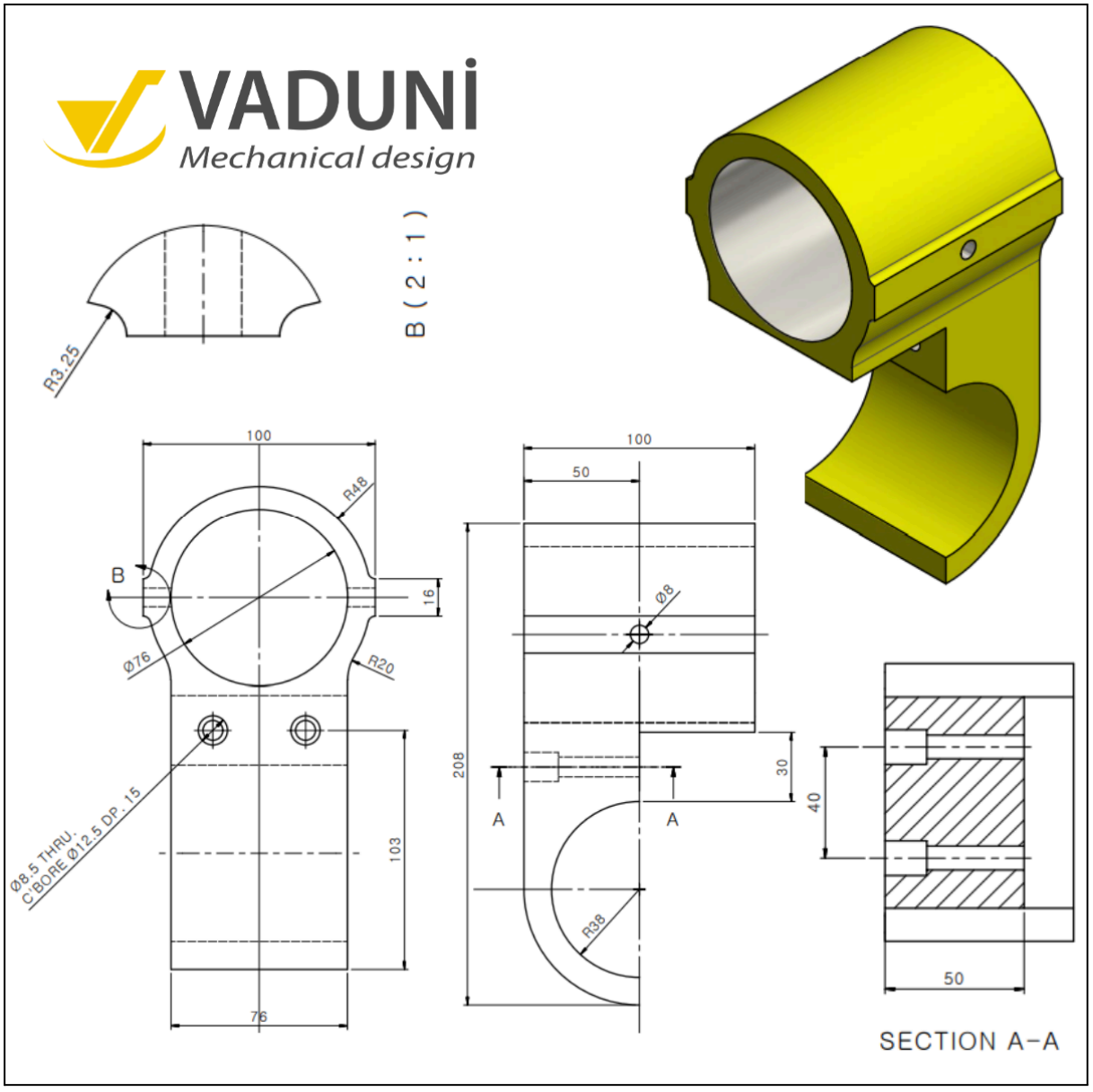
Bài tập 543


VADUNI
Mechanical design
Φ12.7
50.8
28.45
11.18
38.1
19.05
38.1
20.57
12.7
19.05
50.8
45°
9.65
19.05
11.18
Φ12.7
R11.18

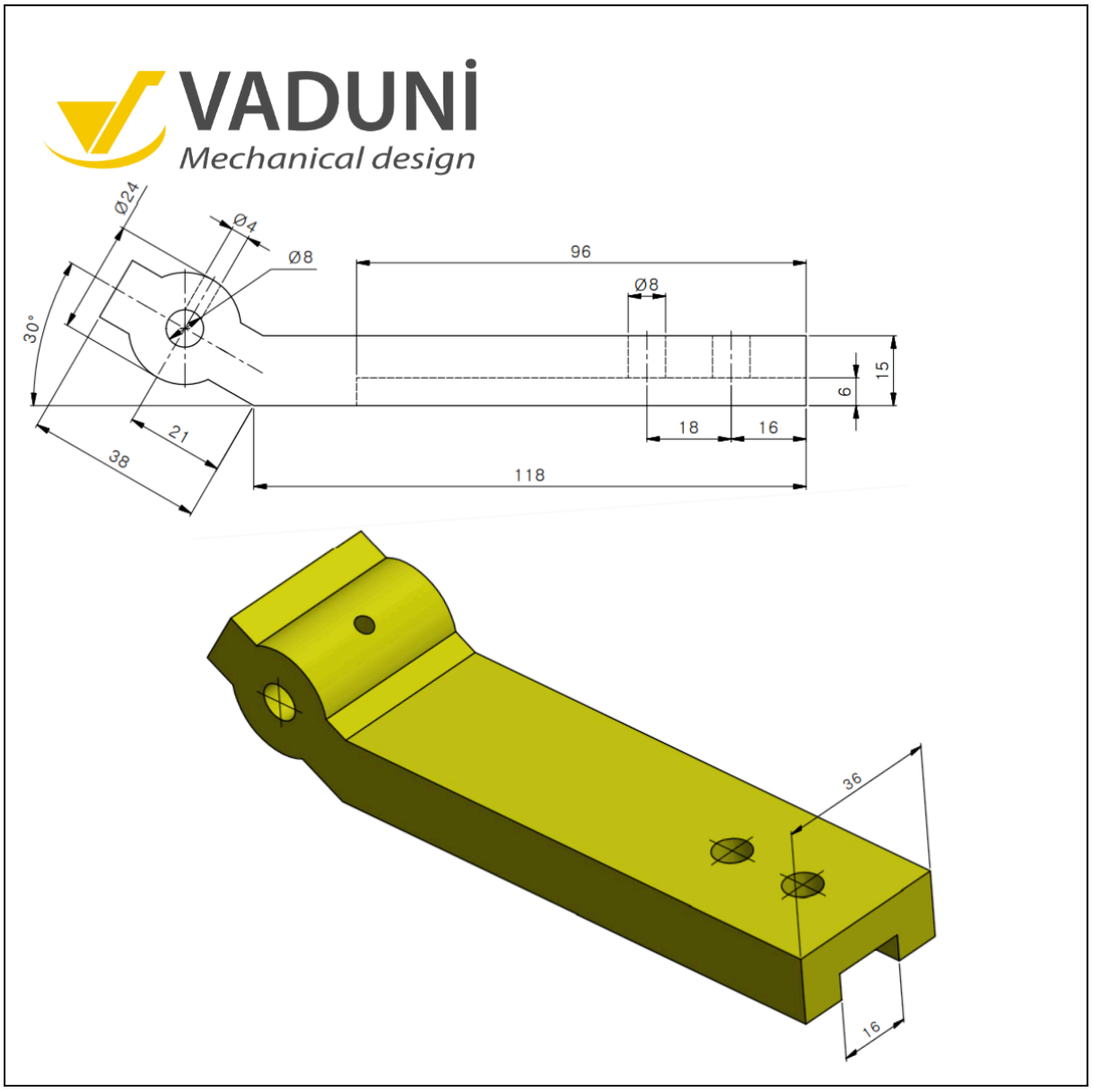
Bài tập 544


VADUNİ
Mechanical design
34.93
17.46
15.88
R6.35
44.45
R15.88
34.93
87.31
76.2
38.1
50.8
38.1
12.7
34.93
19.05
ϕ12.7
ϕ19.05
9.53
76.2
111.13
149.23

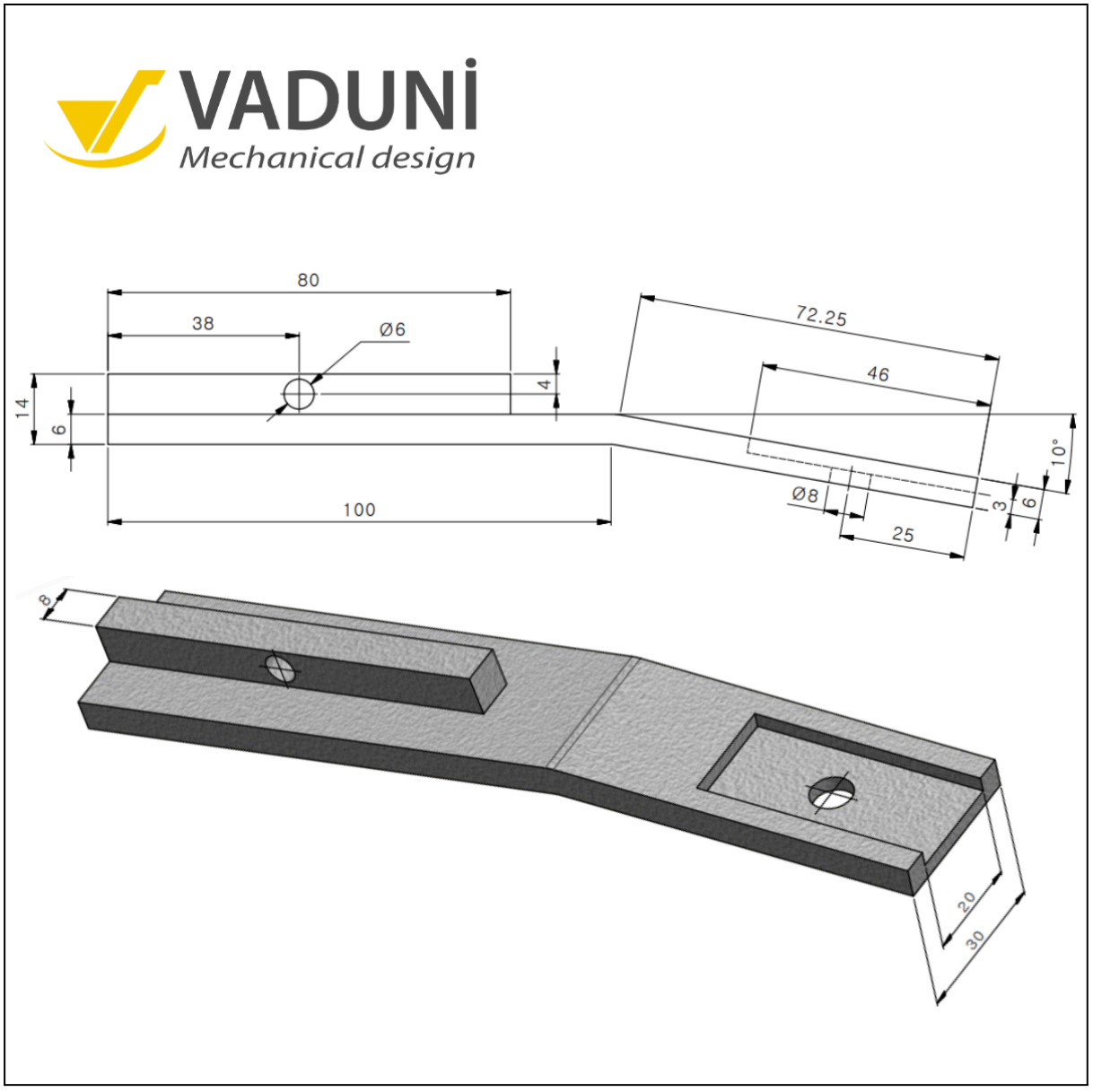
Bài tập 545


VADUNİ
Mechanical design
B (2 : 1)
R3.25
100
R48
B
16
Ø76
R20
Ø8.5 THRU.
C'BORE Ø12.5 DP. 15
103
76
100
50
Ø8
208
30
A
A
R38
40
50
SECTION A-A

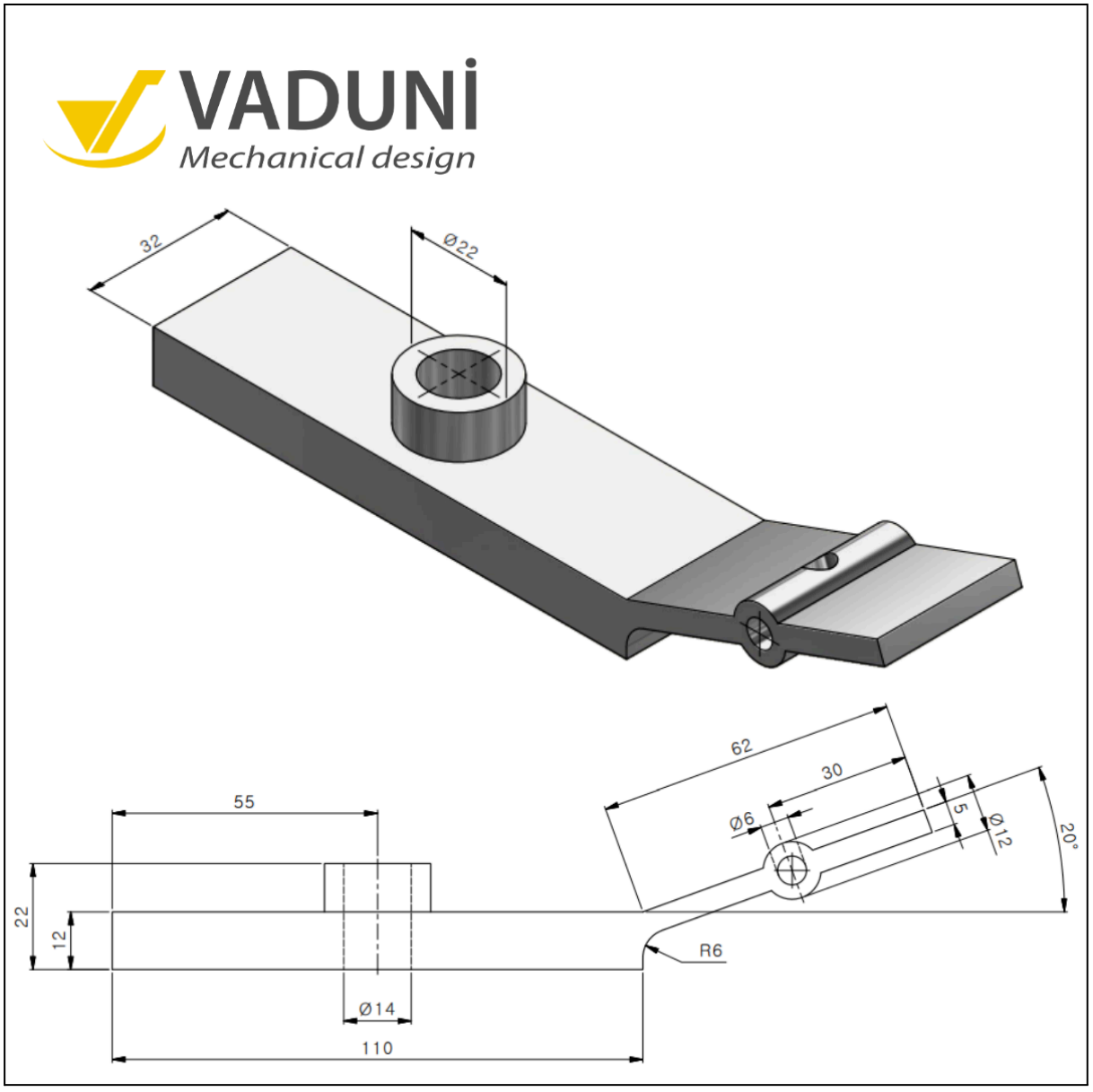
Bài tập 546


VADUNİ
Mechanical design
Ø24
Ø4
Ø8
96
Ø8
30°
15
6
18
16
21
38
118
36
16

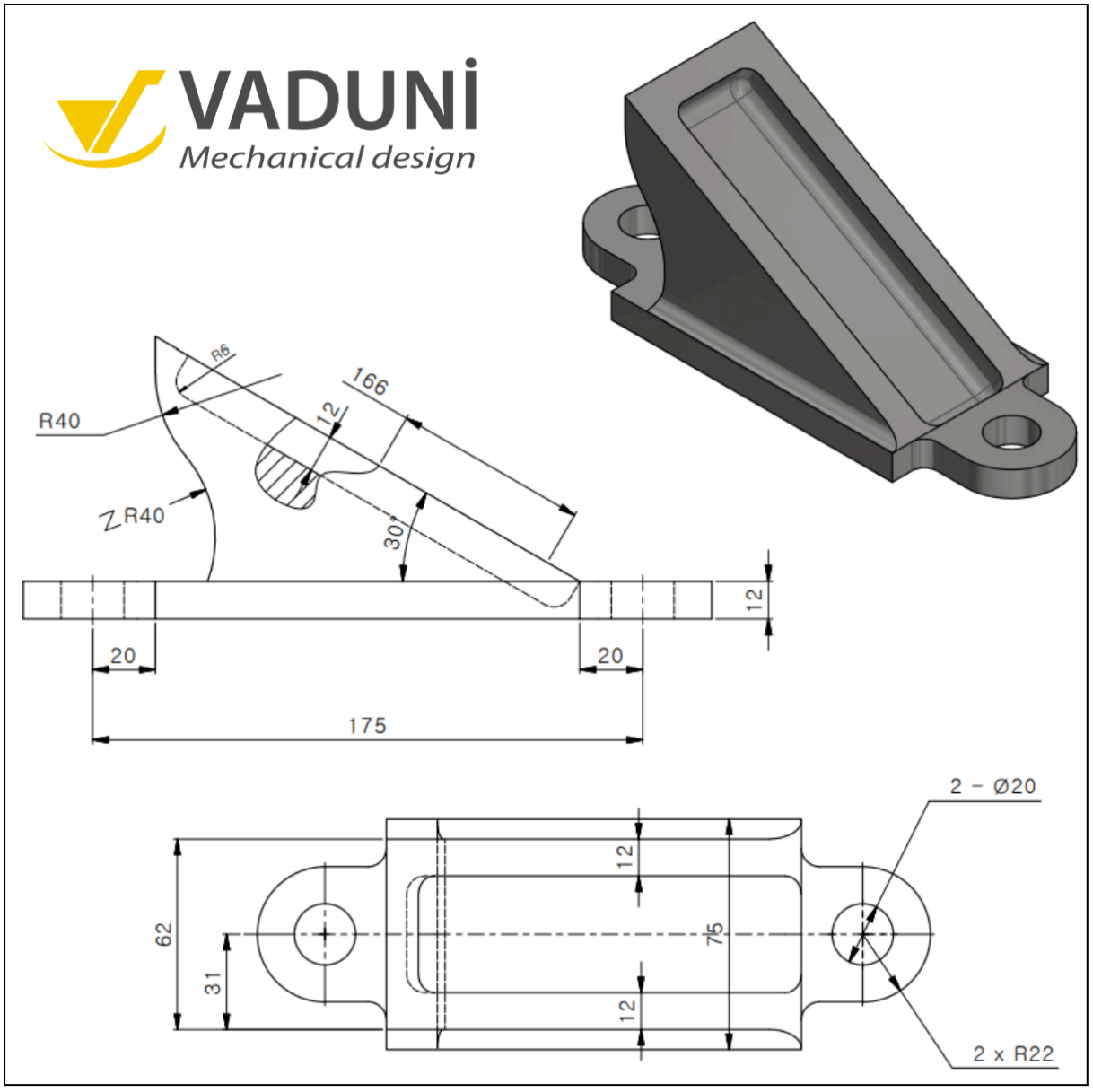
Bài tập 547


VADUNİ
Mechanical design
80
38
Ø6
4
14
6
100
72.25
46
10°
Ø8
3
6
25
8
20
30

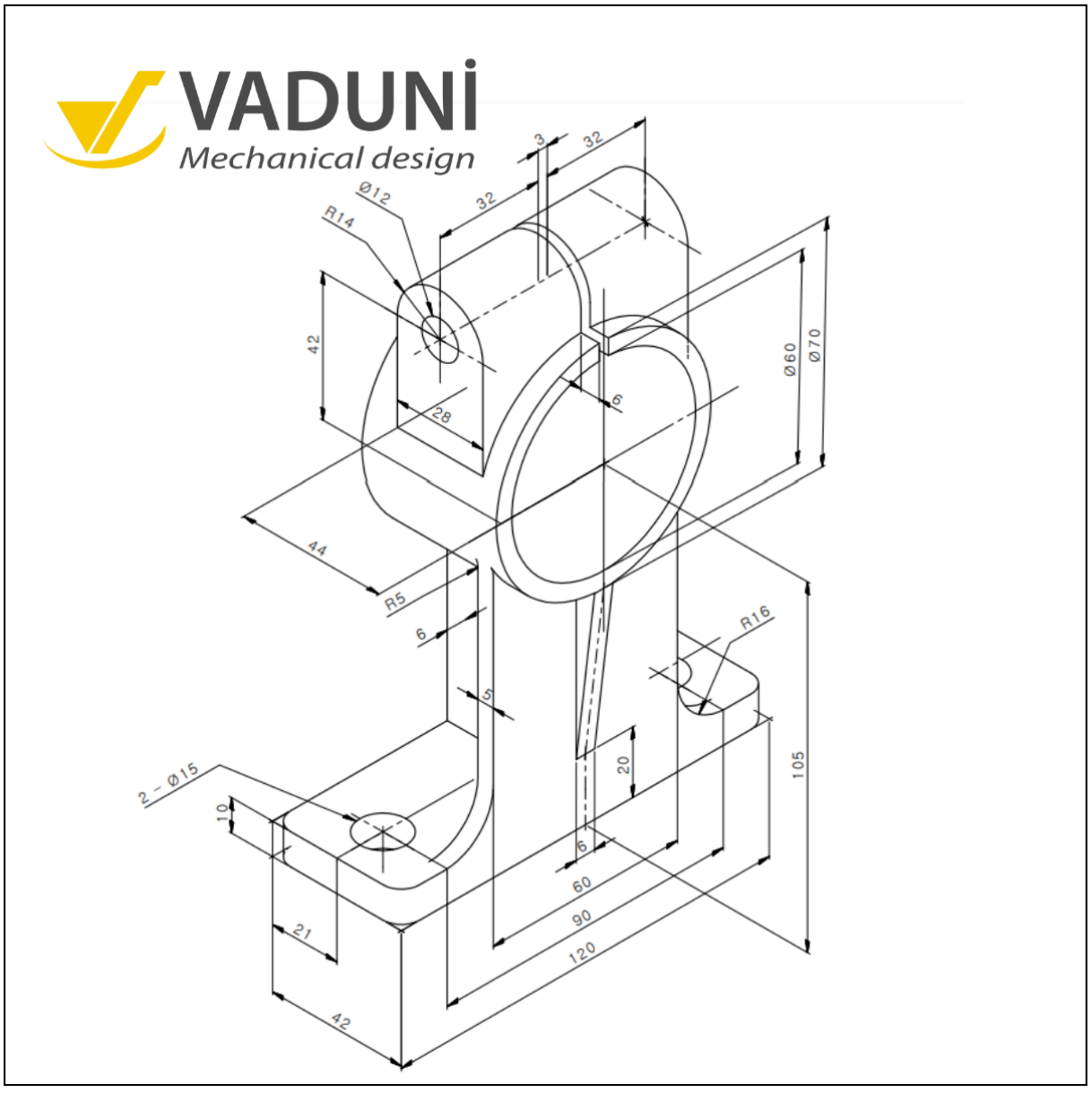
Bài tập 548


VADUNİ
Mechanical design
32
Ø22
62
30
Ø6
5
Ø12
20°
55
22
12
R6
Ø14
110

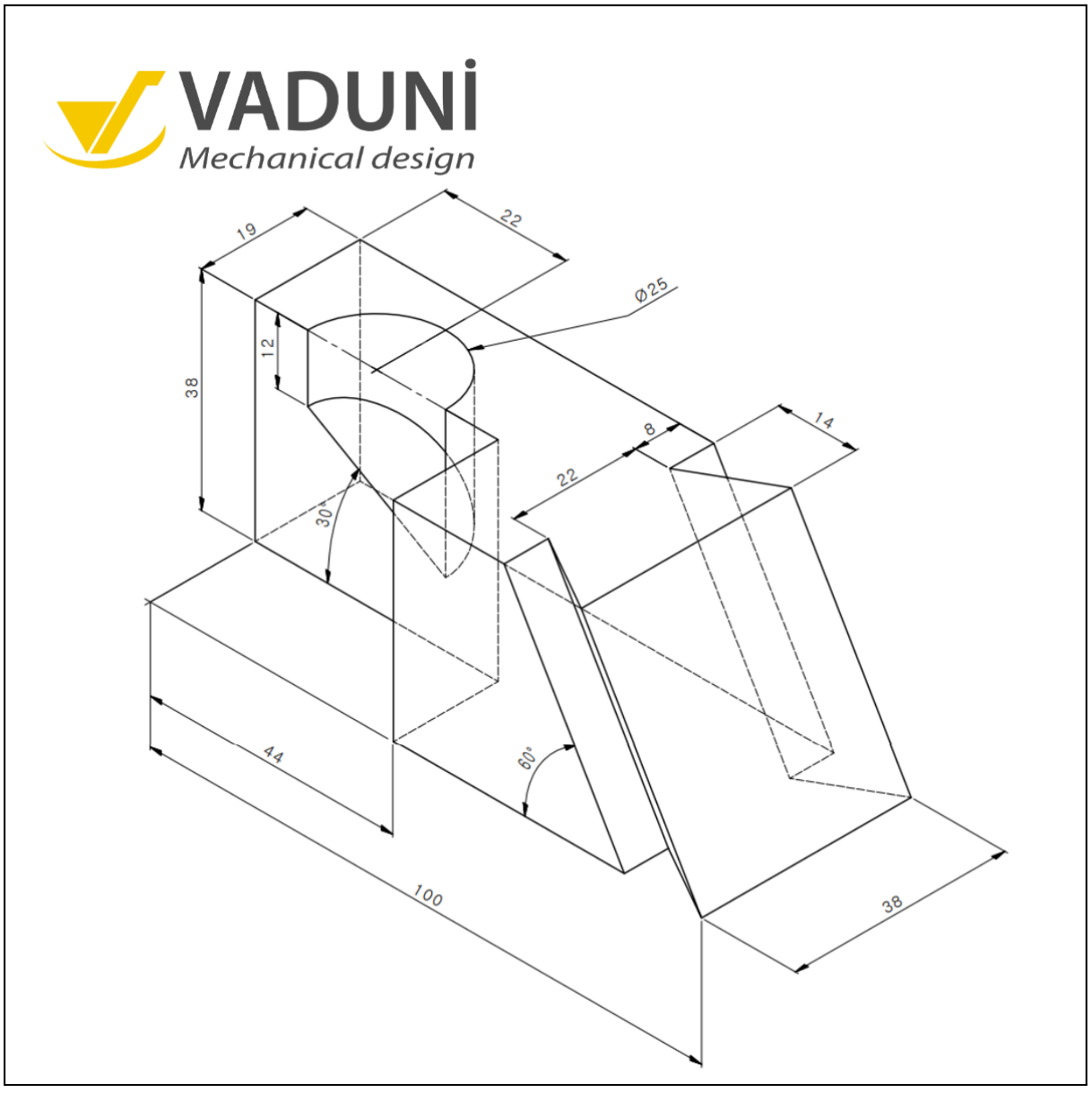
Bài tập 549


VADUNI
Mechanical design
R6
166
12
R40
R40
30°
12
20
20
175
2 - Ø20
12
62
31
75
12
2 x R22

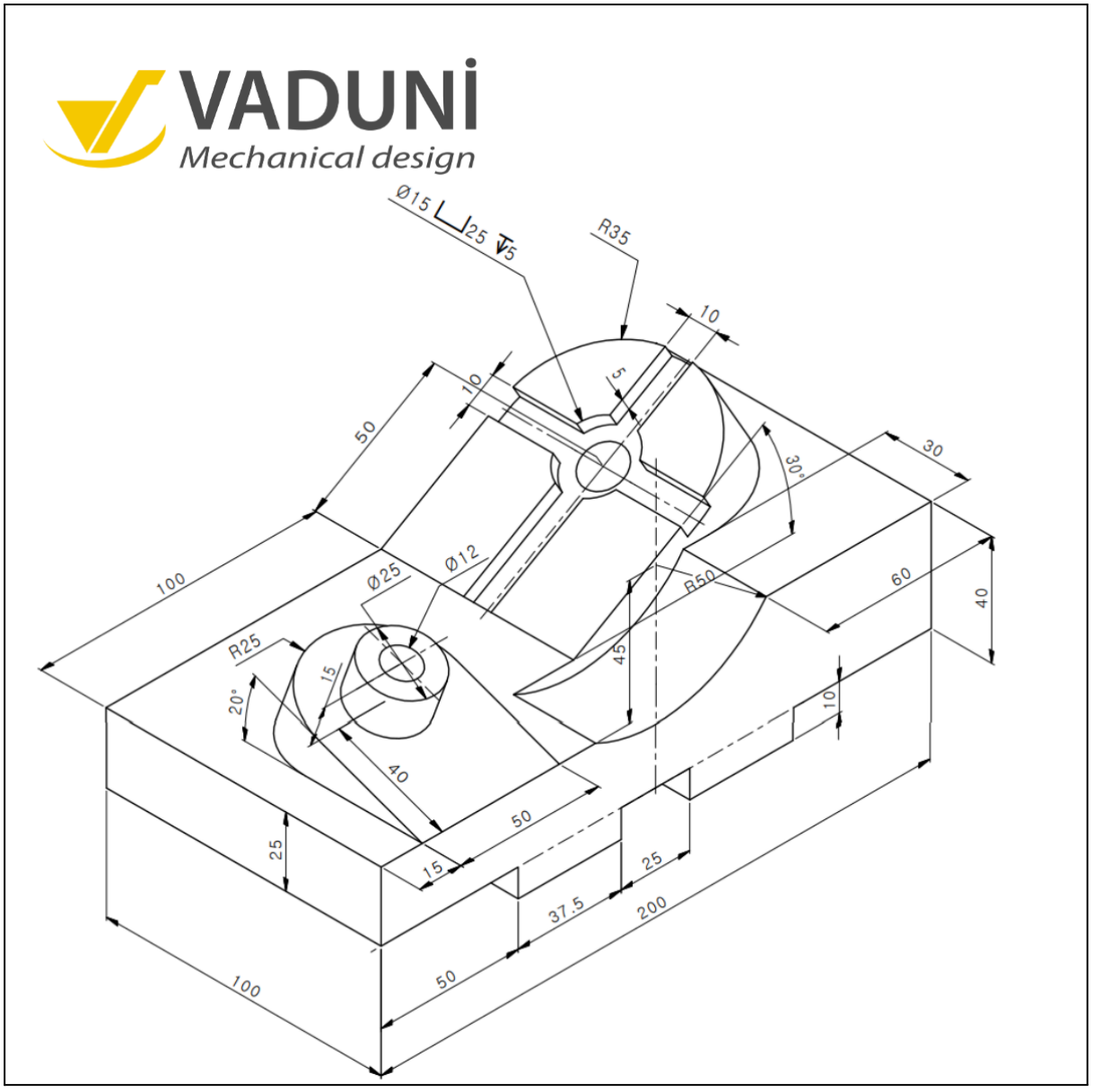
Bài tập 550


VADUNİ
Mechanical design
3
32
32
Ø12
R14
42
28
6
Ø60
Ø70
44
R5
6
5
R16
105
20
6
60
90
120
2 – Ø15
10
21
42

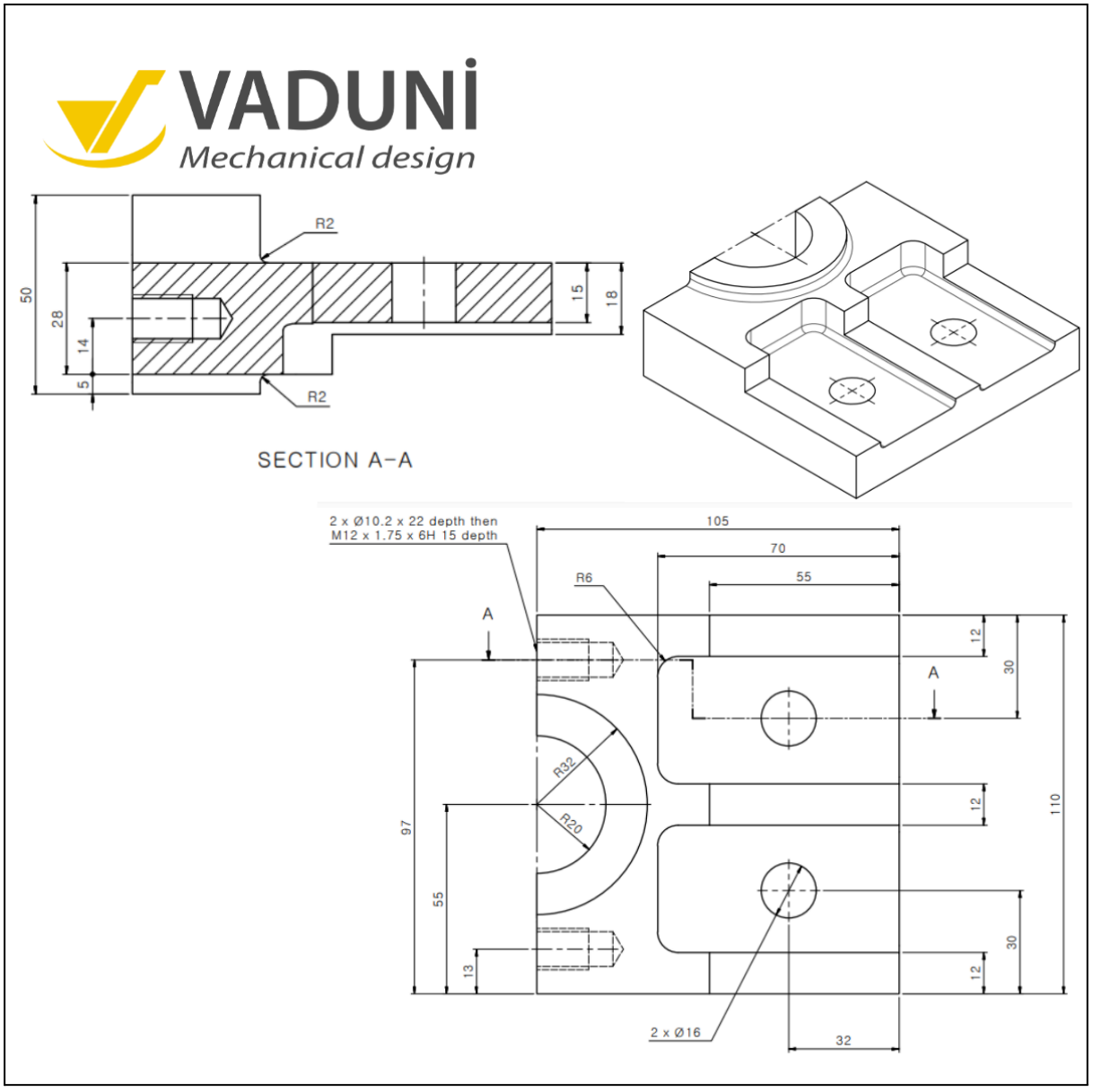
Bài tập 551



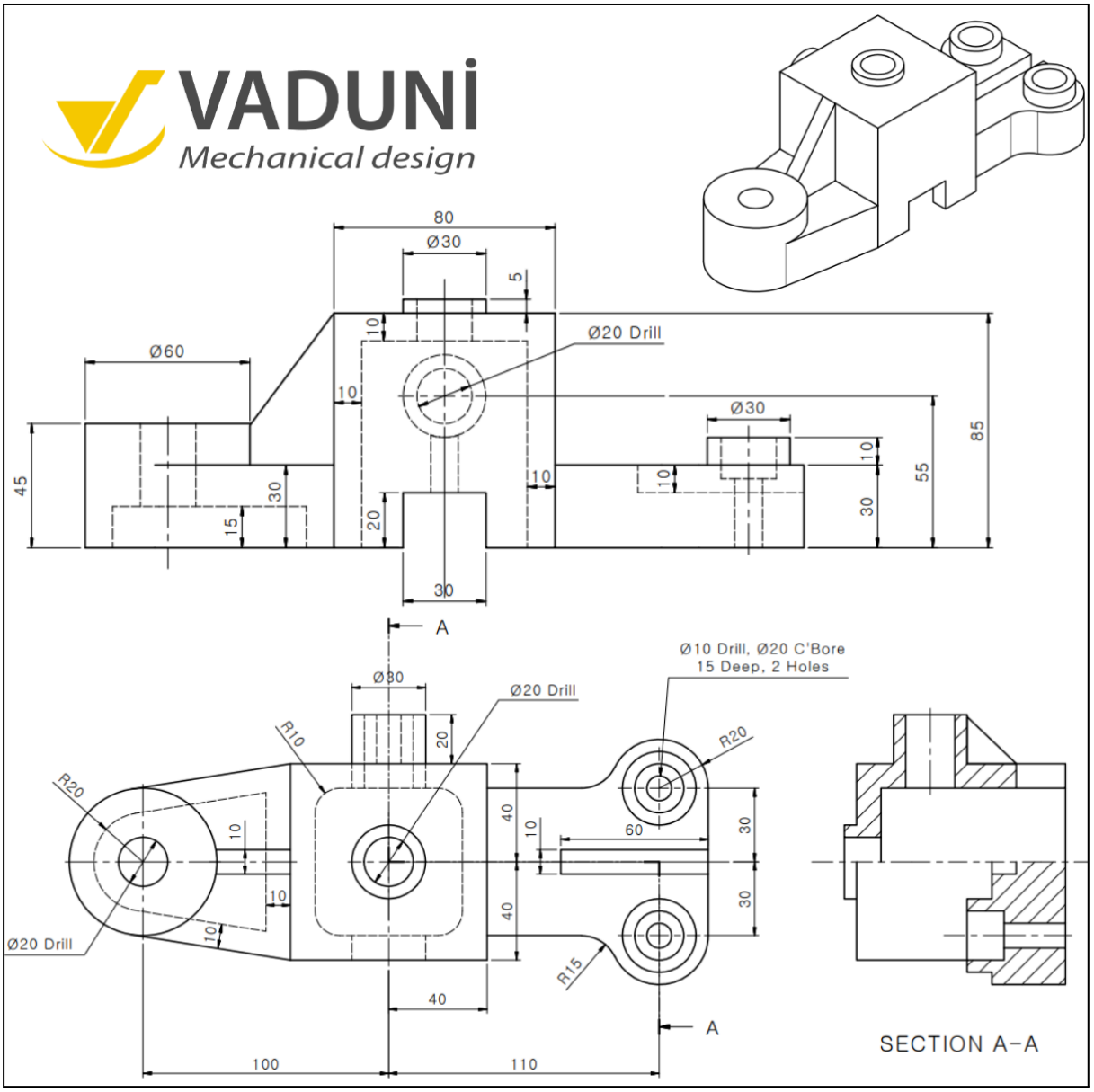
Bài tập 552


VADUNİ
Mechanical design
Ø15
25
5
R35
10
10
5
50
30°
30
100
Ø25
Ø12
R50
60
40
R25
15
20°
45
10
40
50
25
15
25
37.5
200
100
50

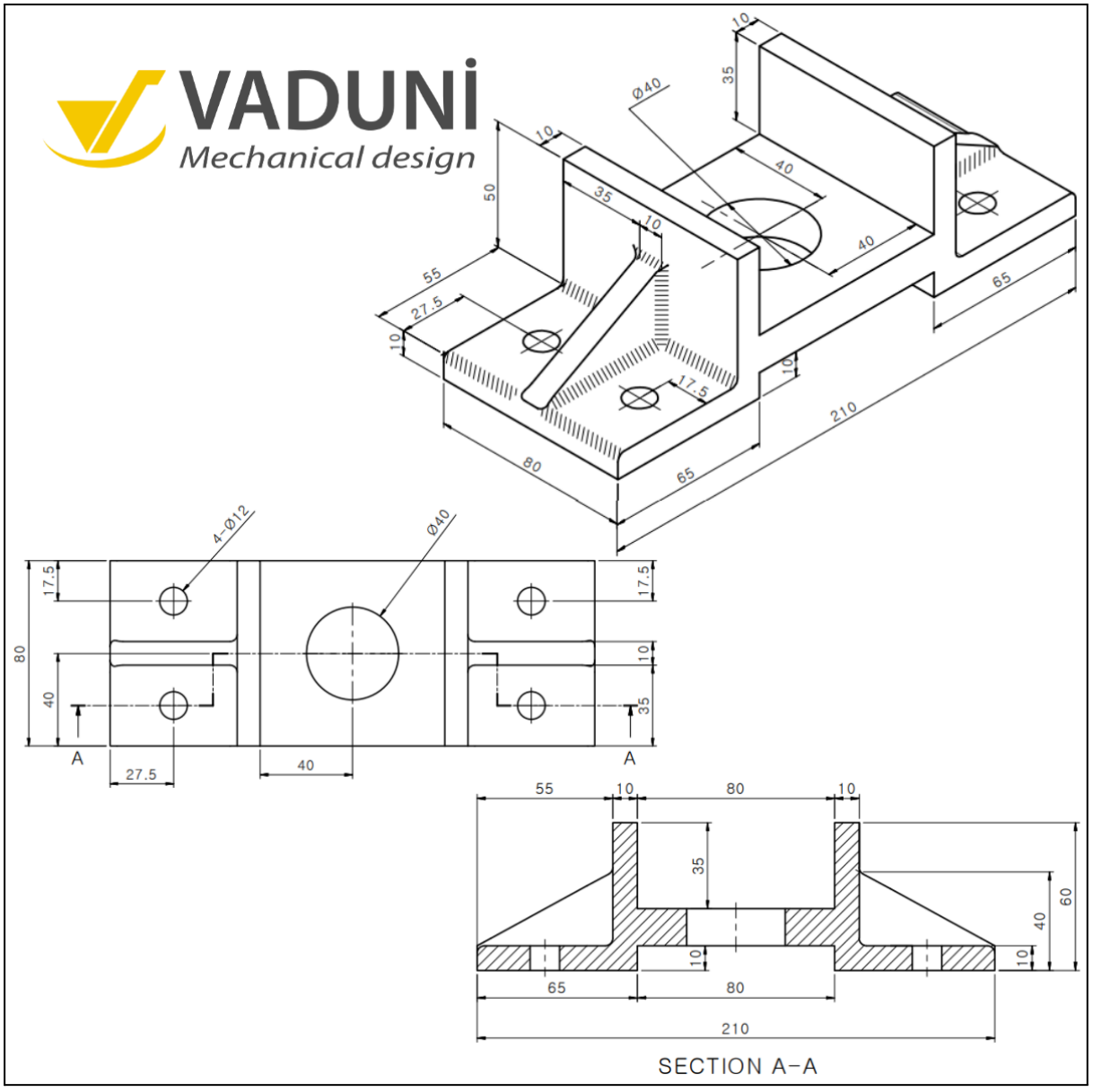
Bài tập 553


VADUNİ
Mechanical design
R2
50
28
14
5
15
18
R2
SECTION A-A
2 x Ø10.2 x 22 depth then
M12 x 1.75 x 6H 15 depth
105
70
55
R6
A
A
12
30
R32
R20
97
55
13
12
110
12
30
2 x Ø16
32

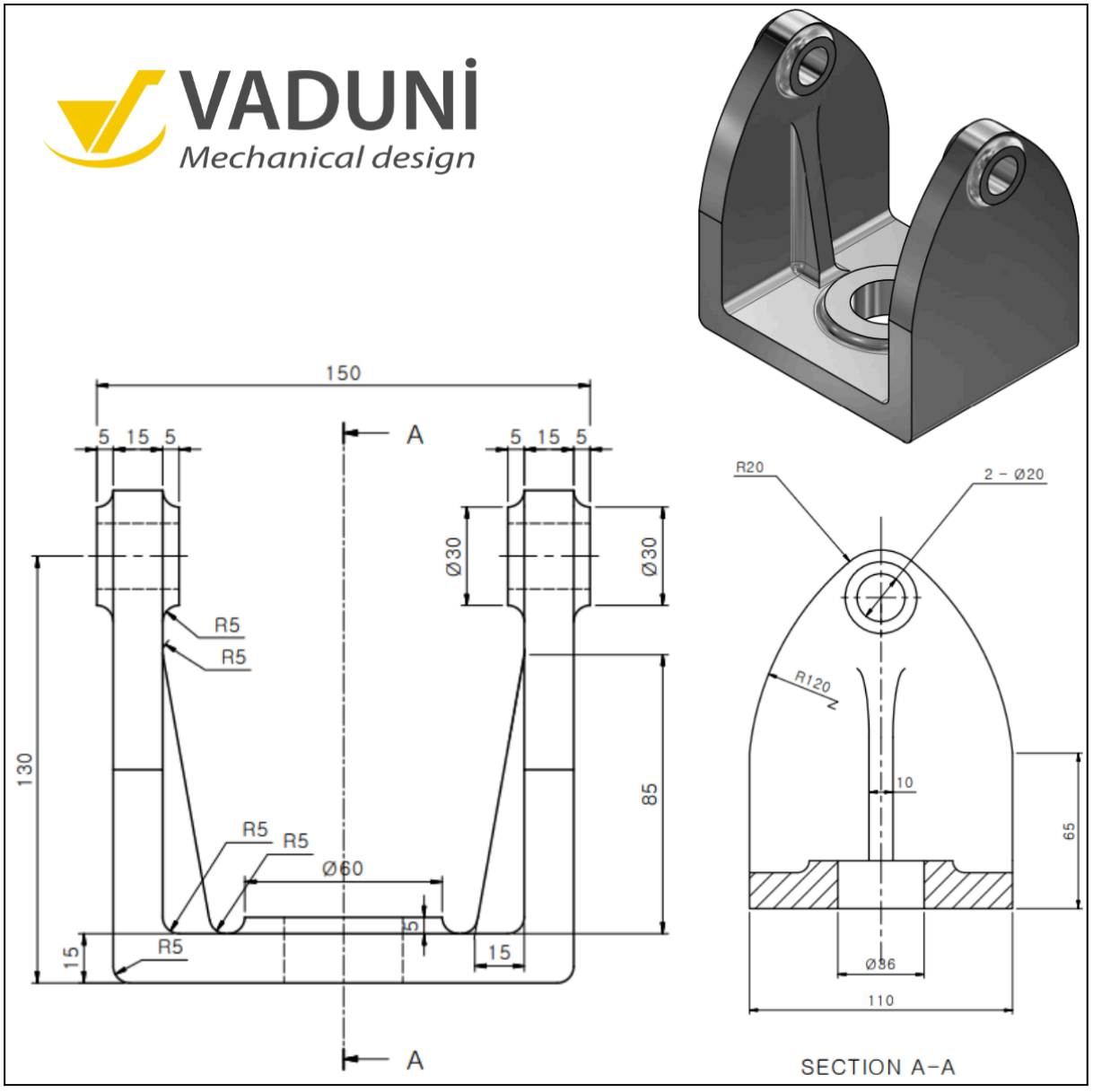
Bài tập 554


VADUNI
Mechanical design
80
Ø30
5
10
Ø20 Drill
Ø60
10
Ø30
85
45
30
15
20
10
10
10
55
30
30
A
Ø10 Drill, Ø20 C'Bore
15 Deep, 2 Holes
Ø30
Ø20 Drill
R10
20
R20
R20
40
10
60
30
10
10
10
30
Ø20 Drill
R15
40
A
100
110
SECTION A-A

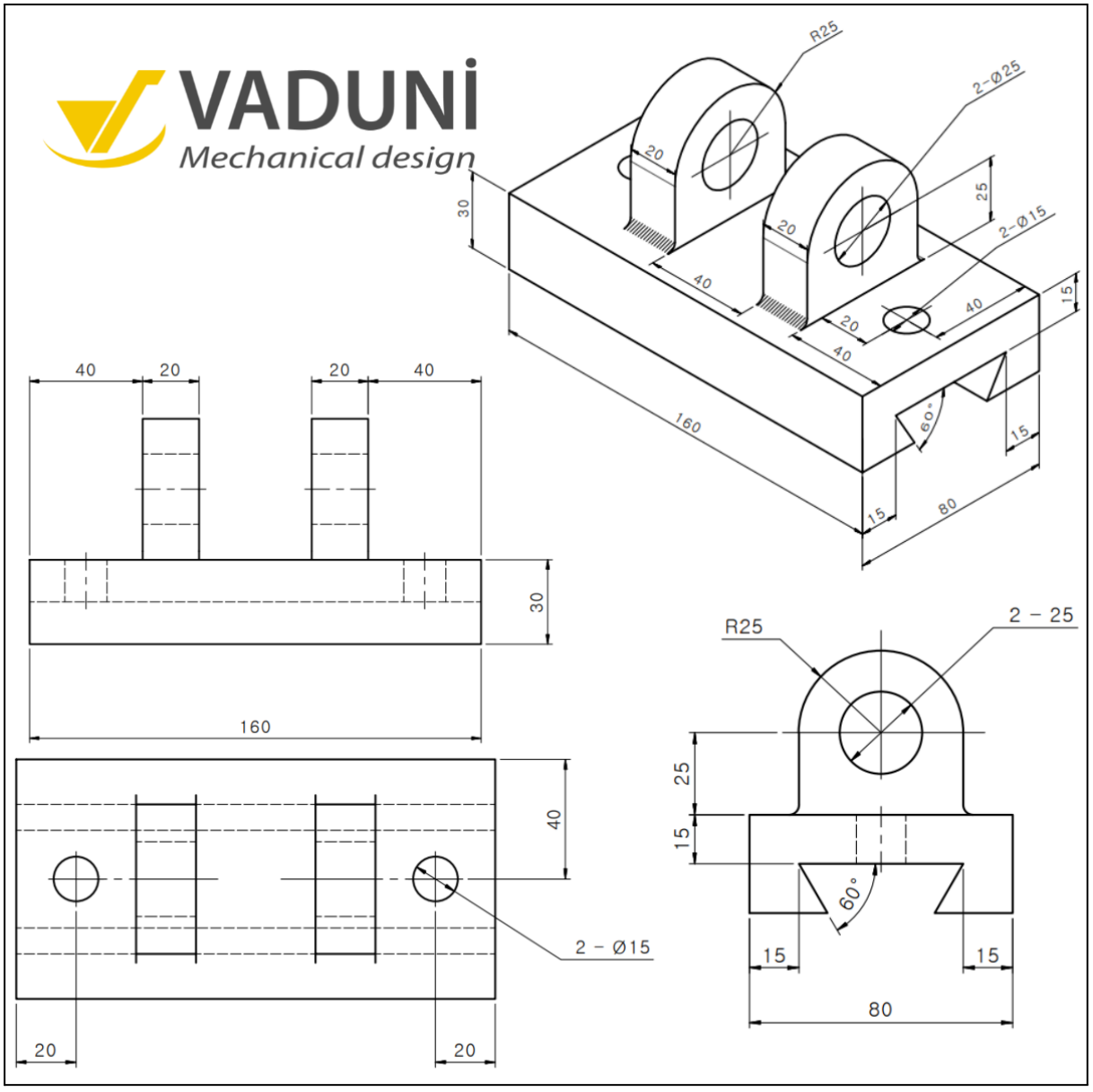
Bài tập 555


VADUNİ
Mechanical design
Ø40
10
35
40
50
55
27.5
65
210
80
17.5
4-Ø12
A
27.5
40
SECTION A-A
60

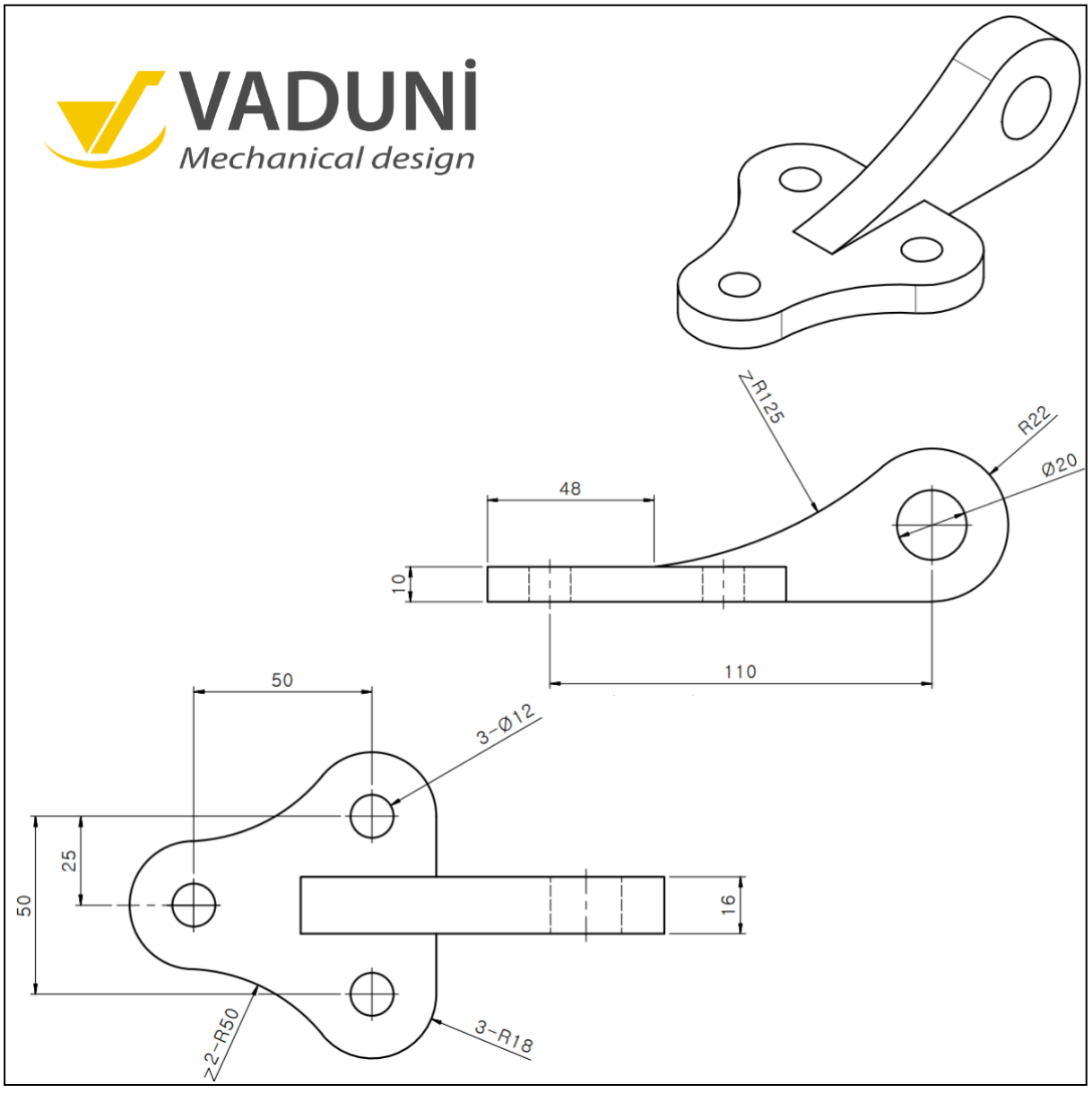
Bài tập 556


VADUNİ
Mechanical design
150
5 15 5
5 15 5
A
Ø30
Ø30
R5
R5
130
85
R5
R5
Ø60
15
R5
15
A
R20
2 - Ø20
R120
10
65
Ø36
110
SECTION A-A

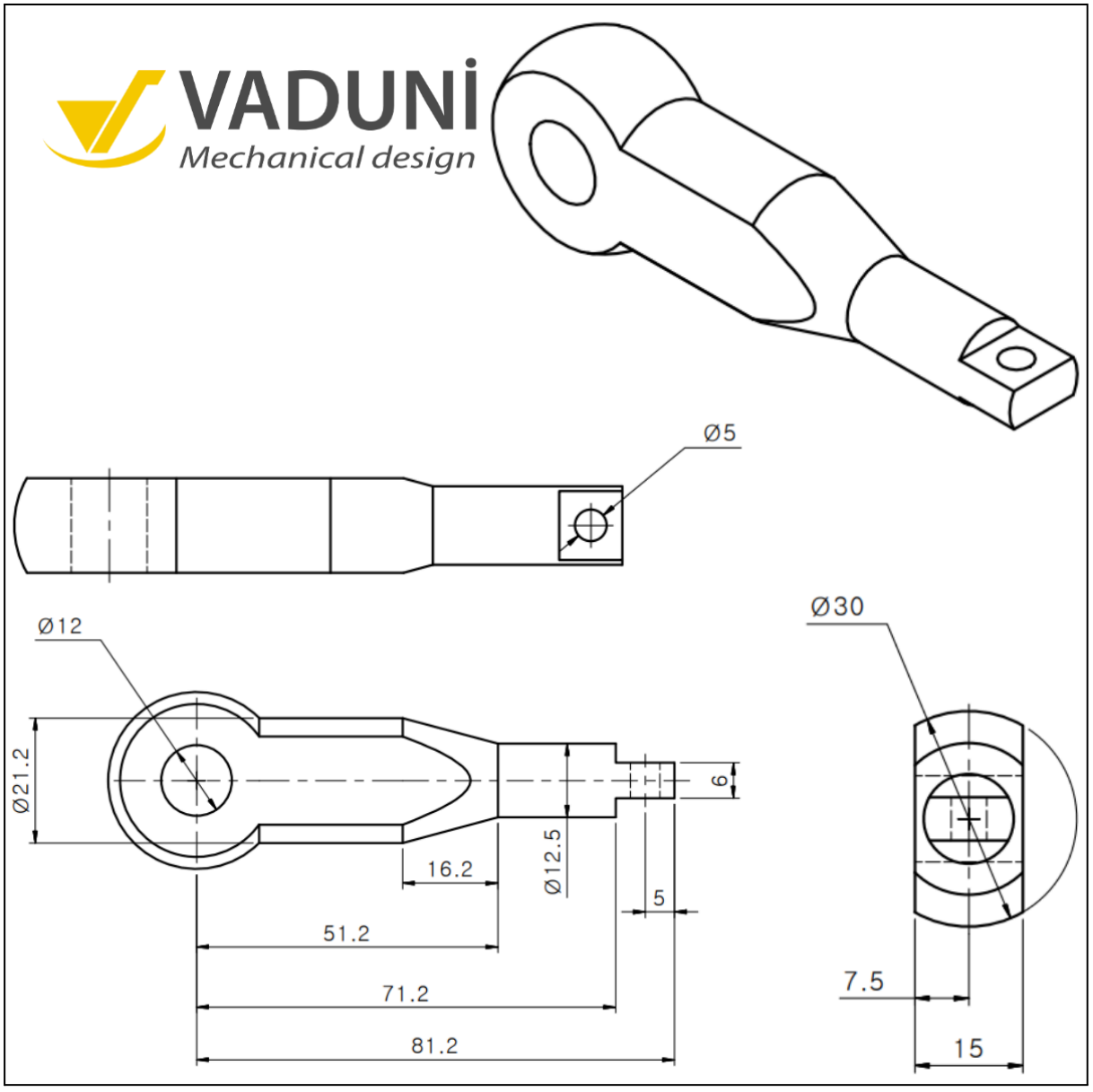
Bài tập 557


VADUNI
Mechanical design
R25
2-Ø25
2-Ø15
20
25
30
40
15
60°
160
80
2 - 25
2 - Ø15

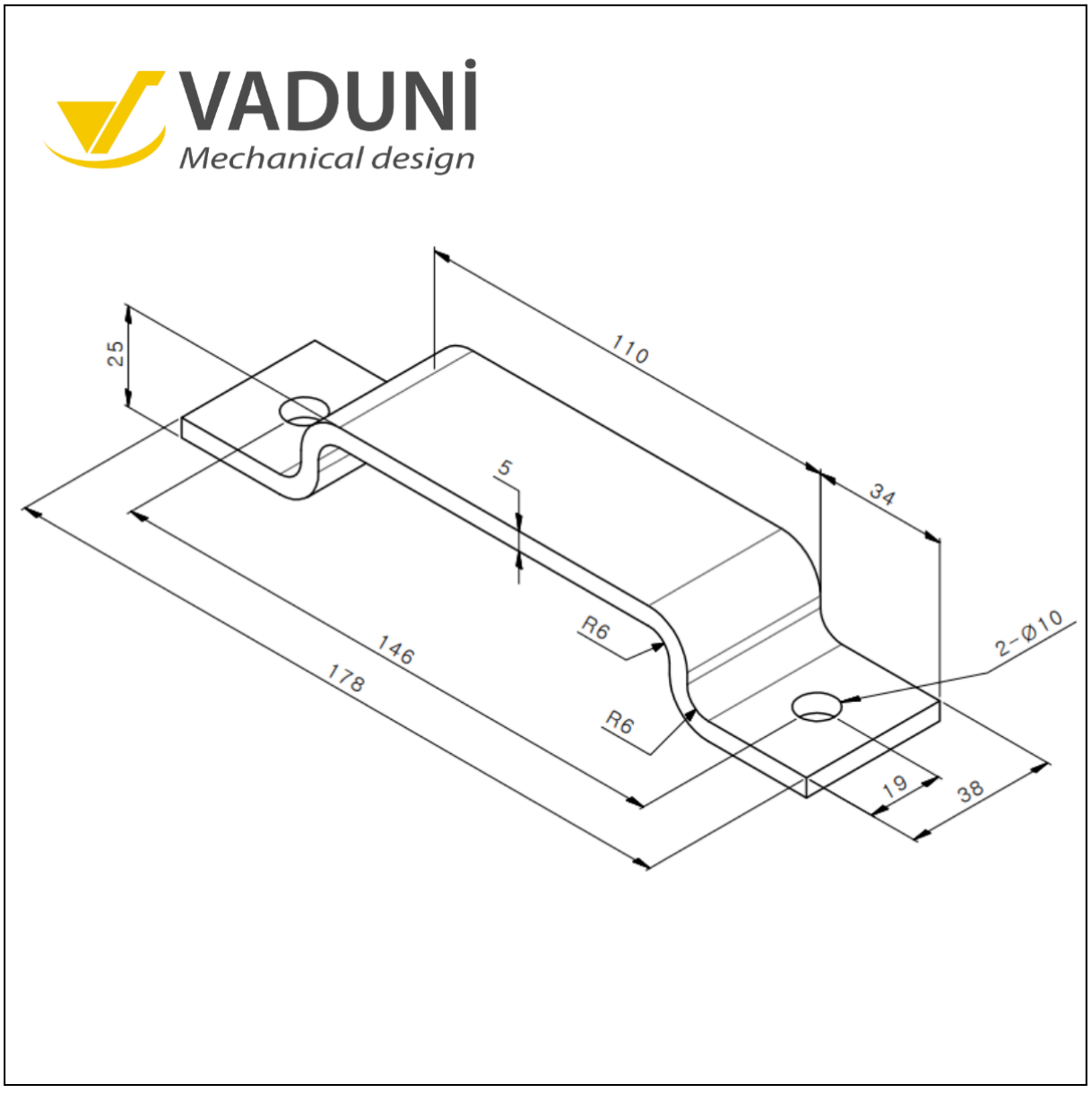
Bài tập 558


VADUNI
Mechanical design
2-R125
R22
Ø20
48
10
110
50
3-Ø12
25
50
16
2-R50
3-R18

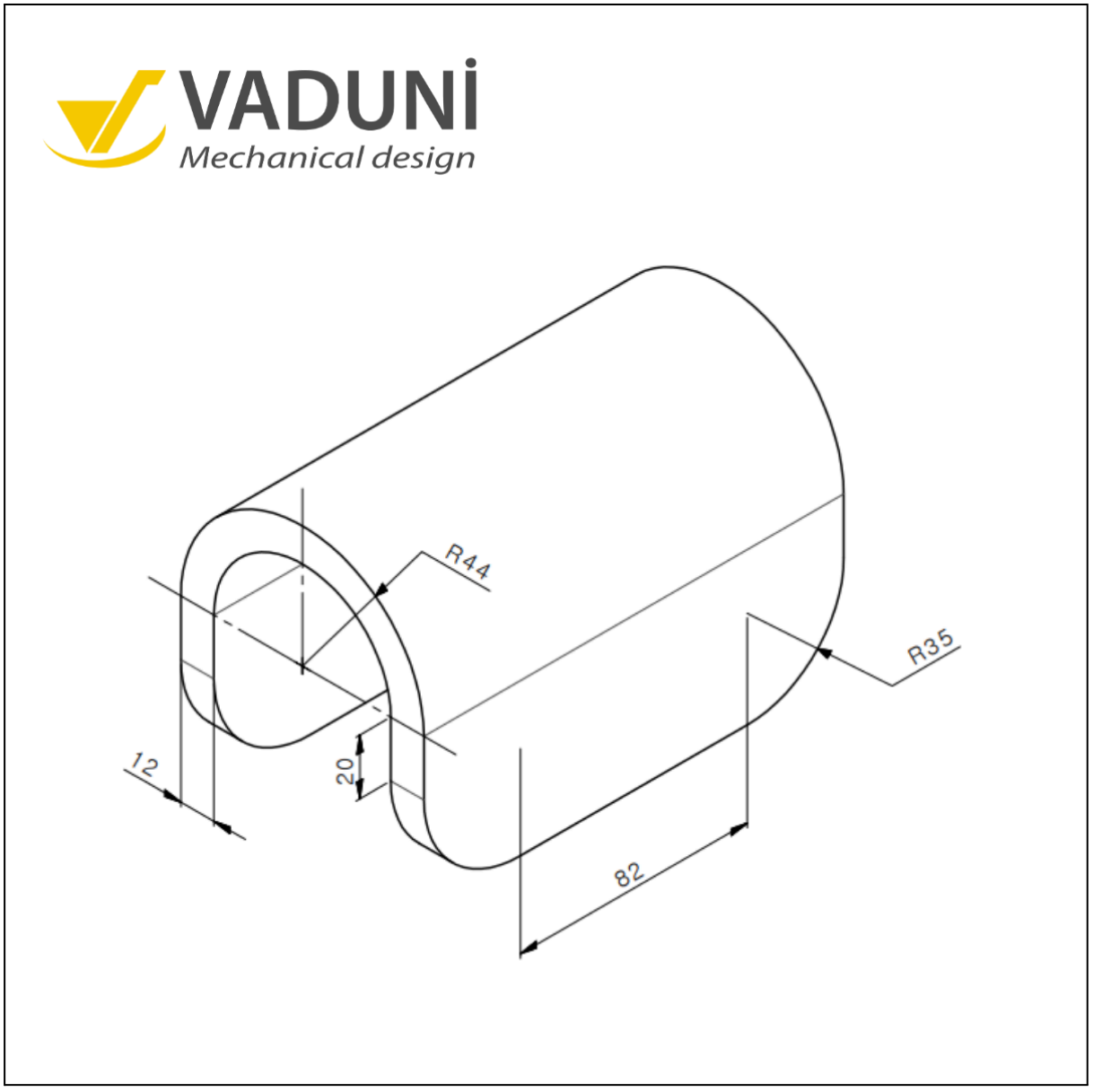
Bài tập 559


VADUNİ
Mechanical design
Ø5
Ø12
Ø21.2
16.2
Ø12.5
6
5
51.2
71.2
81.2
Ø30
7.5
15

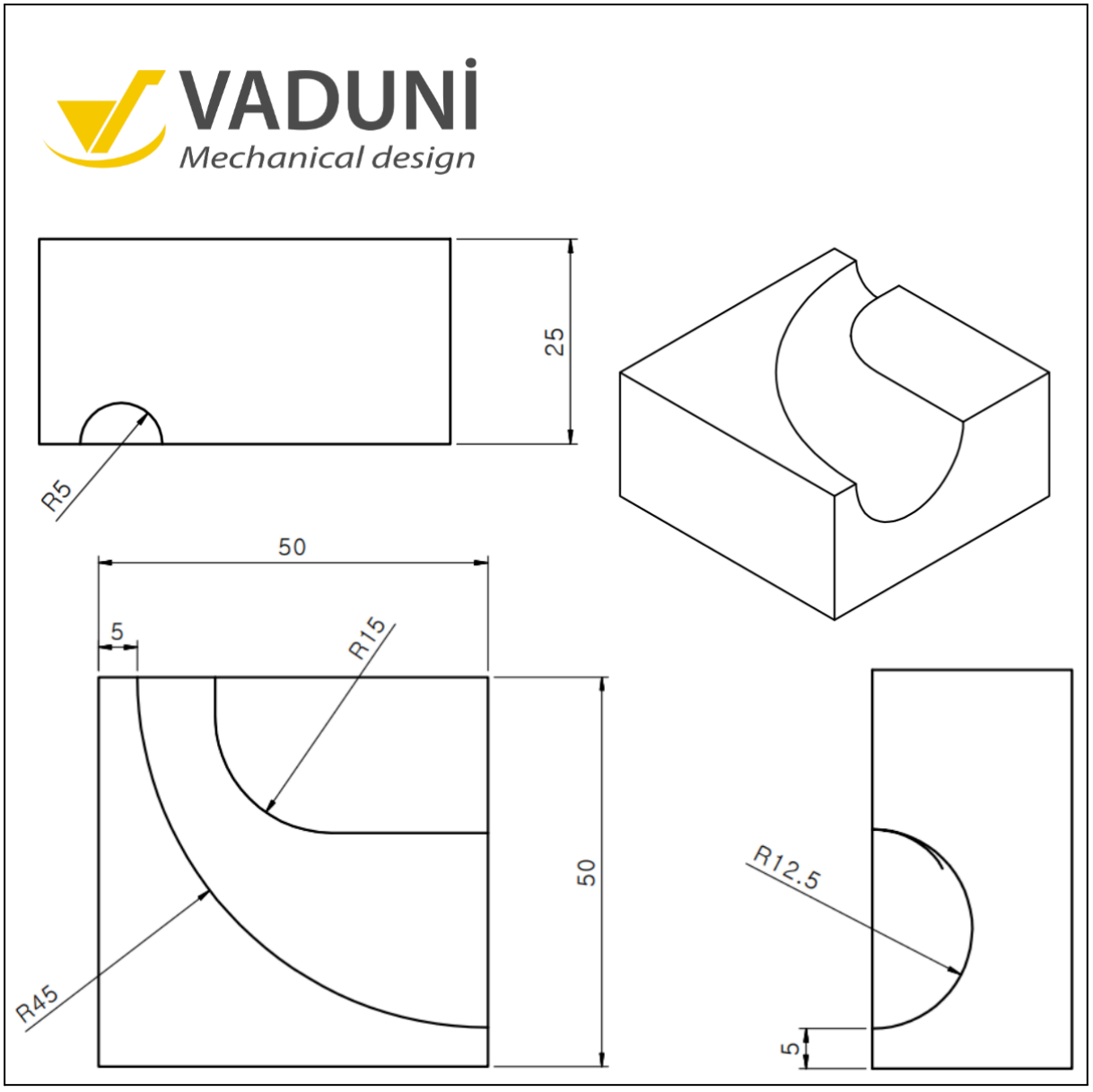
Bài tập 560



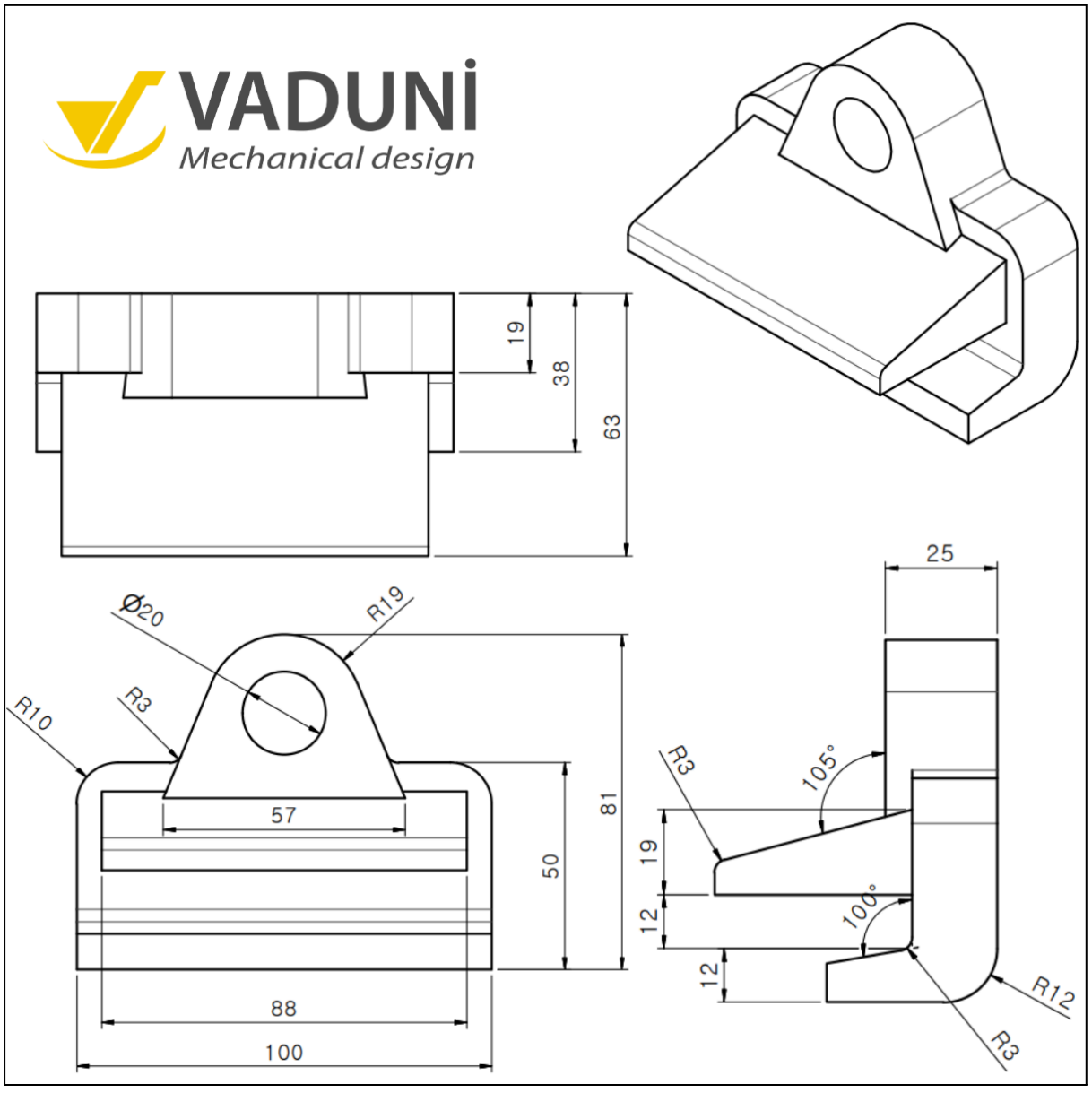
Bài tập 561



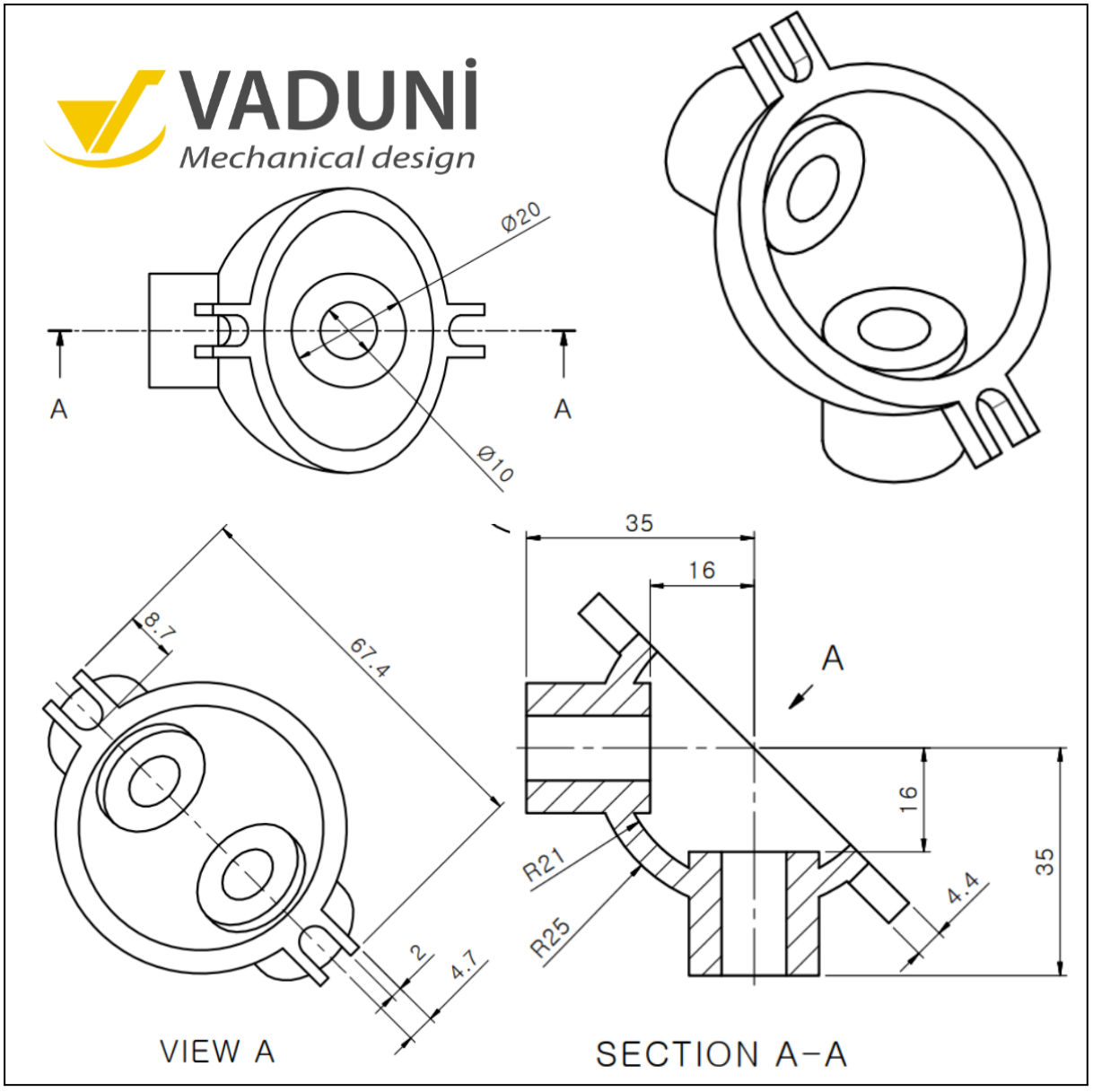
Bài tập 562



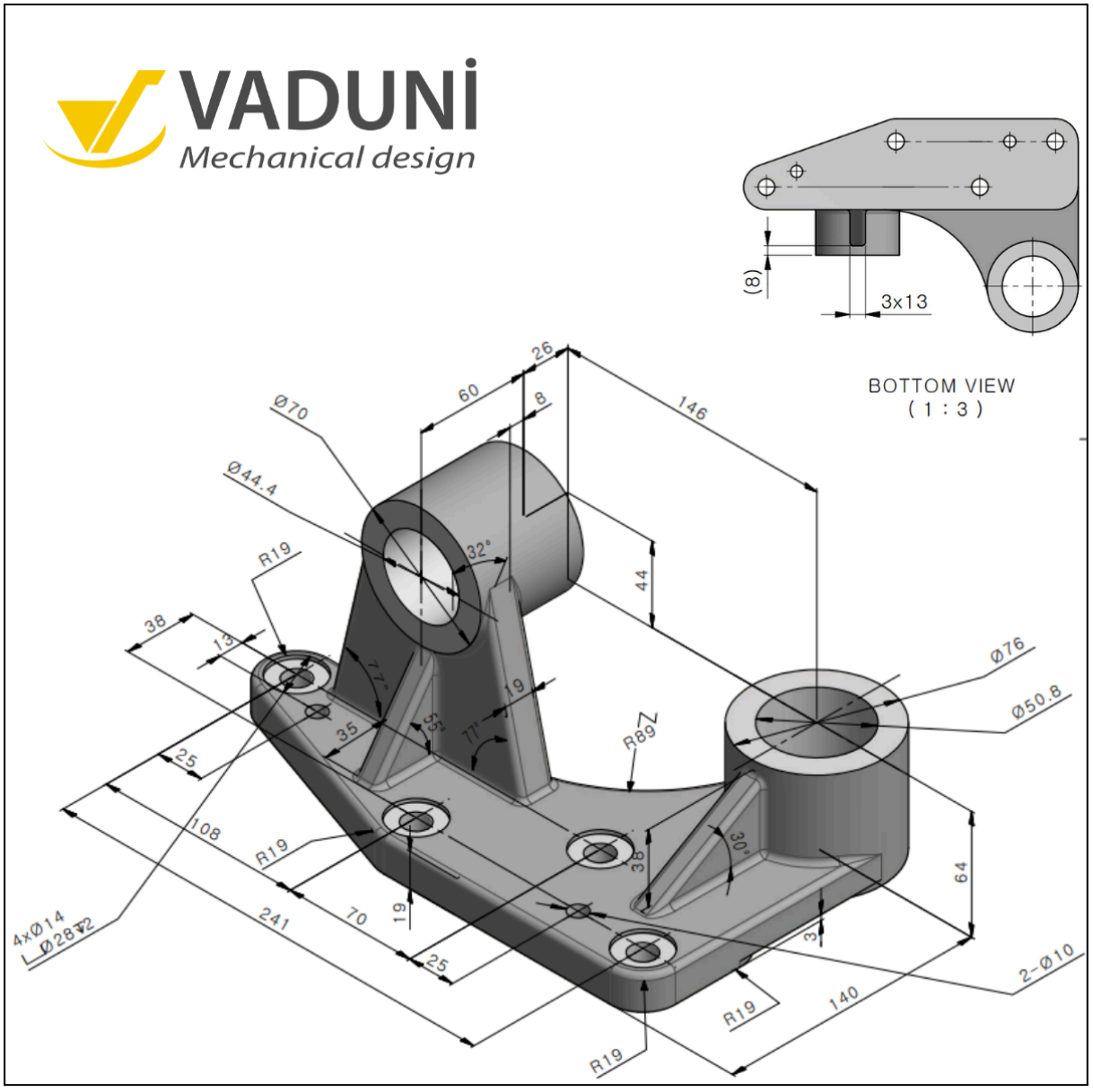
Bài tập 563


VADUNI
Mechanical design
19
38
63
Ø20
R19
R10
R3
57
50
81
88
100
25
R3
105°
19
12
100°
12
R12
R3

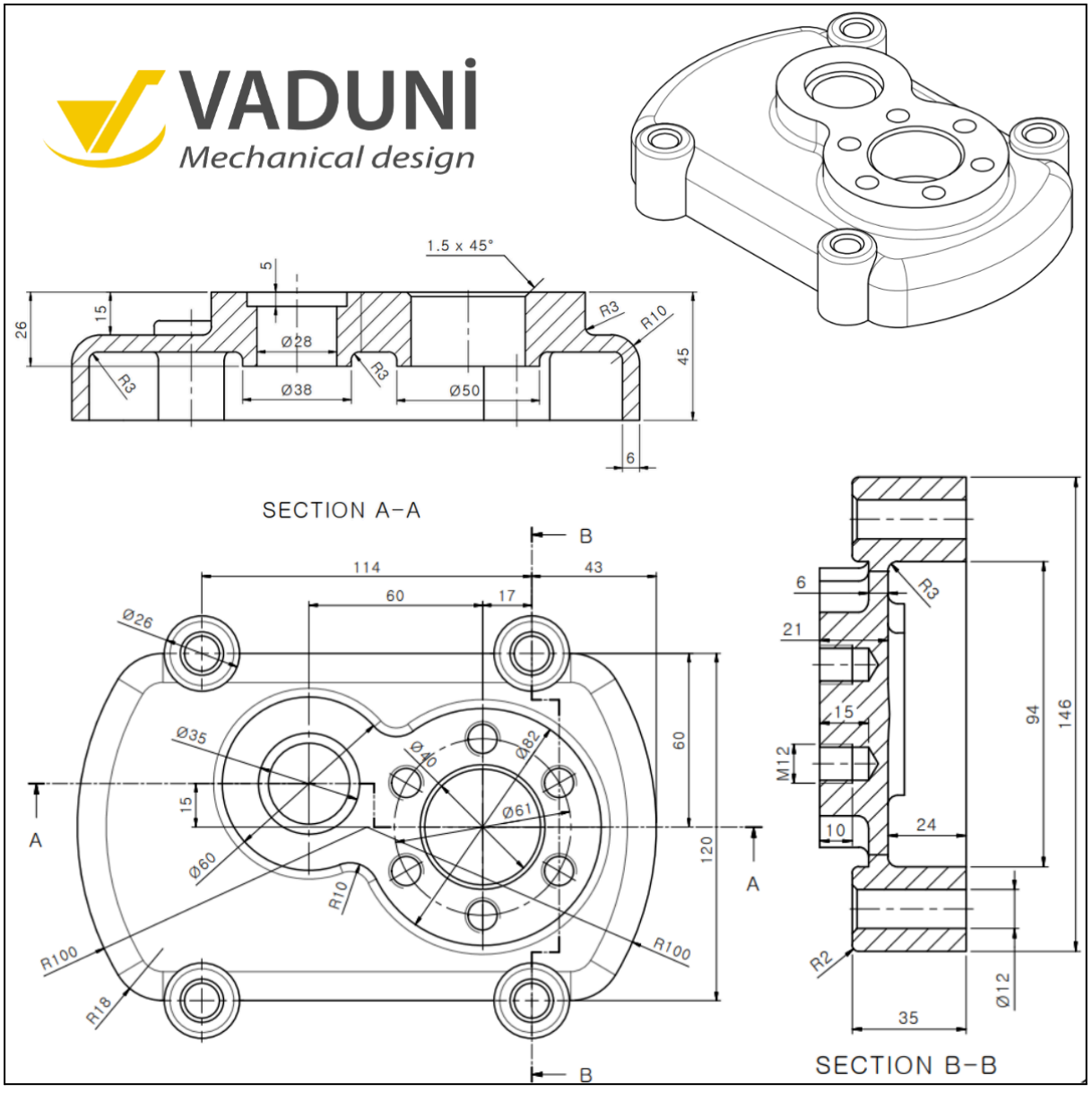
Bài tập 564


VADUNİ
Mechanical design
Ø20
Ø10
A
A
35
16
A
8.7
67.4
16
R21
R25
4.4
35
2
4.7
VIEW A
SECTION A-A

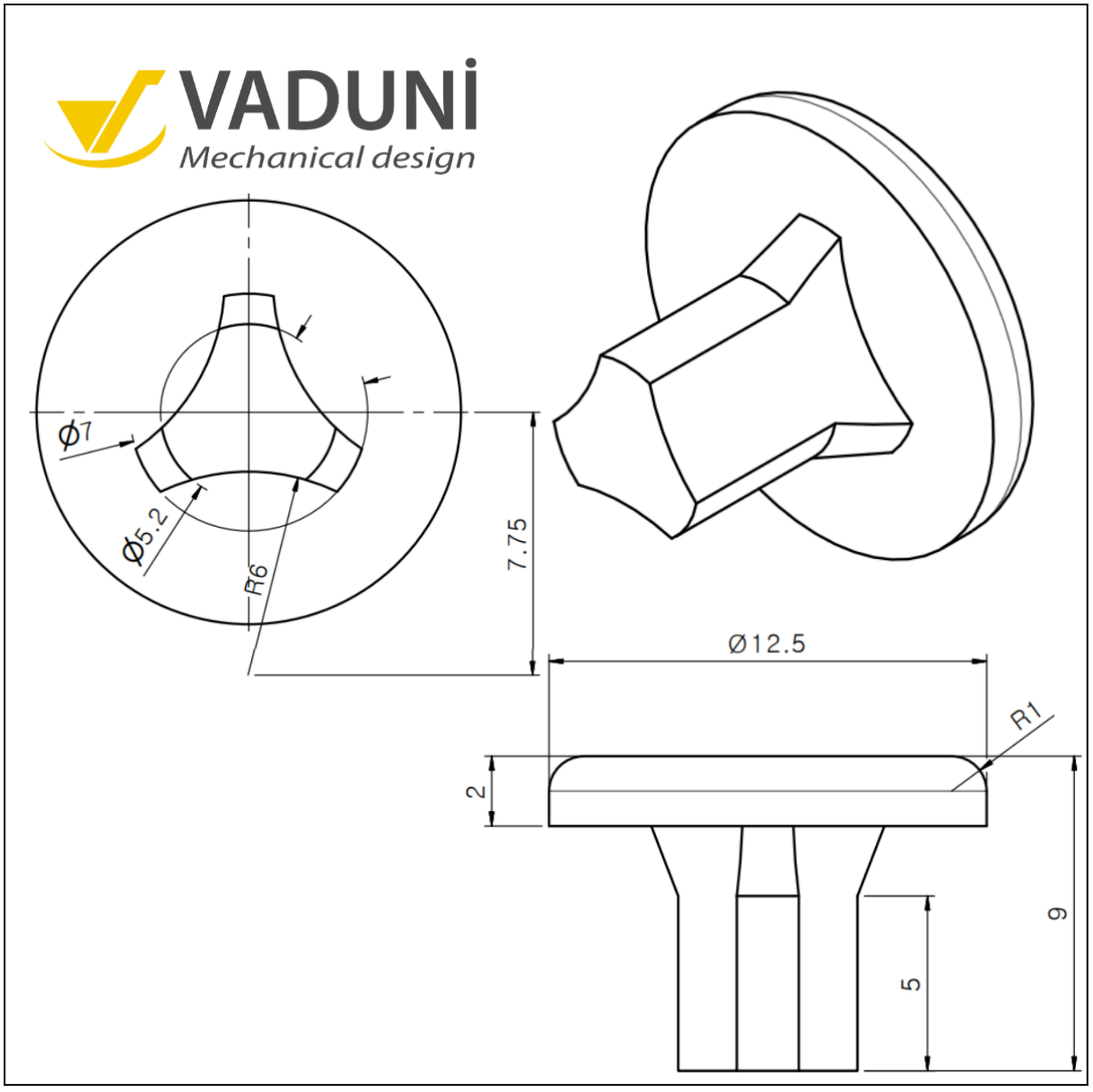
Bài tập 565


VADUNİ
Mechanical design
(8)
3x13
BOTTOM VIEW
(1 : 3)
Ø70
Ø44.4
R19
38
13
35
25
108
241
70
19
60
26
8
146
44
32°
77°
19
R89
Ø76
Ø50.8
30°
64
140
2-Ø10
R19
R19
4xØ14
LØ28▽2

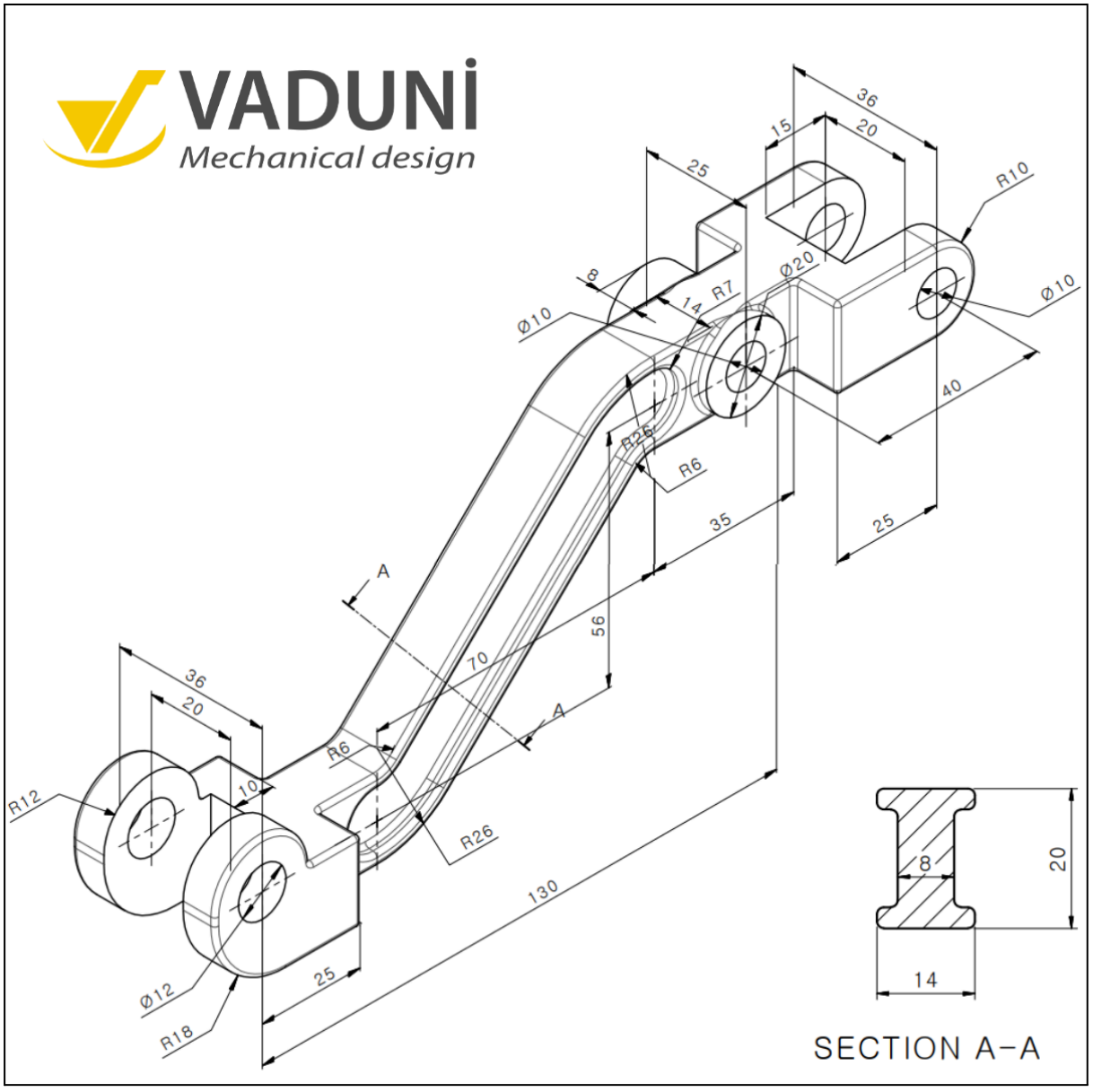
Bài tập 566


VADUNİ
Mechanical design
1.5 x 45°
SECTION A-A
SECTION B-B
Ø26
Ø35
Ø60
Ø40
Ø82
Ø61
Ø28
Ø38
Ø50
R3
R10
R100
R18
R2
M12
Ø12
114
60
17
43
120
94
146
24
35

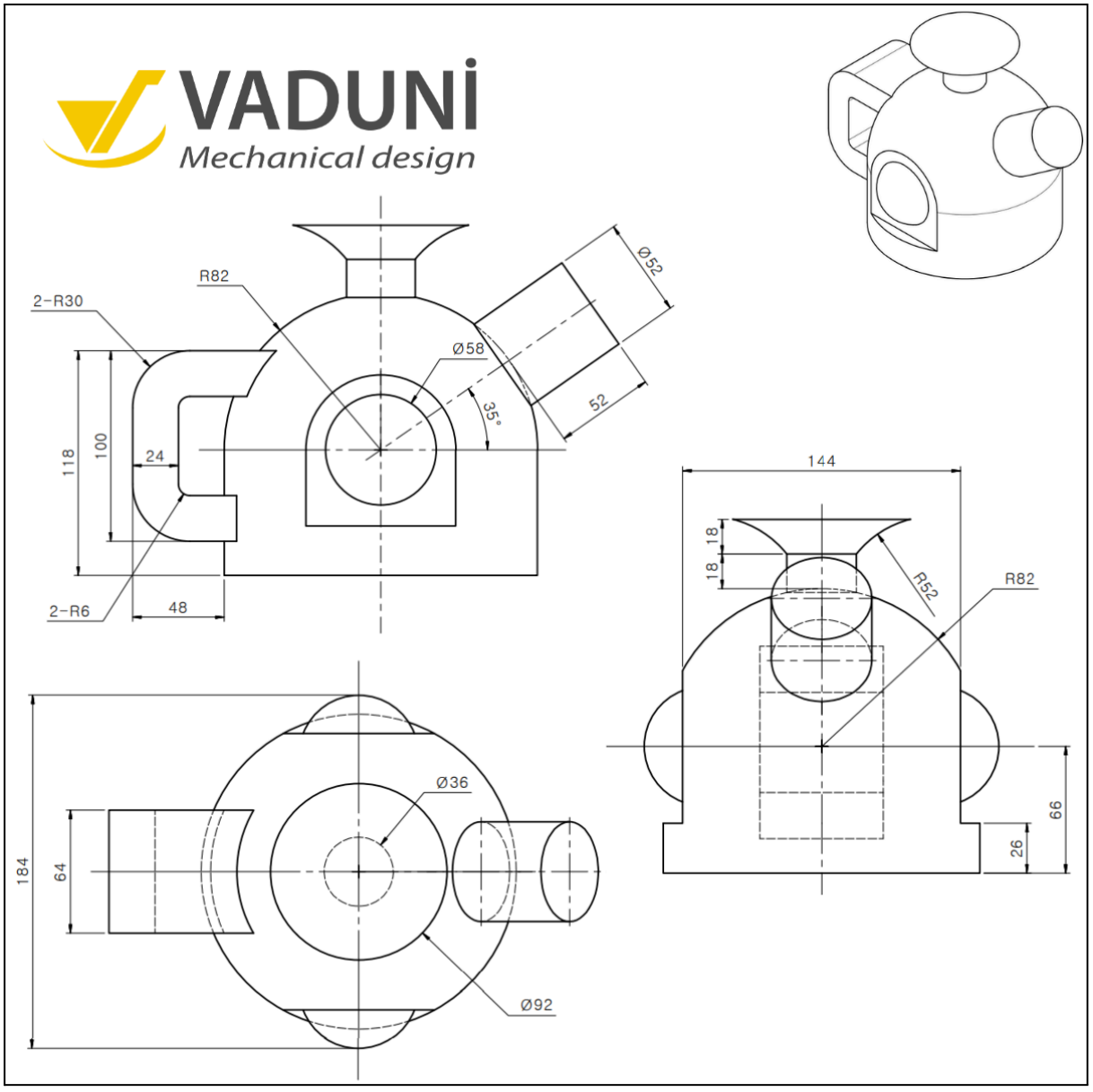
Bài tập 567



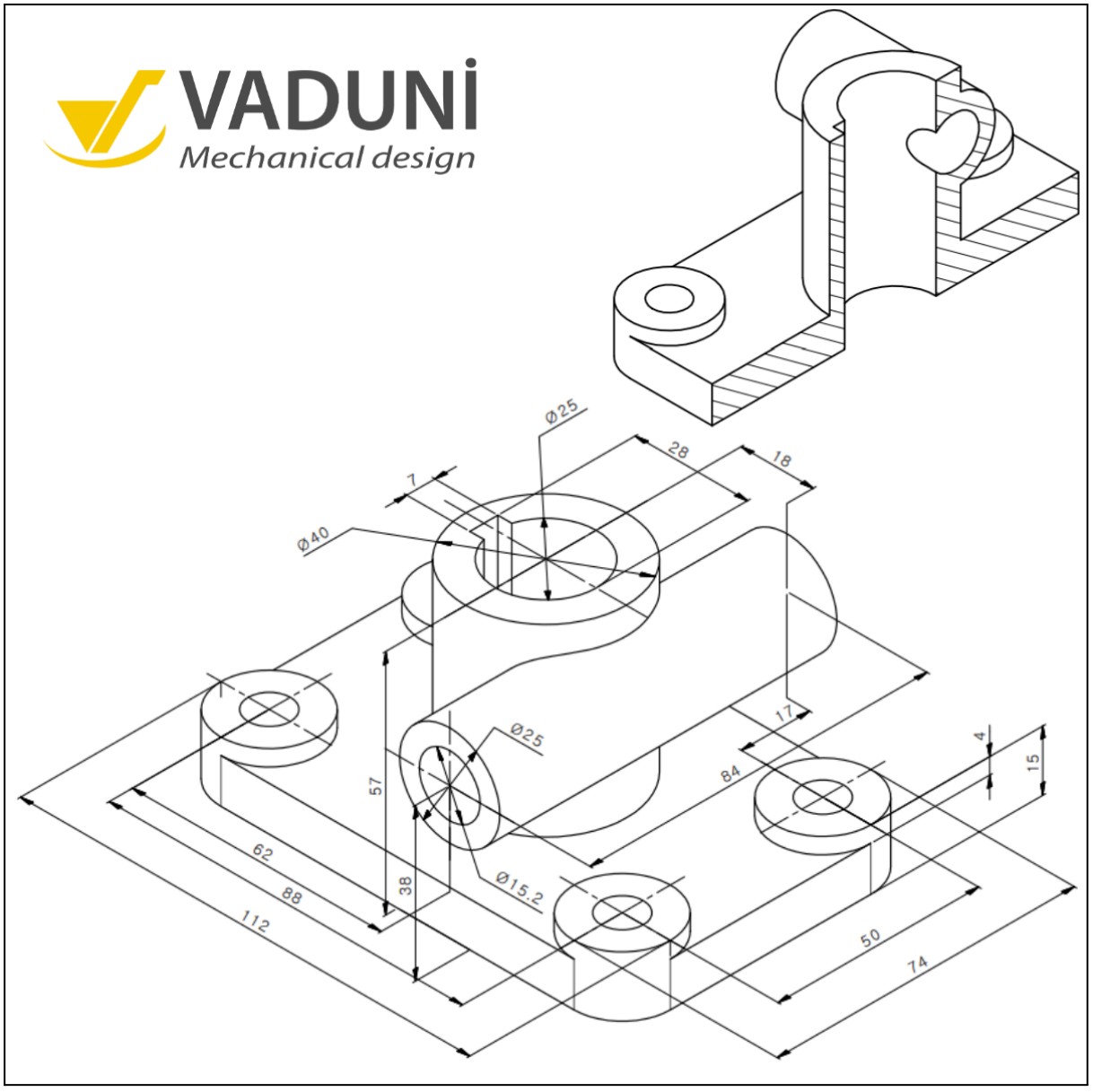
Bài tập 568


VADUNI
Mechanical design
36
20
15
25
R10
Ø20
Ø10
8
14
R7
Ø10
40
R26
R6
35
25
A
56
70
A
36
20
R6
R12
10
R26
130
Ø12
R18
25
8
20
14
SECTION A-A

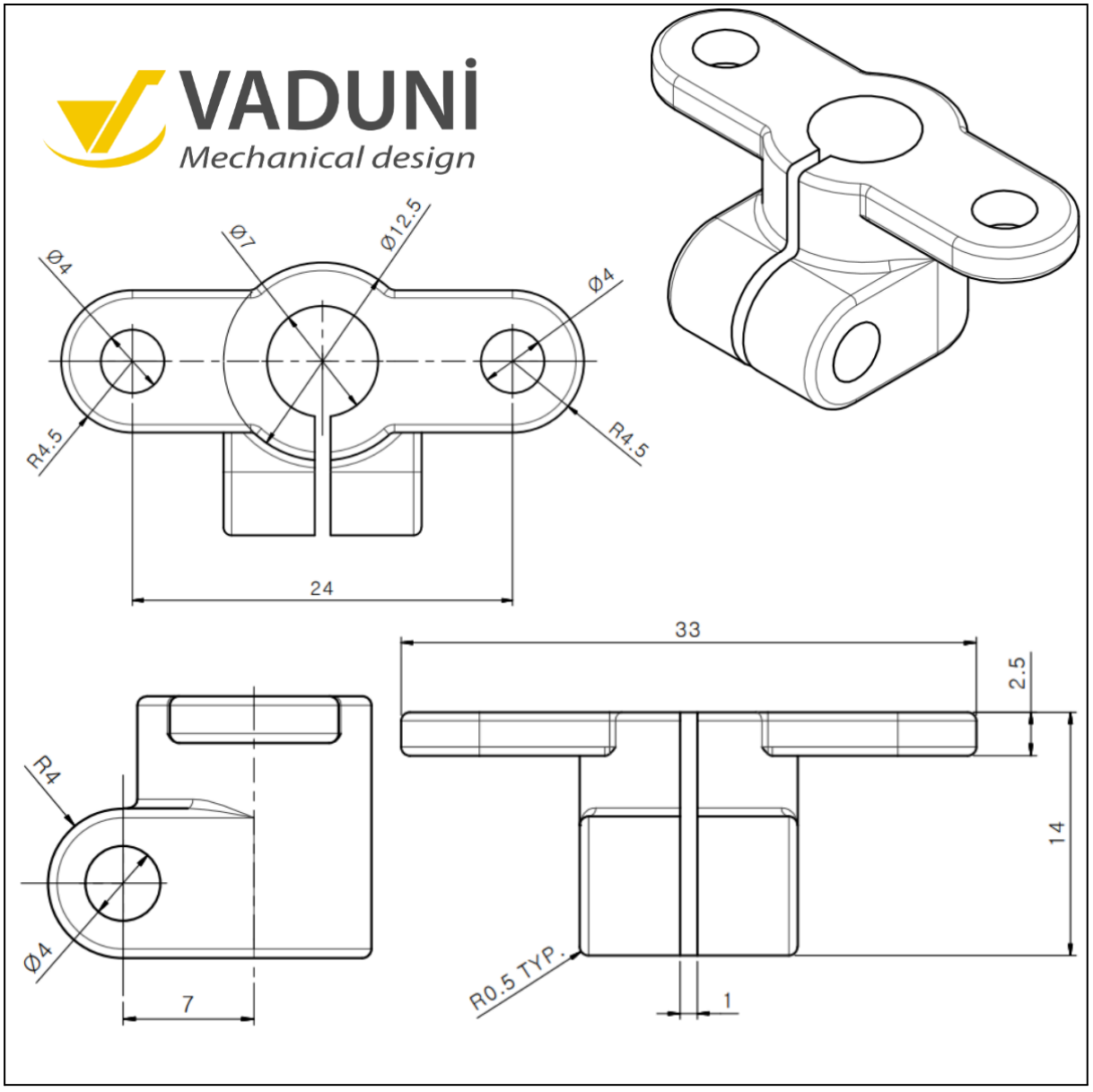
Bài tập 569


VADUNİ
Mechanical design
R82
2-R30
Ø52
Ø58
35°
52
118
100
24
2-R6
48
144
18
18
R52
R82
66
26
184
64
Ø36
Ø92

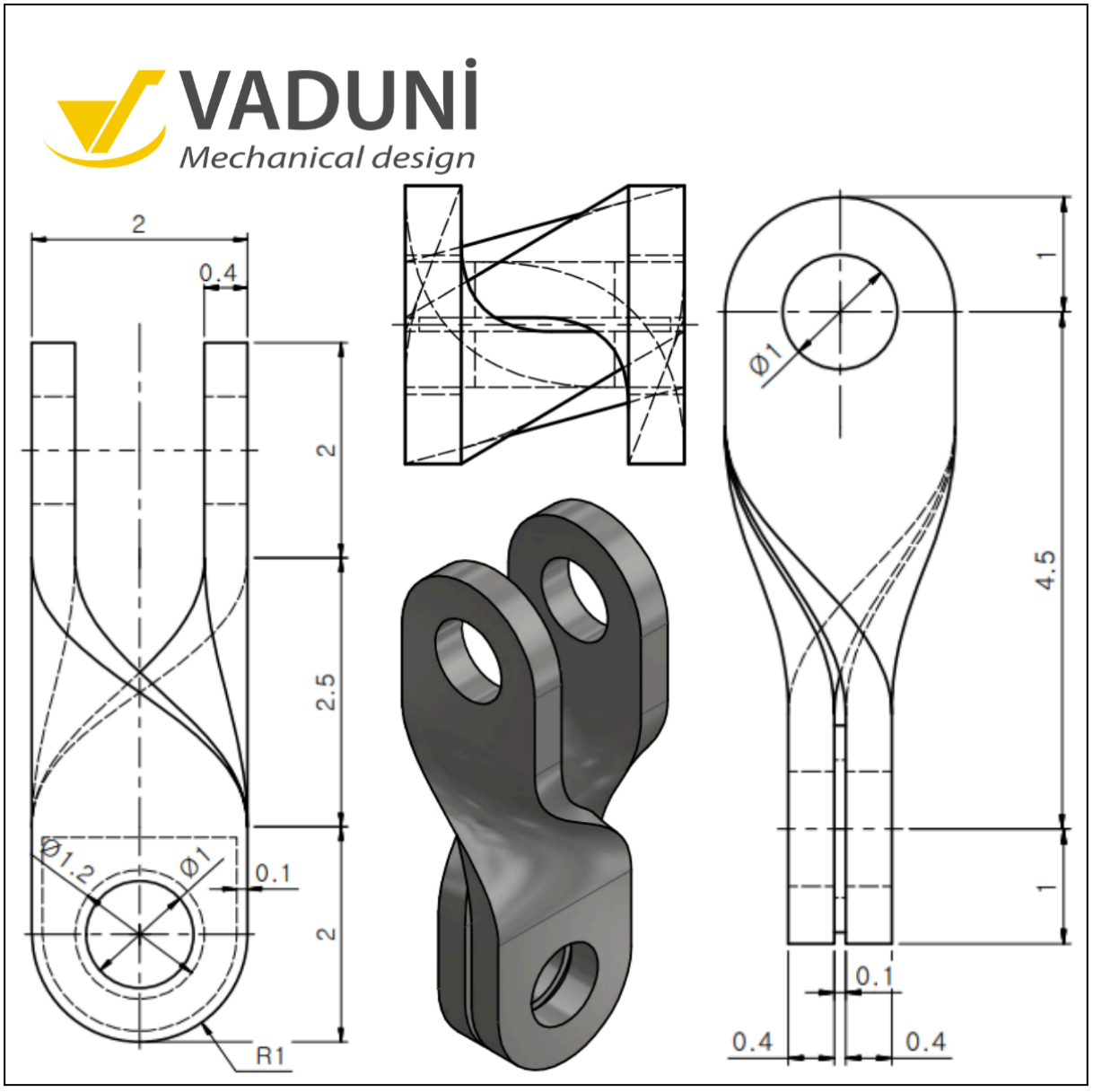
Bài tập 570


VADUNİ
Mechanical design
Ø25
28
18
7
Ø40
Ø25
17
4
15
84
57
62
88
112
38
Ø15.2
50
74

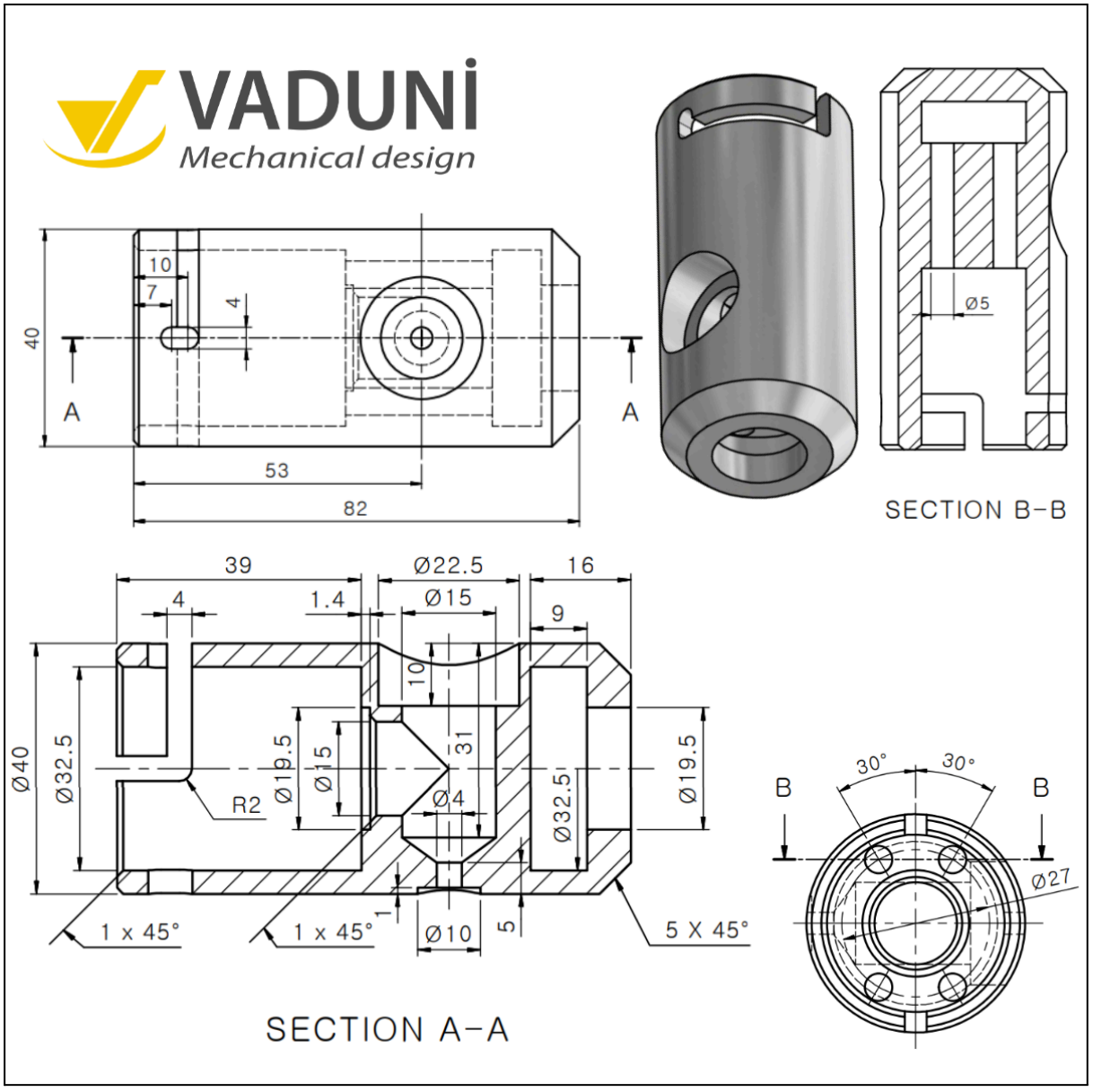
Bài tập 571


VADUNİ
Mechanical design
Ø4
Ø7
Ø12.5
Ø4
R4.5
R4.5
24
33
2.5
14
R4
Ø4
7
R0.5 TYP.
1

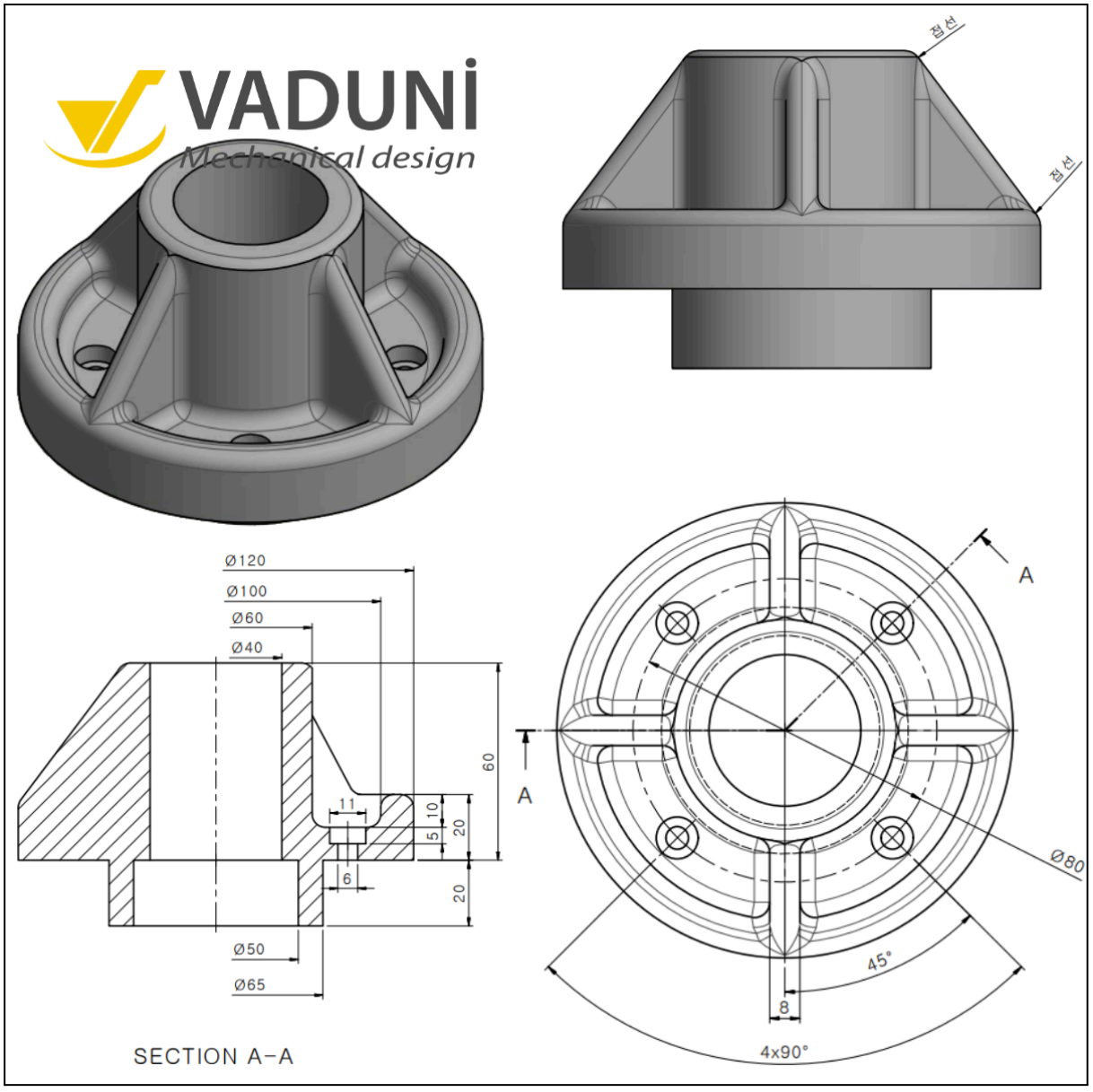
Bài tập 572


VADUNİ
Mechanical design
2
0.4
2
2.5
2
Ø1.2
Ø1
0.1
R1
1
Ø1
4.5
1
0.1
0.4
0.4

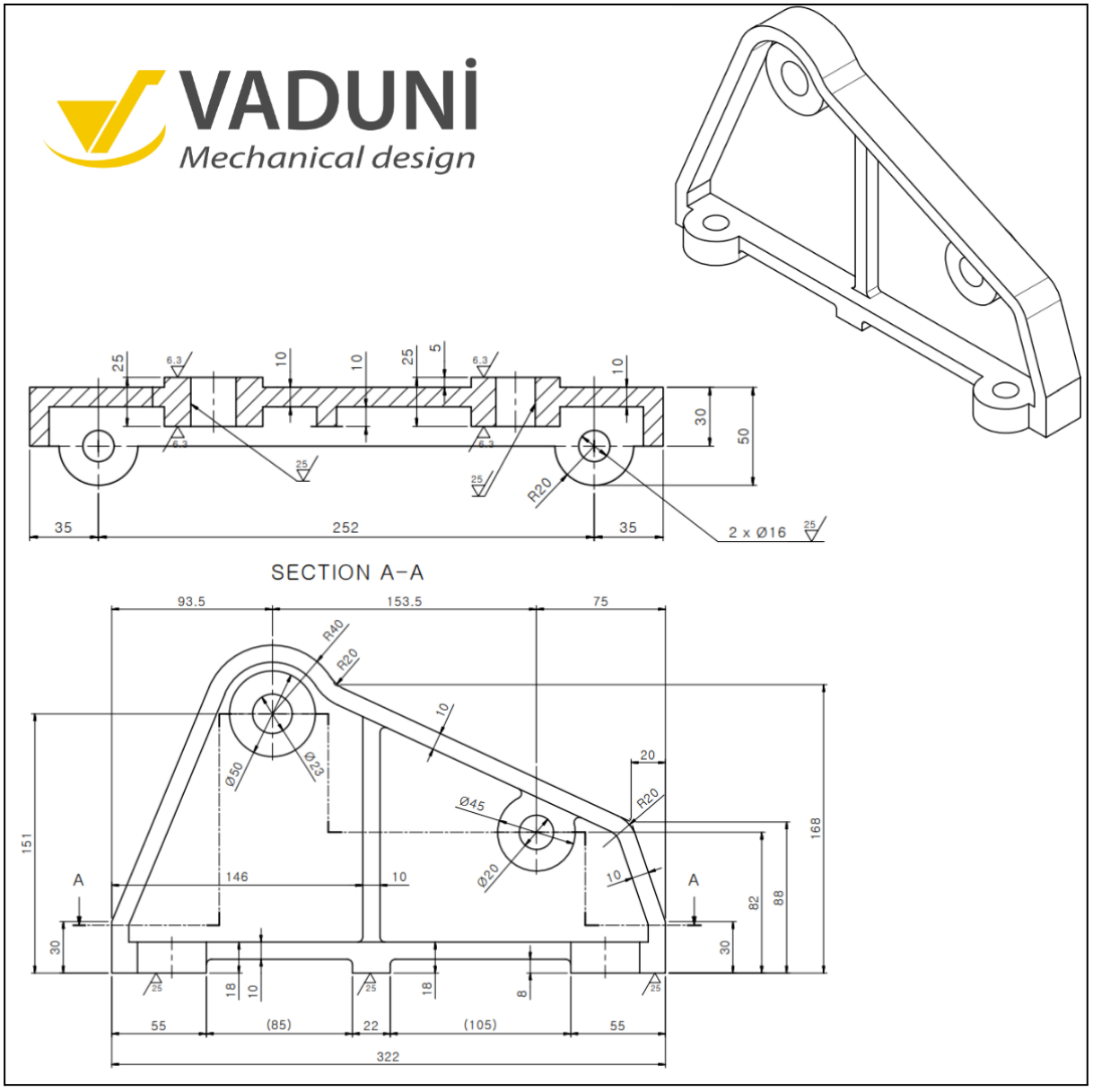
Bài tập 573


VADUNİ
Mechanical design
10
7
4
40
A
A
53
82
Ø5
SECTION B-B
39
4
1.4
Ø22.5
Ø15
16
9
10
31
Ø40
Ø32.5
Ø19.5
Ø15
R2
Ø4
Ø32.5
Ø19.5
1 x 45°
1 x 45°
1
Ø10
5
5 X 45°
SECTION A-A
B
B
30°
30°
Ø27

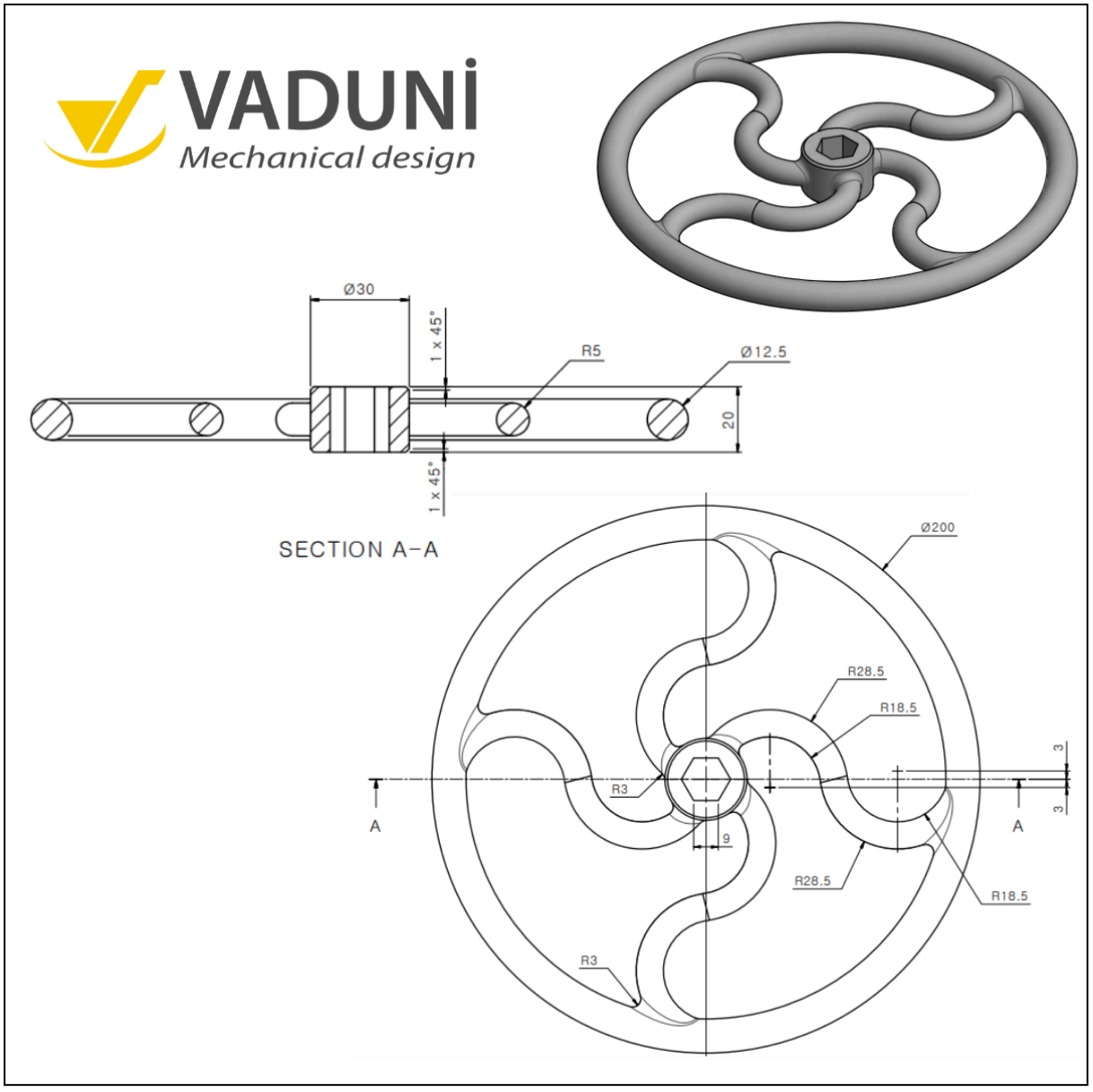
Bài tập 574


VADUNI
Mechanical design
Ø120
Ø100
Ø60
Ø40
60
11
10
5
20
6
20
Ø50
Ø65
SECTION A-A
A
A
Ø80
45°
8
4x90°

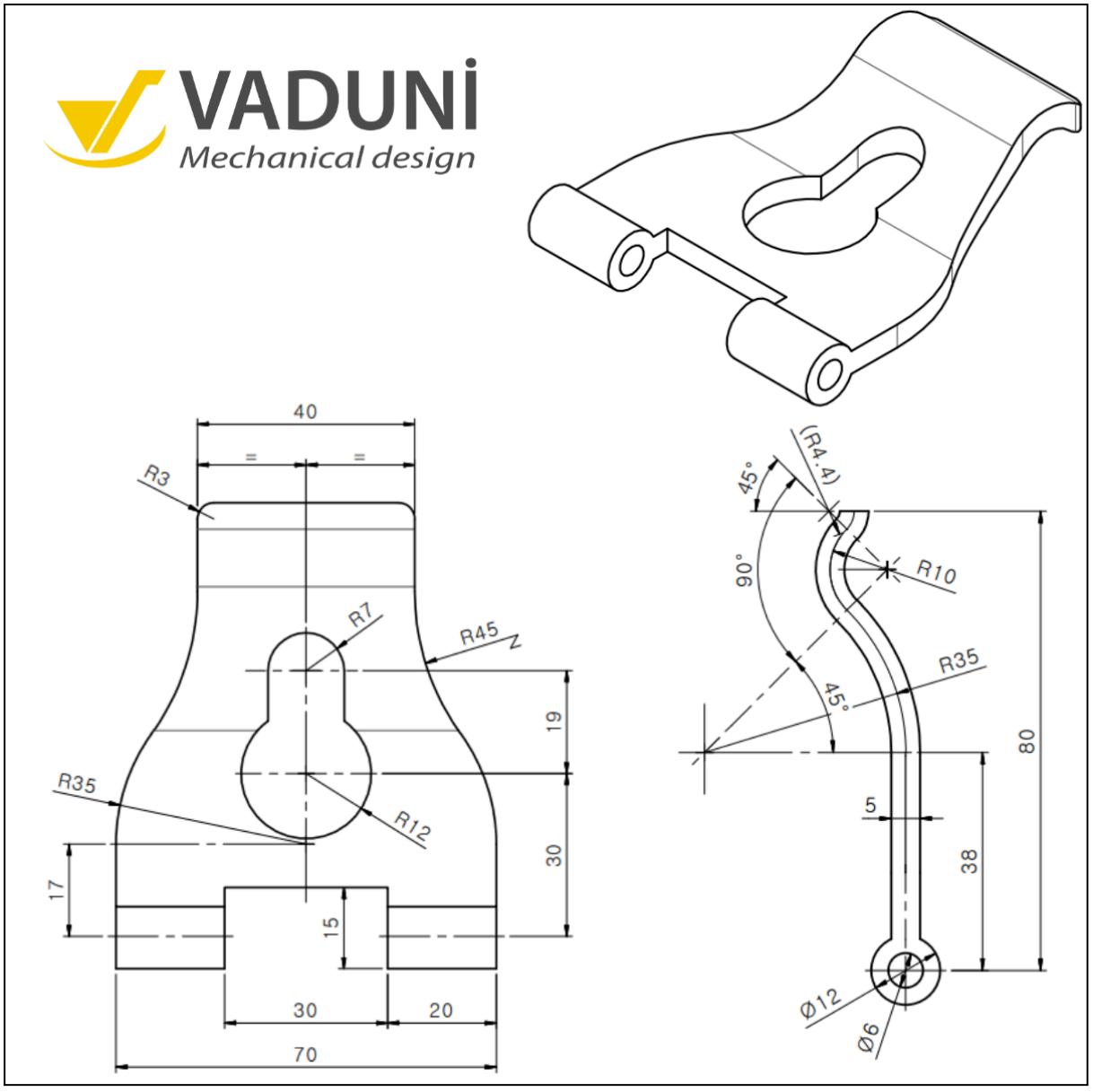
Bài tập 575


VADUNİ
Mechanical design
SECTION A-A
2 x Ø16
R20
R40
Ø50
Ø23
Ø45
Ø20

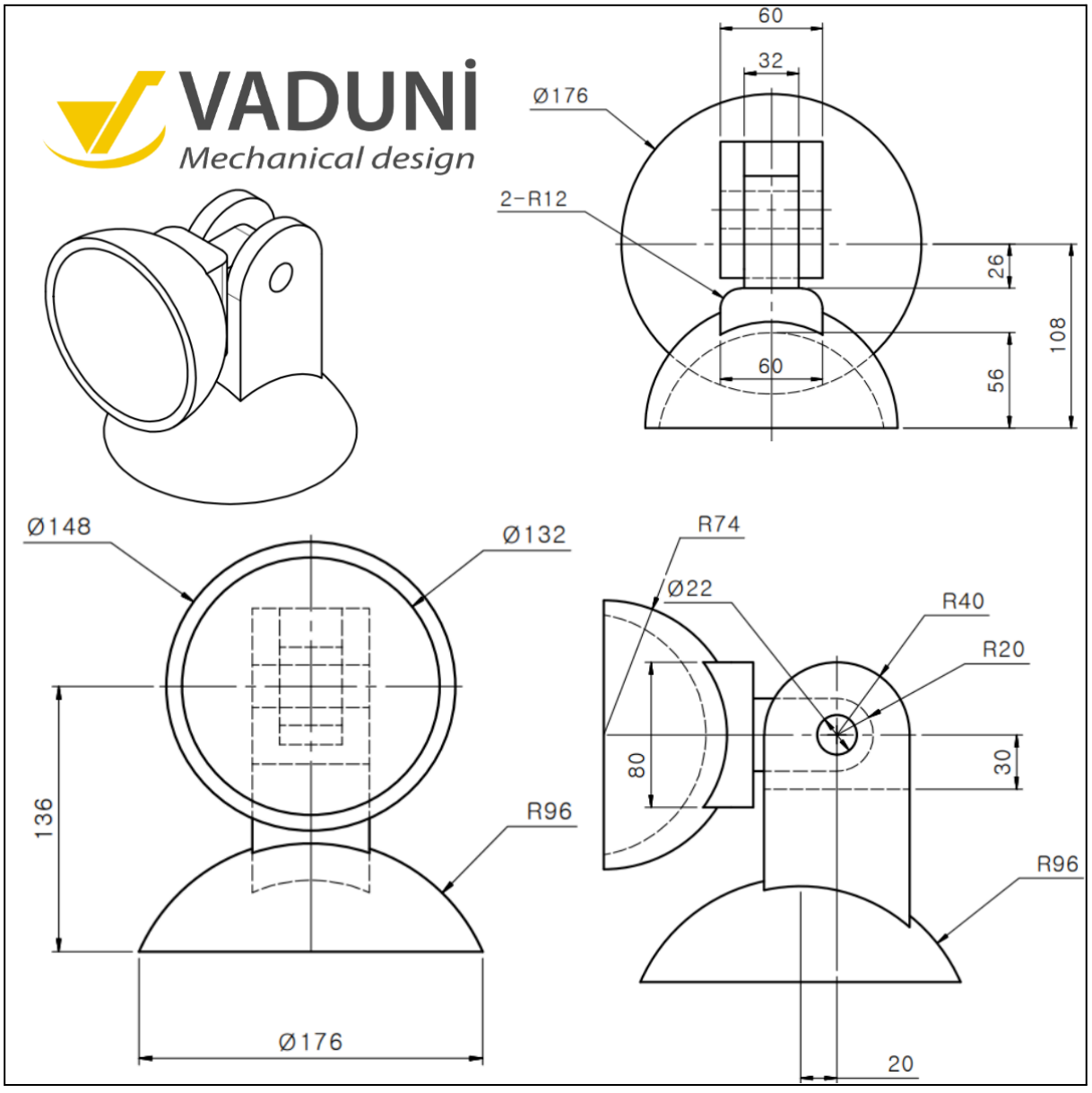
Bài tập 576


VADUNI
Mechanical design
Ø30
1 x 45°
R5
Ø12.5
20
1 x 45°
SECTION A-A
Ø200
R28.5
R18.5
R3
A
A
9
3
3
R28.5
R18.5
R3

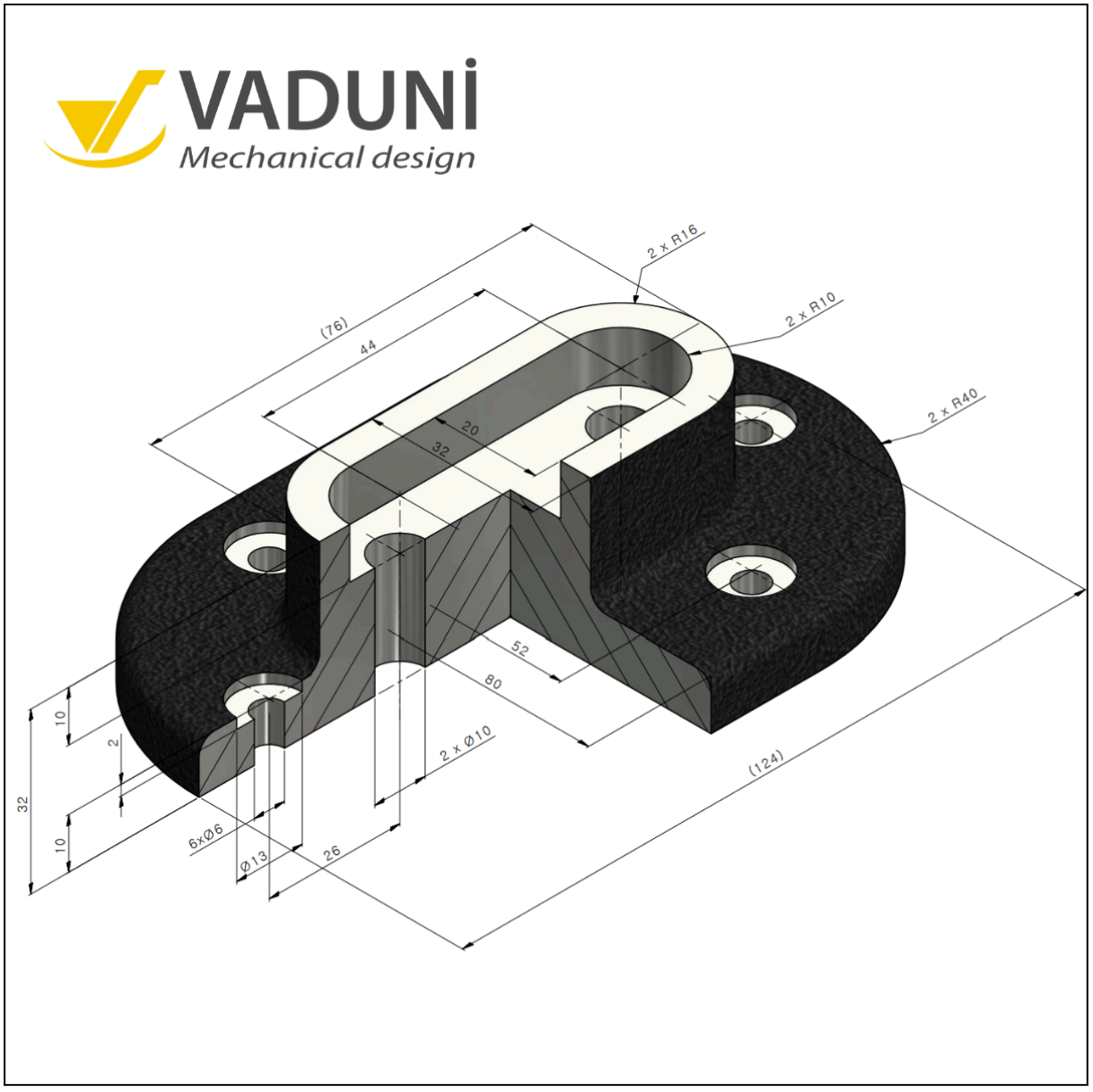
Bài tập 577


VADUNI
Mechanical design
40
R3
R7
R45
19
30
R35
R12
17
15
30
20
70
(R4.4)
45°
90°
R10
R35
45°
80
5
38
Ø12
Ø6

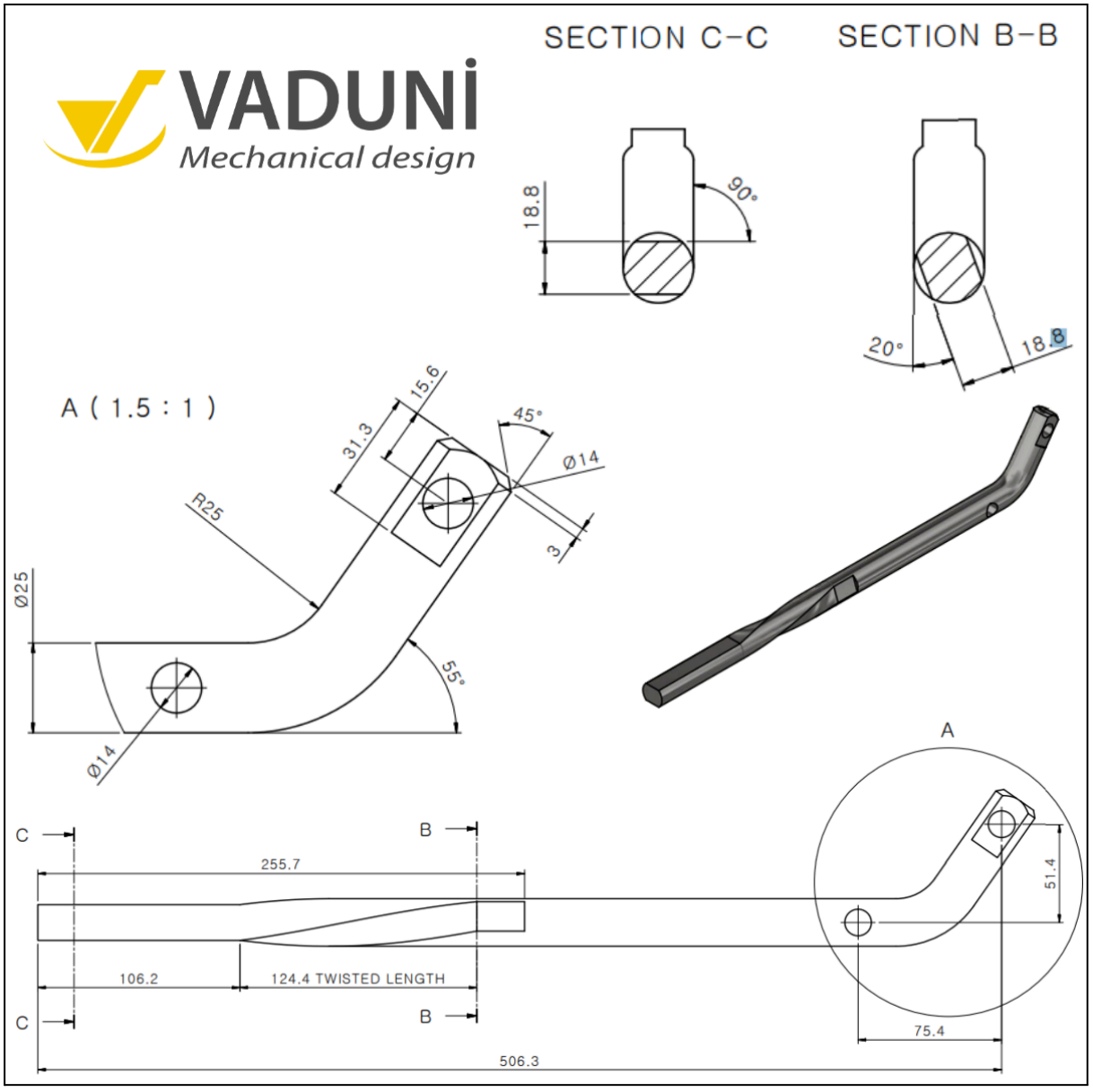
Bài tập 578


VADUNI
Mechanical design
60
32
Ø176
2-R12
26
108
56
60
Ø148
Ø132
136
R96
Ø176
R74
Ø22
R40
R20
80
30
R96
20

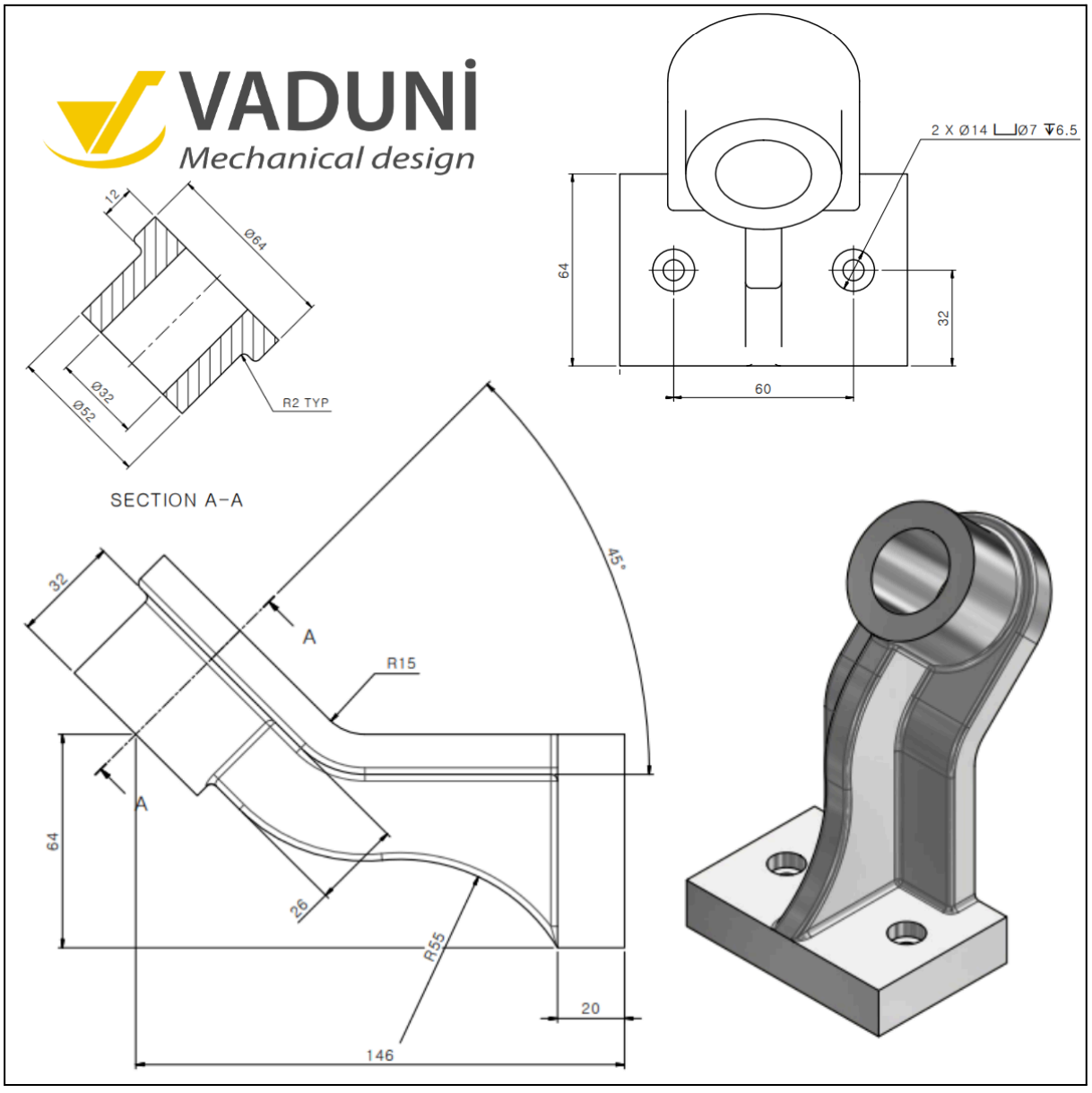
Bài tập 579


VADUNİ
Mechanical design
2 x R16
2 x R10
2 x R40
(76)
44
20
32
52
80
(124)
2 x Ø10
6xØ6
Ø13
26
10
2
10
32

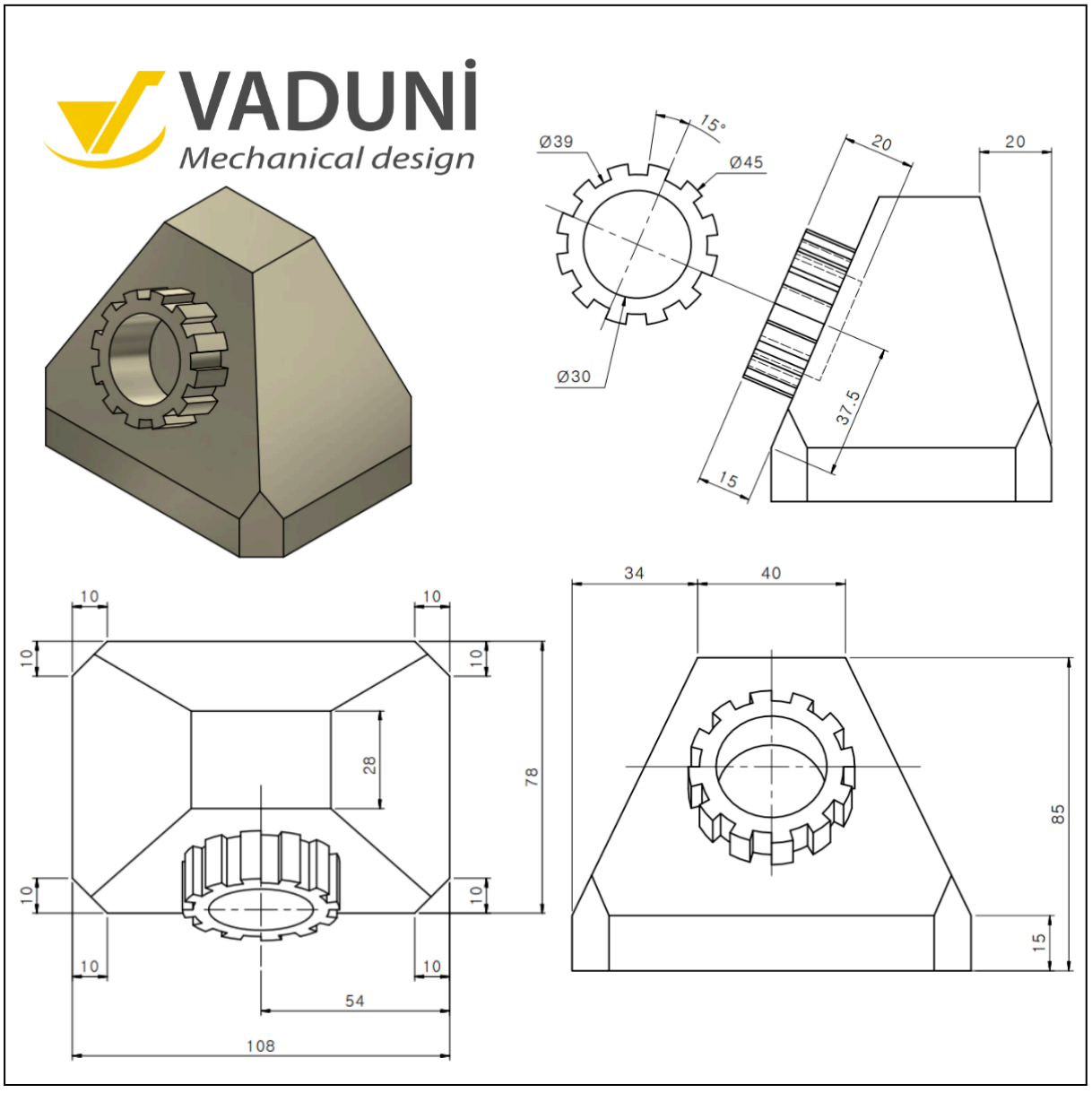
Bài tập 580


SECTION C-C
SECTION B-B
VADUNI
Mechanical design
18.8
90°
20°
18.8
A (1.5 : 1)
15.6
31.3
45°
Ø14
3
R25
Ø25
55°
Ø14
A
C
B
255.7
106.2
124.4 TWISTED LENGTH
C
B
51.4
75.4
506.3

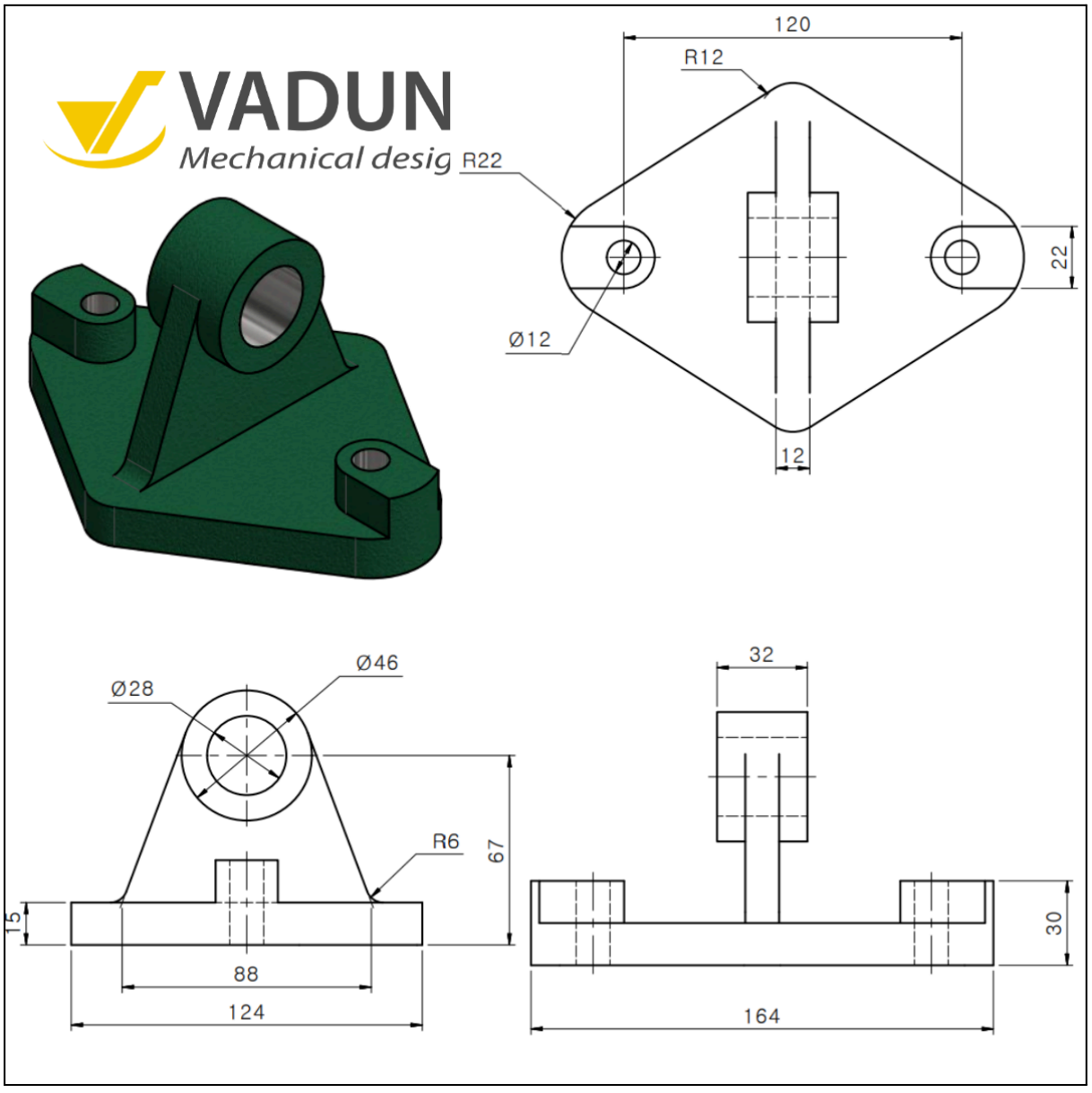
Bài tập 581


VADUNİ
Mechanical design
2 X Ø14 ⌴ Ø7 ↧6.5
64
32
60
12
Ø64
Ø32
Ø52
R2 TYP
SECTION A-A
45°
A
R15
32
64
26
R55
20
146

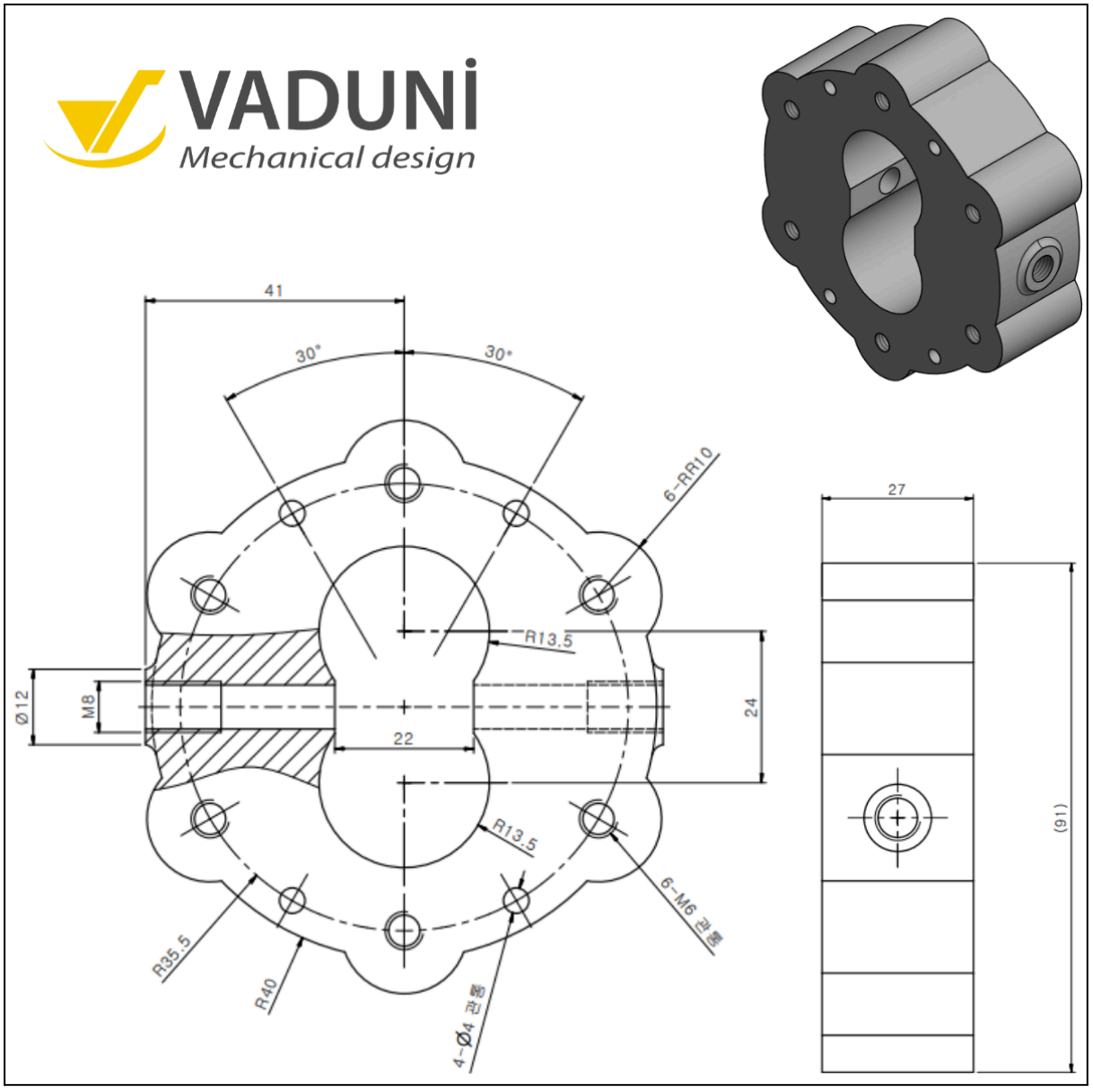
Bài tập 582


VADUNİ
Mechanical design
Ø39
15°
Ø45
20
20
Ø30
37.5
15
10
10
10
10
28
78
10
10
10
10
54
108
34
40
85
15

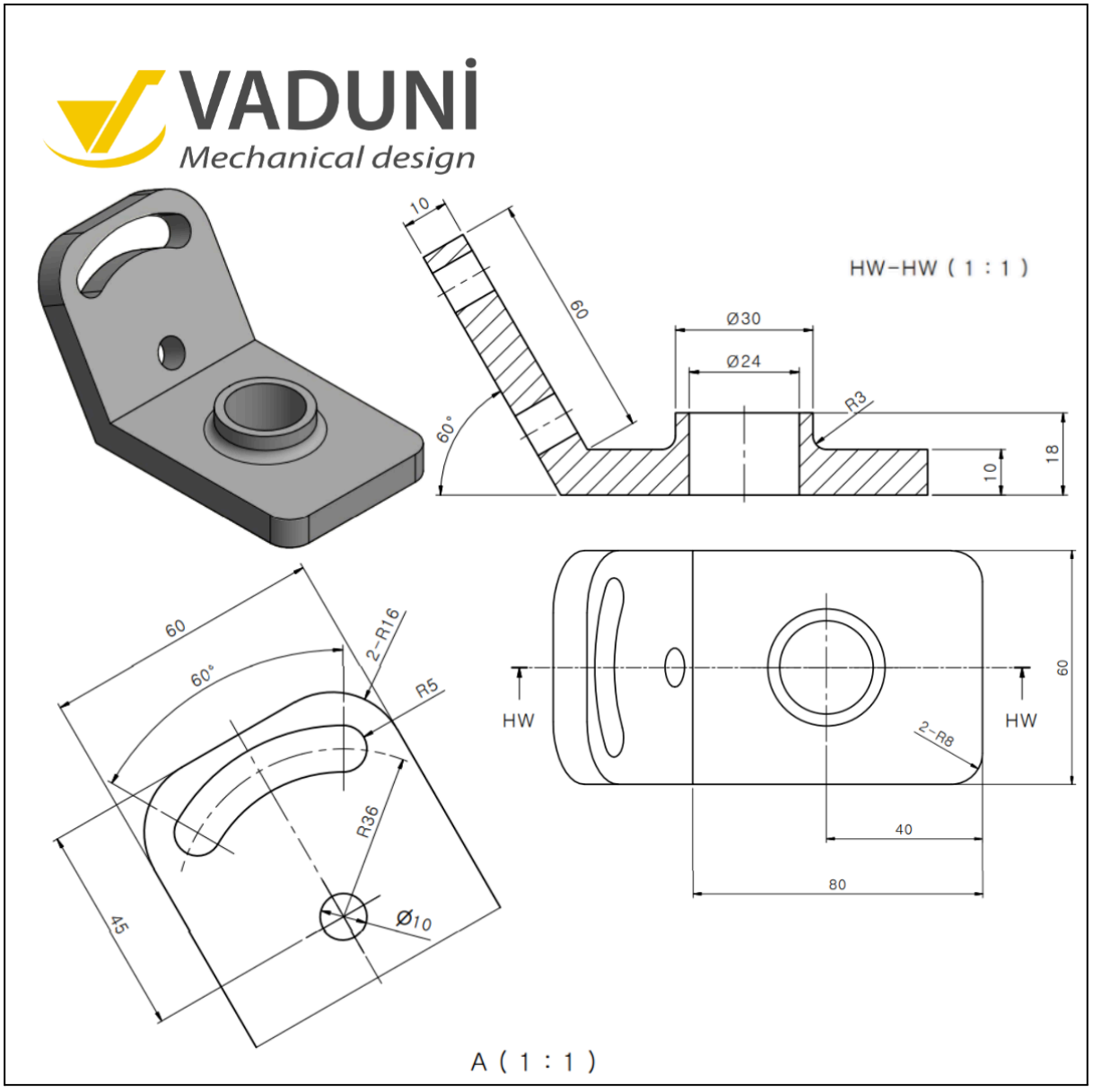
Bài tập 583


VADUN
Mechanical desig
120
R12
R22
Ø12
22
12
Ø46
Ø28
R6
67
15
88
124
32
30
164

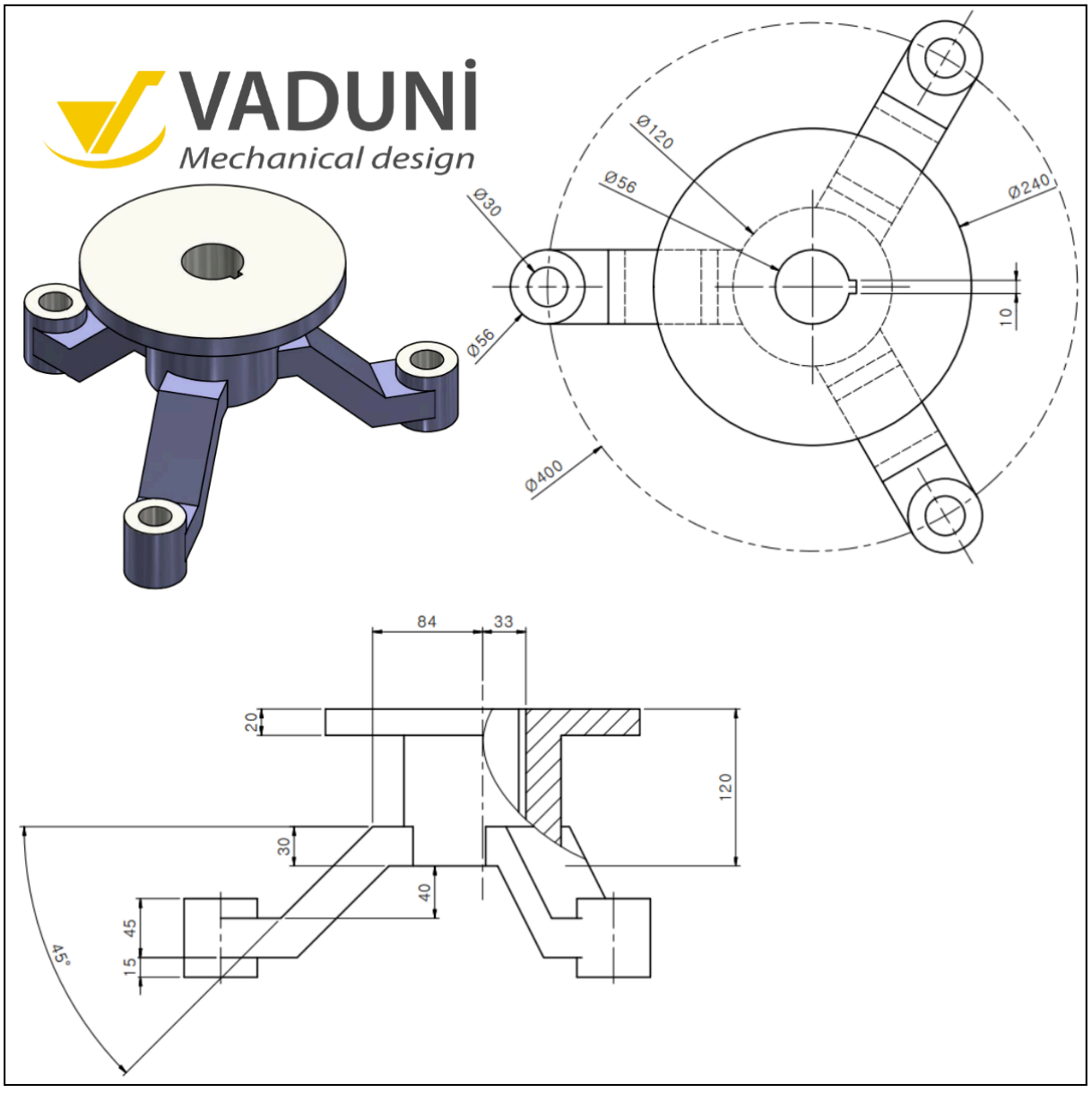
Bài tập 584


VADUNİ
Mechanical design
41
30°
30°
6-RR10
R13.5
Ø12
M8
22
24
R13.5
6-M6 관통
R35.5
R40
4-Ø4 관통
27
(91)

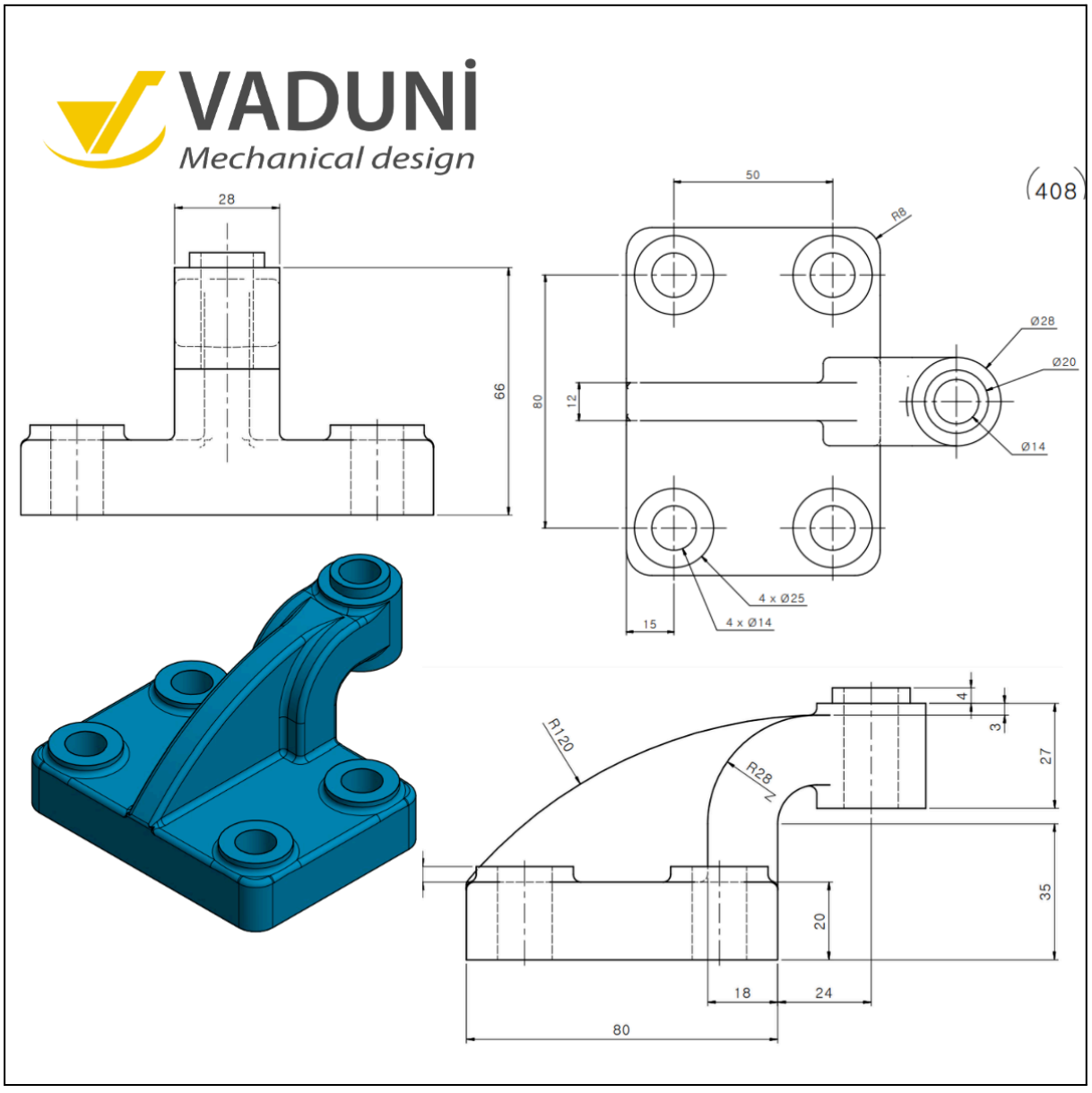
Bài tập 585


VADUNİ
Mechanical design
HW–HW (1 : 1)
10
60
Ø30
Ø24
R3
60°
10
18
HW
HW
60
2–R8
40
80
60
60°
2–R16
R5
R36
Ø10
45
A (1 : 1)

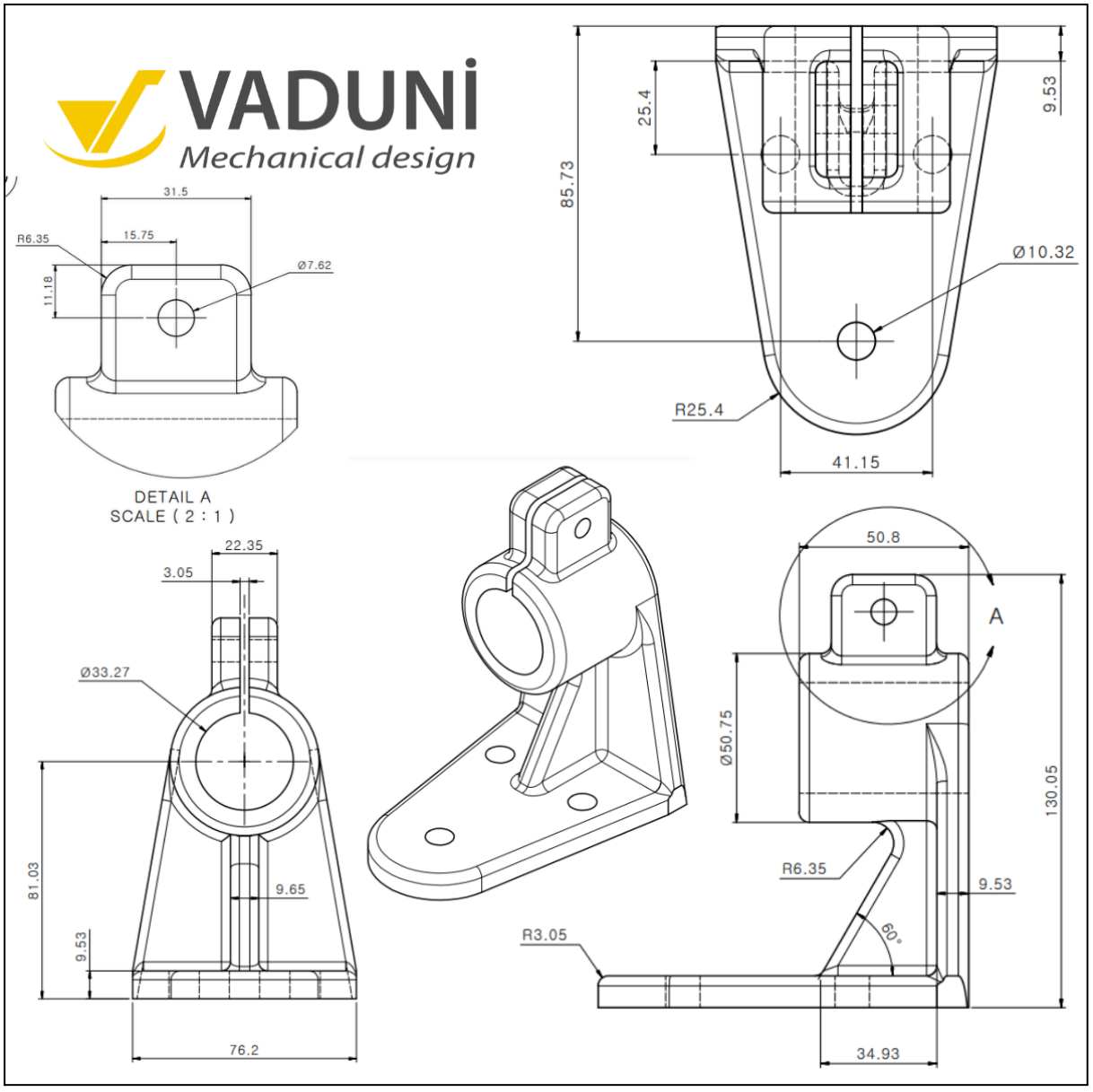
Bài tập 586


VADUNI
Mechanical design
Ø120
Ø56
Ø30
Ø240
Ø56
10
Ø400
84
33
20
120
30
40
45
15
45°

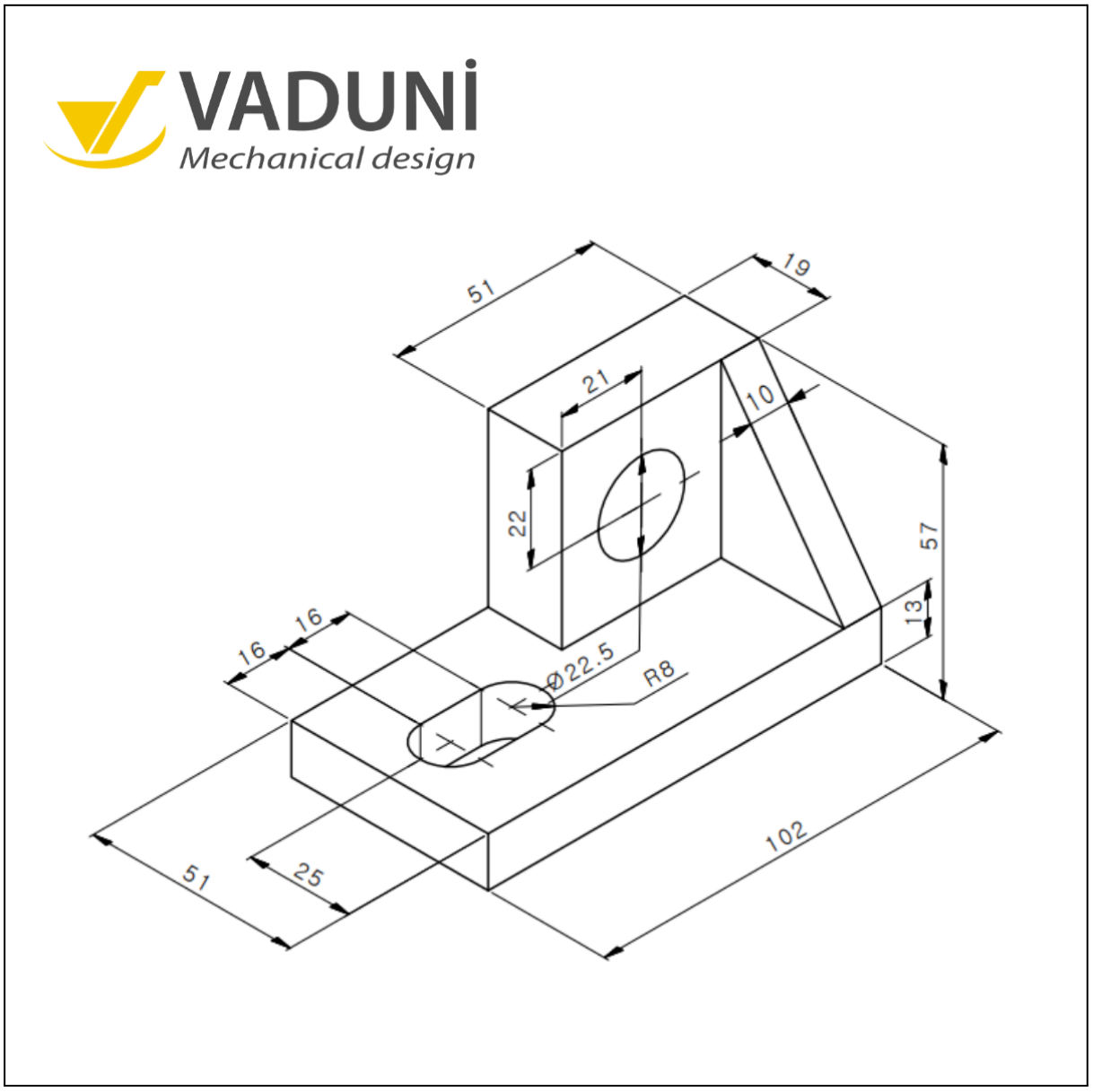
Bài tập 587


VADUNİ
Mechanical design
(408)
28
66
50
R8
Ø28
Ø20
Ø14
80
12
4 x Ø25
4 x Ø14
15
R120
R28
4
3
27
35
20
18
24
80

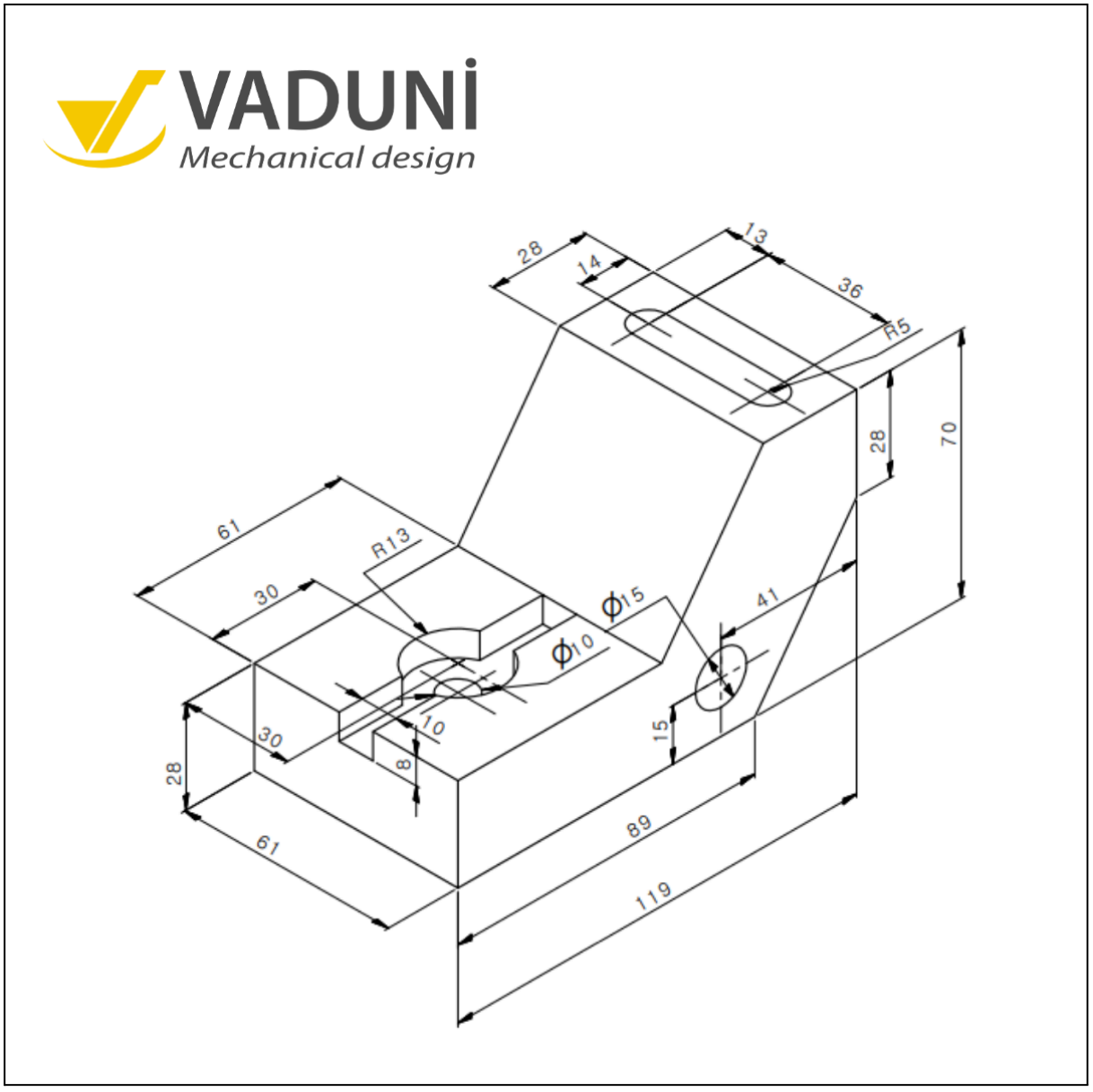
Bài tập 588


VADUNİ
Mechanical design
31.5
15.75
R6.35
Ø7.62
11.18
DETAIL A
SCALE (2 : 1)
85.73
25.4
9.53
Ø10.32
R25.4
41.15
22.35
3.05
Ø33.27
81.03
9.53
9.65
76.2
50.8
A
Ø50.75
130.05
R6.35
9.53
R3.05
60°
34.93

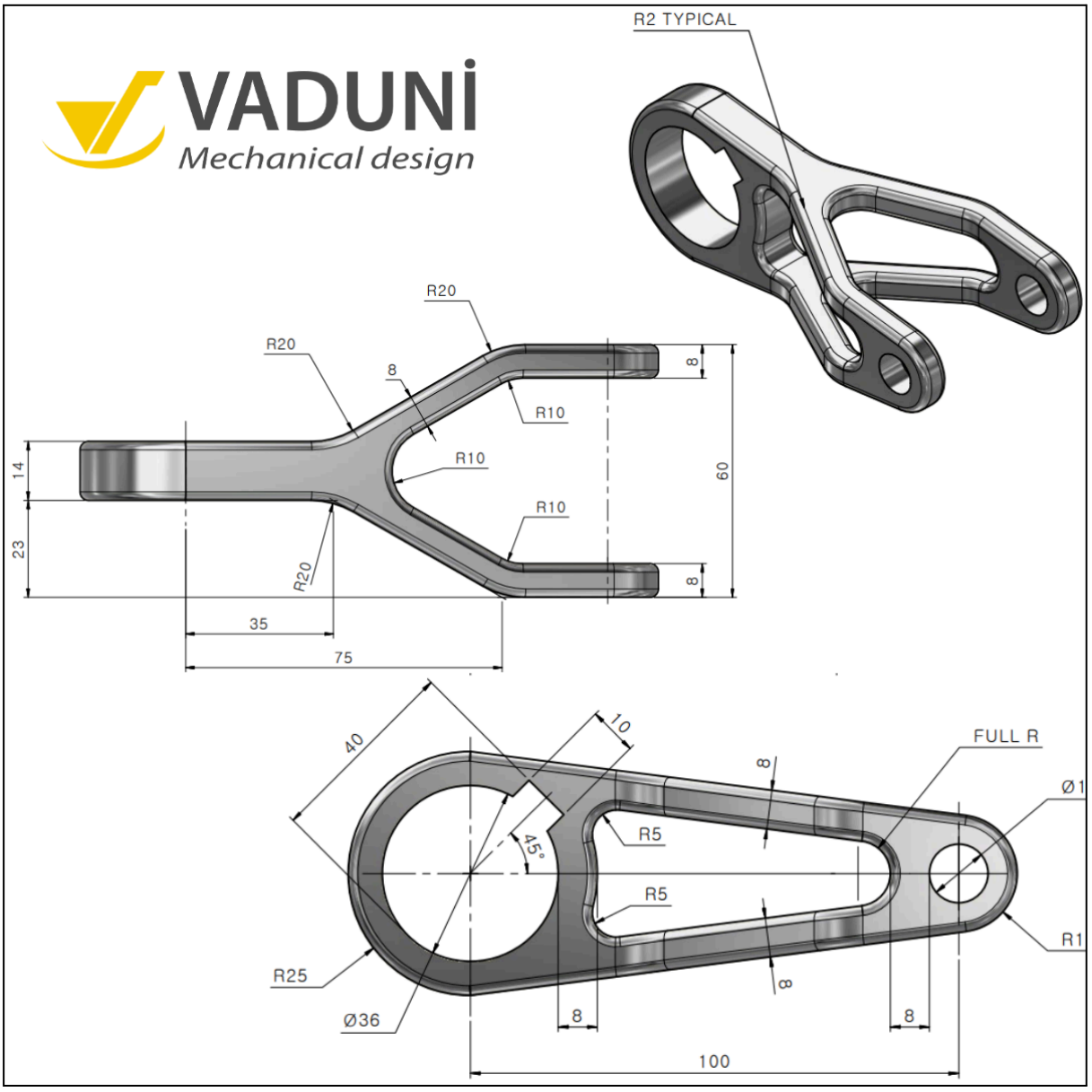
Bài tập 589


VADUNI
Mechanical design
51
19
21
10
22
57
16
16
13
Ø22.5
R8
51
25
102

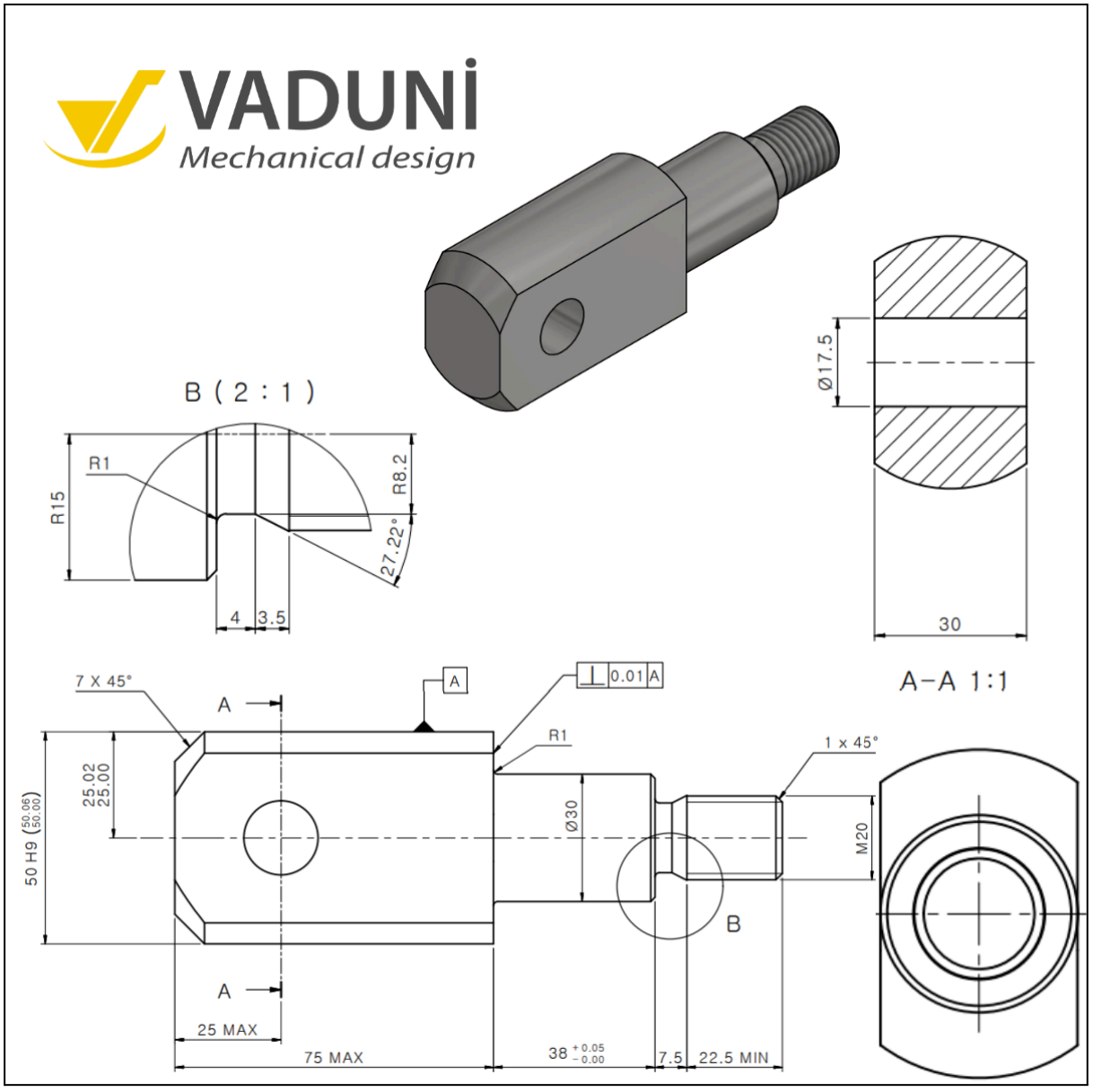
Bài tập 590


VADUNİ
Mechanical design
28
14
13
36
R5
28
70
61
R13
30
ϕ15
41
ϕ10
30
10
8
15
28
61
89
119

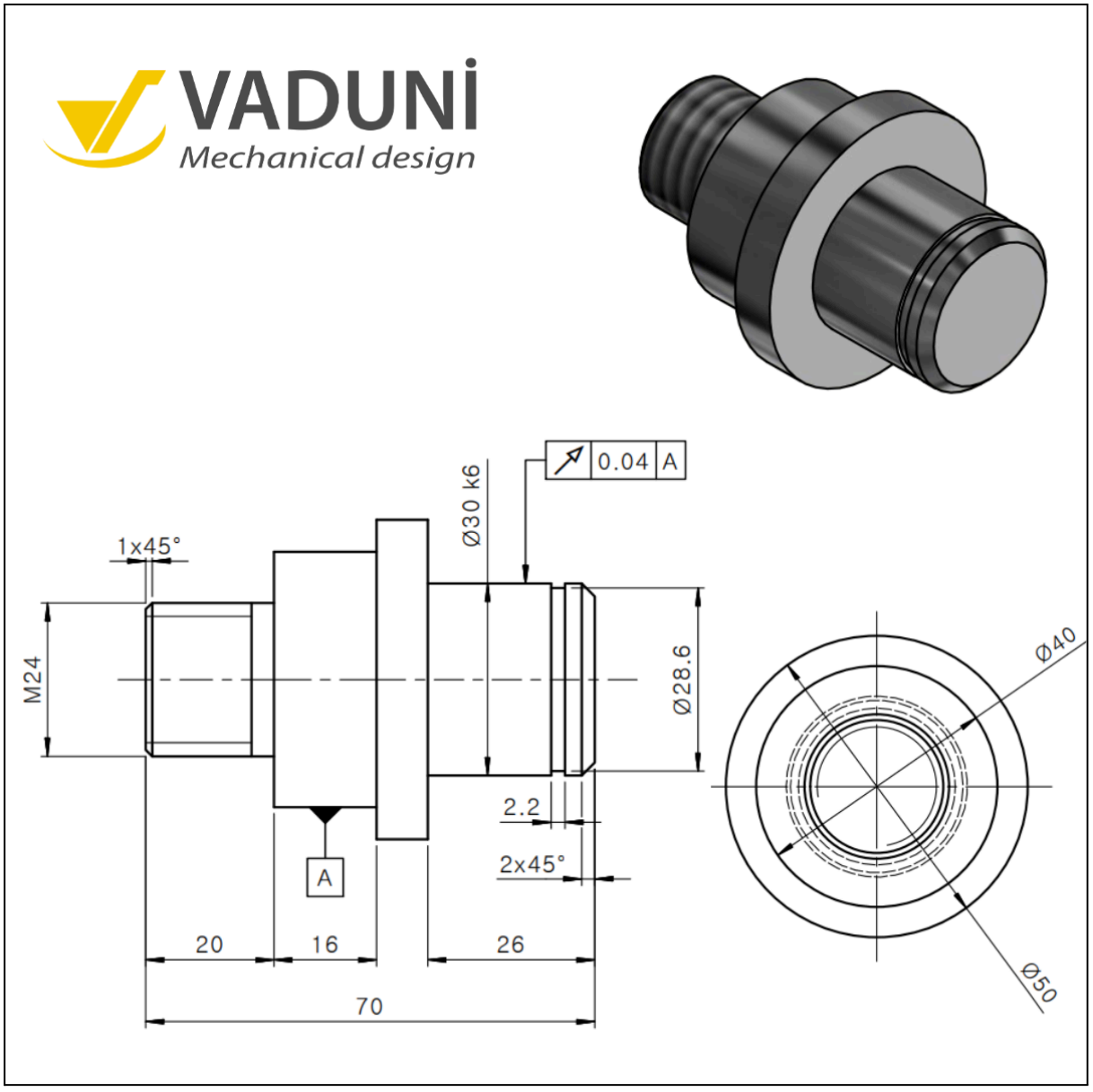
Bài tập 591


VADUNİ
Mechanical design
R2 TYPICAL
R20
R20
8
R10
R10
R10
14
23
60
8
8
R20
35
75
40
10
8
FULL R
Ø1
45°
R5
R5
R1
R25
Ø36
8
8
8
100

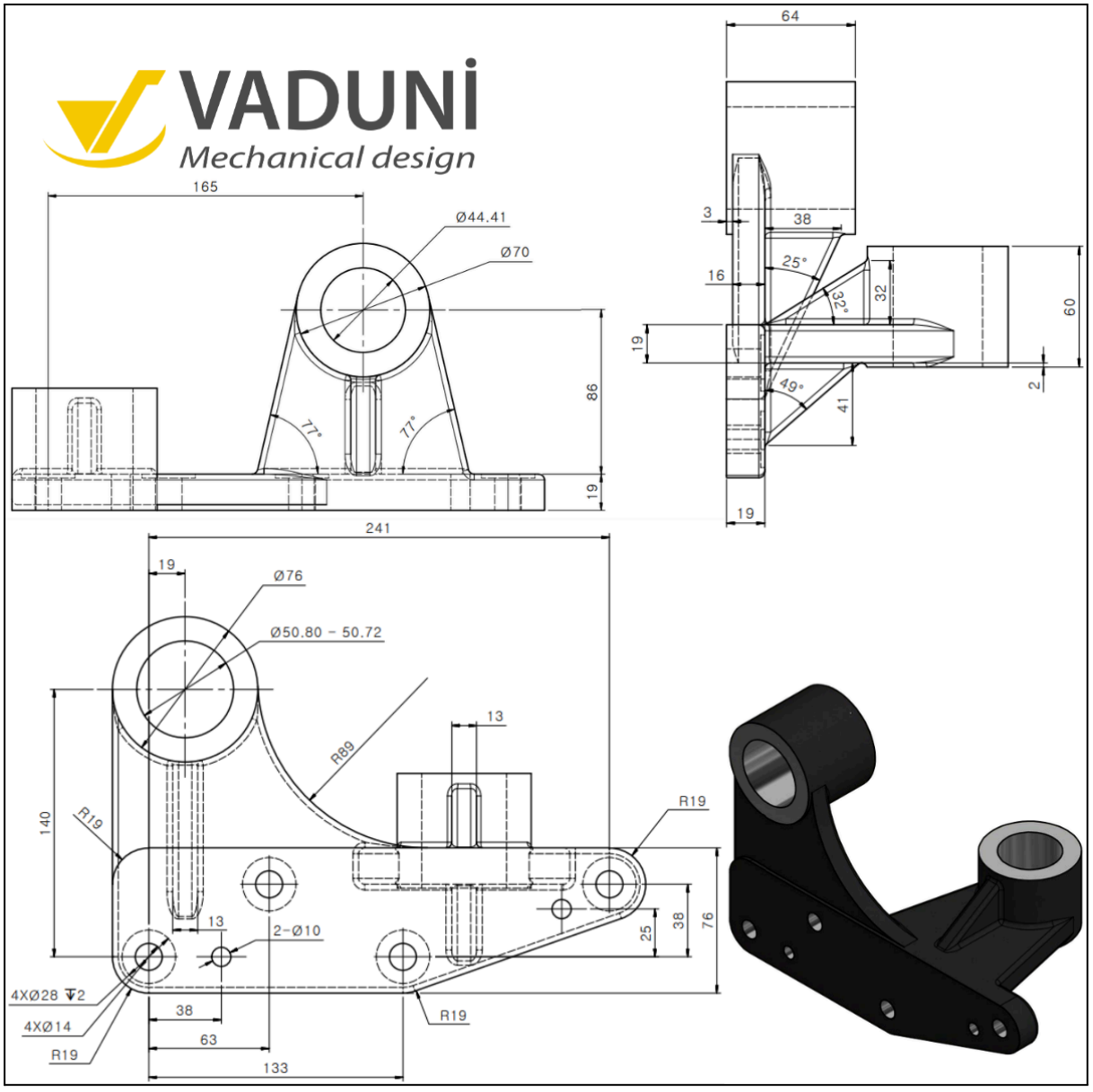
Bài tập 592


VADUNİ
Mechanical design
B (2 : 1)
R1
R15
R8.2
27.22°
4
3.5
Ø17.5
30
A–A 1:1
7 X 45°
A
0.01 A
R1
1 x 45°
25.02
25.00
50 H9 (50.06 / 50.00)
Ø30
M20
B
25 MAX
75 MAX
38 +0.05 −0.00
7.5
22.5 MIN

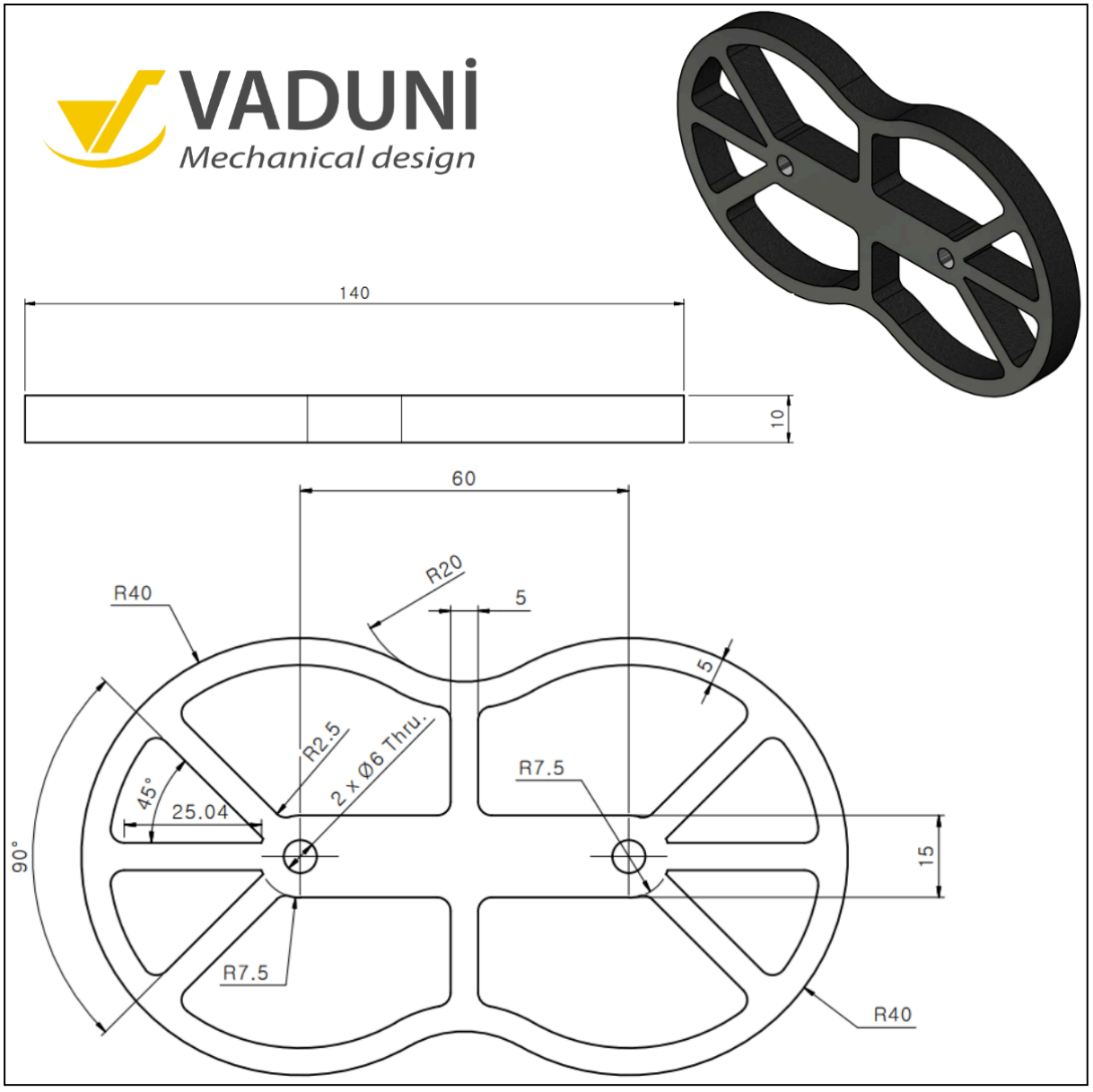
Bài tập 593


VADUNİ
Mechanical design
0.04 A
Ø30 k6
1x45°
M24
Ø28.6
2.2
2x45°
A
20
16
26
70
Ø40
Ø50

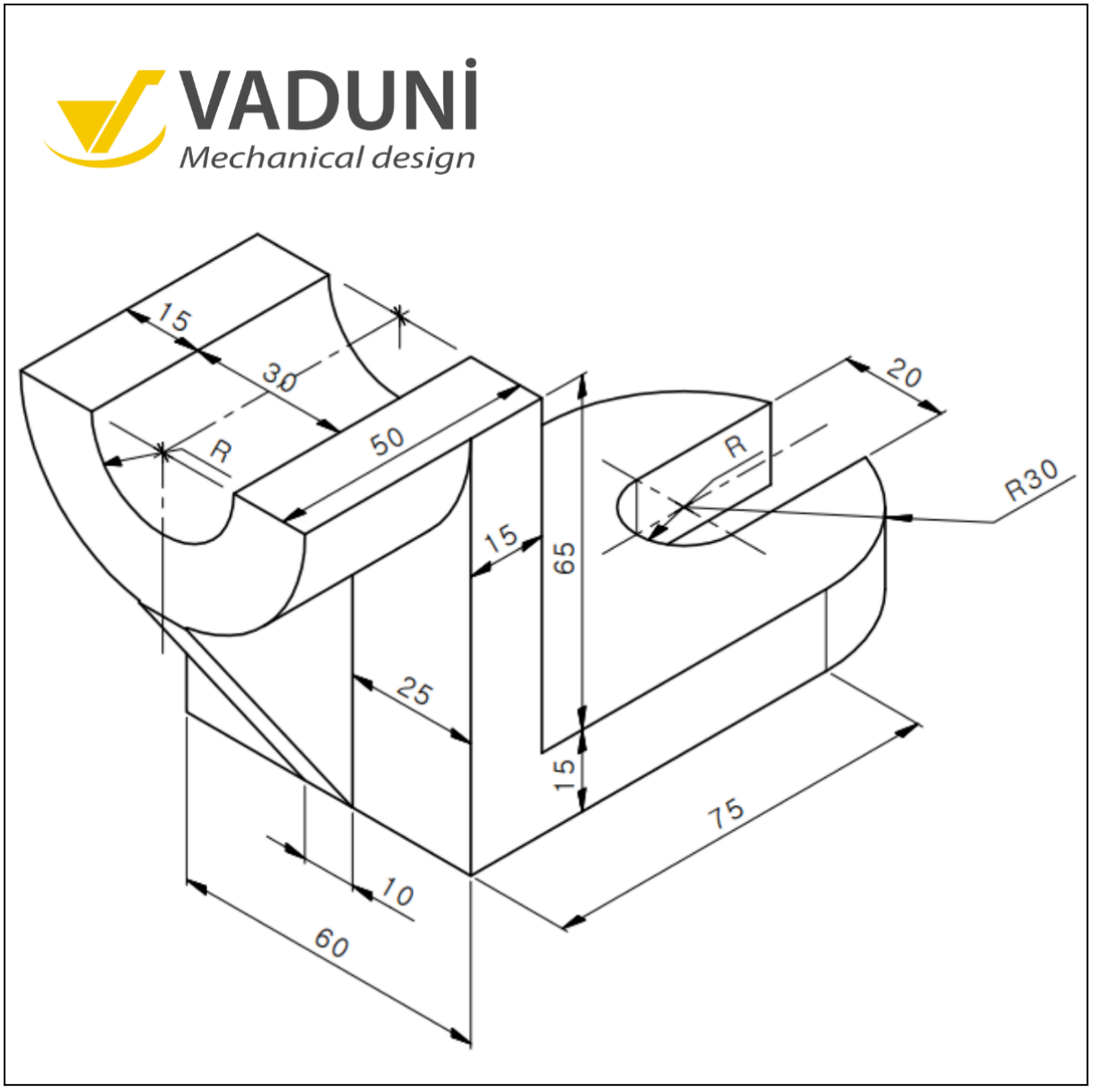
Bài tập 594


VADUNİ
Mechanical design
165
Ø44.41
Ø70
86
19
77°
77°
64
3
38
16
25°
32°
32
60
19
2
49°
41
19
241
19
Ø76
Ø50.80 - 50.72
13
R89
R19
140
R19
13
2-Ø10
25
38
76
4XØ28 ↧2
4XØ14
R19
38
63
133
R19

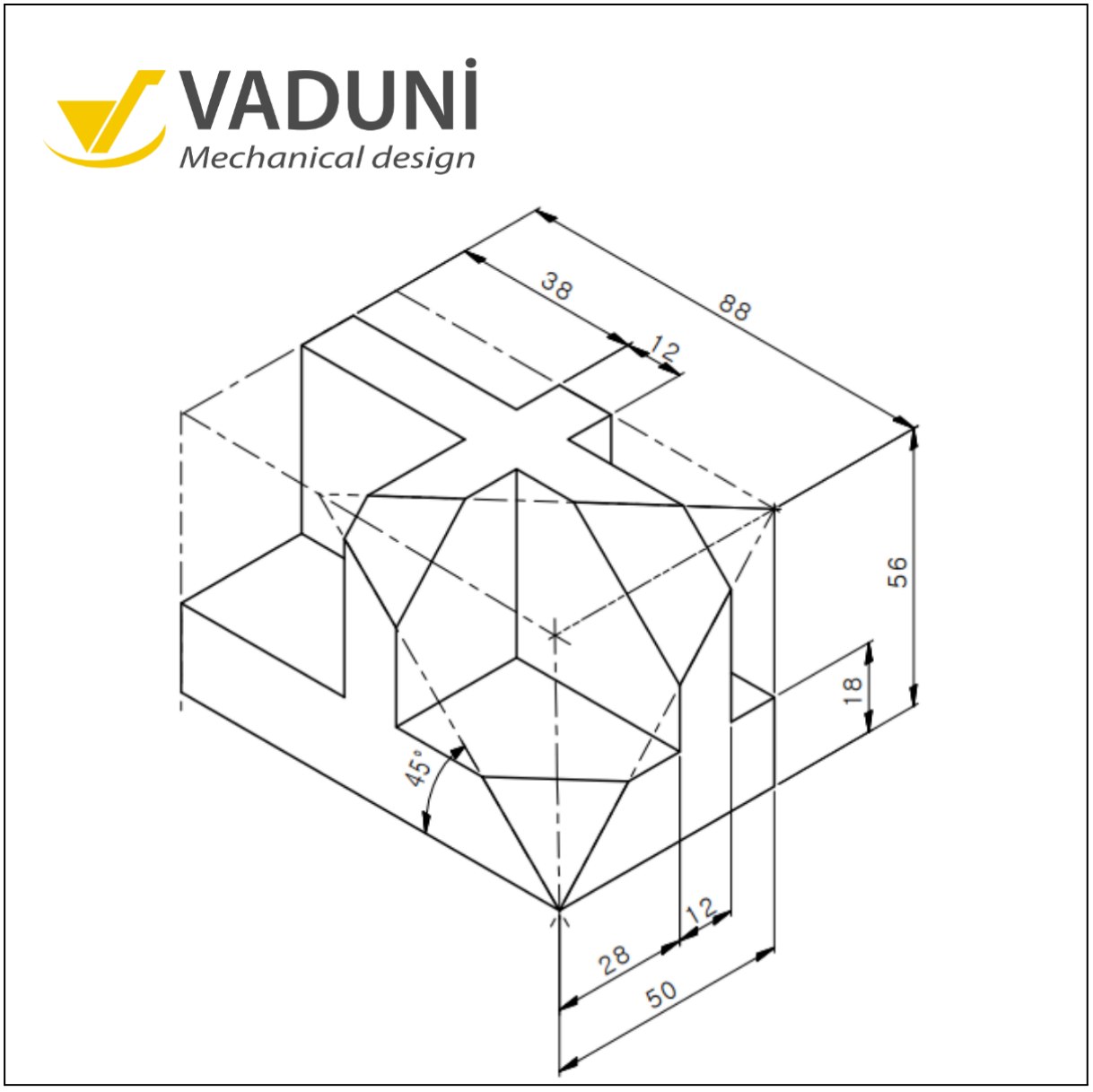
Bài tập 595


VADUNİ
Mechanical design
140
10
60
R20
5
R40
5
R2.5
2 x Ø6 Thru.
R7.5
45°
25.04
90°
15
R7.5
R40

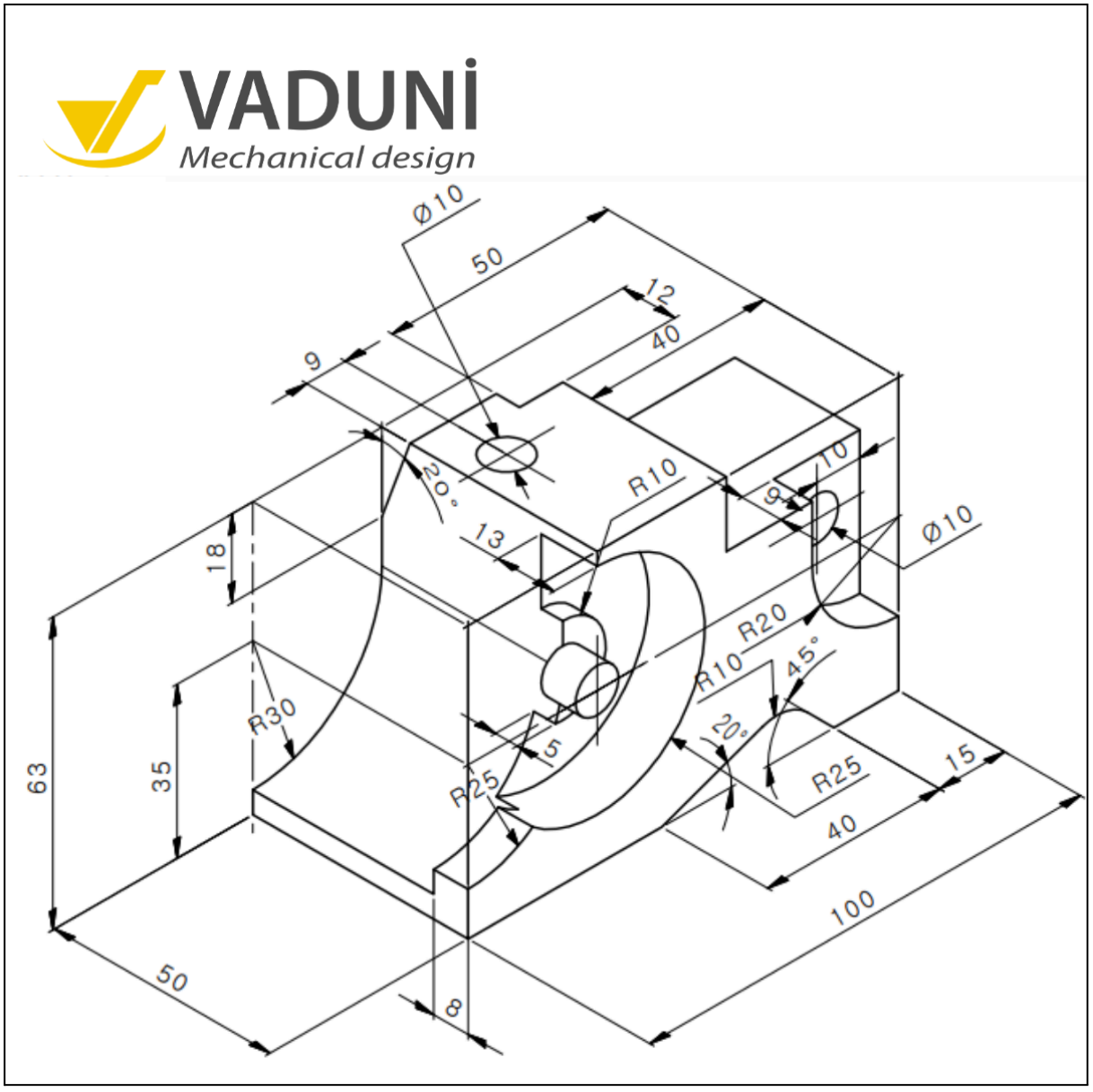
Bài tập 596



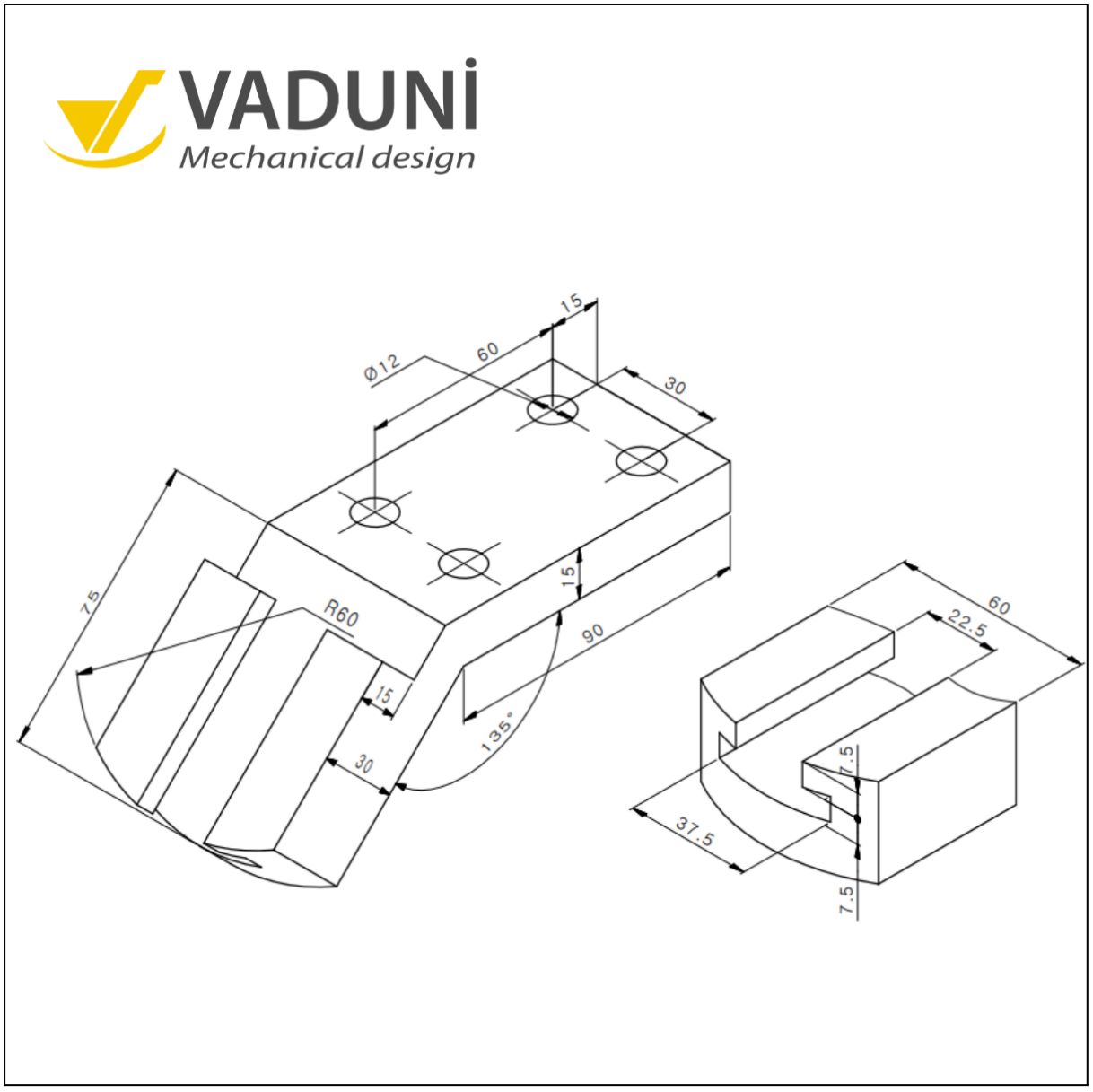
Bài tập 597



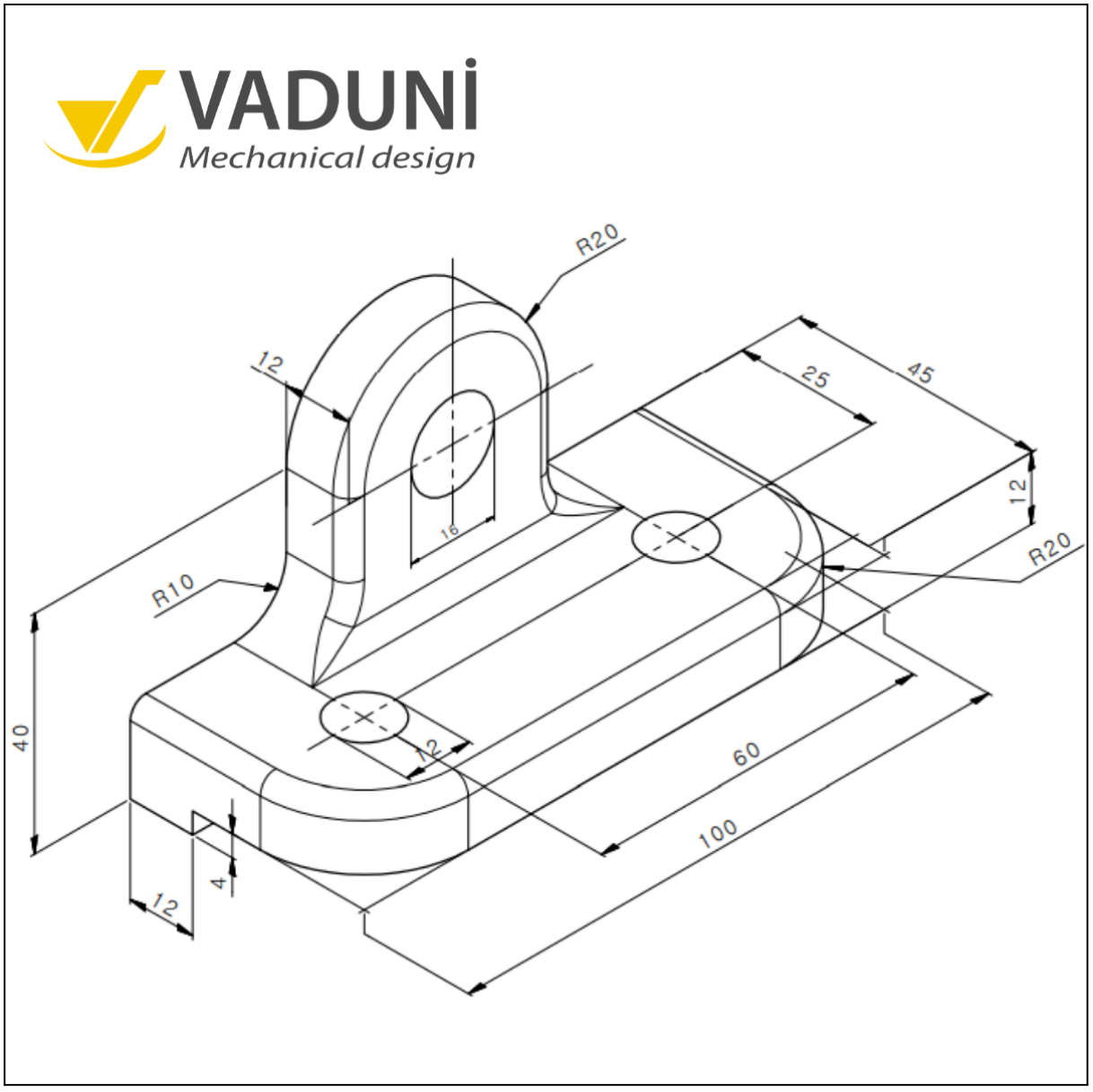
Bài tập 598


VADUNİ
Mechanical design
Ø10
50
12
40
9
20°
R10
10
9
Ø10
13
18
R20
R10
45°
20°
R30
5
R25
R25
15
40
63
35
100
50
8

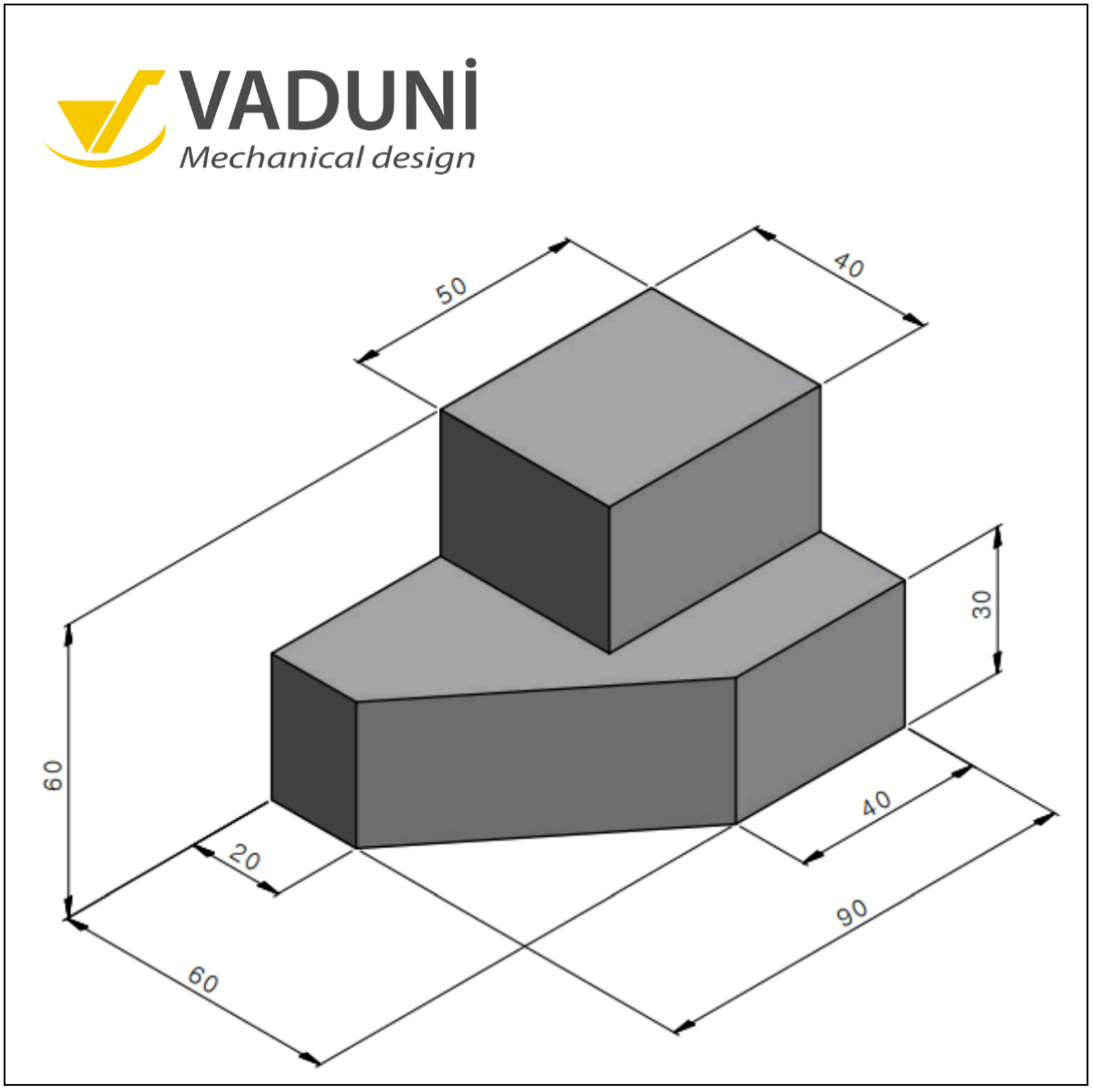
Bài tập 599


VADUNİ
Mechanical design
Ø12
60
15
30
15
90
135°
R60
7.5
15
30
60
22.5
7.5
37.5
7.5

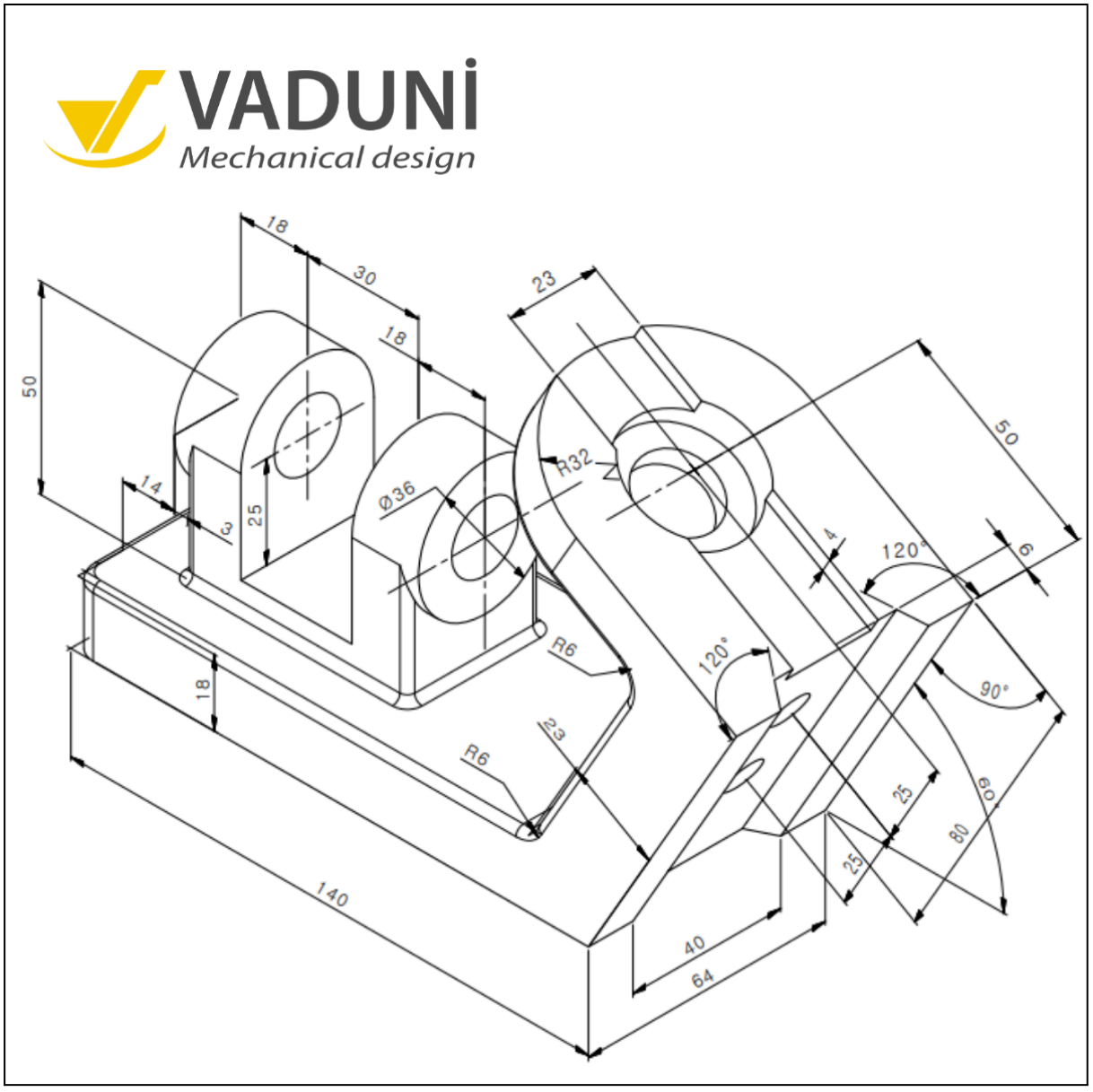
Bài tập 600


VADUNİ
Mechanical design
R20
12
25
45
12
R20
R10
16
40
12
60
100
4
12

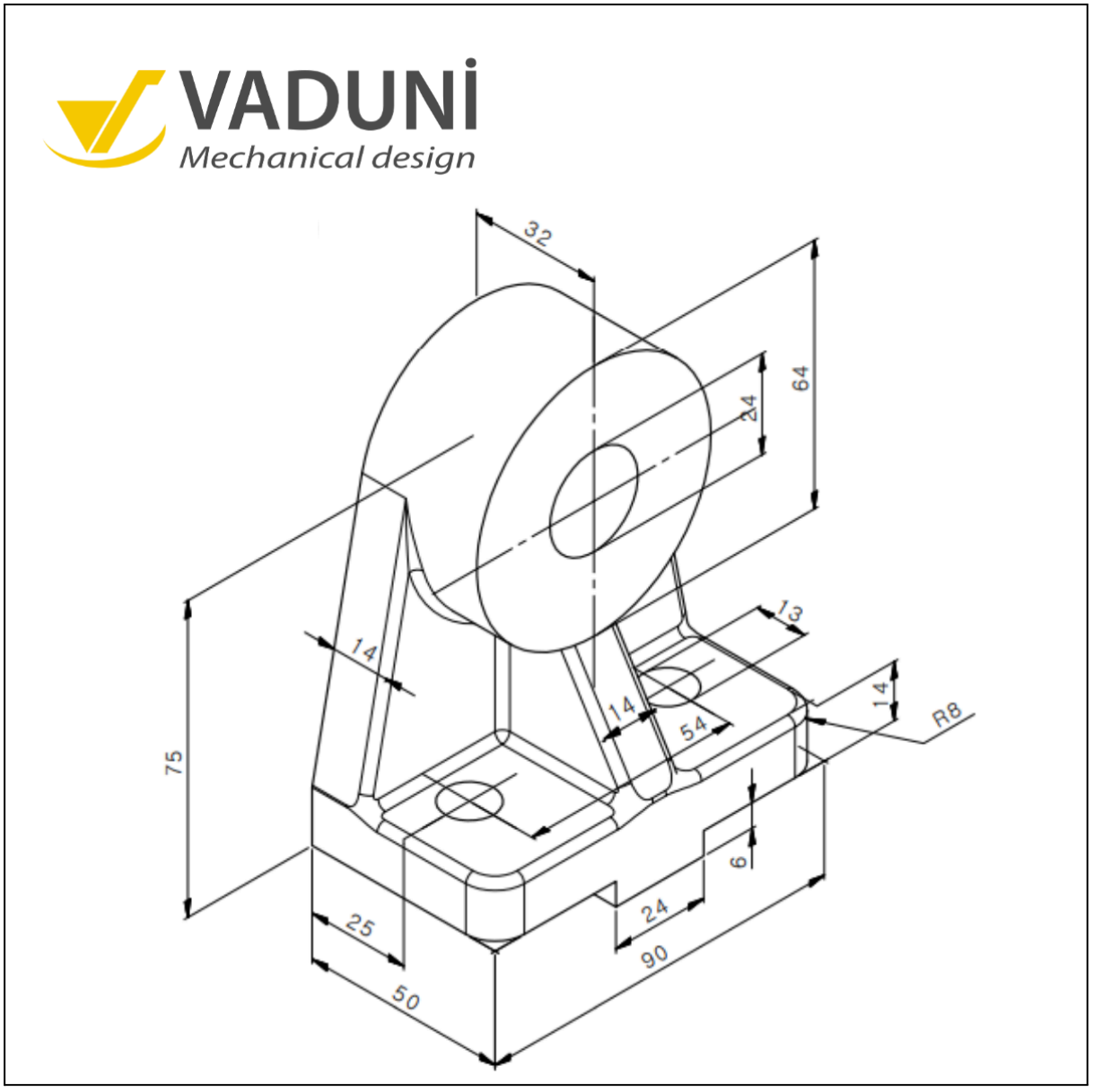
Bài tập 601



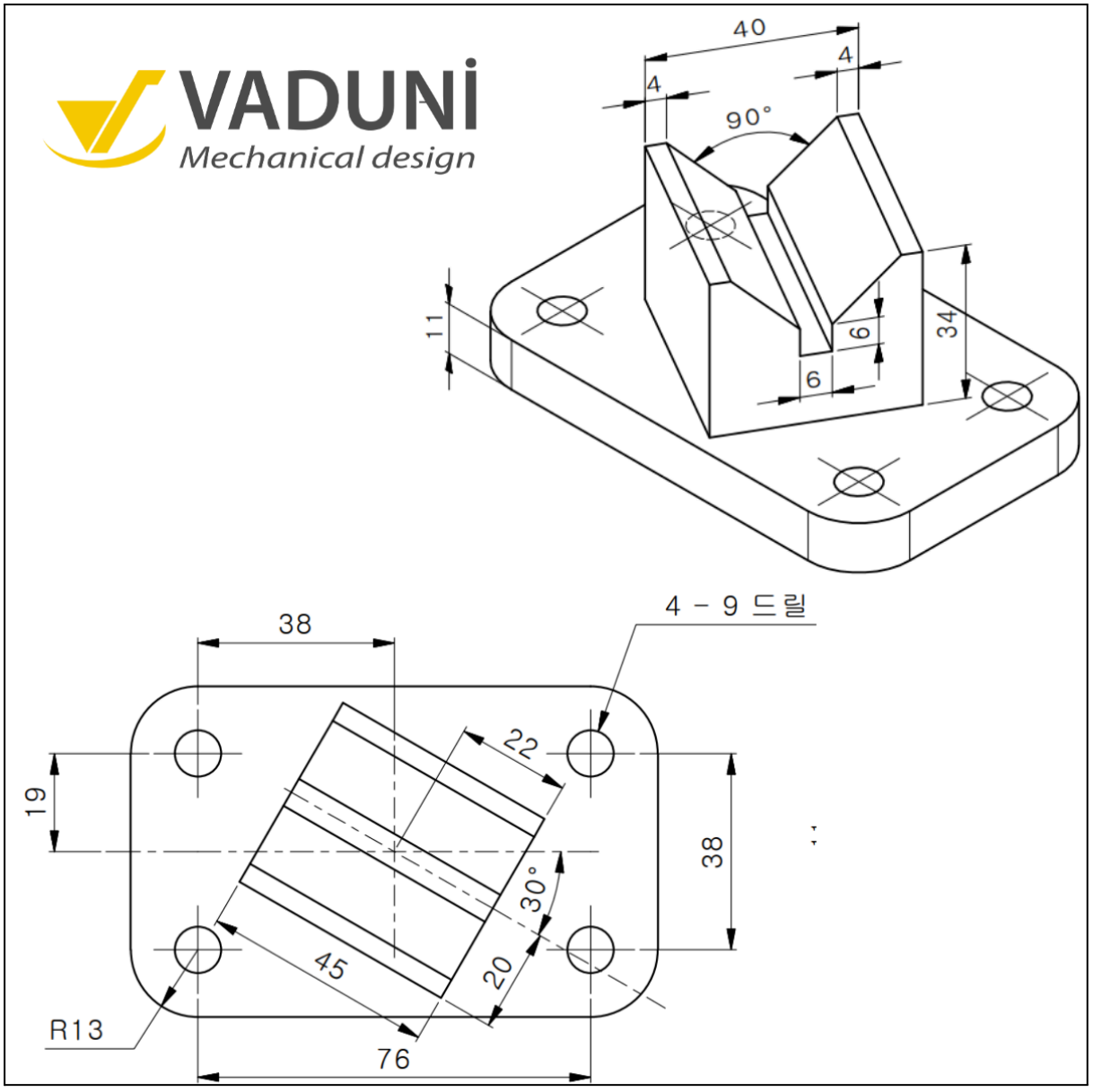
Bài tập 602


VADUNİ
Mechanical design
18
30
18
23
50
50
14
3
25
Ø36
R32
4
120°
6
R6
120°
18
R6
23
90°
25
60
80
25
140
40
64

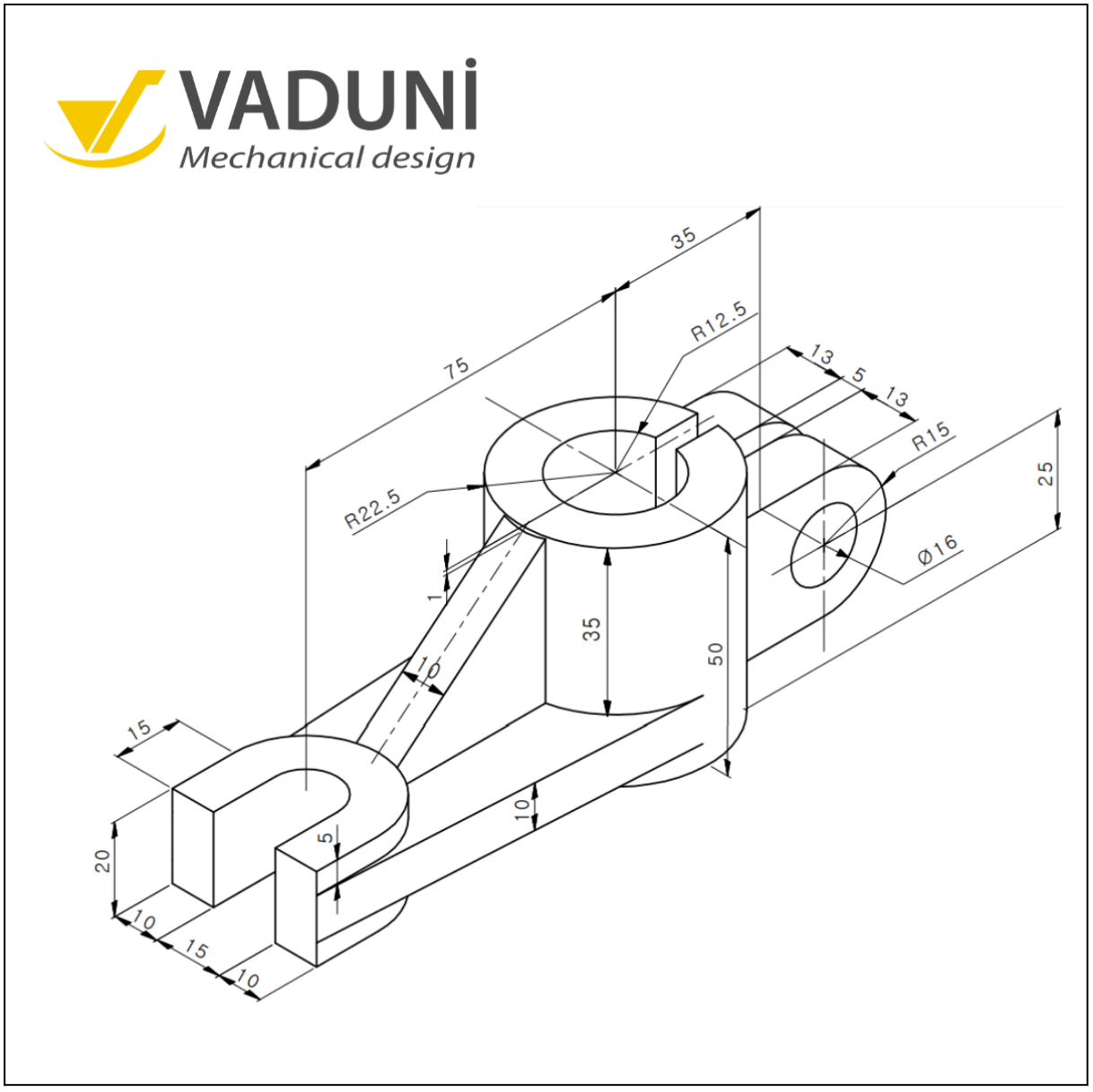
Bài tập 603


VADUNİ
Mechanical design
32
64
24
14
13
14
54
14
R8
75
6
24
25
50
90

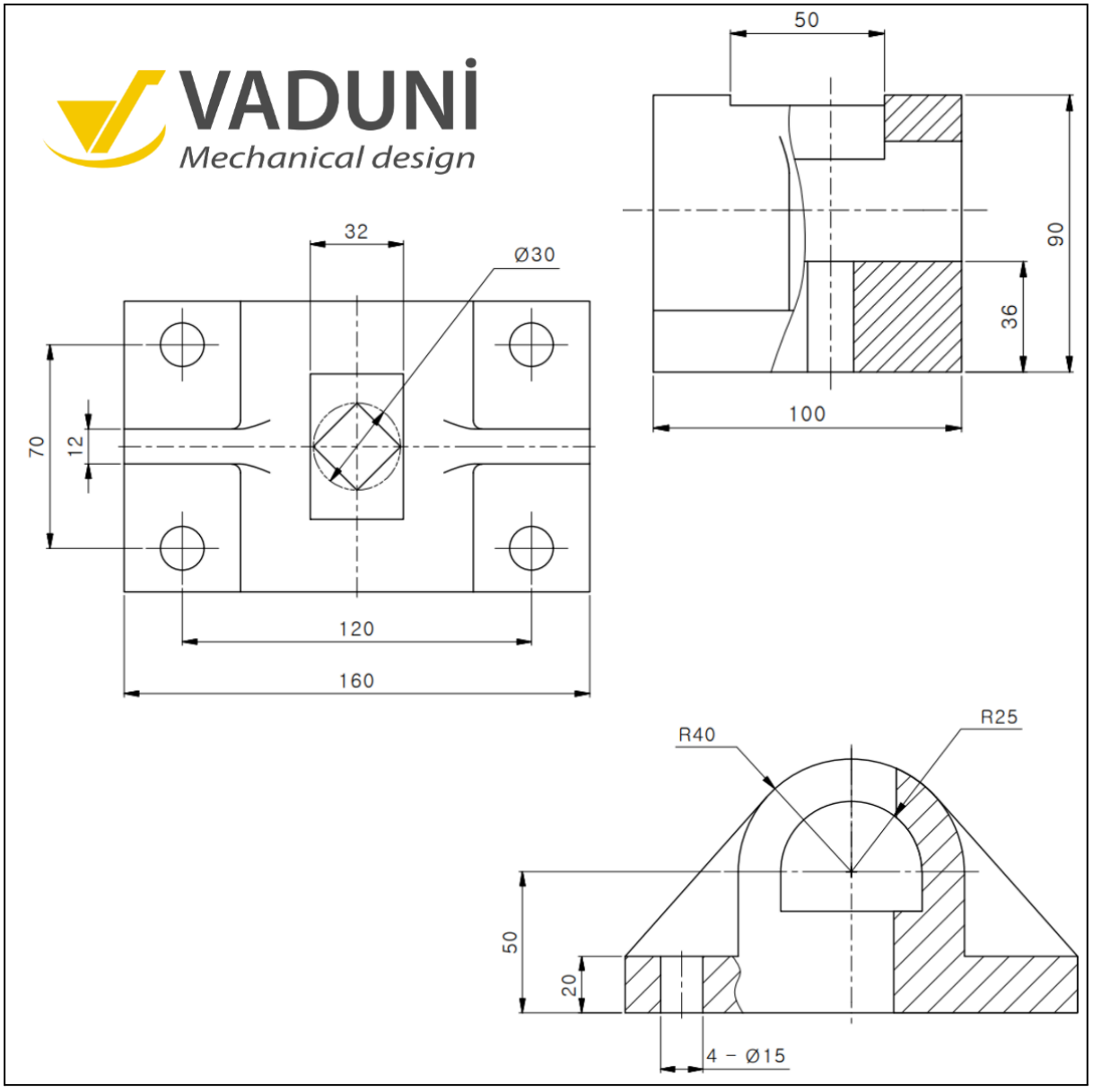
Bài tập 604


VADUNI
Mechanical design
40
4
4
90°
11
6
6
34
4 - 9 드릴
38
22
19
38
30°
45
20
R13
76

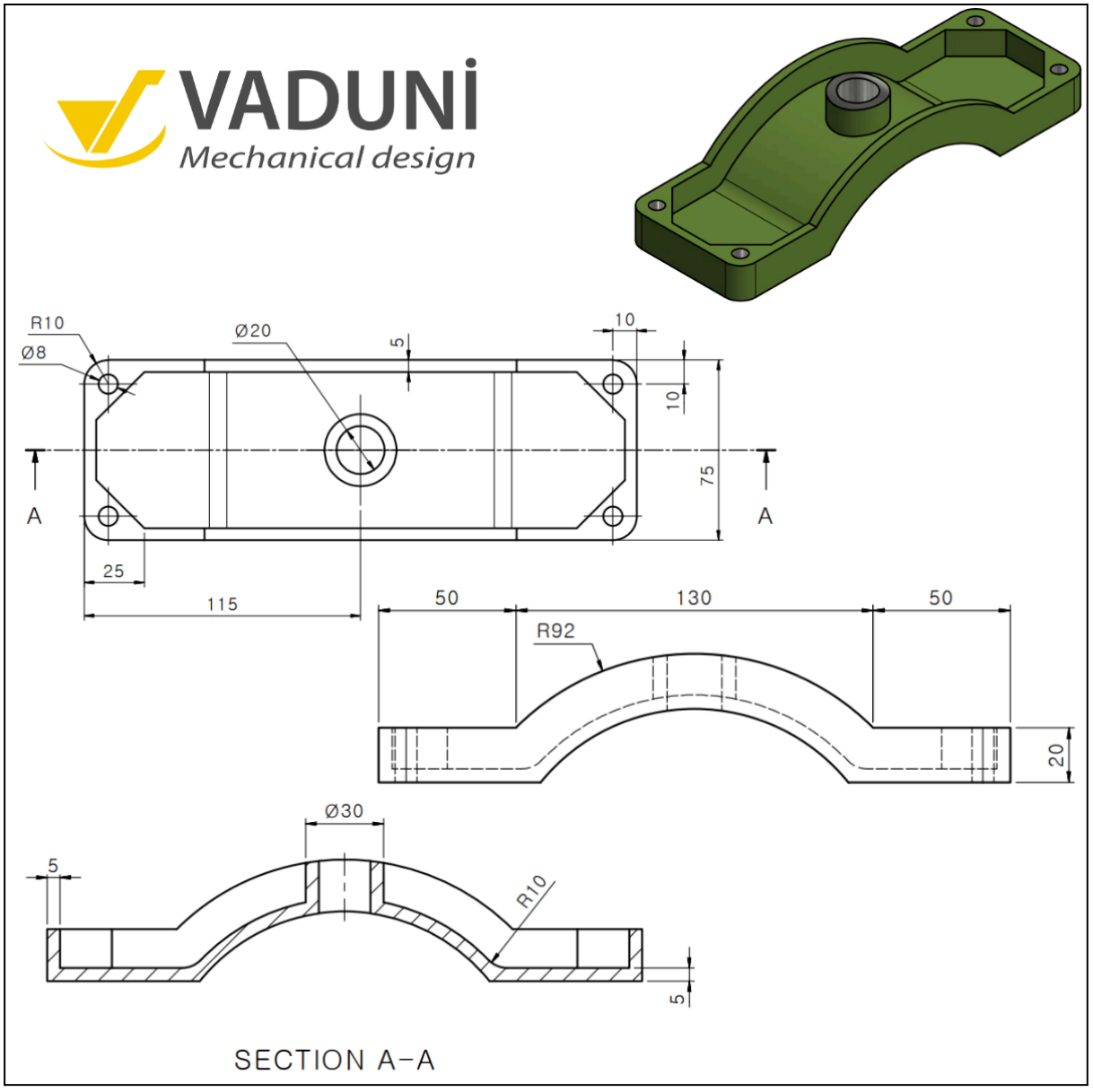
Bài tập 605


VADUNİ
Mechanical design
35
75
R12.5
13
5
13
R15
25
R22.5
Ø16
1
10
35
50
15
20
10
5
10
15
10

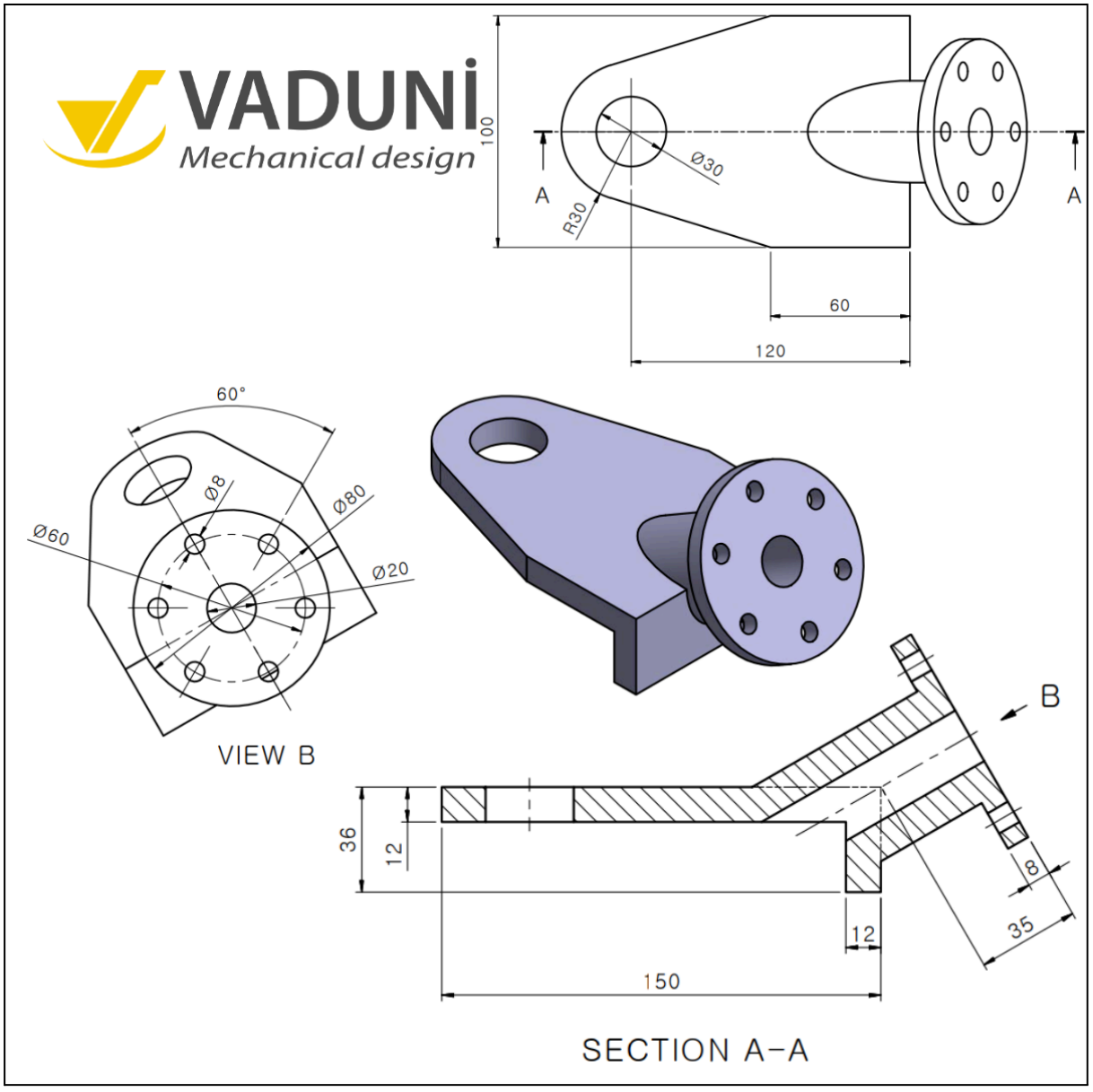
Bài tập 606


VADUNI
Mechanical design
50
90
36
100
32
Ø30
70
12
120
160
R40
R25
50
20
4 – Ø15

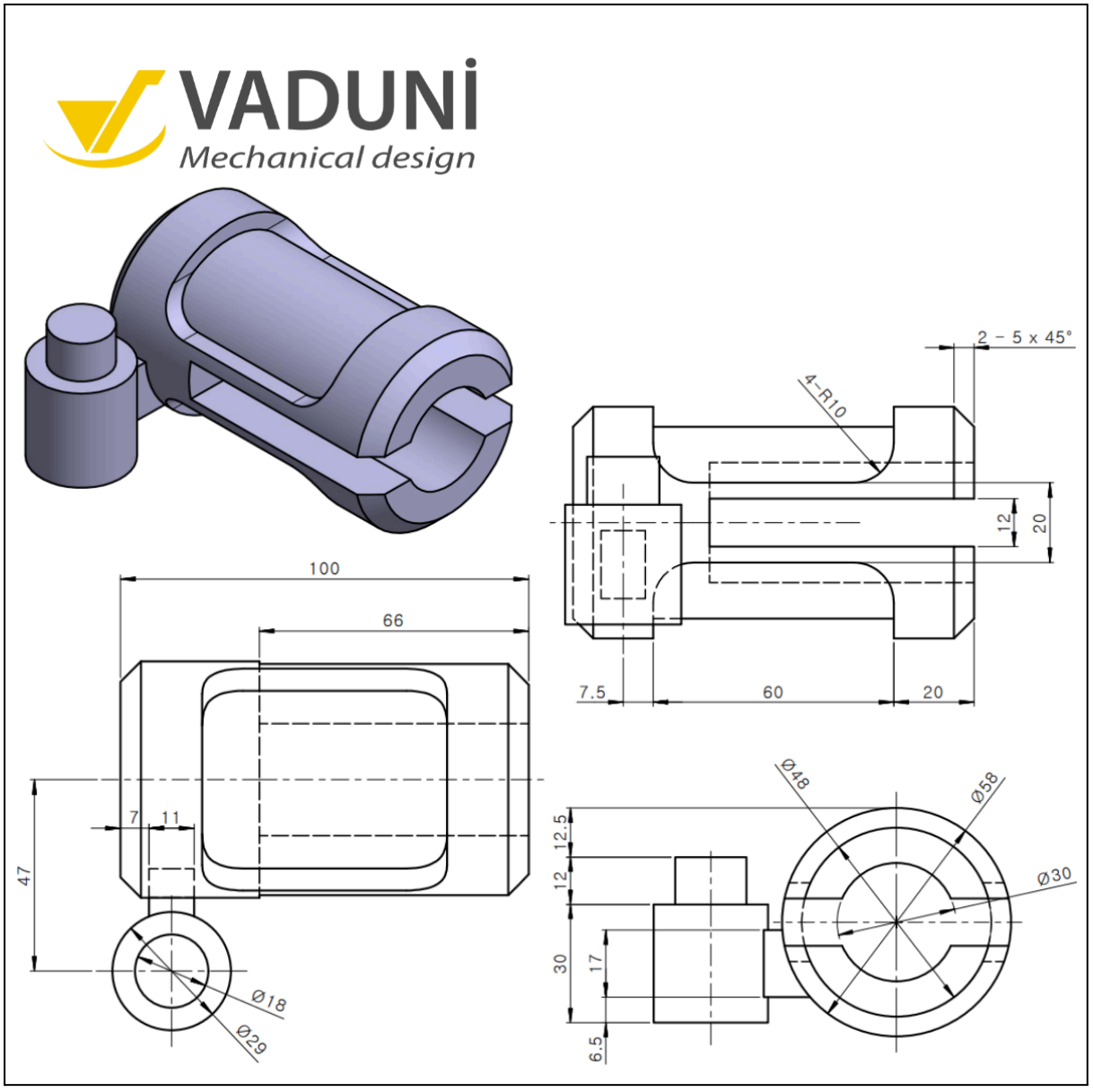
Bài tập 607


VADUNI
Mechanical design
R10
Ø8
Ø20
5
10
10
75
A
A
25
115
50
130
50
R92
20
Ø30
5
R10
5
SECTION A–A

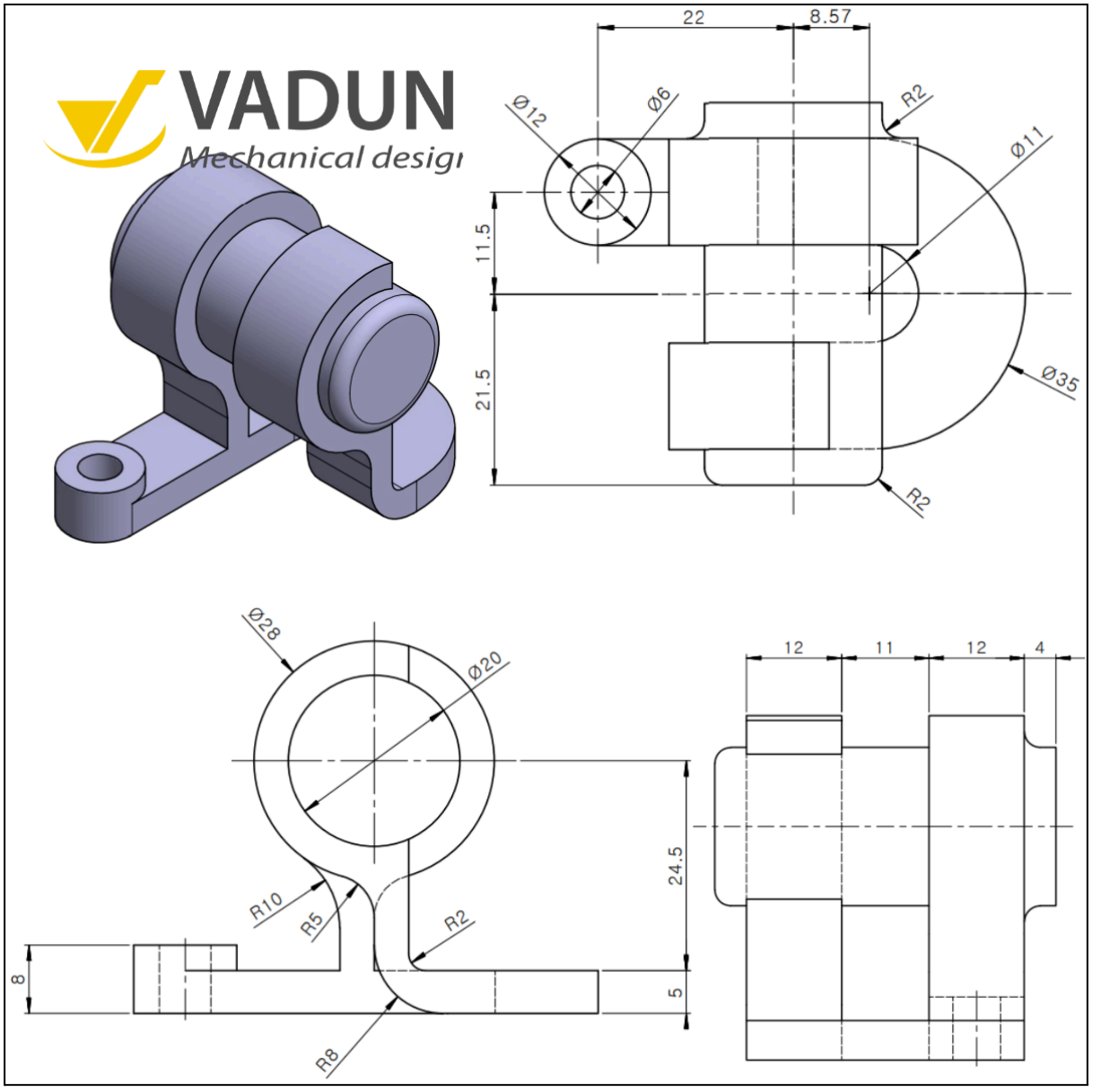
Bài tập 608


VADUNI
Mechanical design
100
Ø30
R30
A
A
60
120
60°
Ø8
Ø80
Ø60
Ø20
VIEW B
B
36
12
12
8
35
150
SECTION A-A

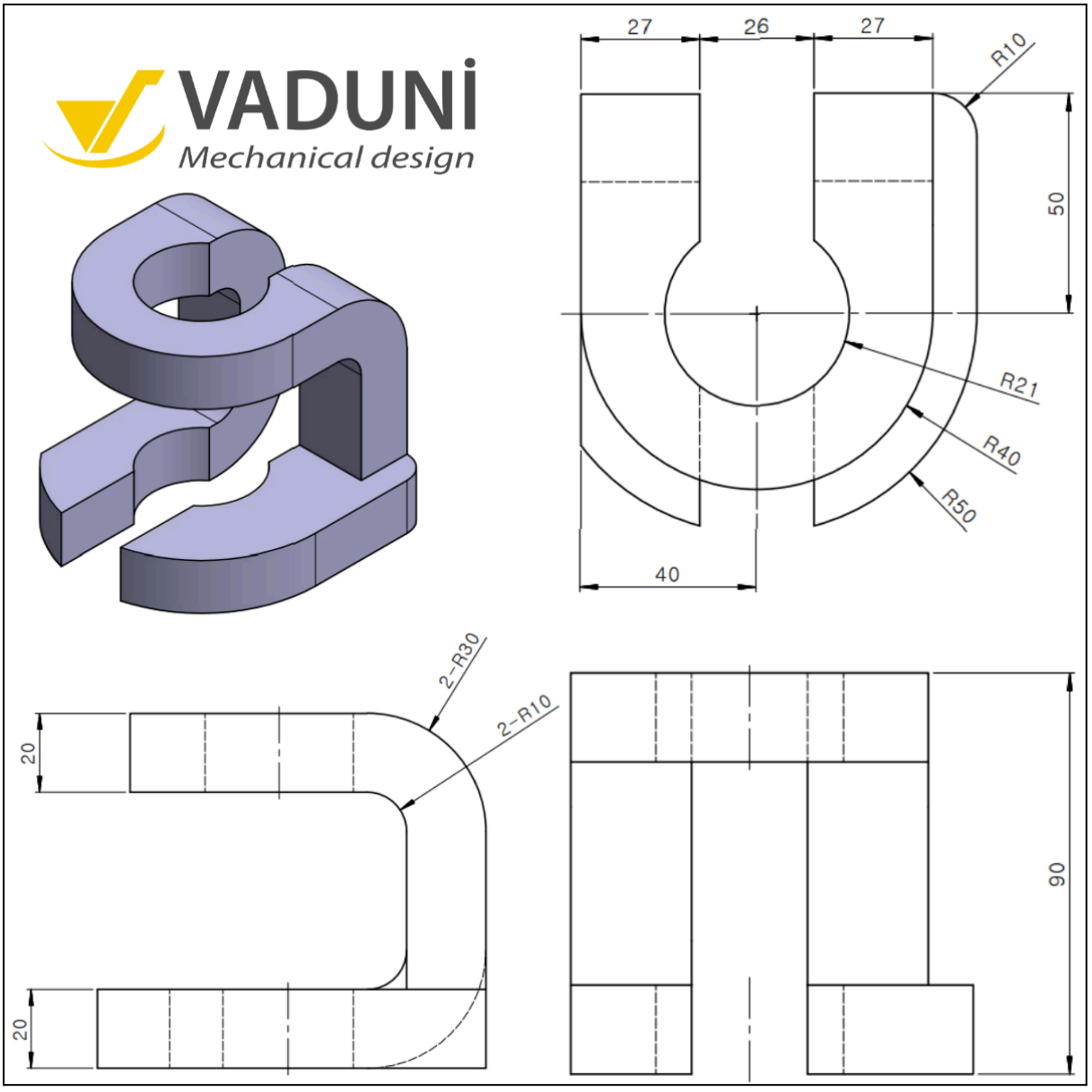
Bài tập 609


VADUNİ
Mechanical design
2 – 5 x 45°
4-R10
12
20
7.5
60
20
100
66
7
11
47
Ø18
Ø29
Ø48
Ø58
Ø30
12.5
12
30
17
6.5

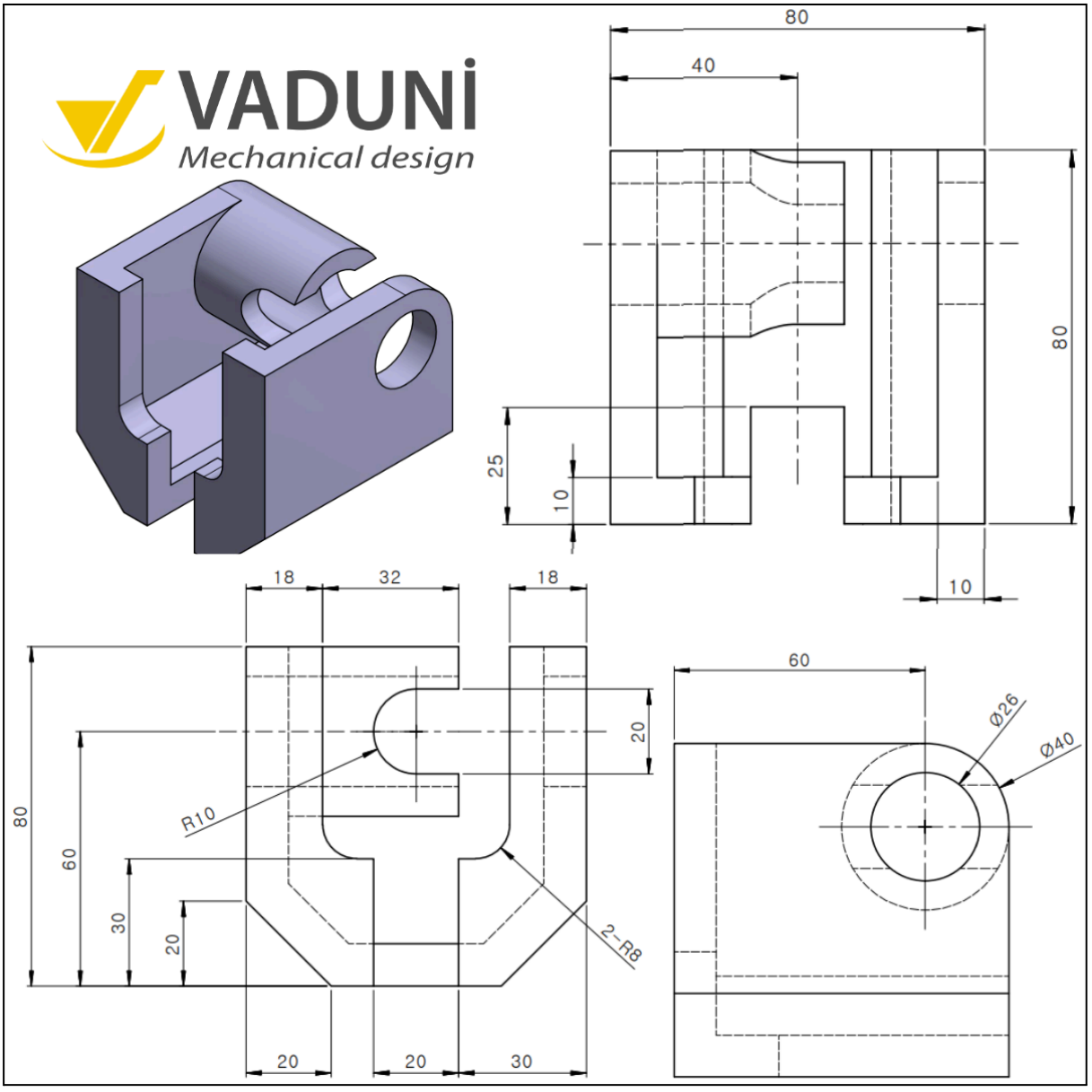
Bài tập 610


VADUN
Mechanical desig
22
8.57
Ø12
Ø6
R2
Ø11
11.5
21.5
Ø35
R2
Ø28
Ø20
12
11
12
4
R10
R5
R2
24.5
8
5
R8

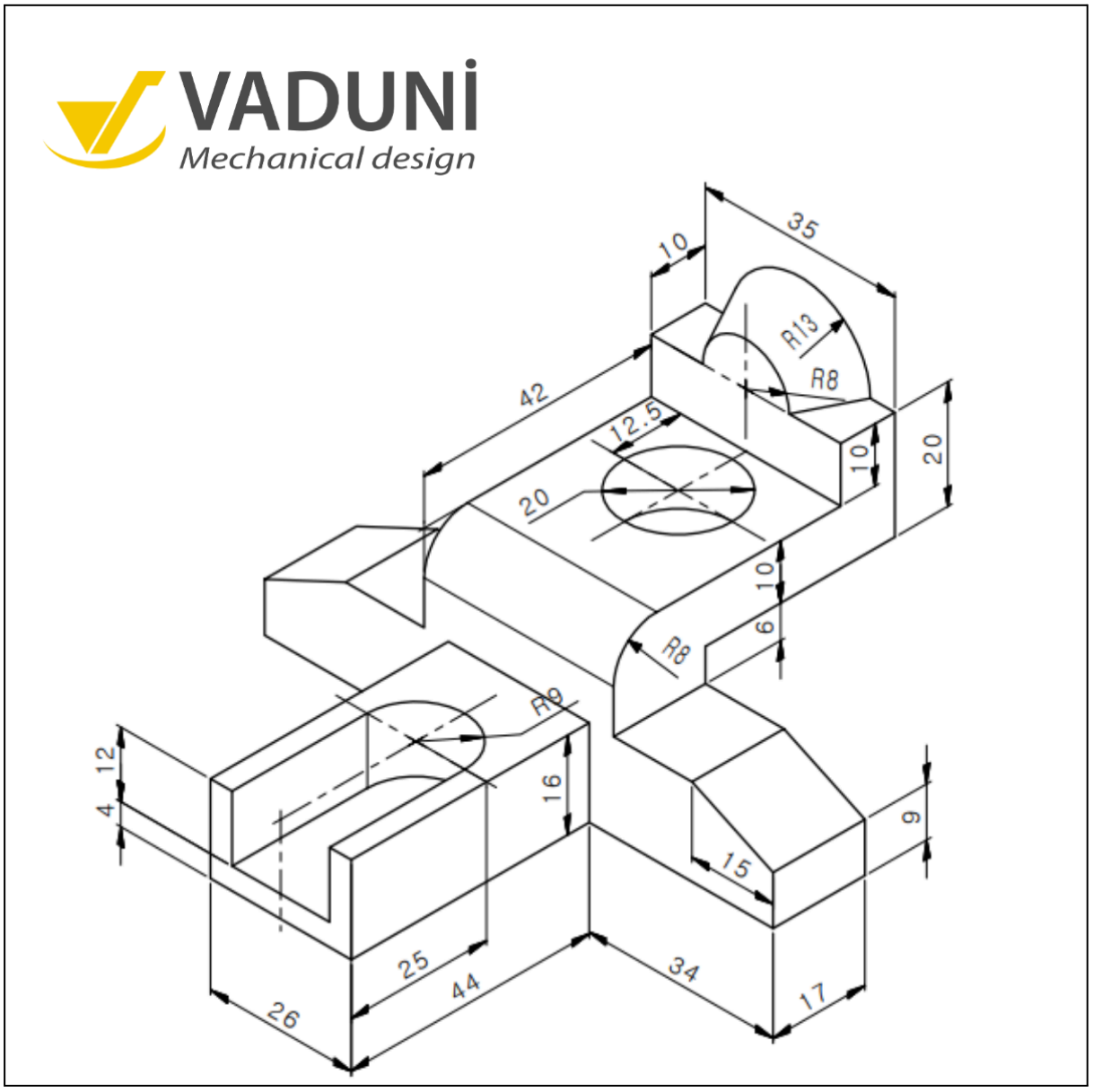
Bài tập 611


VADUNI
Mechanical design
27
26
27
R10
50
R21
R40
R50
40
2-R30
2-R10
20
20
90

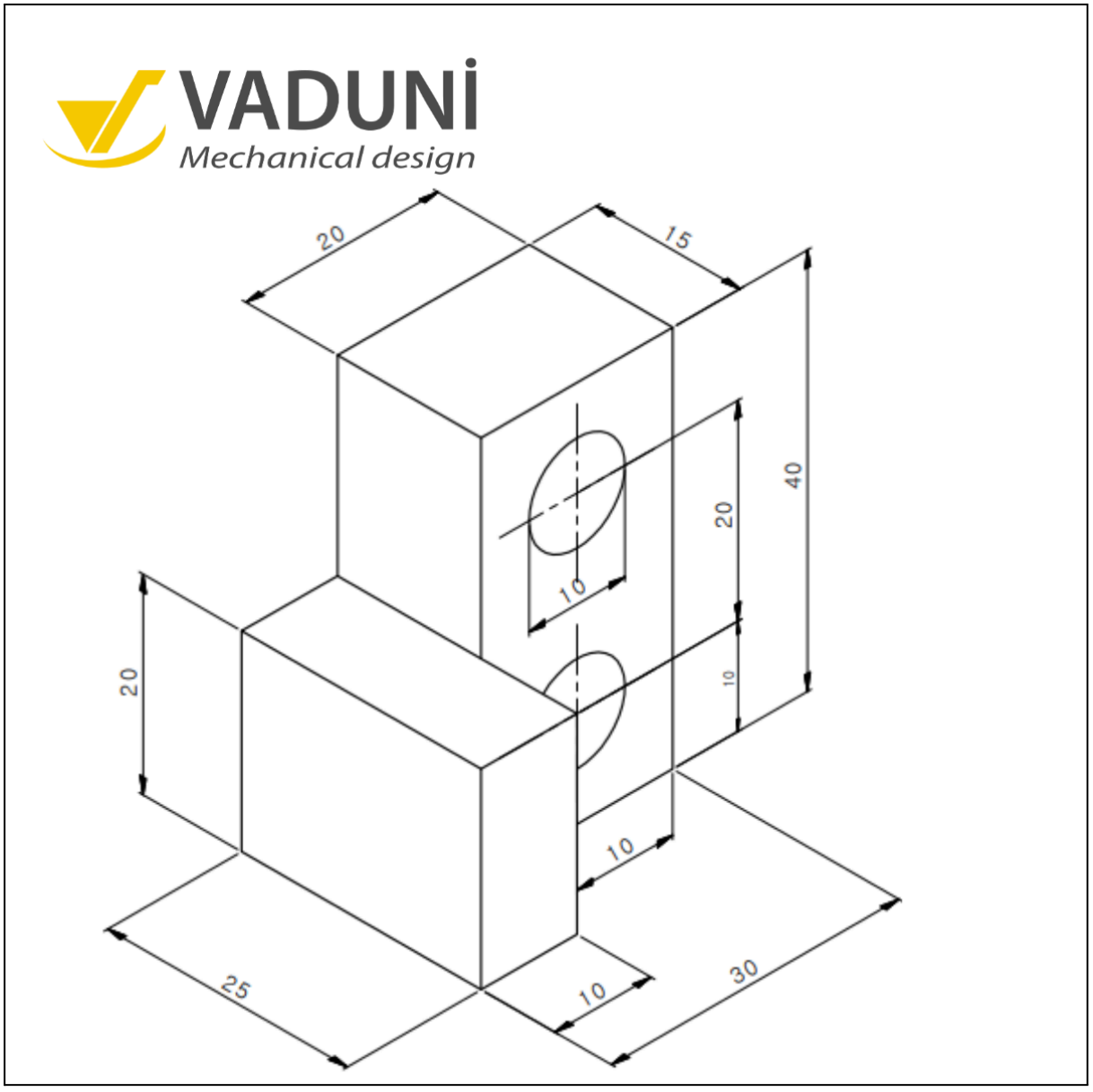
Bài tập 612


VADUNI
Mechanical design
80
40
80
25
10
10
18
32
18
20
R10
80
60
30
20
2-R8
20
20
30
60
Ø26
Ø40

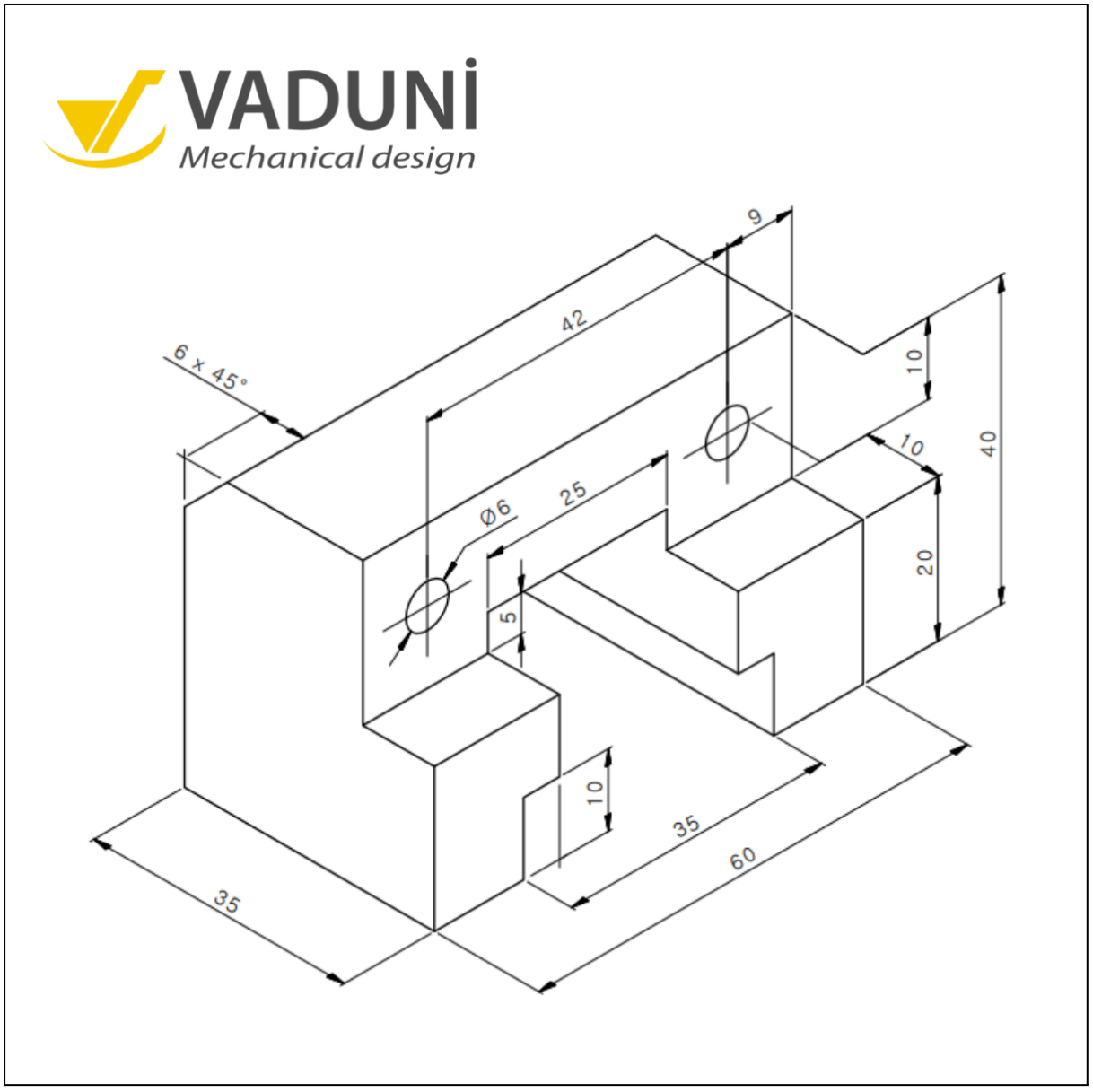
Bài tập 613


VADUNİ
Mechanical design
10
35
R13
R8
42
12.5
20
10
20
10
6
R8
R9
12
4
16
9
15
25
44
34
26
17

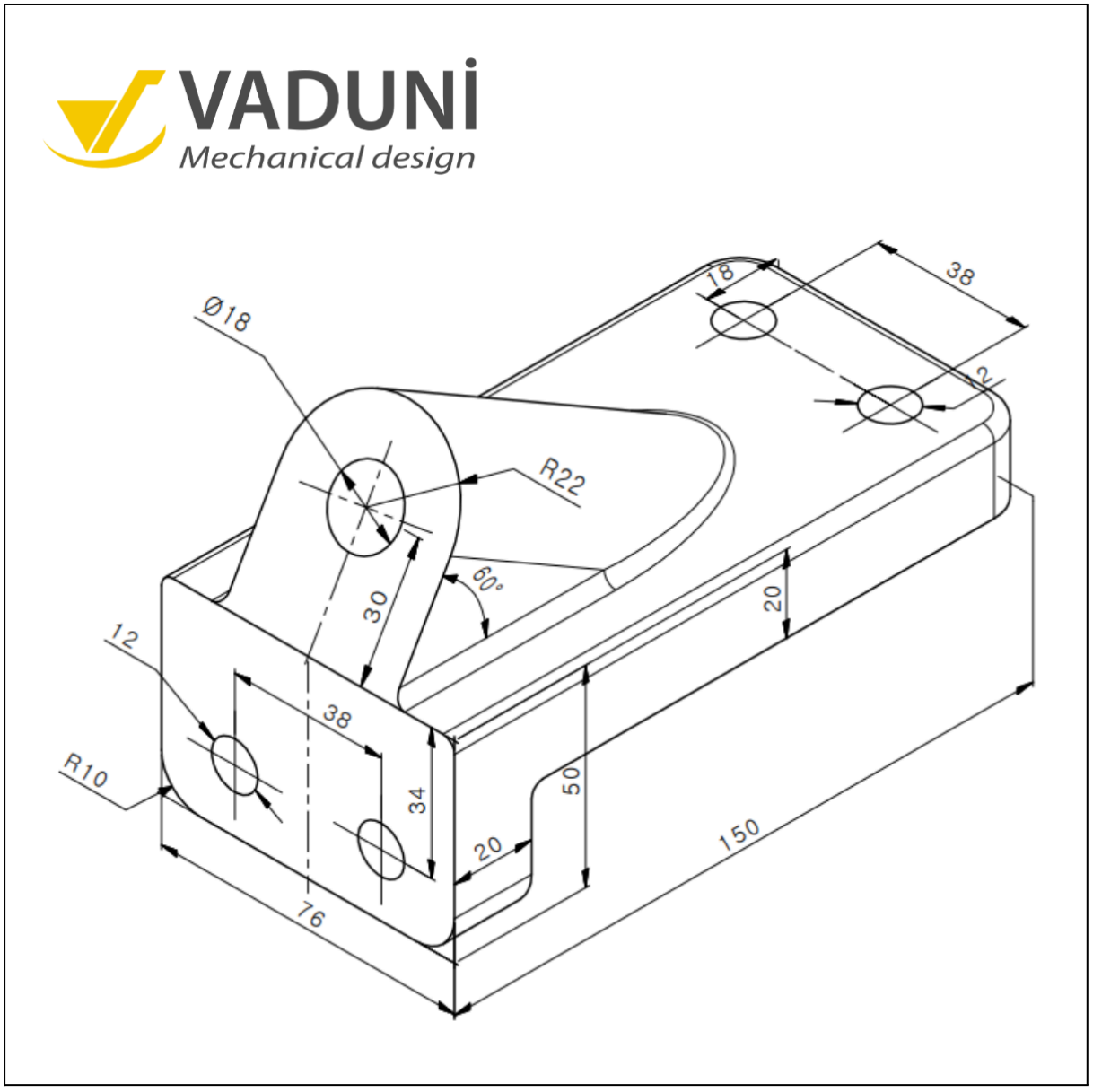
Bài tập 614



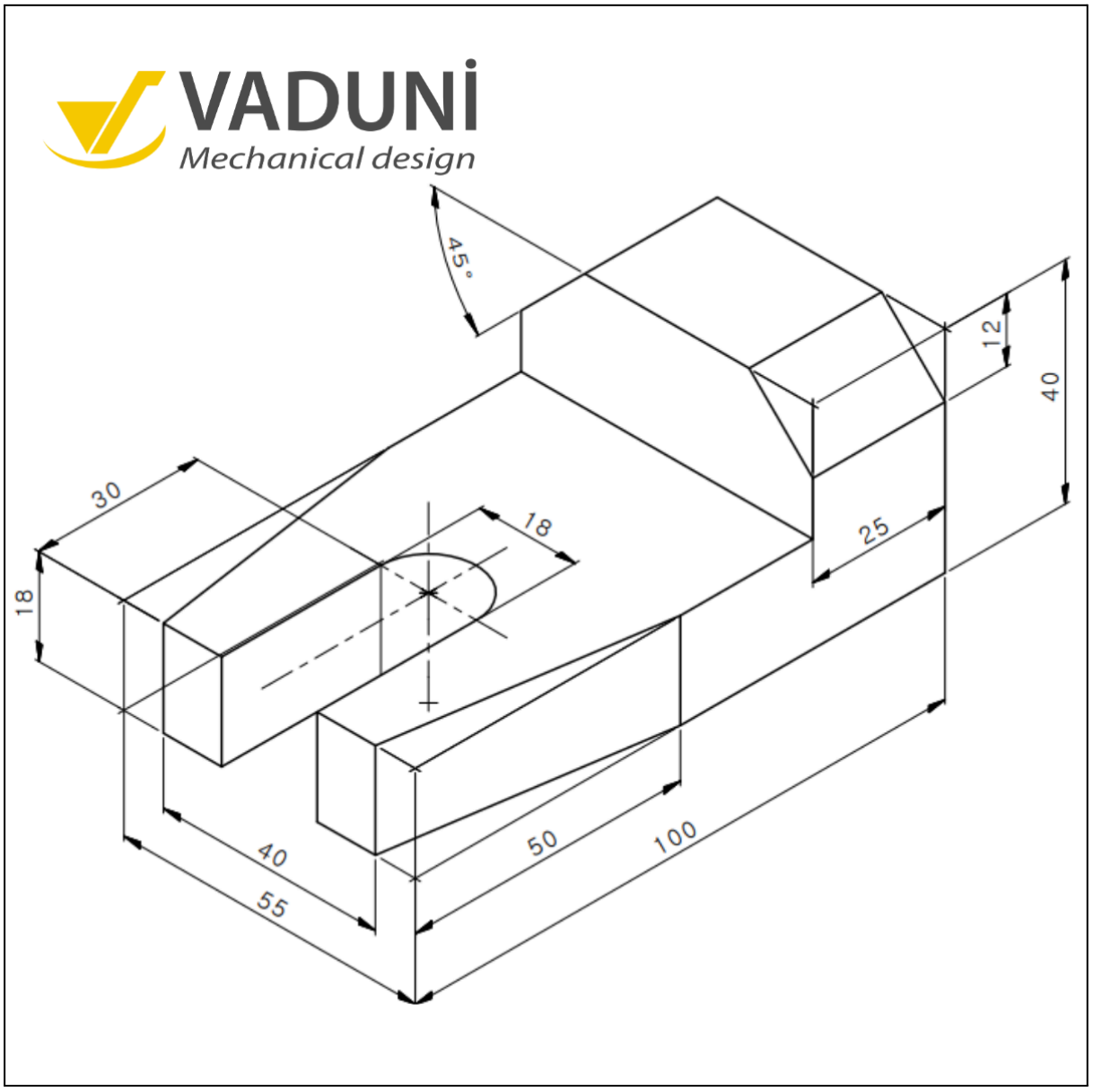
Bài tập 615


VADUNİ
Mechanical design
9
42
6 x 45°
10
10
40
Ø6
25
5
20
10
35
60
35

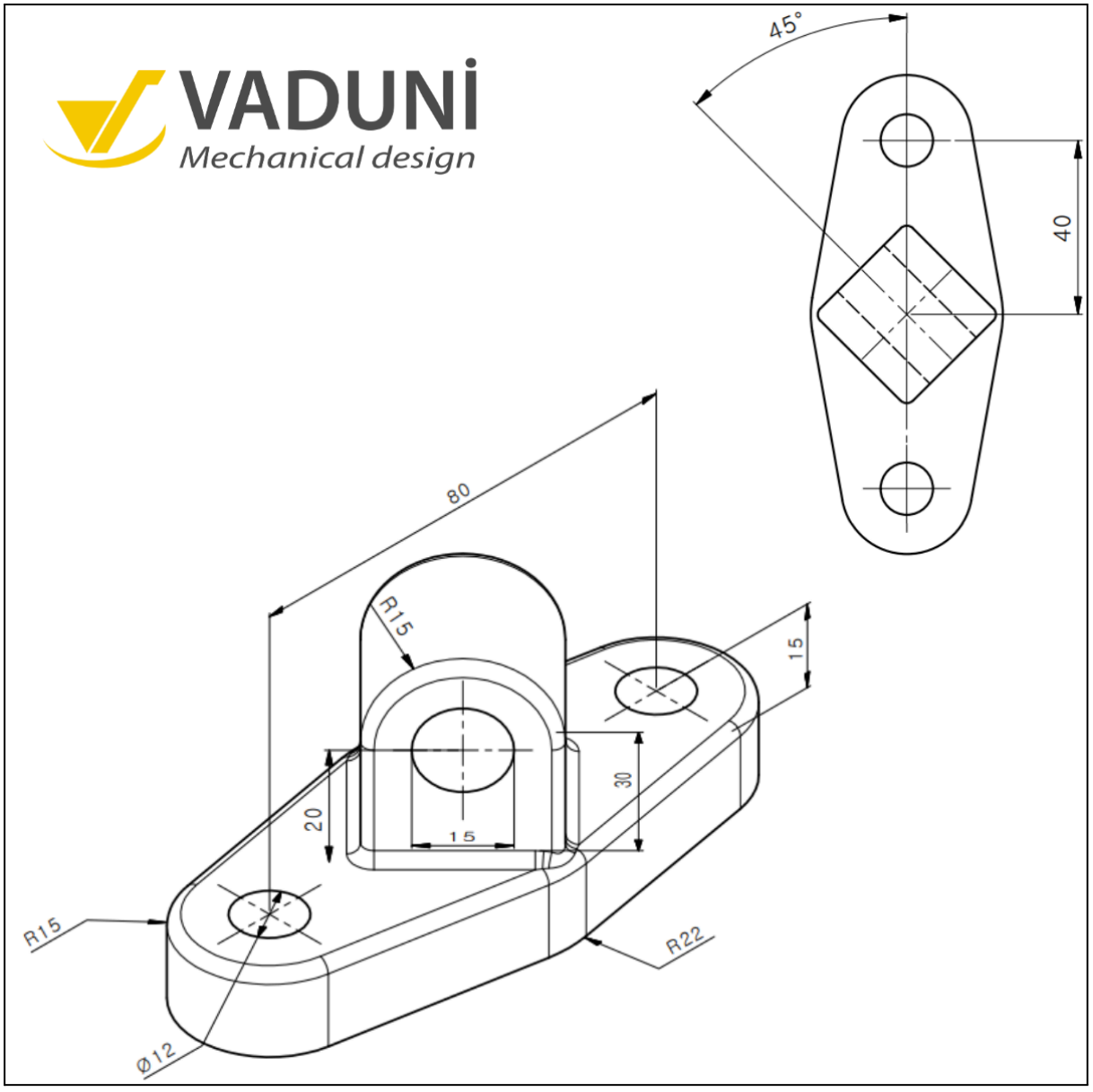
Bài tập 616


VADUNİ
Mechanical design
Ø18
R22
30
60°
12
38
R10
34
76
18
38
20
50
20
150

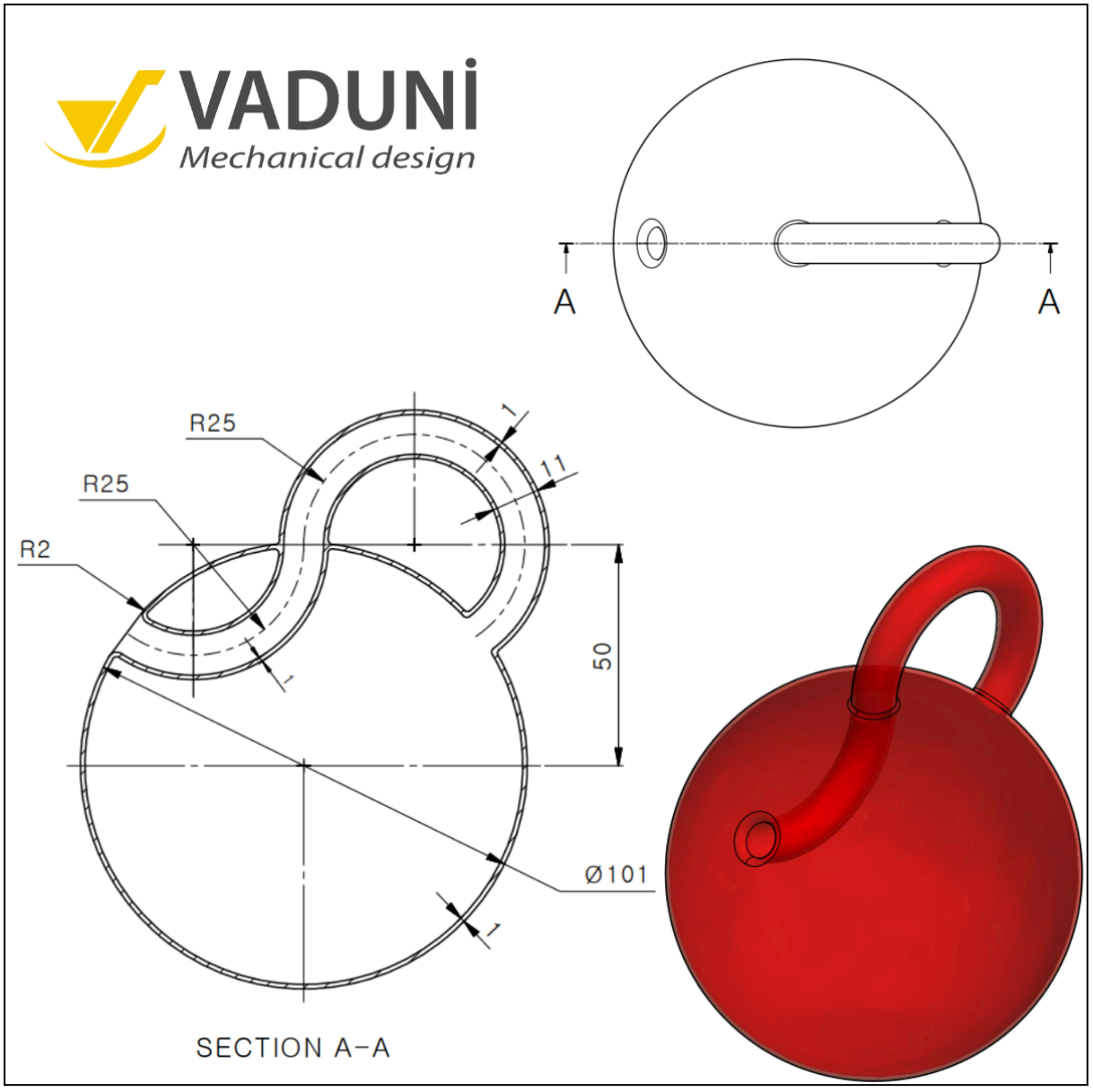
Bài tập 617



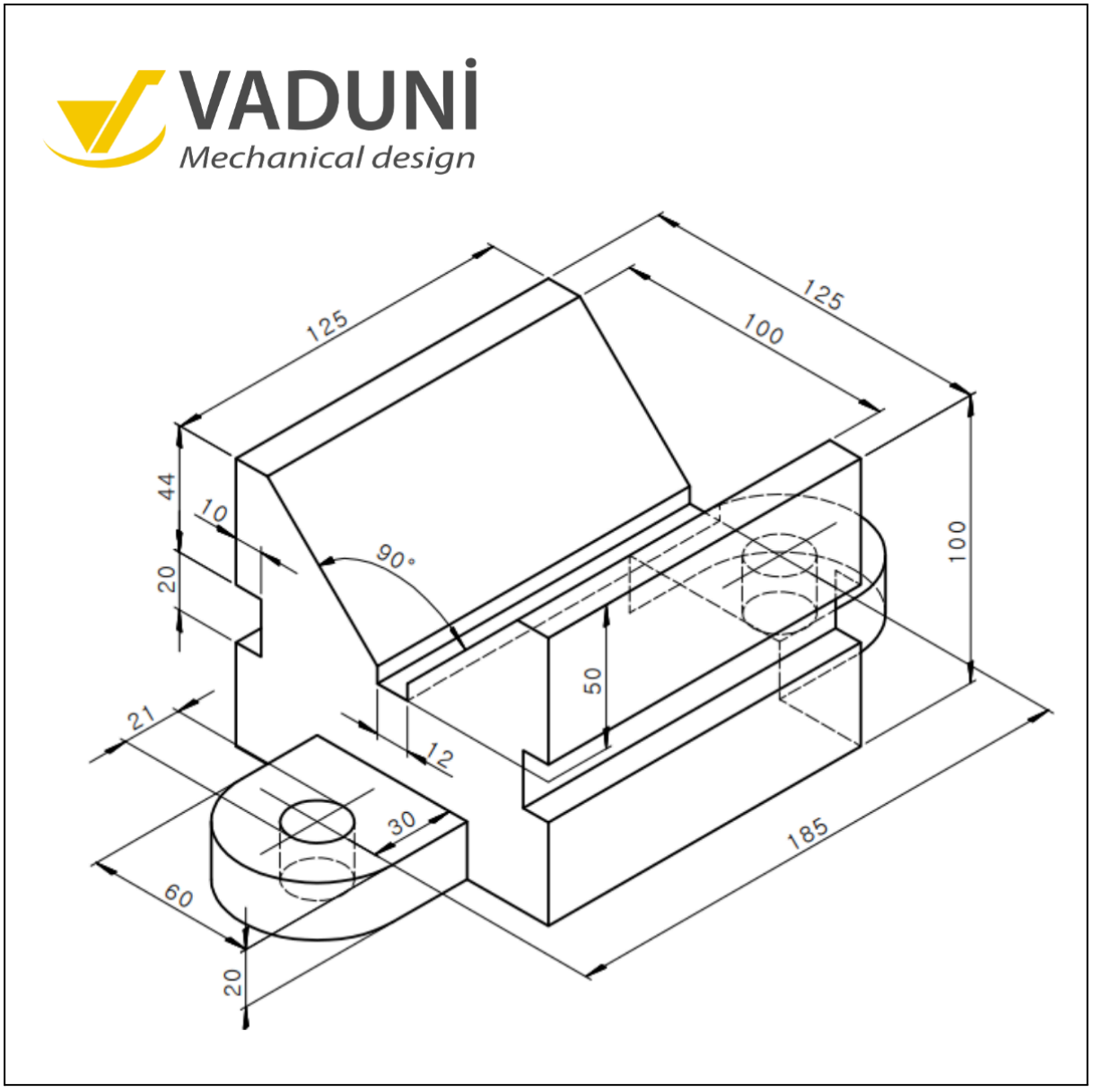
Bài tập 618



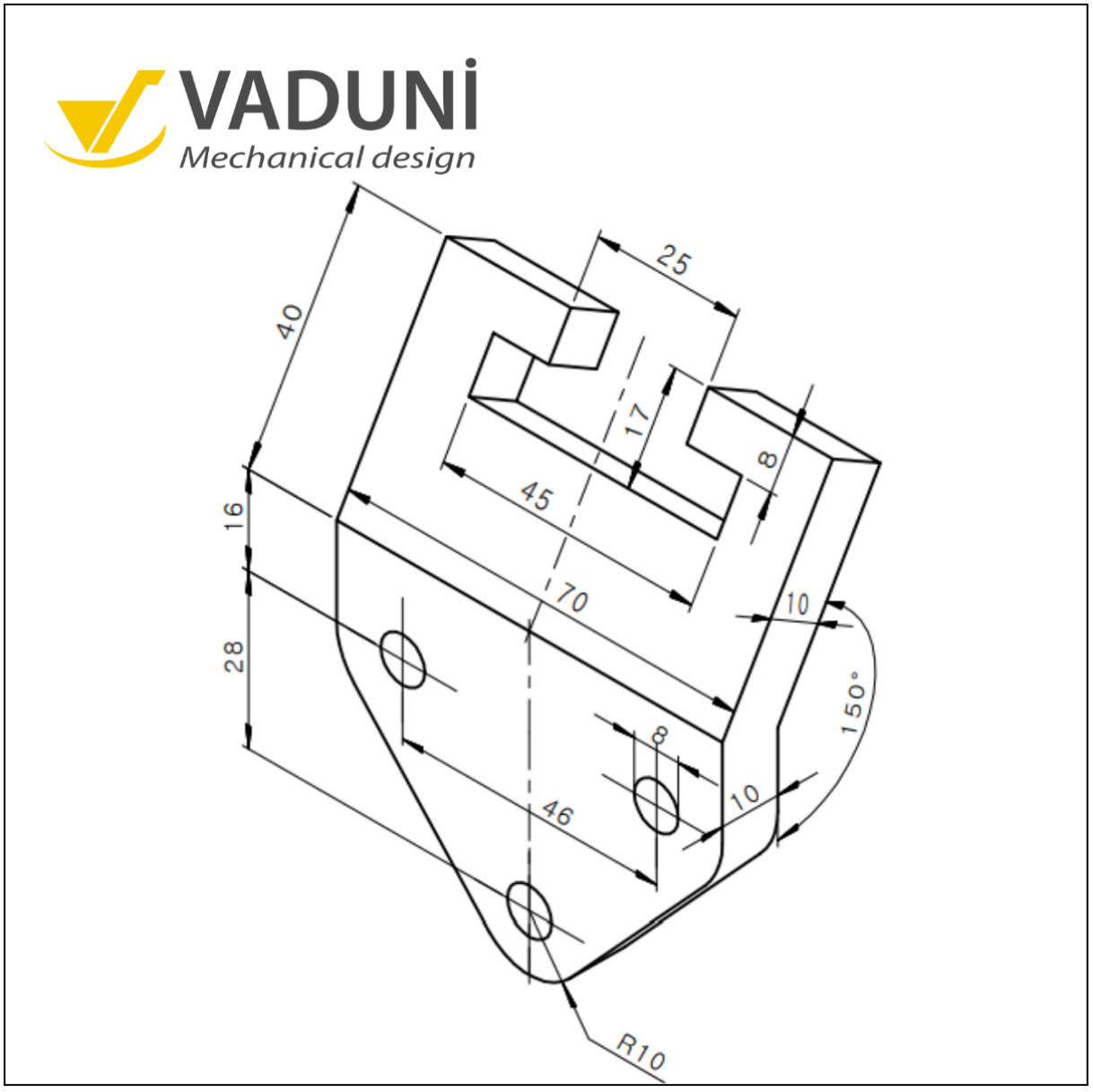
Bài tập 619


VADUNİ
Mechanical design
A
A
R25
R25
R2
1
11
50
1
Ø101
1
SECTION A-A

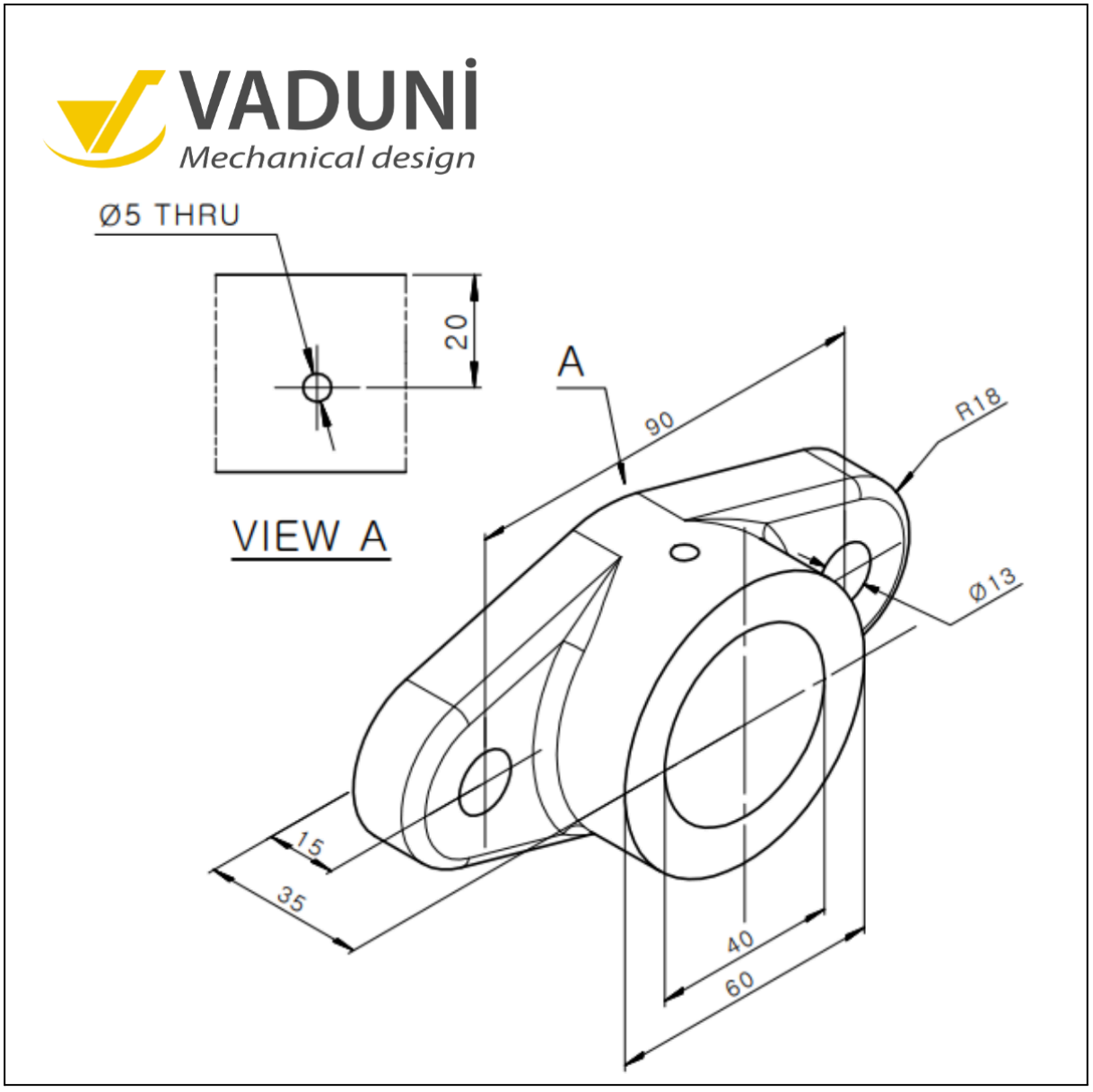
Bài tập 620


VADUNİ
Mechanical design
125
125
100
44
10
20
90°
100
50
21
12
30
185
60
20

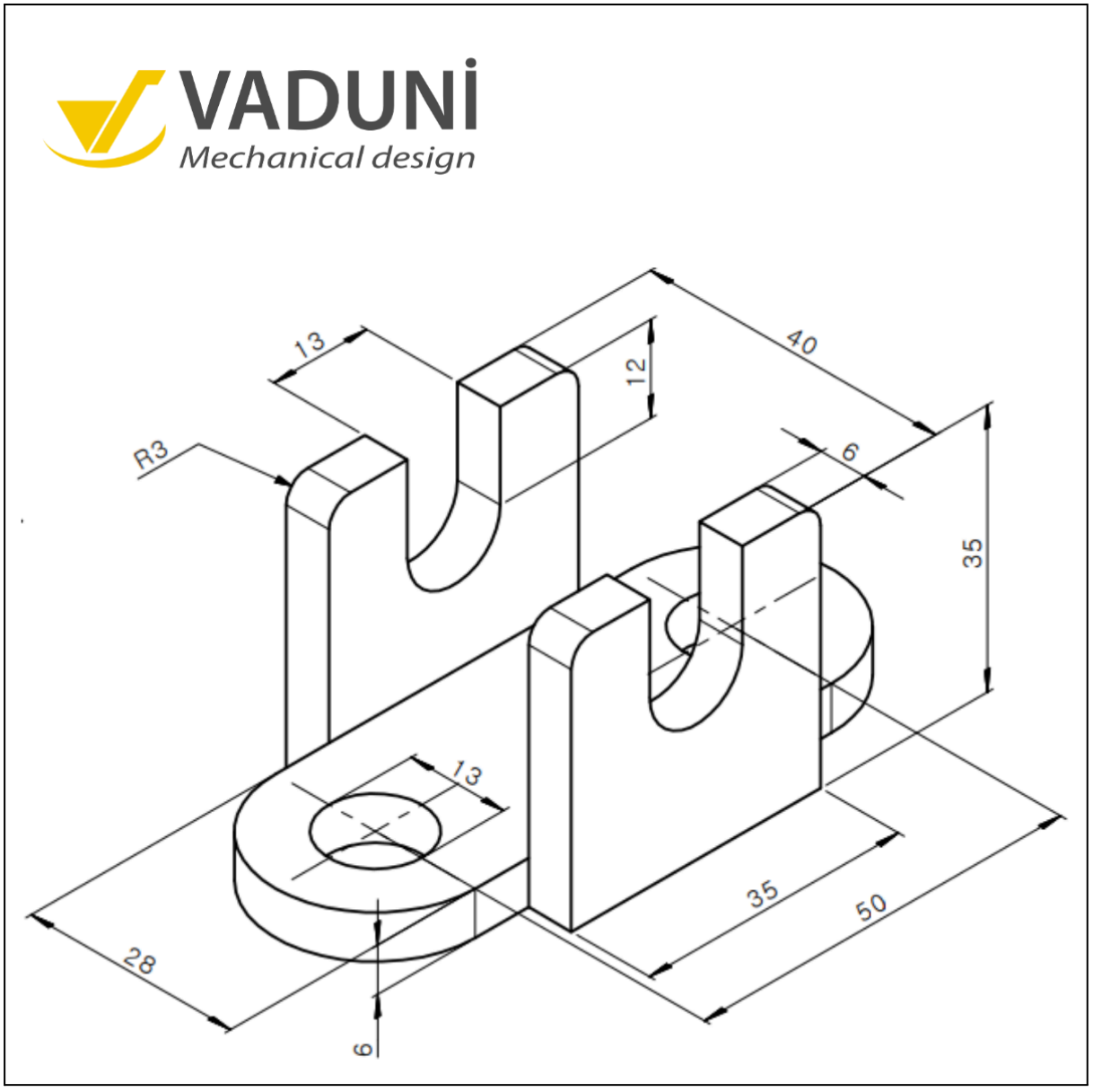
Bài tập 621


VADUNİ
Mechanical design
25
40
17
8
45
16
70
10
28
150°
8
46
10
R10

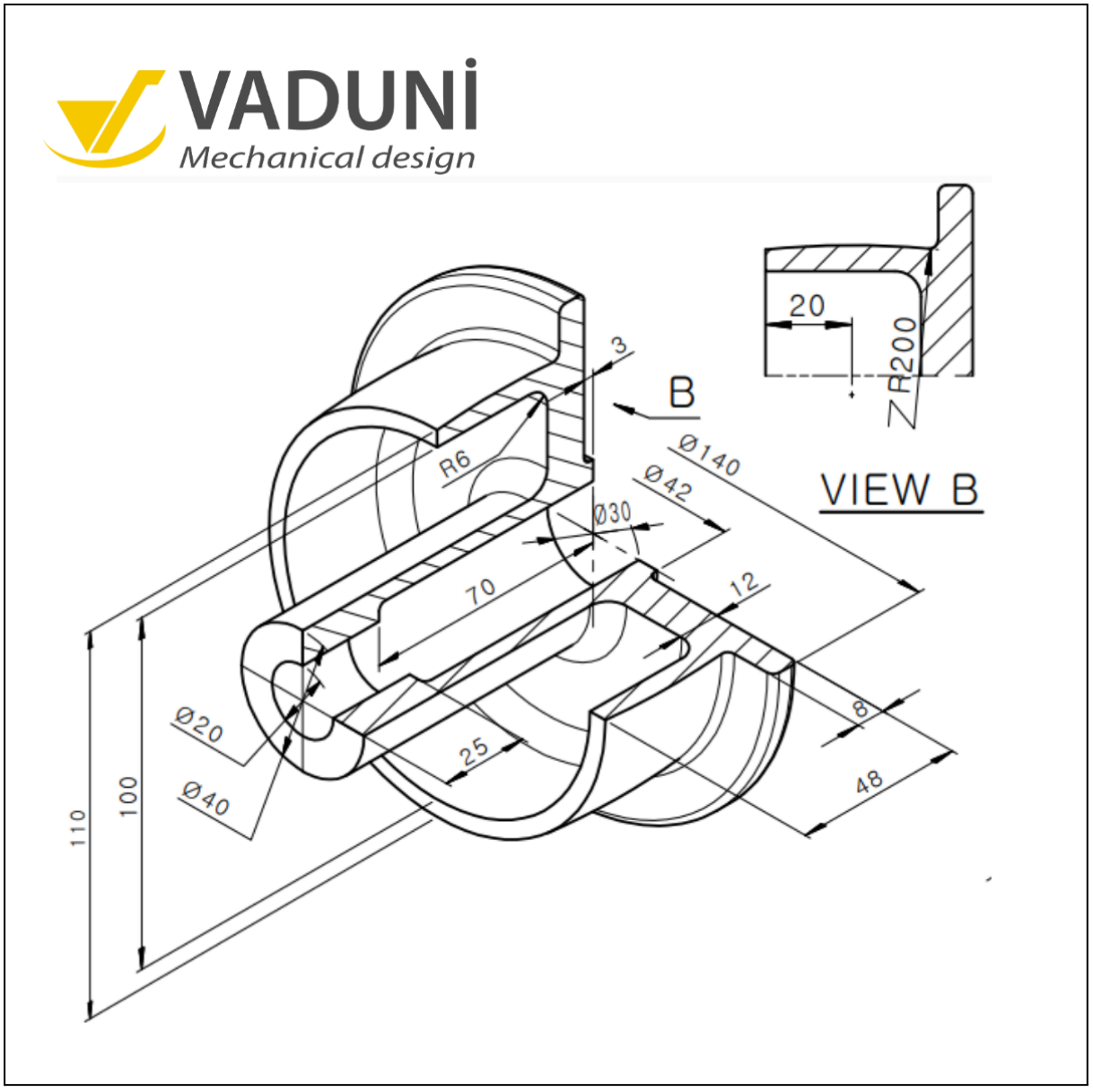
Bài tập 622


VADUNİ
Mechanical design
Ø5 THRU
20
A
VIEW A
90
R18
Ø13
15
35
40
60

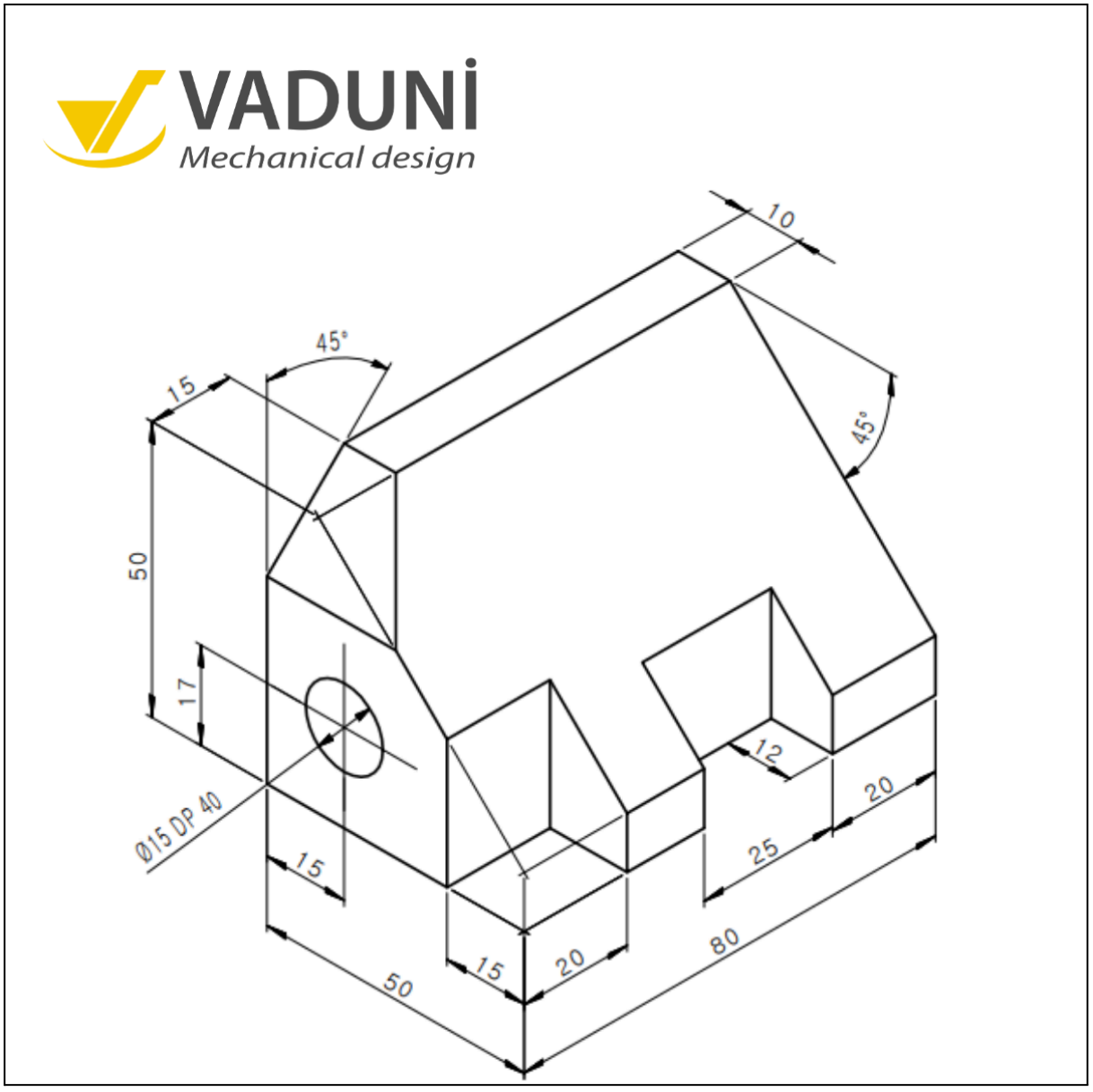
Bài tập 623



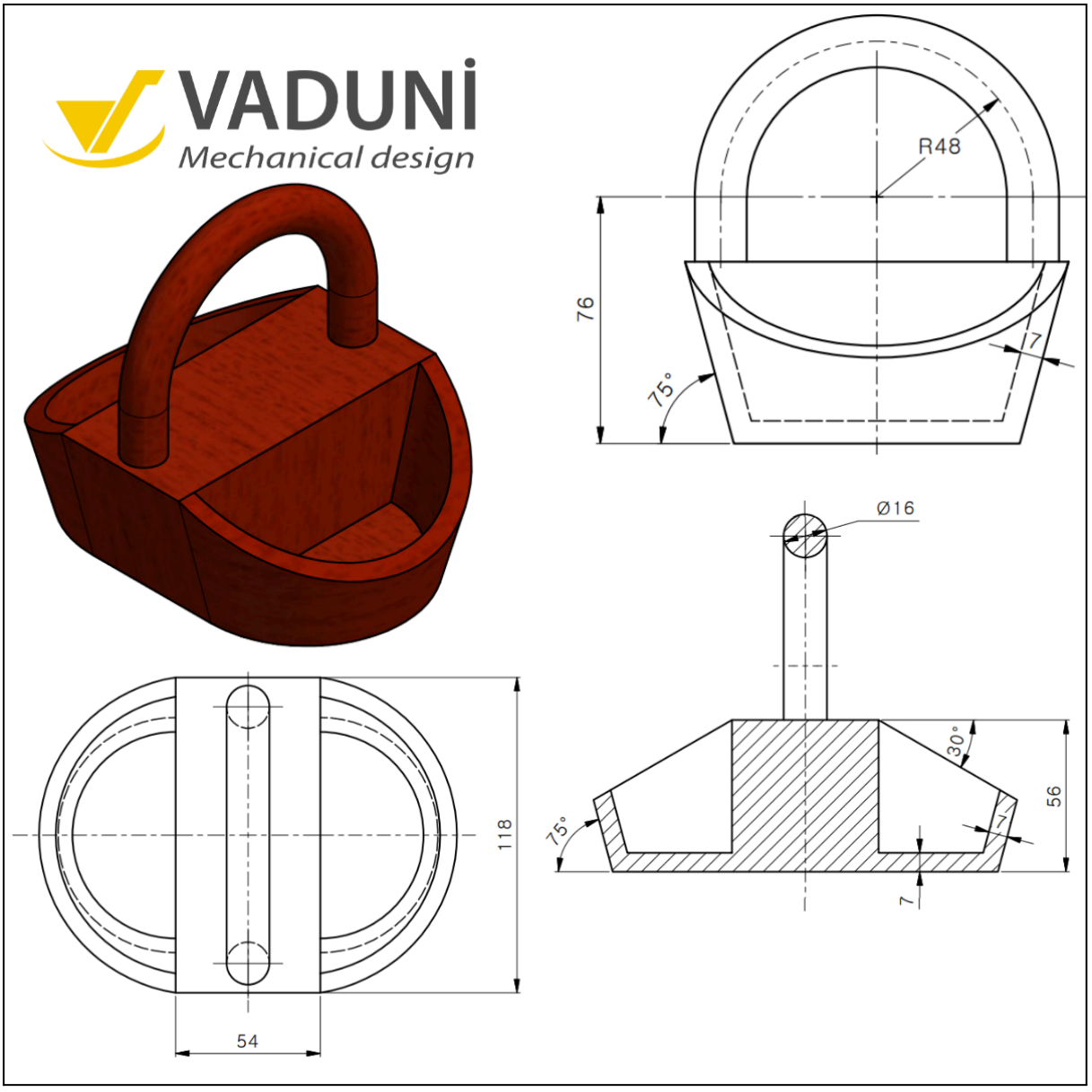
Bài tập 624


VADUNİ
Mechanical design
20
R200
3
B
R6
Ø140
Ø42
Ø30
VIEW B
70
12
8
48
25
Ø20
Ø40
110
100

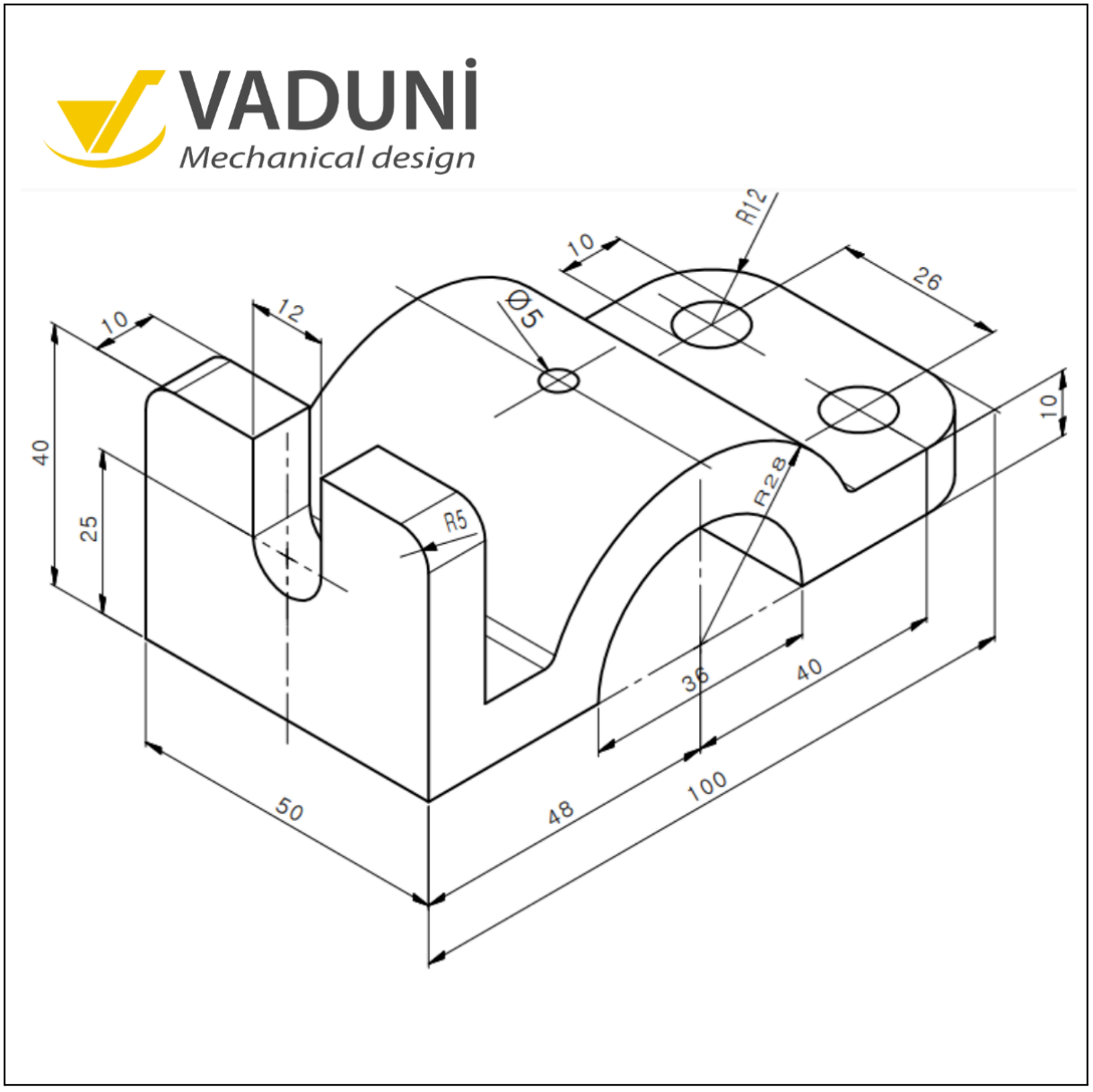
Bài tập 625


VADUNİ
Mechanical design
10
45°
15
45°
50
17
Ø15 DP 40
15
12
20
25
80
15
20
50

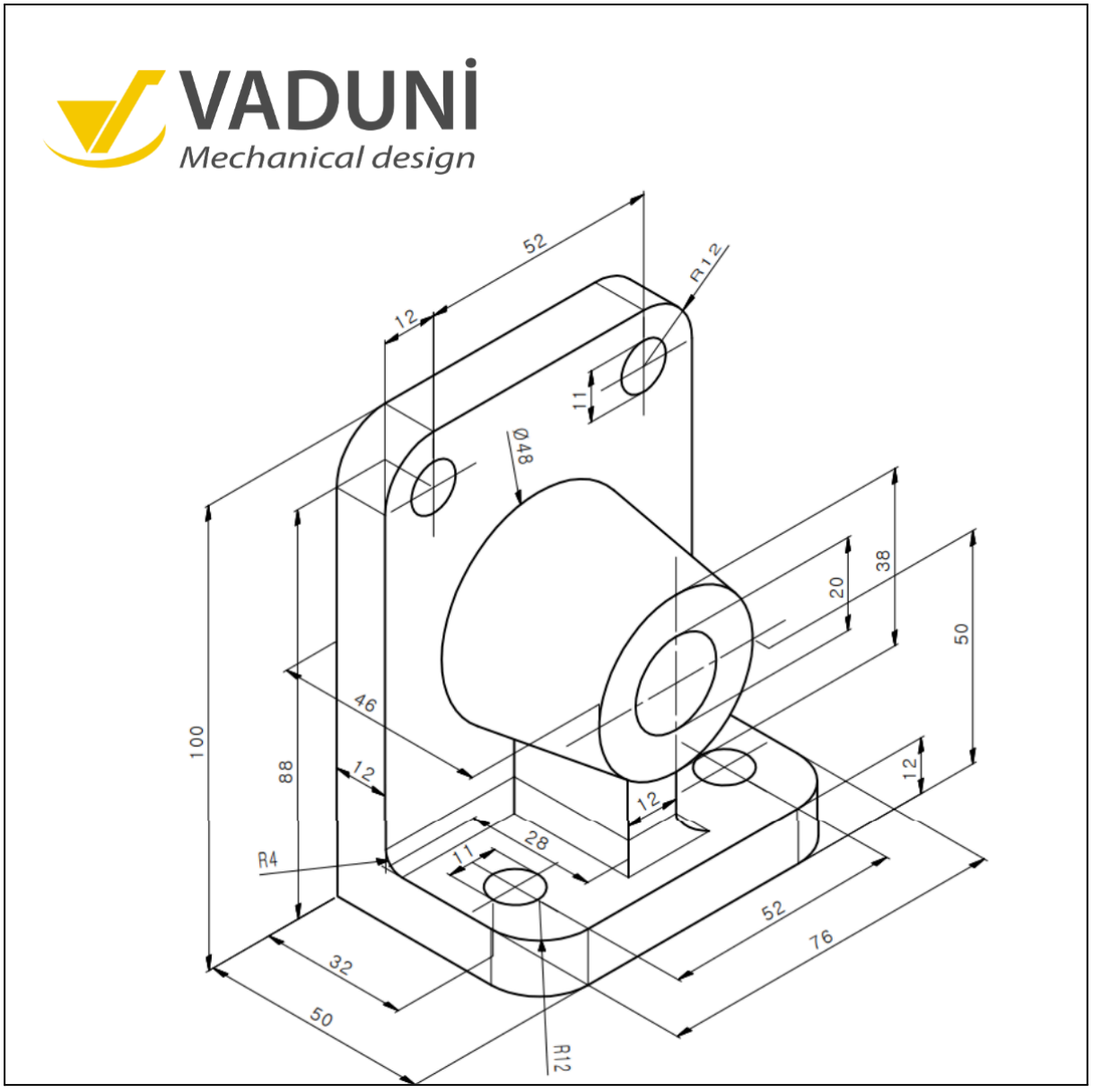
Bài tập 626



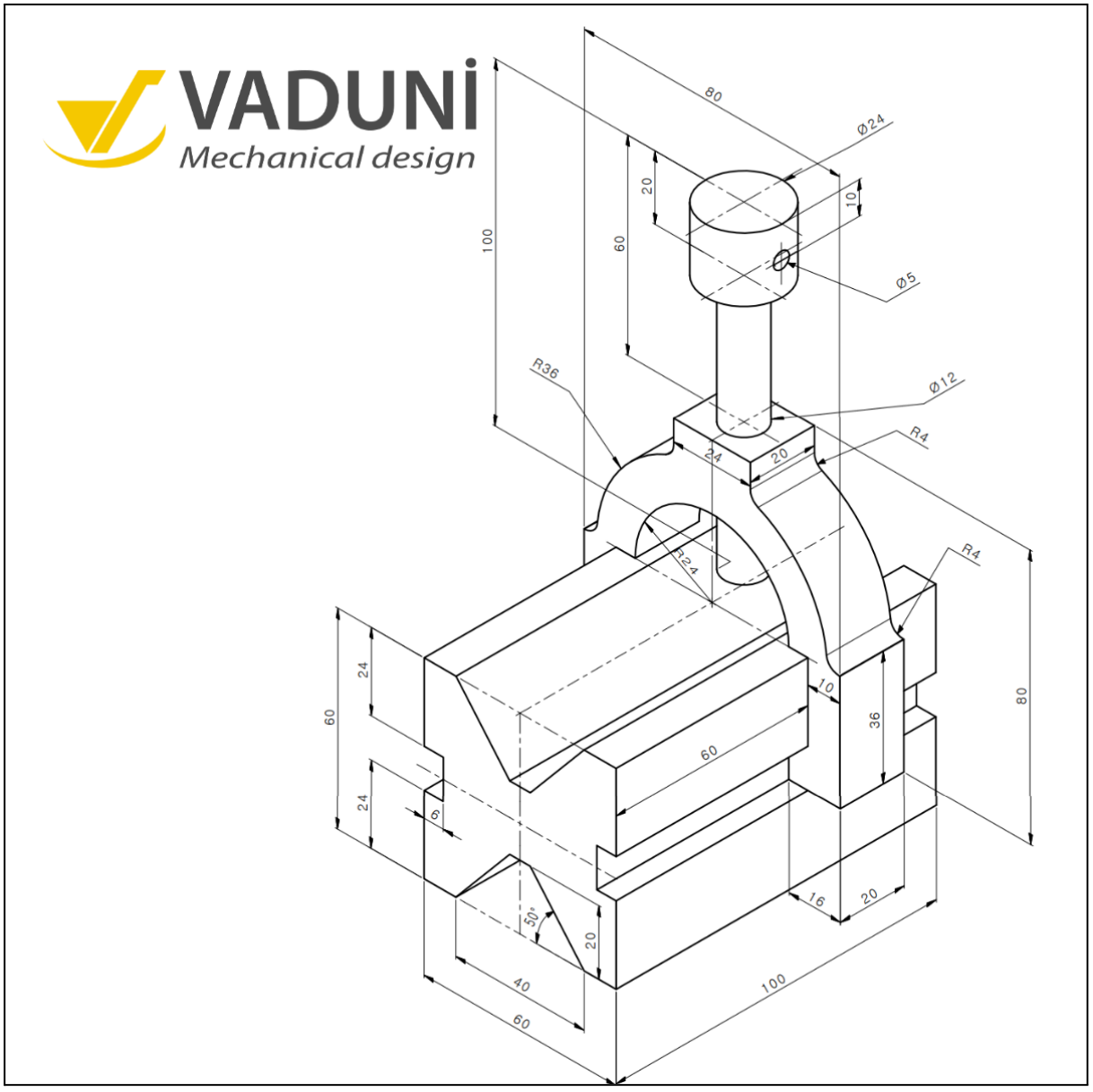
Bài tập 627


VADUNI
Mechanical design
R12
10
26
10
12
Ø5
40
25
R5
R28
10
36
40
50
48
100

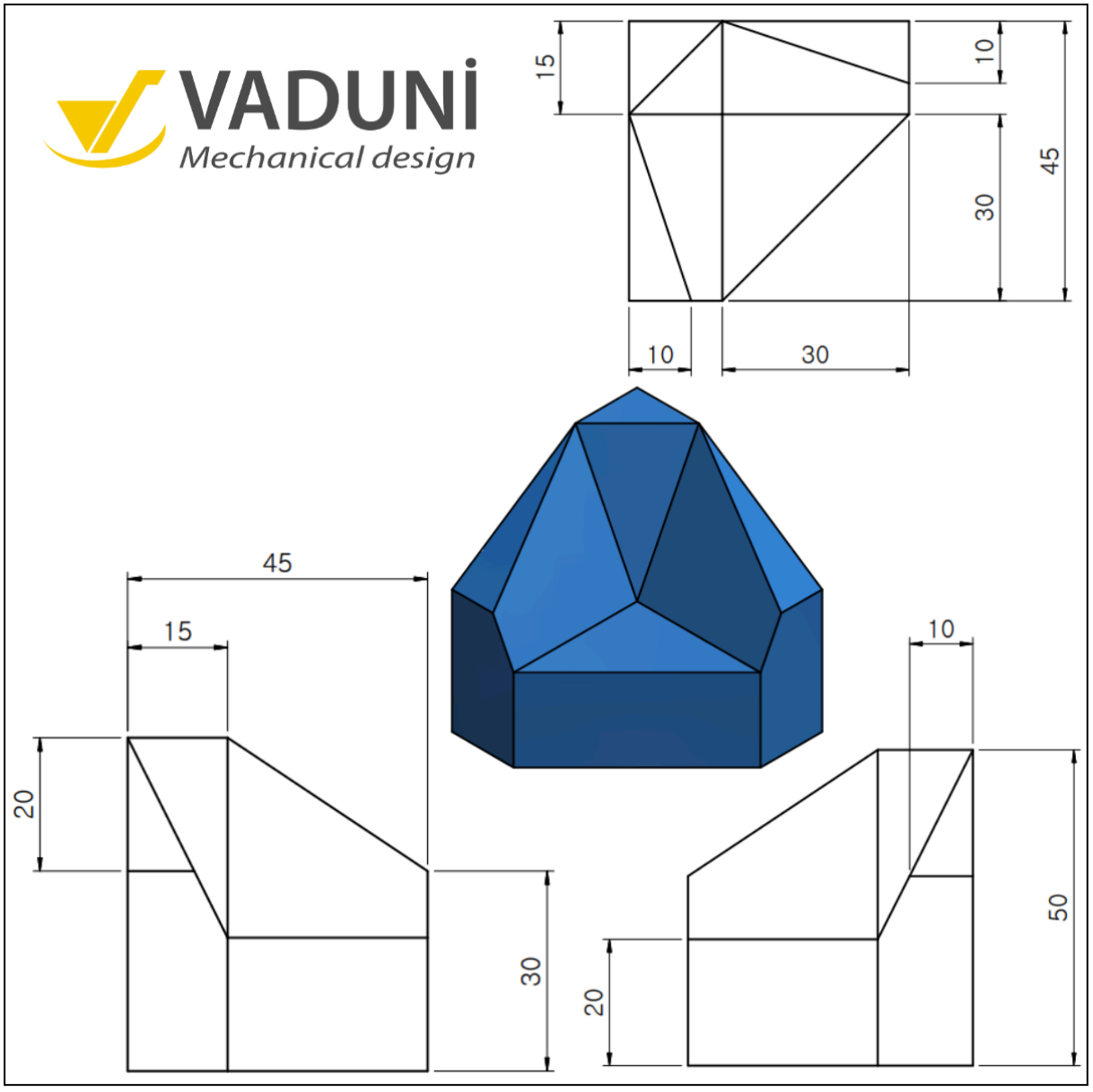
Bài tập 628


VADUNI
Mechanical design
52
12
R12
11
Ø48
38
20
50
46
100
88
12
12
12
R4
28
11
52
76
32
50
R12

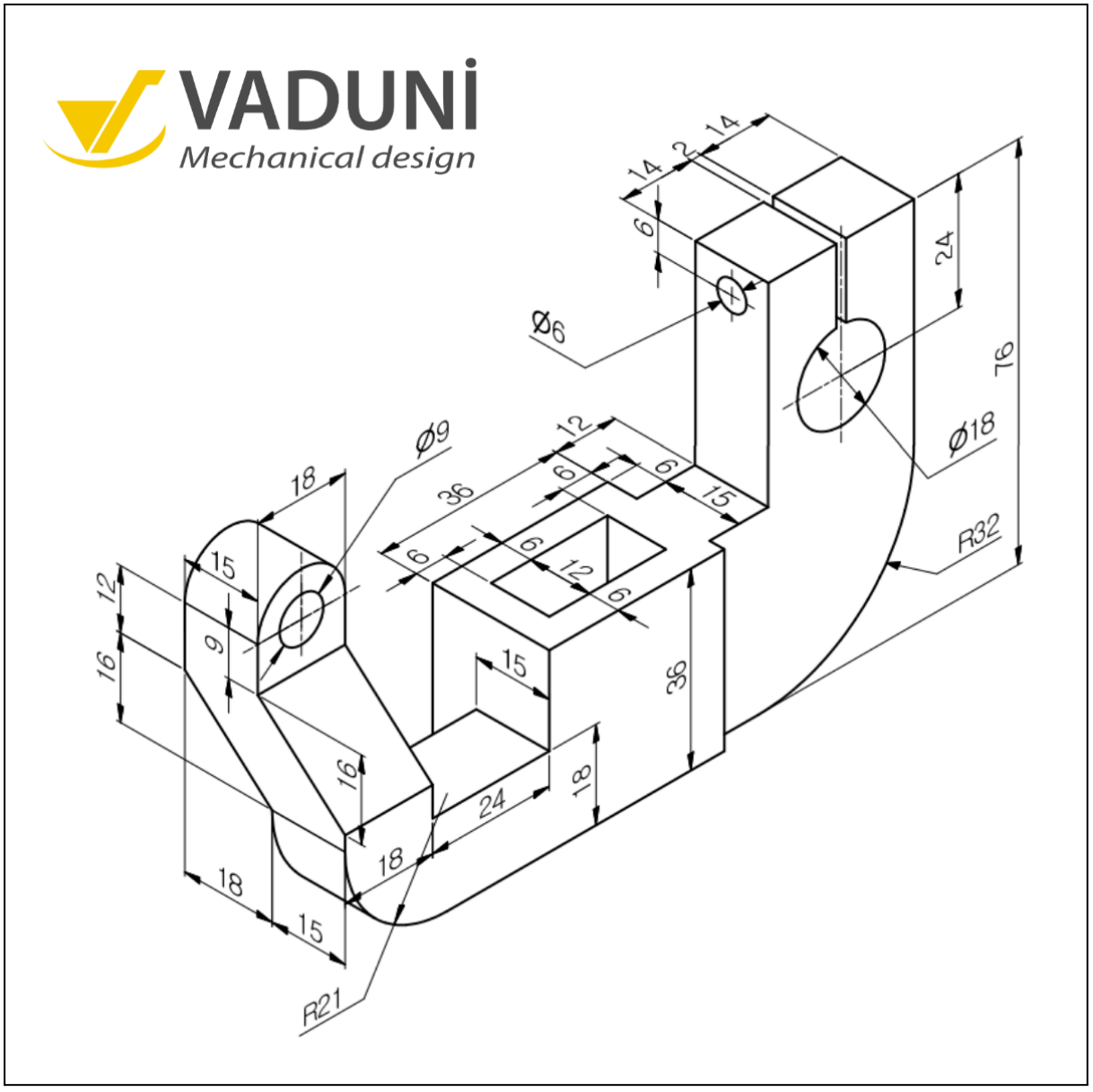
Bài tập 629


VADUNI
Mechanical design
80
Ø24
10
20
60
100
Ø5
R36
Ø12
R4
24
20
R4
24
60
24
24
6
10
36
80
60
50°
20
16
20
40
60
100

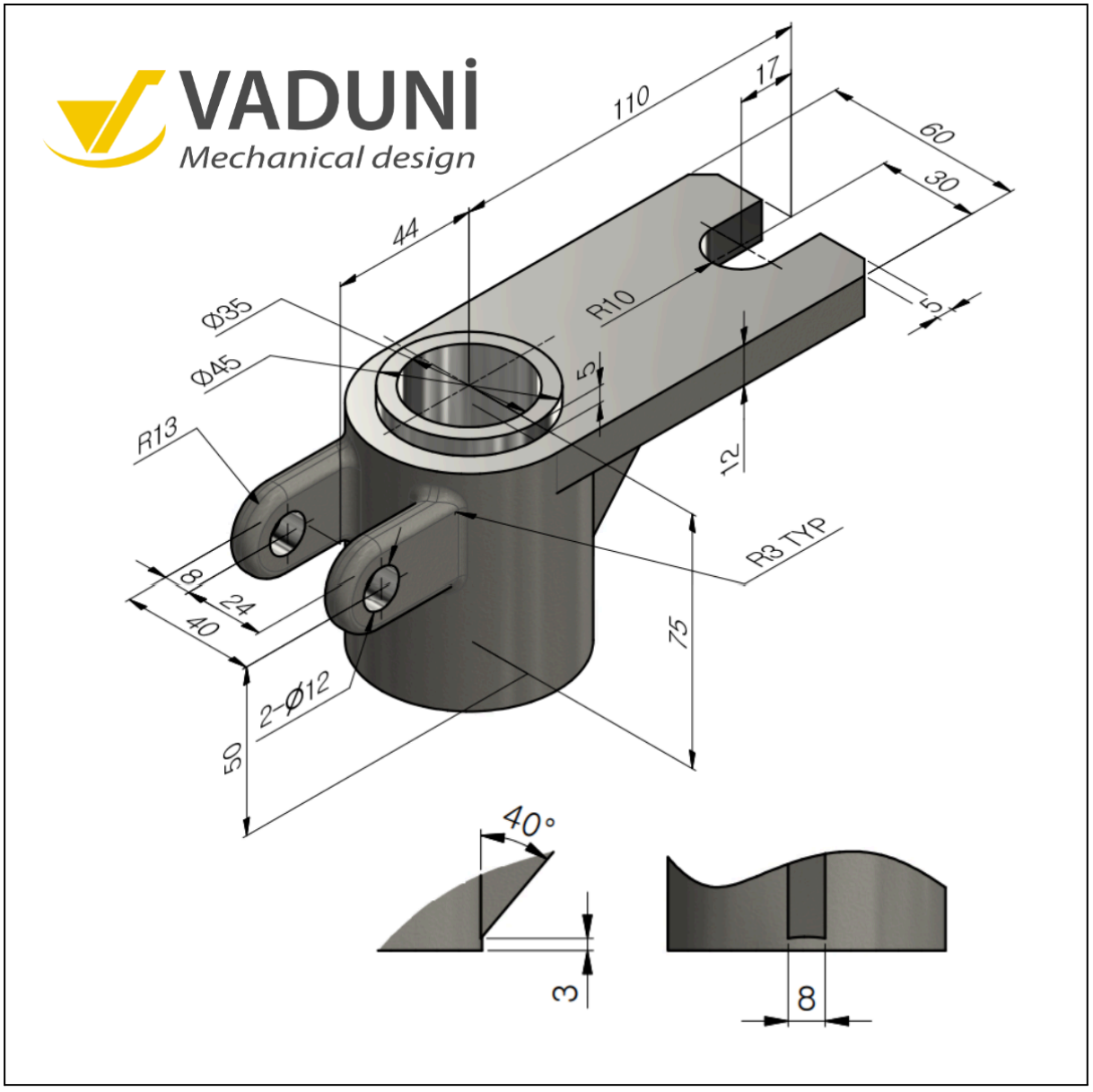
Bài tập 630



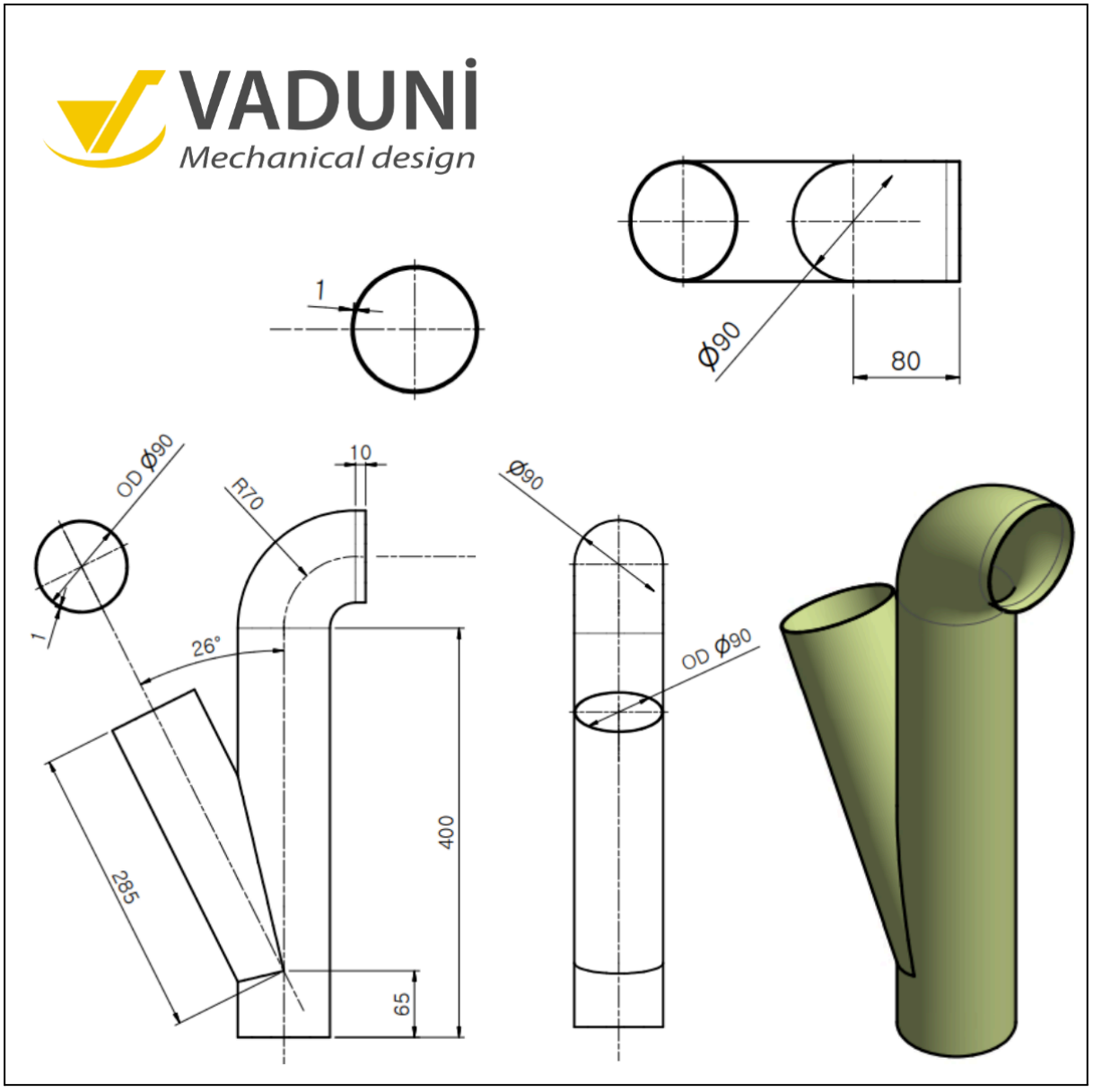
Bài tập 631


VADUNİ
Mechanical design
14
2
14
6
24
Ø6
76
Ø18
R32
Ø9
12
6
6
15
36
6
6
12
6
18
15
12
16
9
15
39
16
24
18
18
15
R21

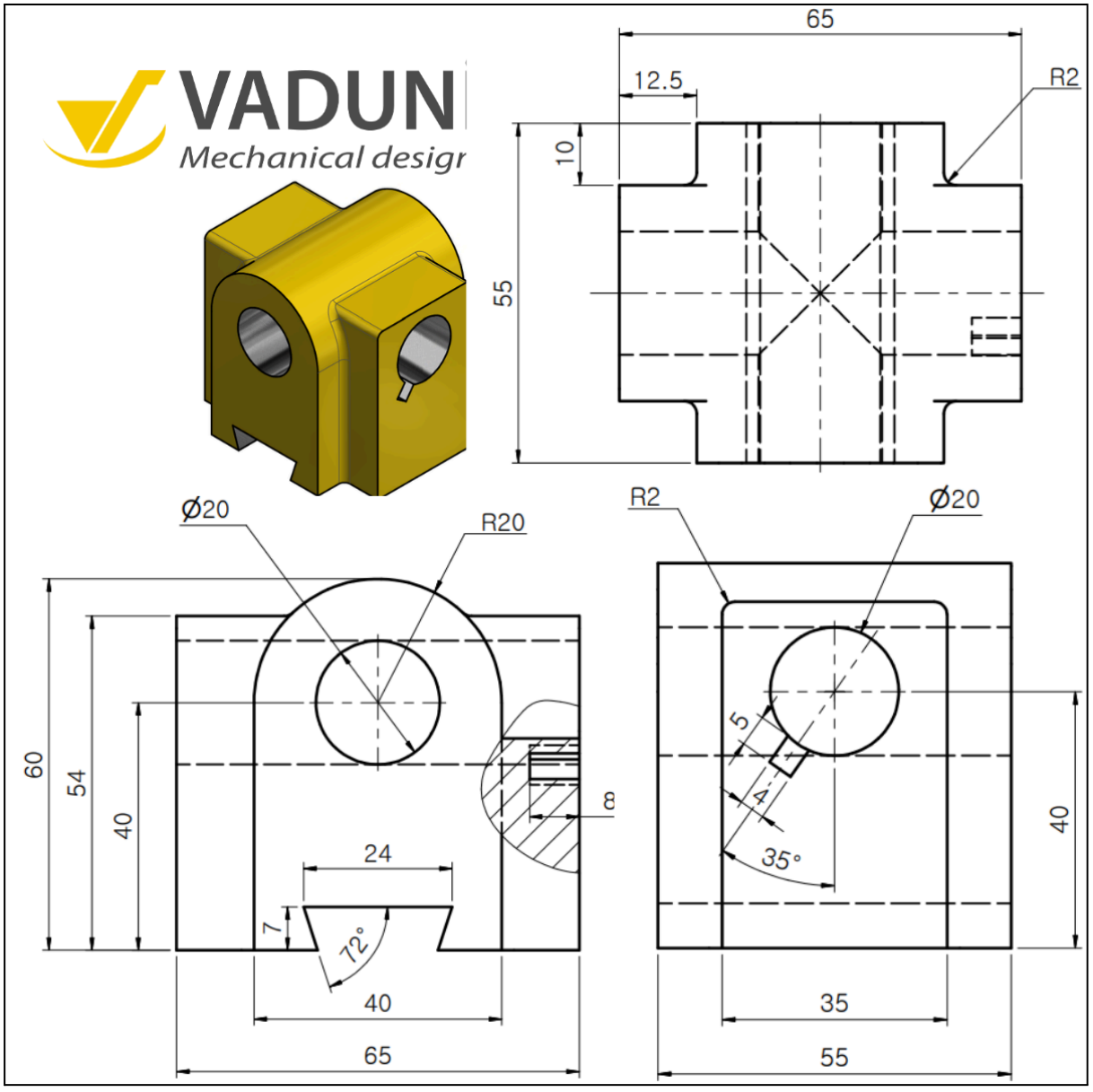
Bài tập 632


VADUNİ
Mechanical design
110
17
60
30
44
Ø35
Ø45
R10
5
5
12
R13
R3 TYP
8
24
40
75
2-Ø12
50
40°
3
8

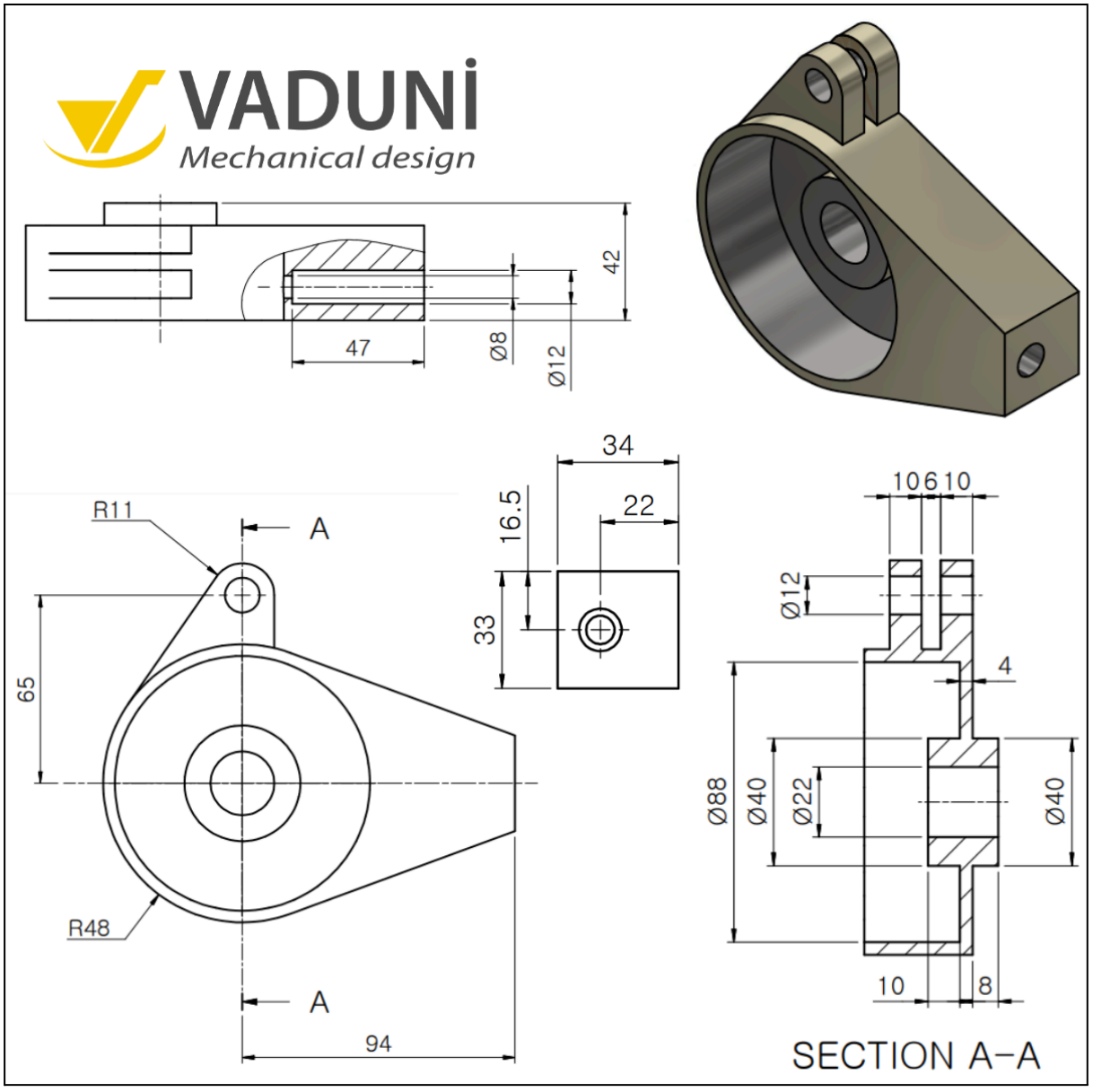
Bài tập 633


VADUNİ
Mechanical design
1
Ø90
80
OD Ø90
R70
10
1
26°
285
400
65
Ø90
OD Ø90

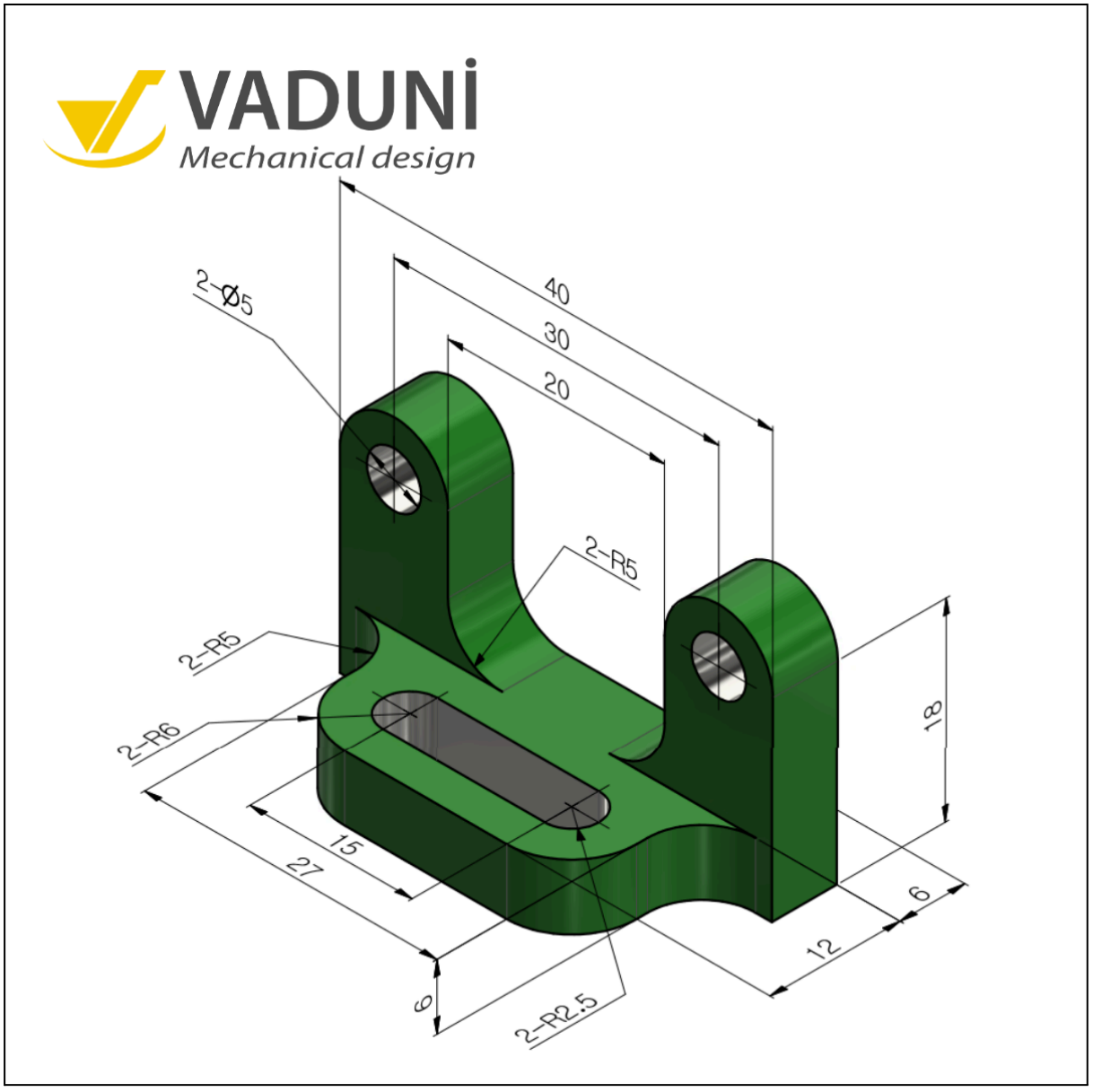
Bài tập 634


VADUN
Mechanical desigr
65
12.5
R2
10
55
Ø20
R20
60
54
40
24
7
72°
40
65
8
R2
Ø20
5
4
35°
40
35
55

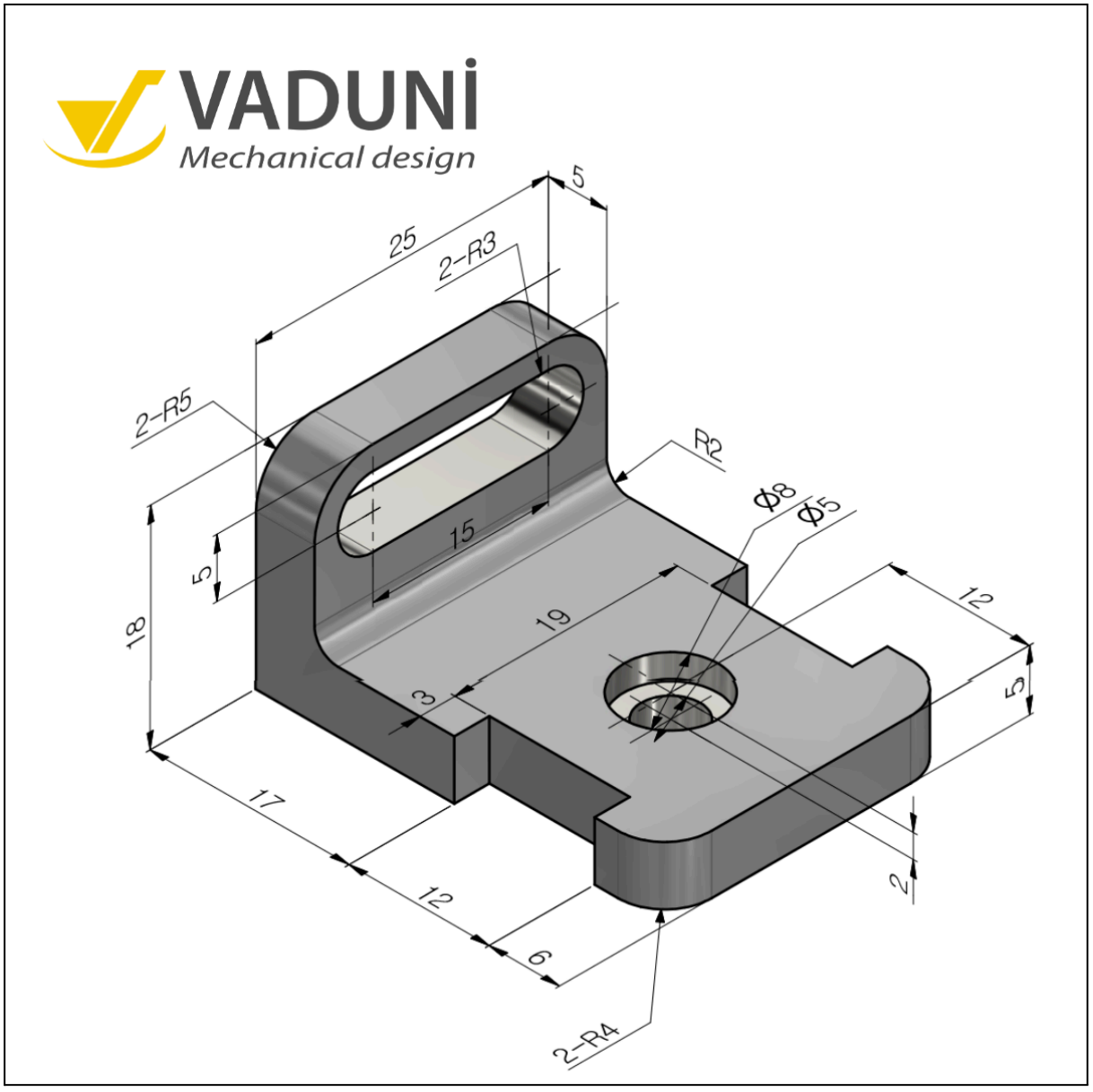
Bài tập 635


VADUNİ
Mechanical design
42
47
Ø8
Ø12
34
22
16.5
33
R11
A
65
R48
A
94
10 6 10
Ø12
4
Ø88
Ø40
Ø22
Ø40
10
8
SECTION A-A

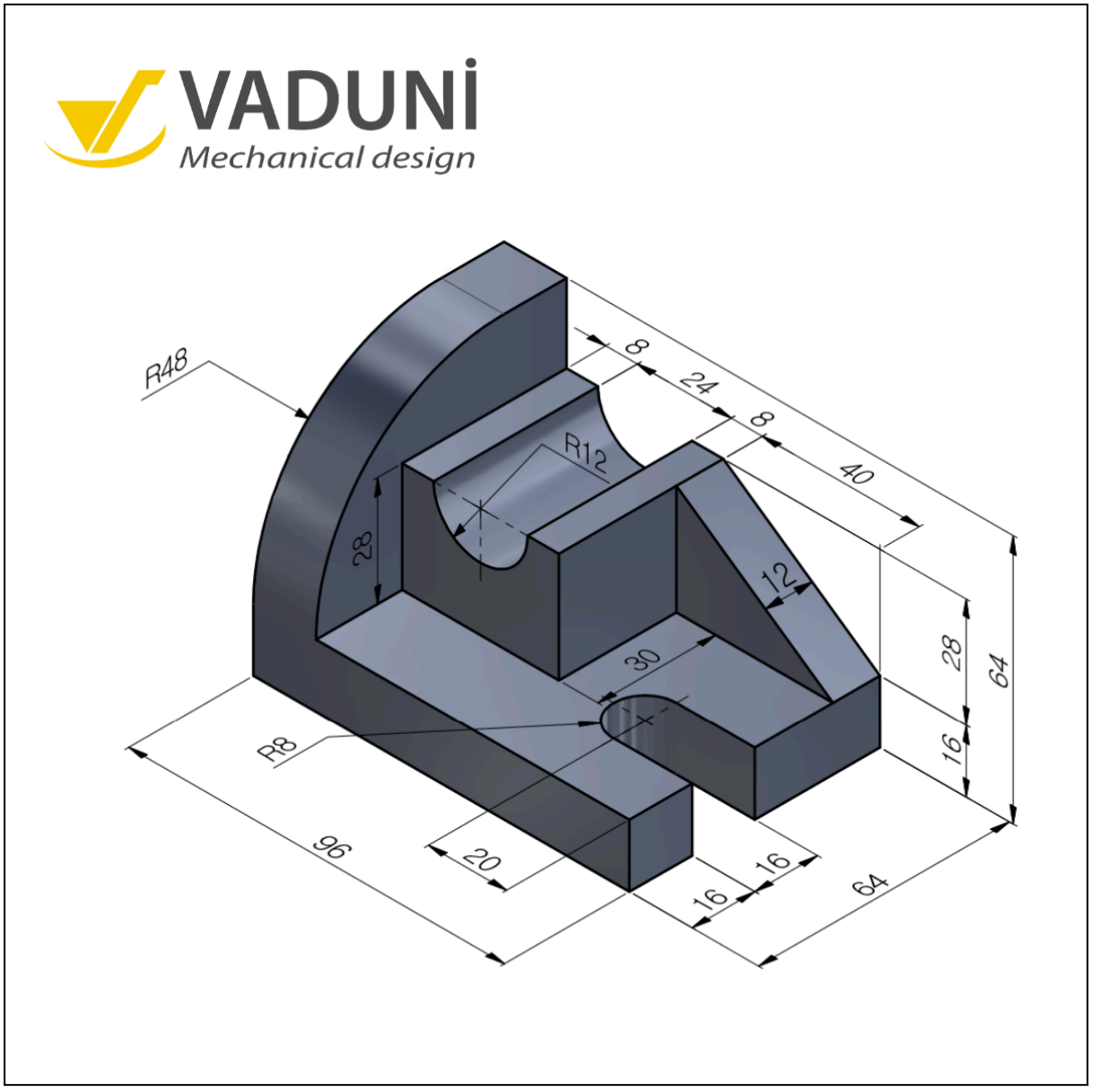
Bài tập 636


VADUNİ
Mechanical design
2-Ø5
40
30
20
2-R5
2-R5
2-R6
18
15
27
6
12
9
2-R2.5

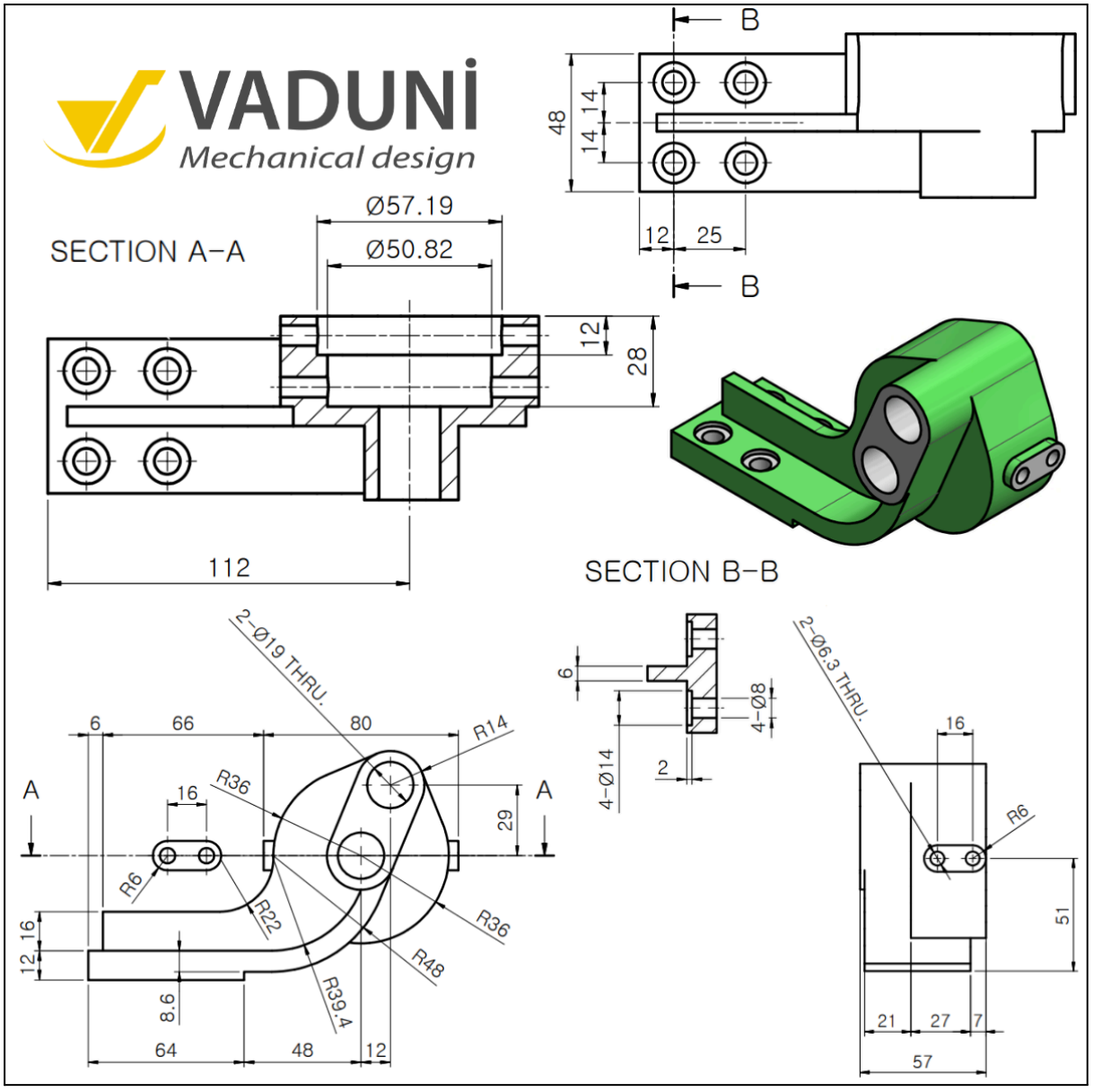
Bài tập 637


VADUNI
Mechanical design
5
25
2-R3
2-R5
R2
Φ8
Φ5
15
5
18
19
3
12
5
17
12
6
2
2-R4

Bài tập 638

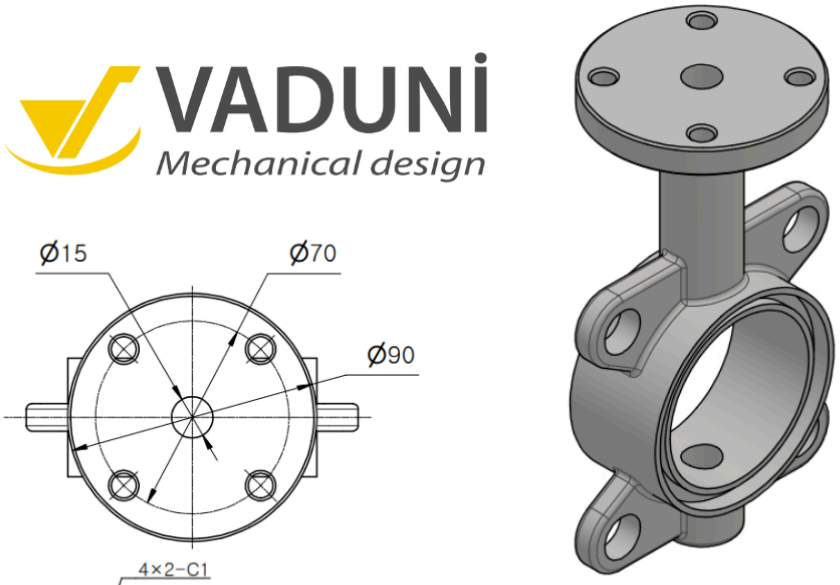

VADUNİ
Mechanical design
R48
8
24
8
40
R12
28
12
30
28
64
16
R8
96
20
16
16
64

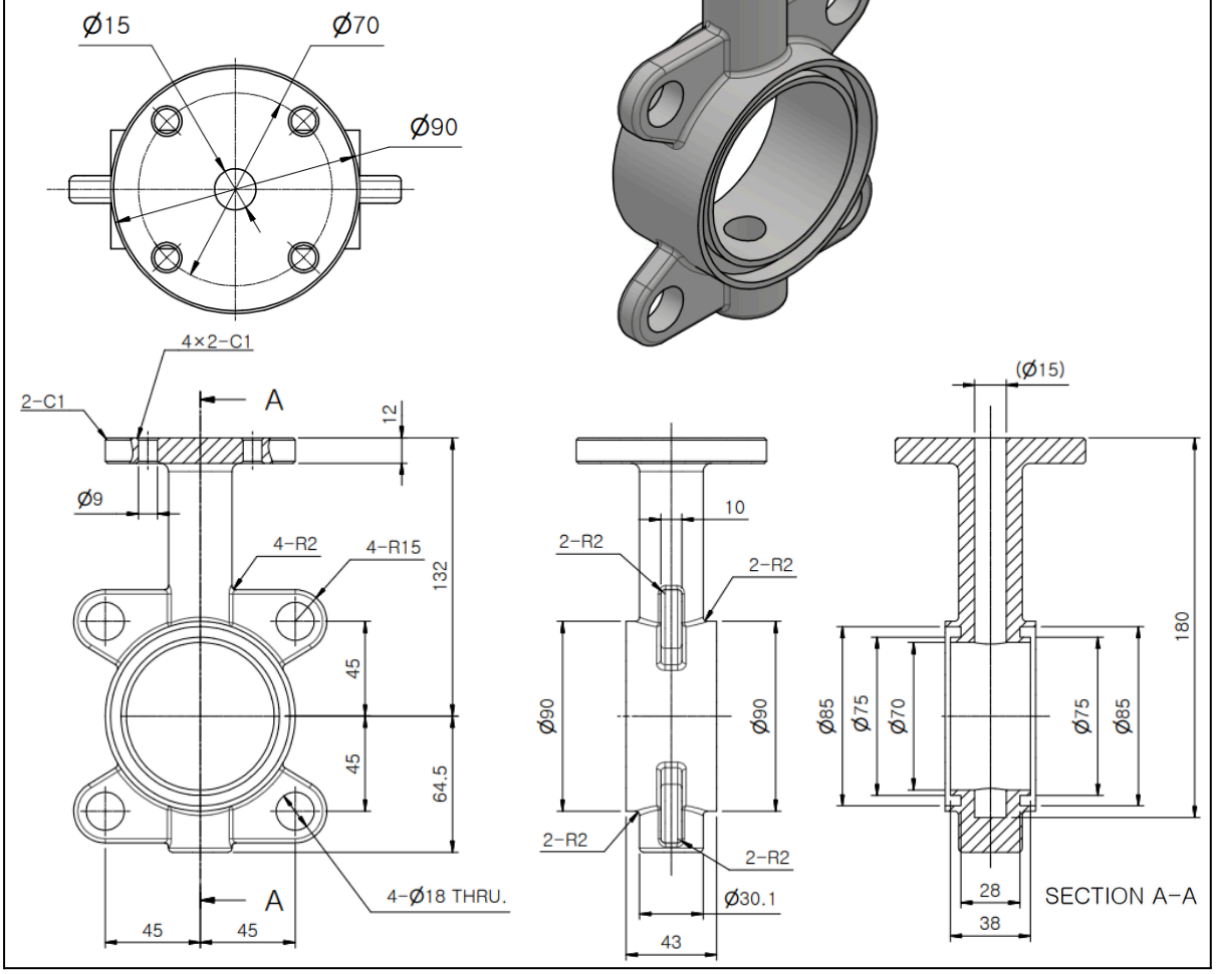
Bài tập 639



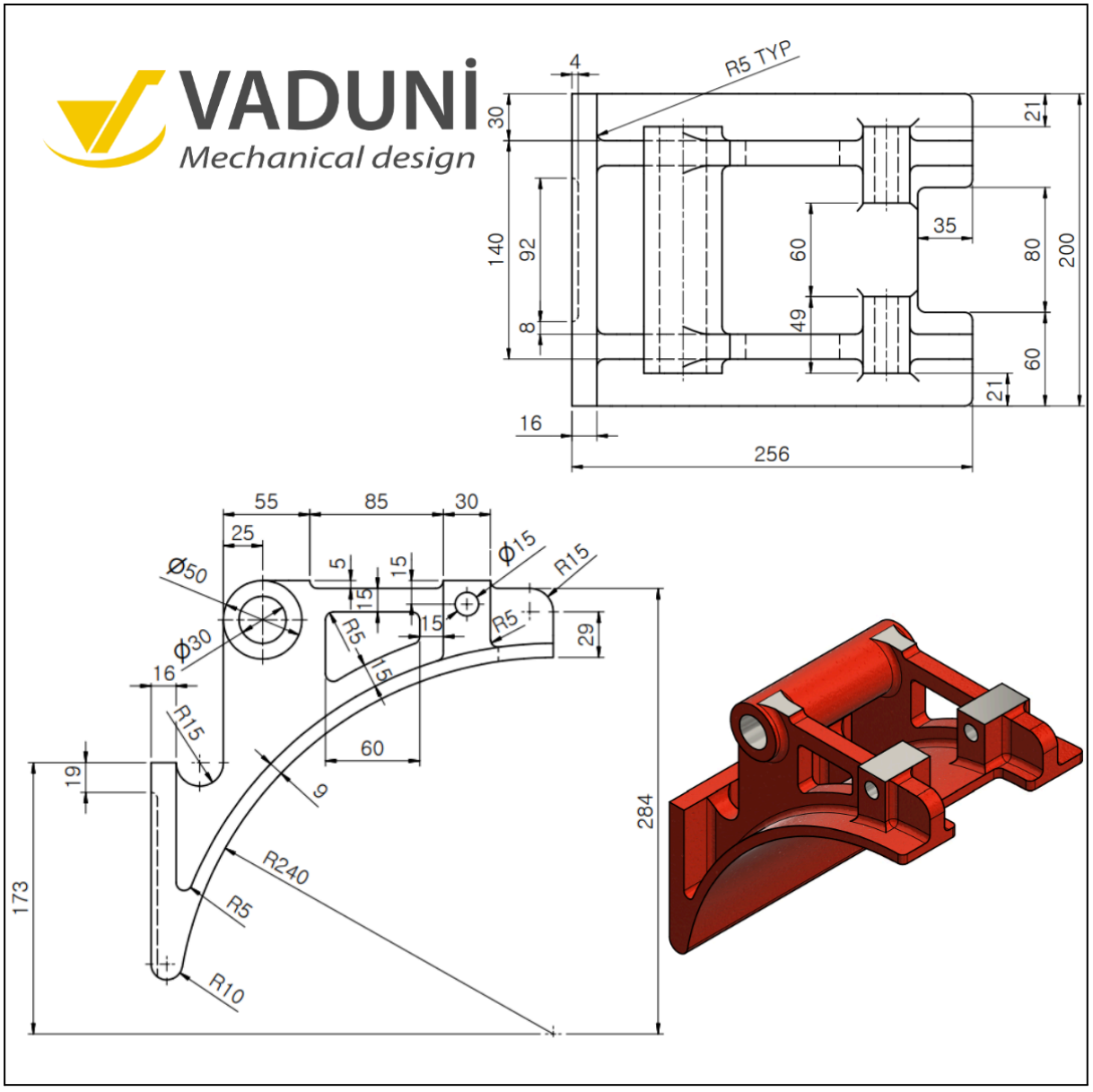
Bài tập 640

VADUNİ
Mechanical design

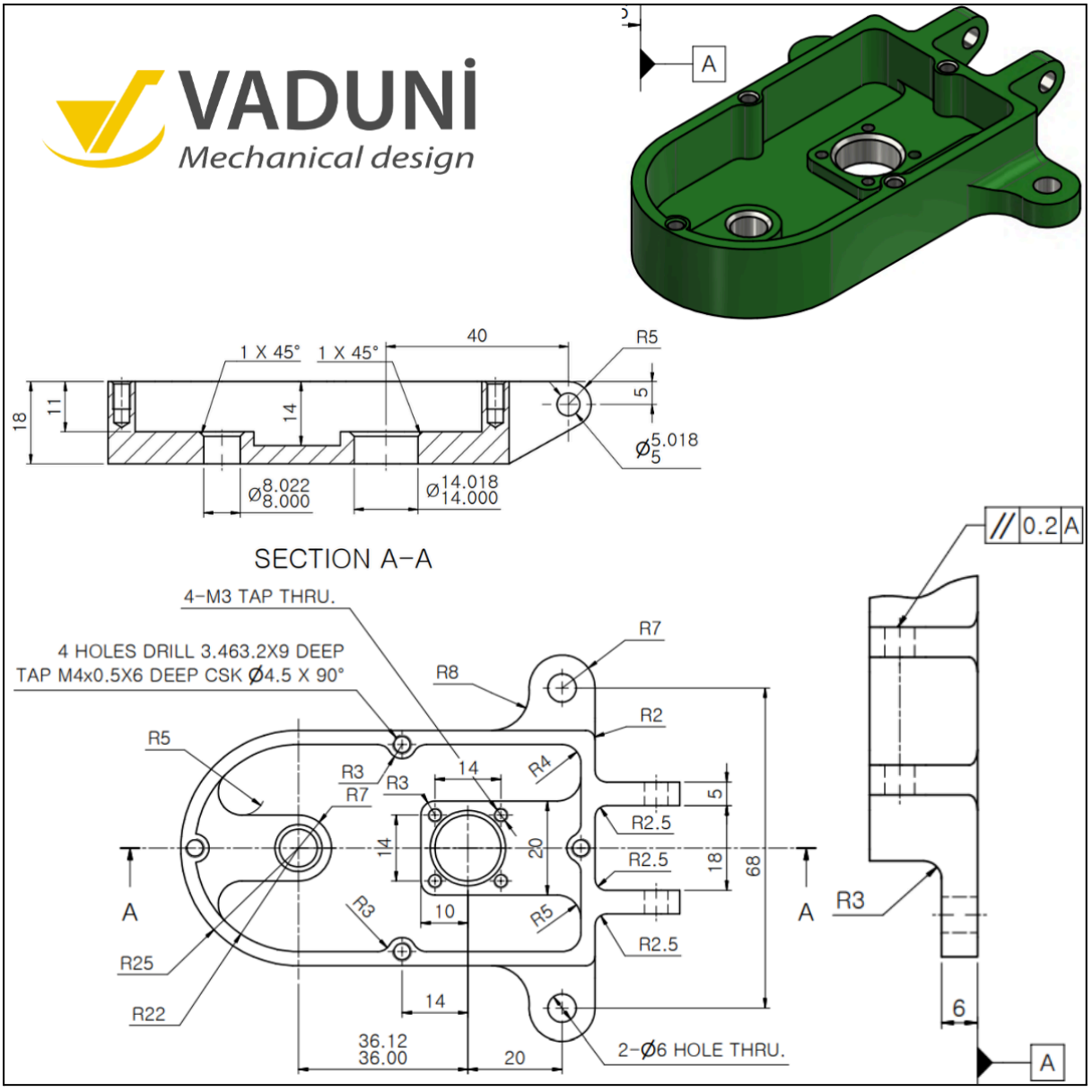




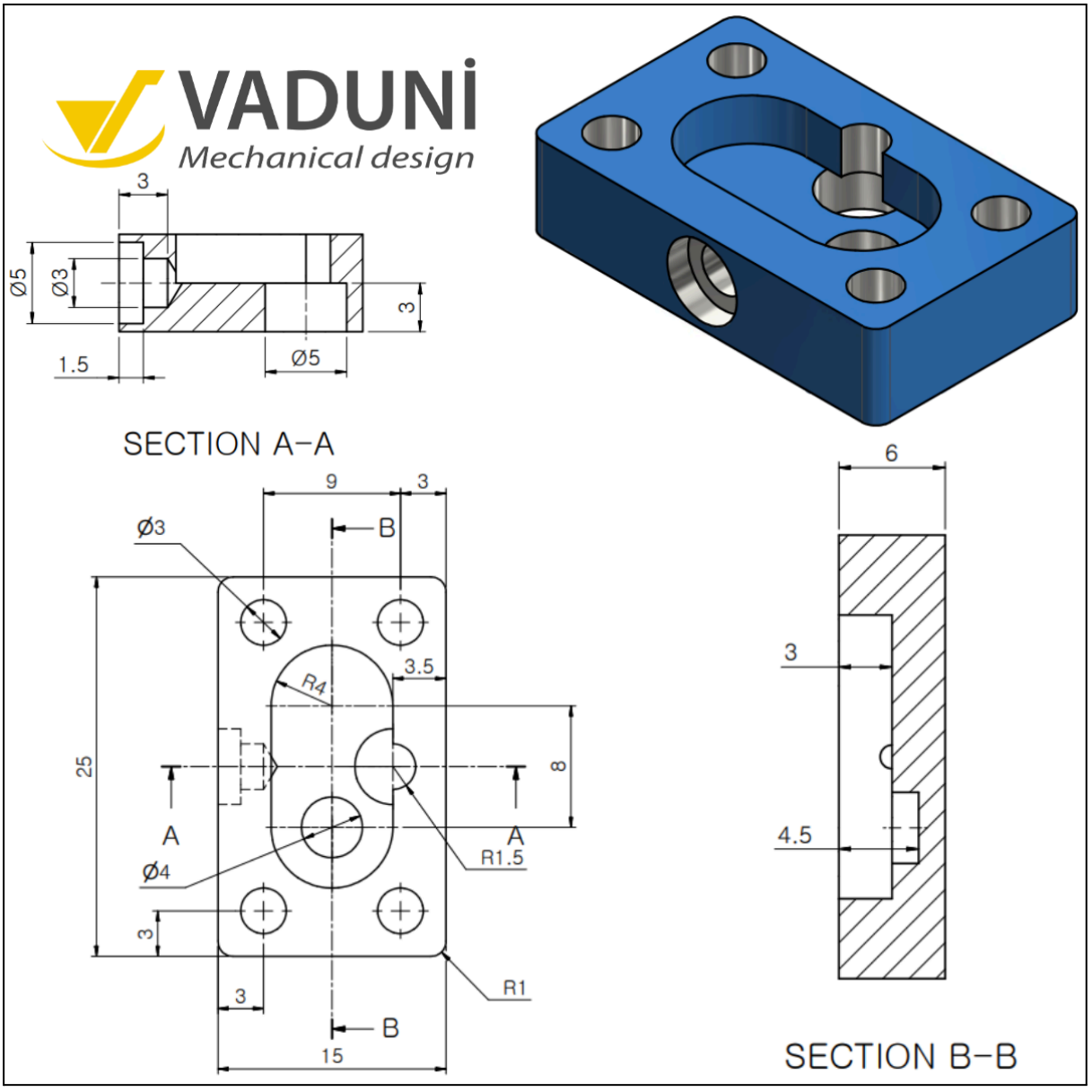
Bài tập 641


VADUNI
Mechanical design
4
R5 TYP
30
140
92
8
21
35
60
49
80
200
60
21
16
256
55
85
30
25
Ø50
Ø30
16
R15
5
15
15
Ø15
R15
R5
15
R5
29
15
60
9
19
173
R240
R5
R10
284

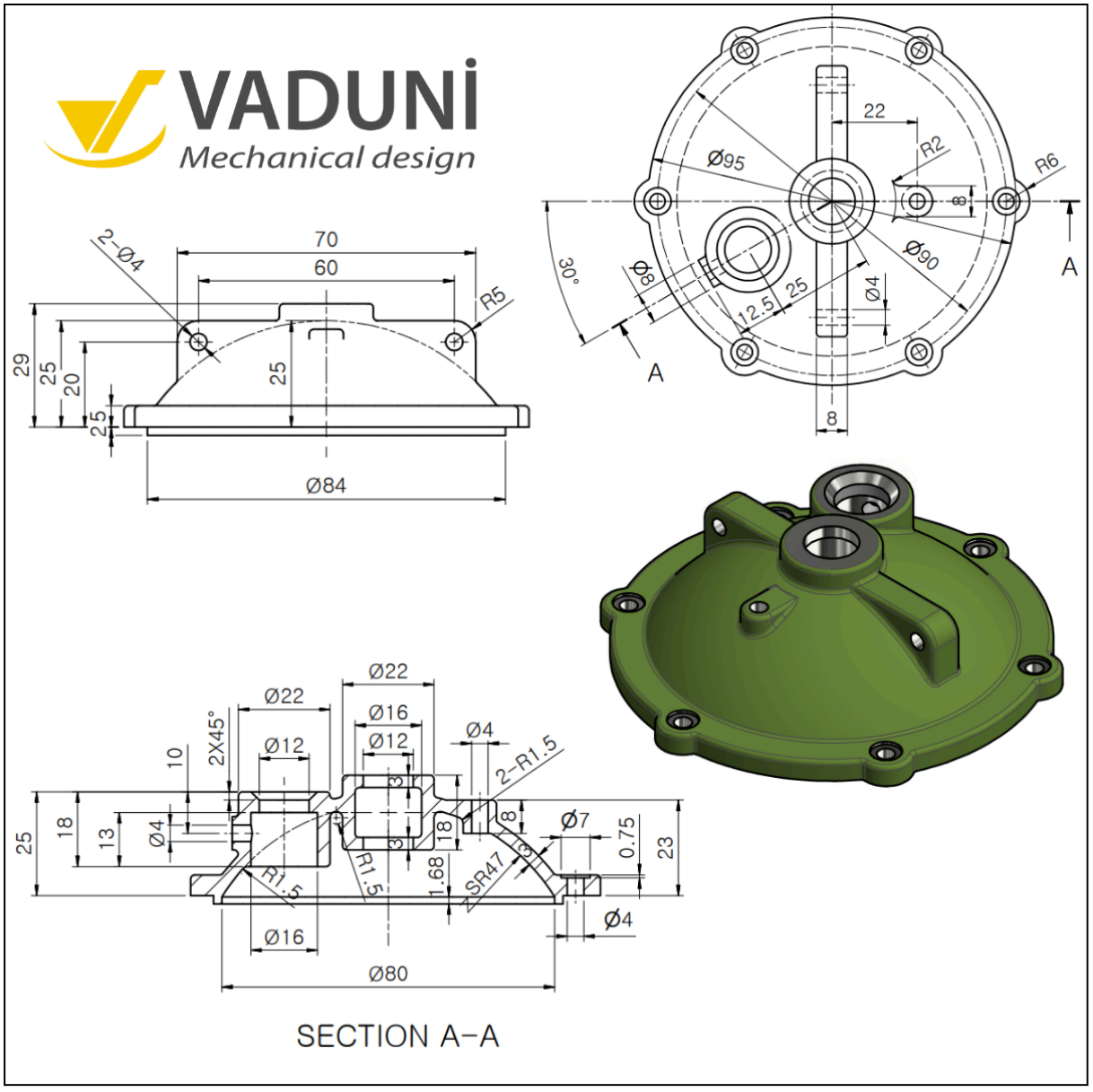
Bài tập 642


VADUNI
Mechanical design
A
1 X 45°
1 X 45°
40
R5
18
11
14
5
Ø5.018 5
Ø8.022 8.000
Ø14.018 14.000
SECTION A-A
4-M3 TAP THRU.
4 HOLES DRILL 3.463.2X9 DEEP
TAP M4x0.5X6 DEEP CSK Ø4.5 X 90°
R7
R8
R2
R5
R3
R7
R3
14
R4
5
R2.5
R2.5
18
68
14
20
A
A
R3
10
R5
R2.5
R25
R22
14
36.12
36.00
20
2-Ø6 HOLE THRU.
// 0.2 A
R3
6
A

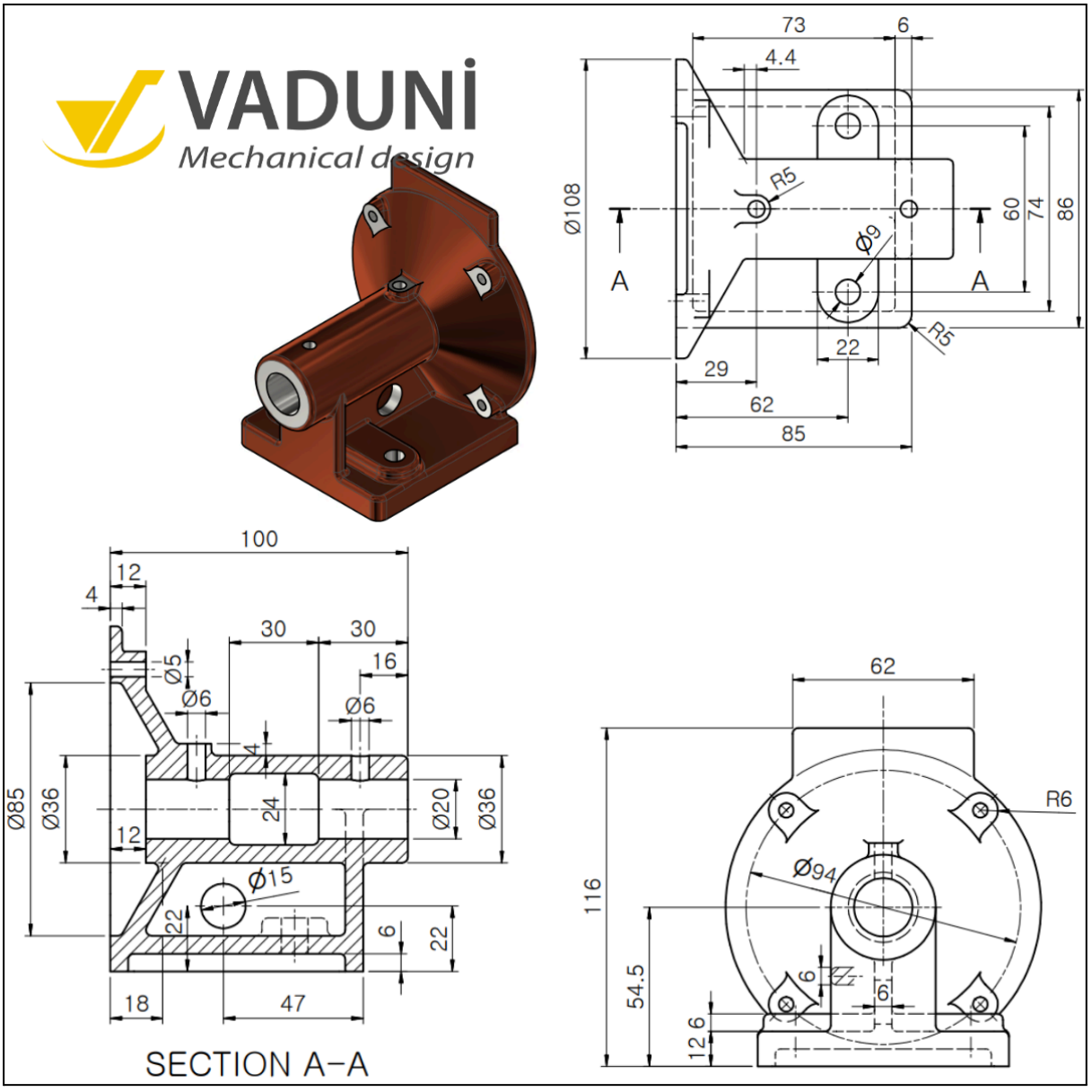
Bài tập 643


VADUNI
Mechanical design
3
Ø5
Ø3
3
1.5
Ø5
SECTION A–A
9
3
B
Ø3
3.5
R4
25
8
A
A
Ø4
R1.5
3
3
R1
B
15
6
3
4.5
SECTION B–B

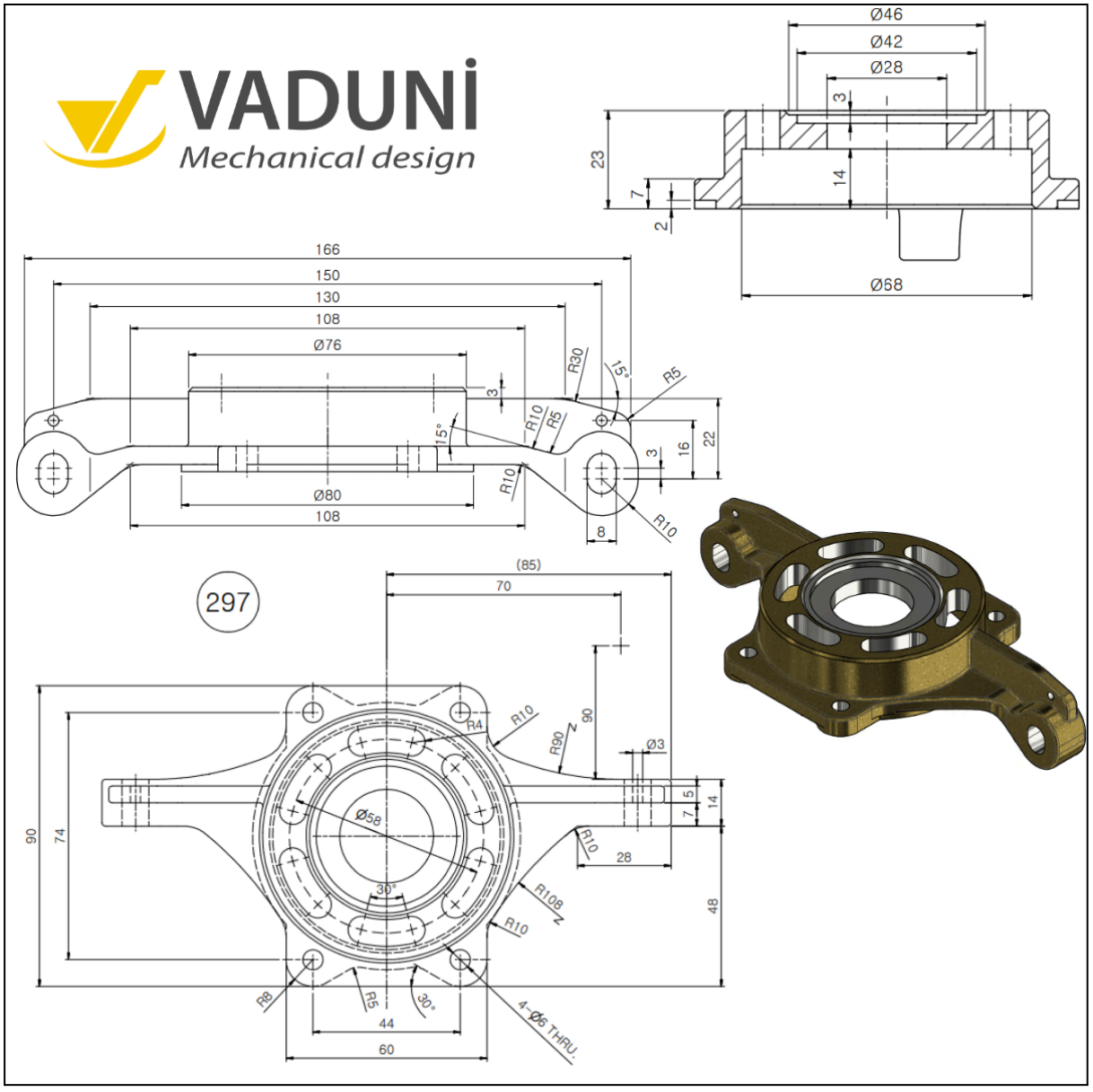
Bài tập 644


VADUNI
Mechanical design
2-Ø4
70
60
R5
29
25
20
25
25
Ø84
22
R2
R6
Ø95
8
Ø90
A
30°
Ø8
12.5
25
Ø4
A
8
Ø22
Ø22
Ø16
Ø12
Ø12
Ø4
2-R1.5
2X45°
10
25
18
13
Ø4
3
3
18
8
Ø7
0.75
23
R1.5
R1.5
1.68
SR47
Ø4
Ø16
Ø80
SECTION A-A

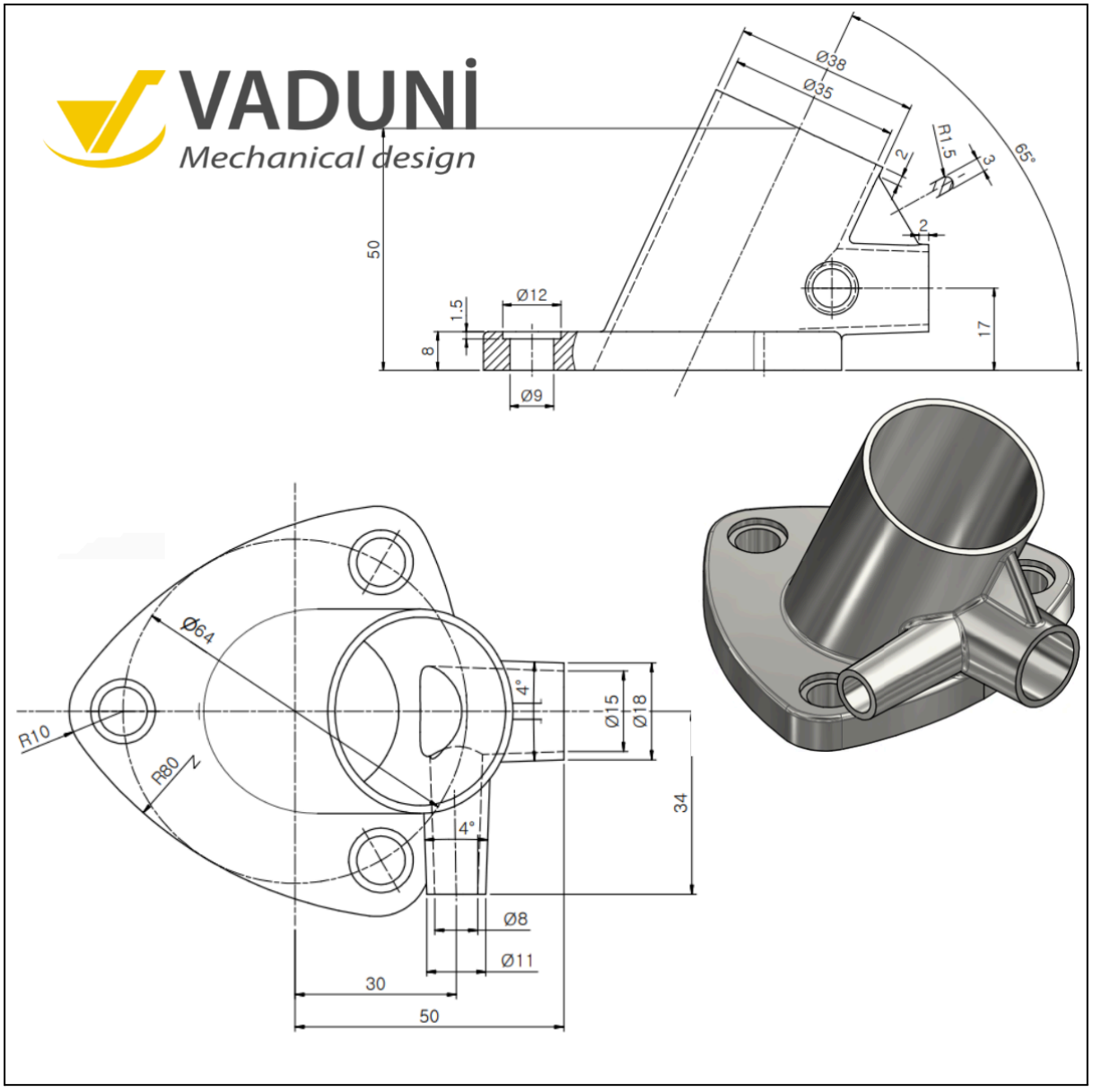
Bài tập 645


VADUNI
Mechanical design
73
6
4.4
Ø108
R5
Ø9
A
A
60
74
86
22
29
62
85
R5
100
12
4
30
30
16
Ø5
Ø6
Ø6
4
Ø85
Ø36
24
Ø20
Ø36
12
Ø15
22
6
22
18
47
SECTION A–A
62
R6
Ø94
116
54.5
6
6
12.6

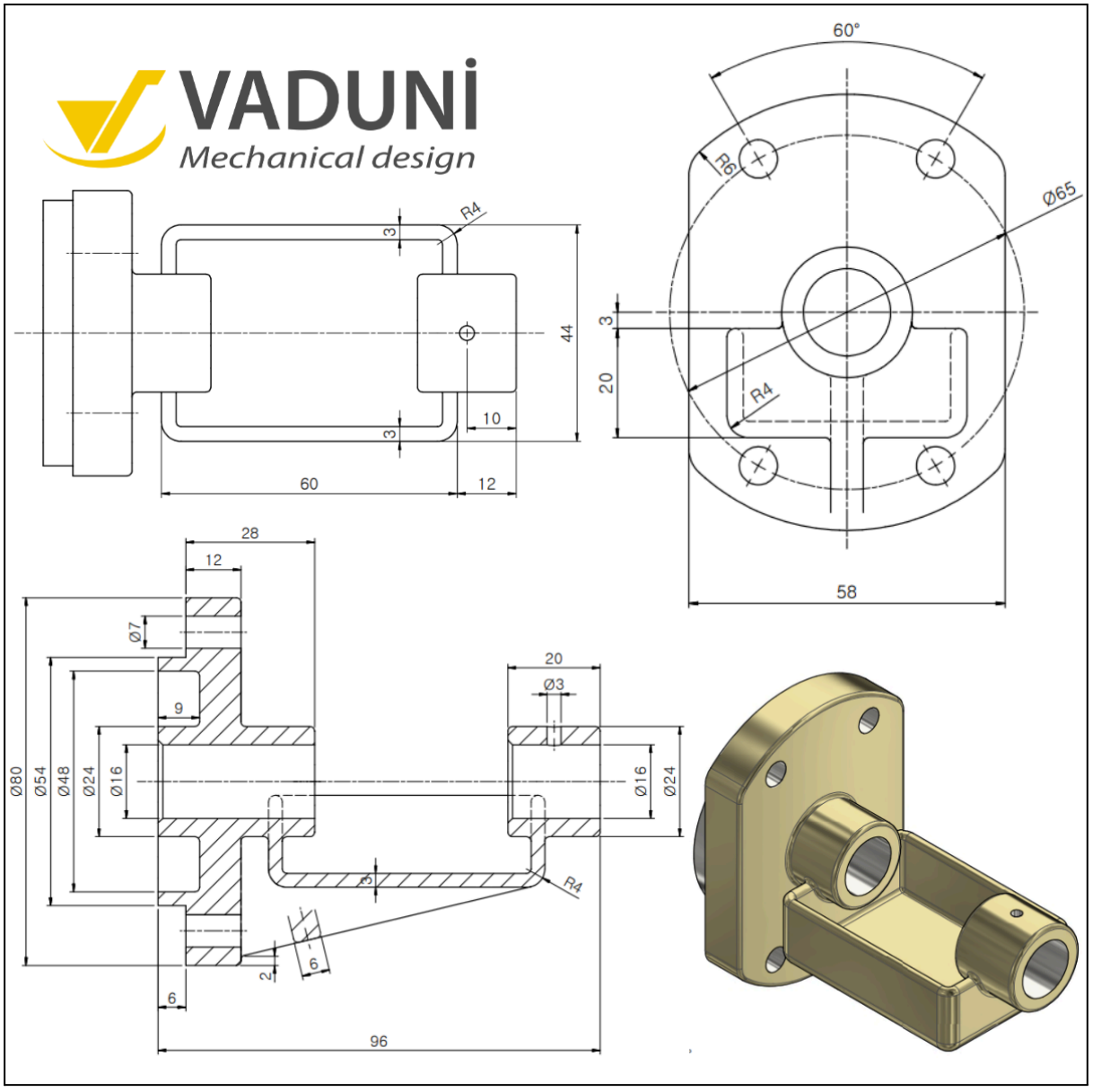
Bài tập 646


VADUNİ
Mechanical design
Ø46
Ø42
Ø28
3
23
14
7
2
Ø68
166
150
130
108
Ø76
R30
15°
R5
3
R10
R5
15°
22
16
3
R10
Ø80
108
8
R10
297
(85)
70
R4
R10
R90
90
Ø3
5
7
14
Ø58
R10
28
30°
R108
R10
48
90
74
R8
R5
30°
44
60
4-Ø6 THRU

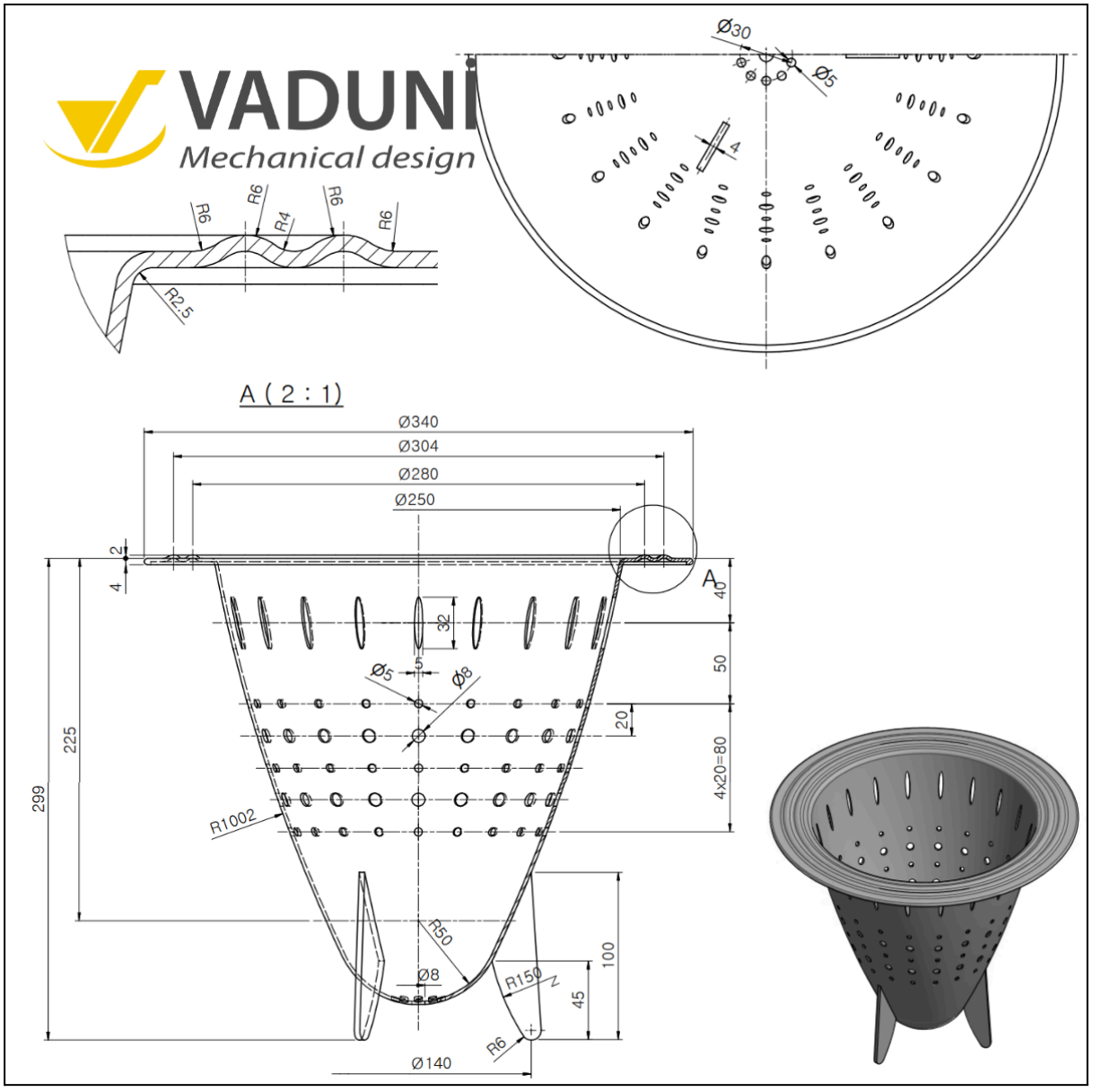
Bài tập 647


VADUNİ
Mechanical design
Ø38
Ø35
R1.5
3
65°
2
2
50
Ø12
1.5
8
Ø9
17
Ø64
R10
R80
4°
Ø15
Ø18
34
4°
Ø8
Ø11
30
50

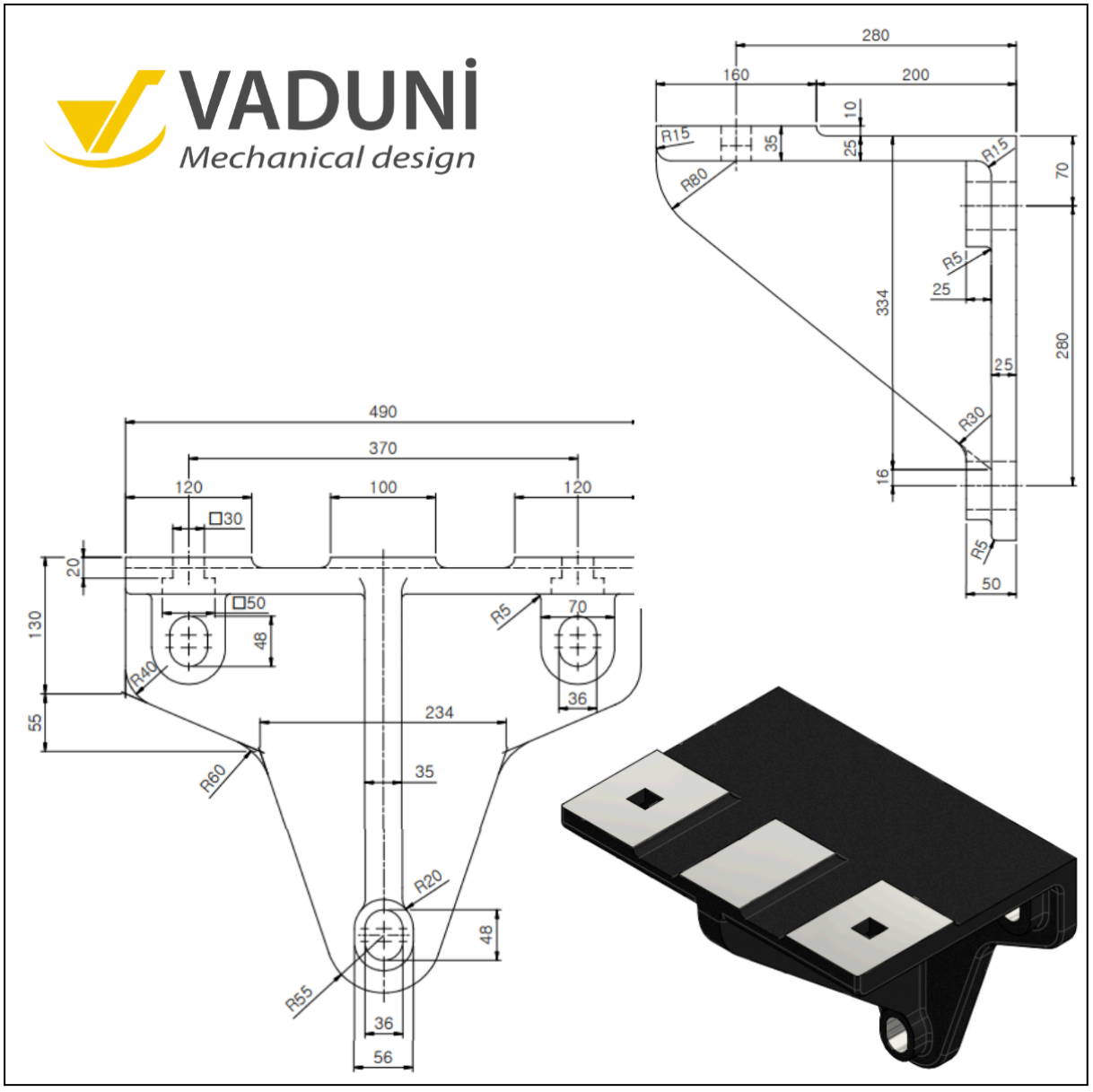
Bài tập 648


VADUNİ
Mechanical design
60°
R6
Ø65
R4
3
20
58
44
10
60
12
28
Ø7
9
Ø80
Ø54
Ø48
Ø24
Ø16
20
Ø3
6
2
96

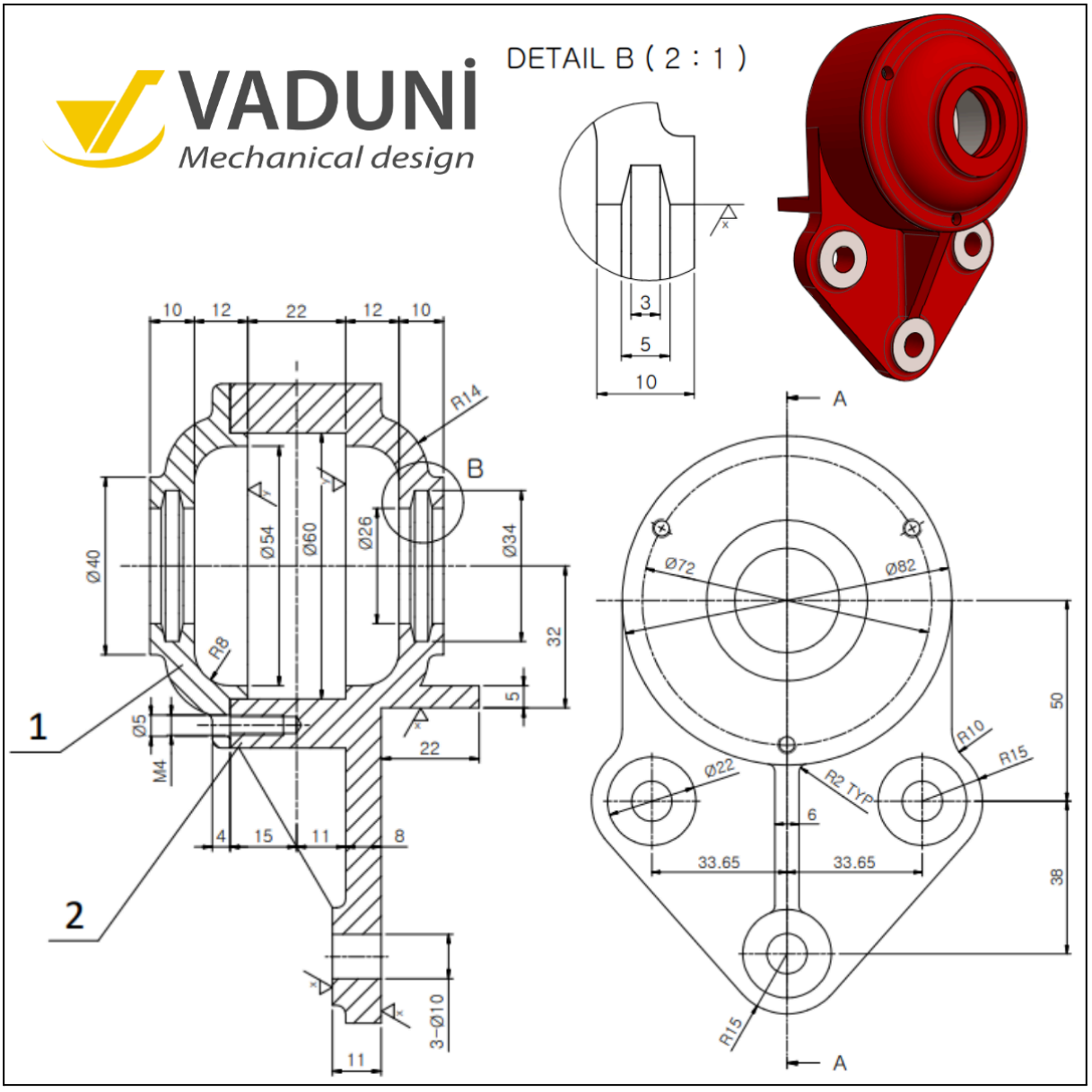
Bài tập 649


VADUNI
Mechanical design
Ø30
Ø5
4
R6
R6
R4
R6
R6
R2.5
A (2 : 1)
Ø340
Ø304
Ø280
Ø250
2
4
A
40
50
20
4x20=80
32
5
Ø5
Ø8
225
299
R1002
R50
Ø8
R150
45
100
R6
Ø140

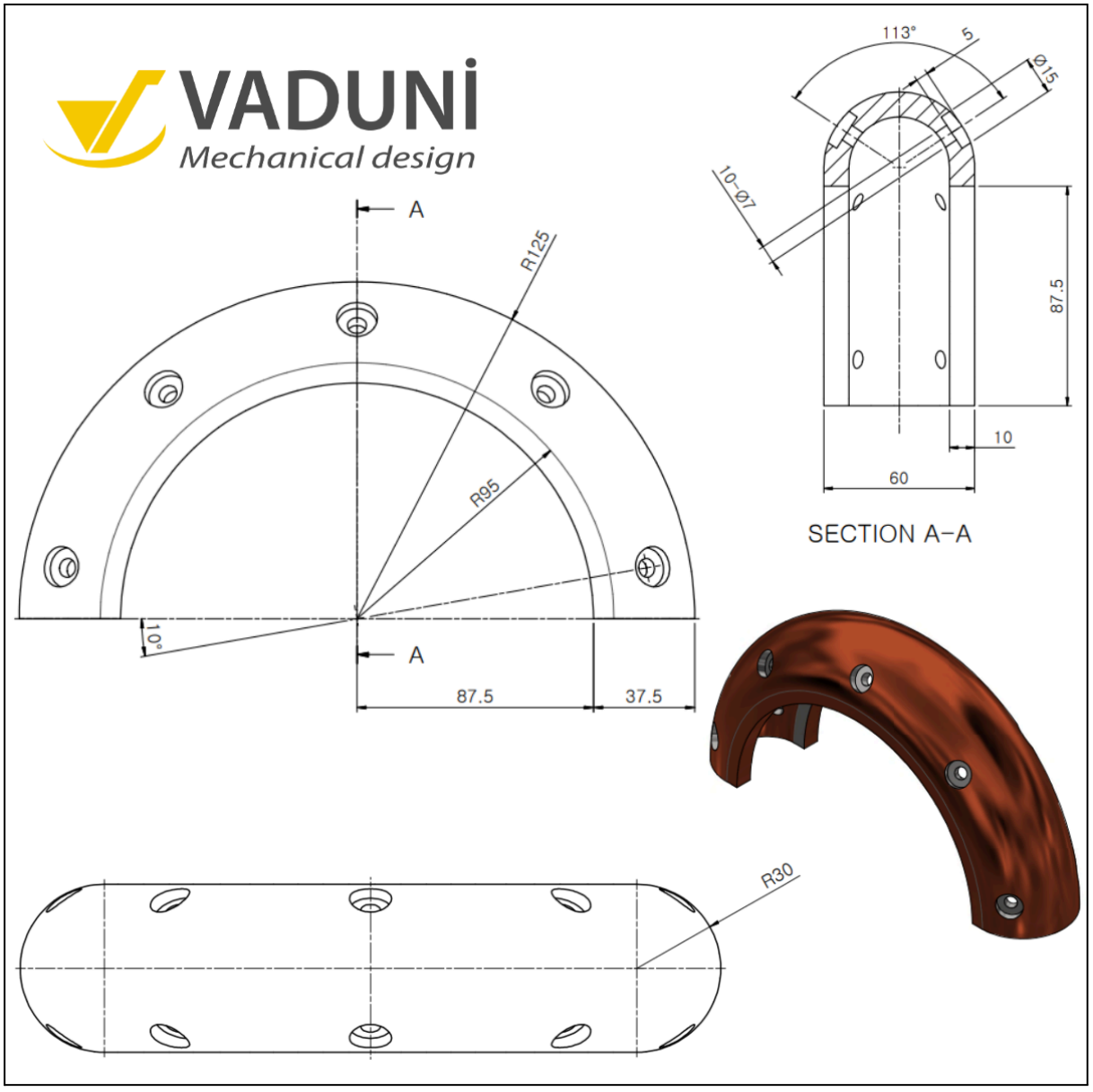
Bài tập 650


VADUNİ
Mechanical design
280
160
200
10
R15
35
25
R15
70
R80
R5
25
334
25
280
R30
16
R5
50
490
370
120
100
120
□30
20
□50
R5
70
130
48
R40
36
55
234
R60
35
R20
48
R55
36
56

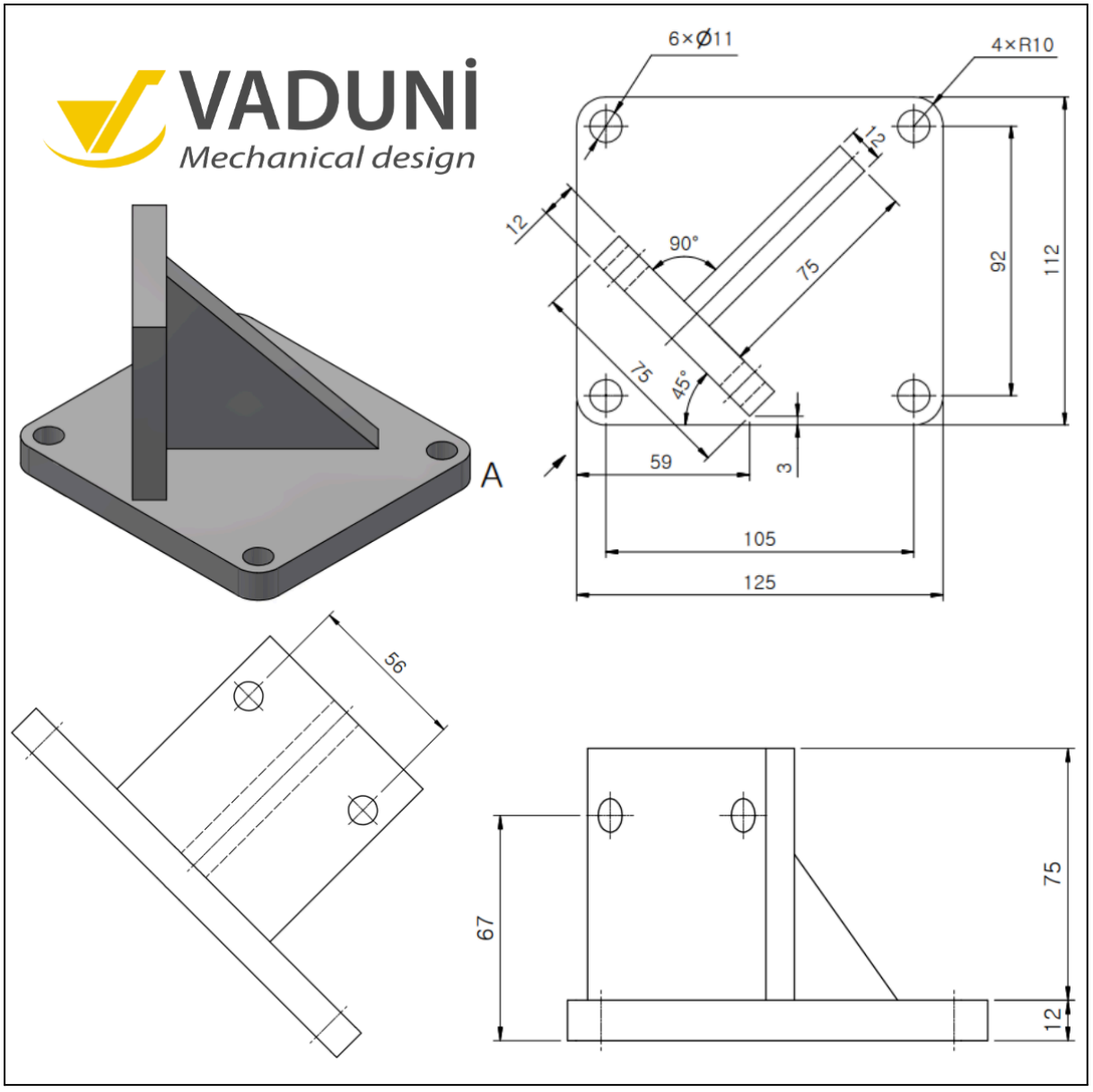
Bài tập 651


VADUNI
Mechanical design
DETAIL B (2 : 1)
3
5
10
10
12
22
12
10
R14
B
Ø40
Ø54
Ø60
Ø26
Ø34
32
5
R8
Ø5
M4
22
4
15
11
8
1
2
3-Ø10
11
A
Ø72
Ø82
50
R10
R15
Ø22
R2 TYP
6
33.65
33.65
38
R15
A

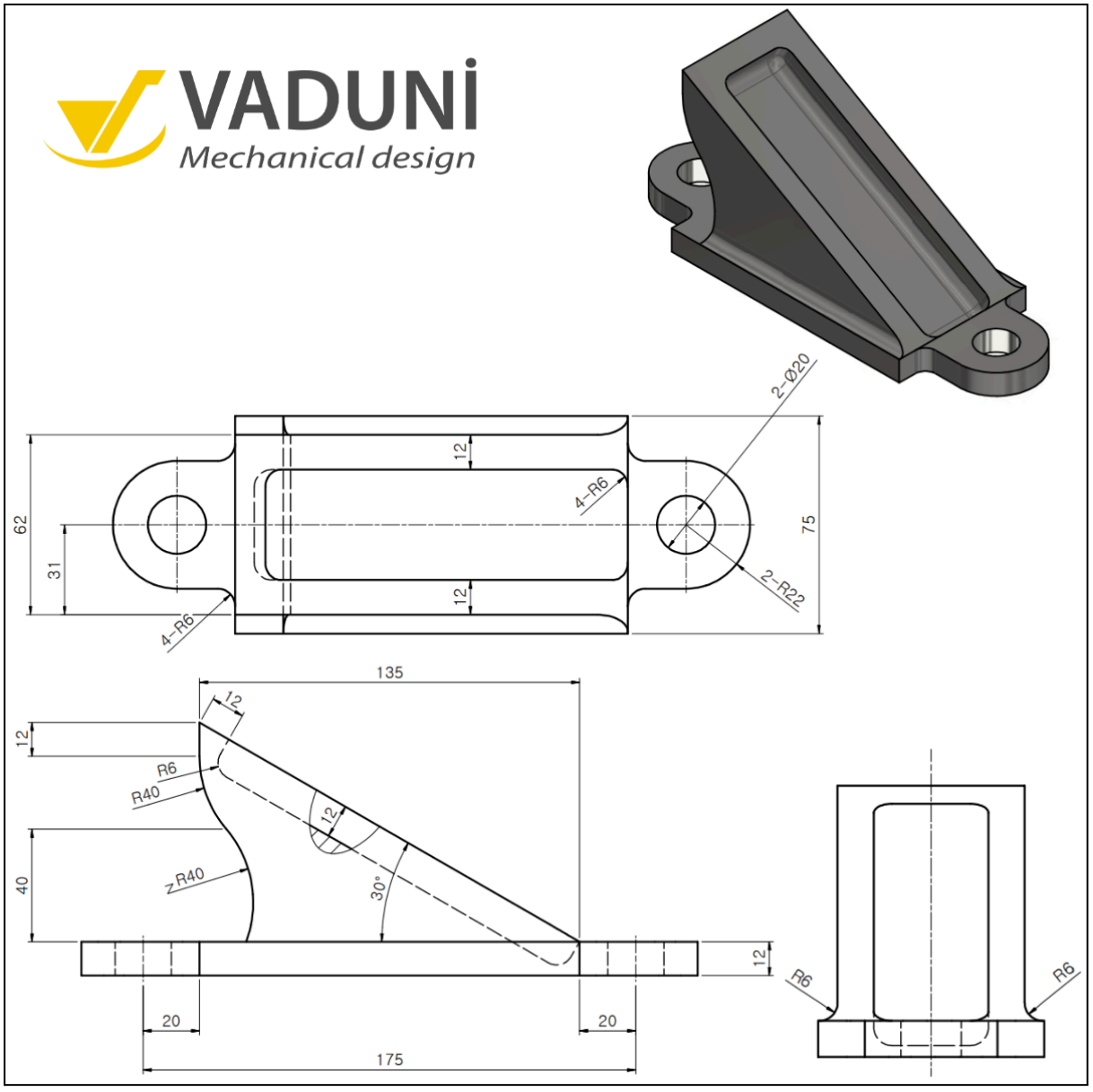
Bài tập 652


VADUNİ
Mechanical design
A
R125
R95
10°
A
87.5
37.5
113°
5
Ø15
10-Ø7
87.5
10
60
SECTION A-A
R30

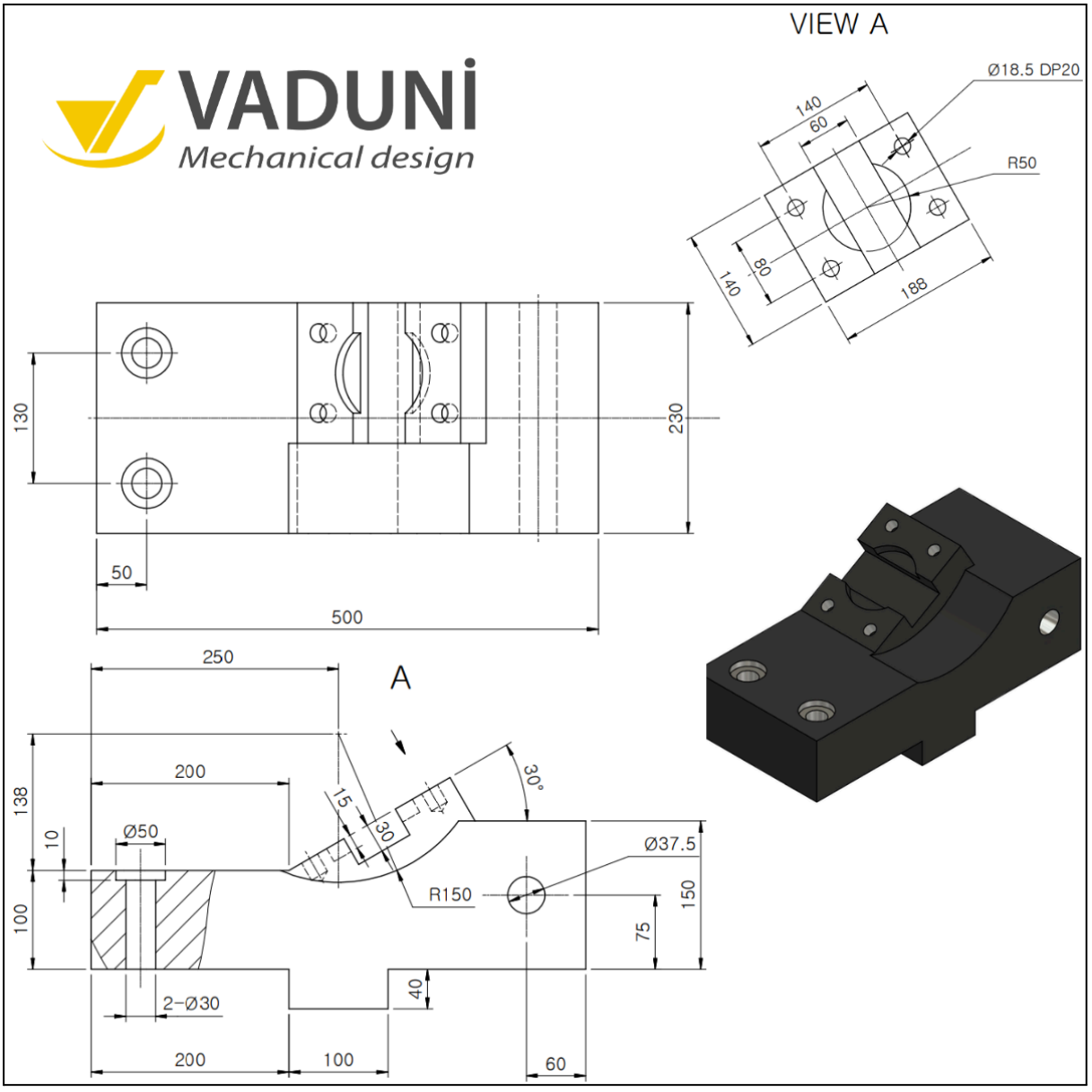
Bài tập 653


VADUNİ
Mechanical design
6×Ø11
4×R10
12
90°
75
92
112
75
45°
59
3
105
125
A
56
67
75
12

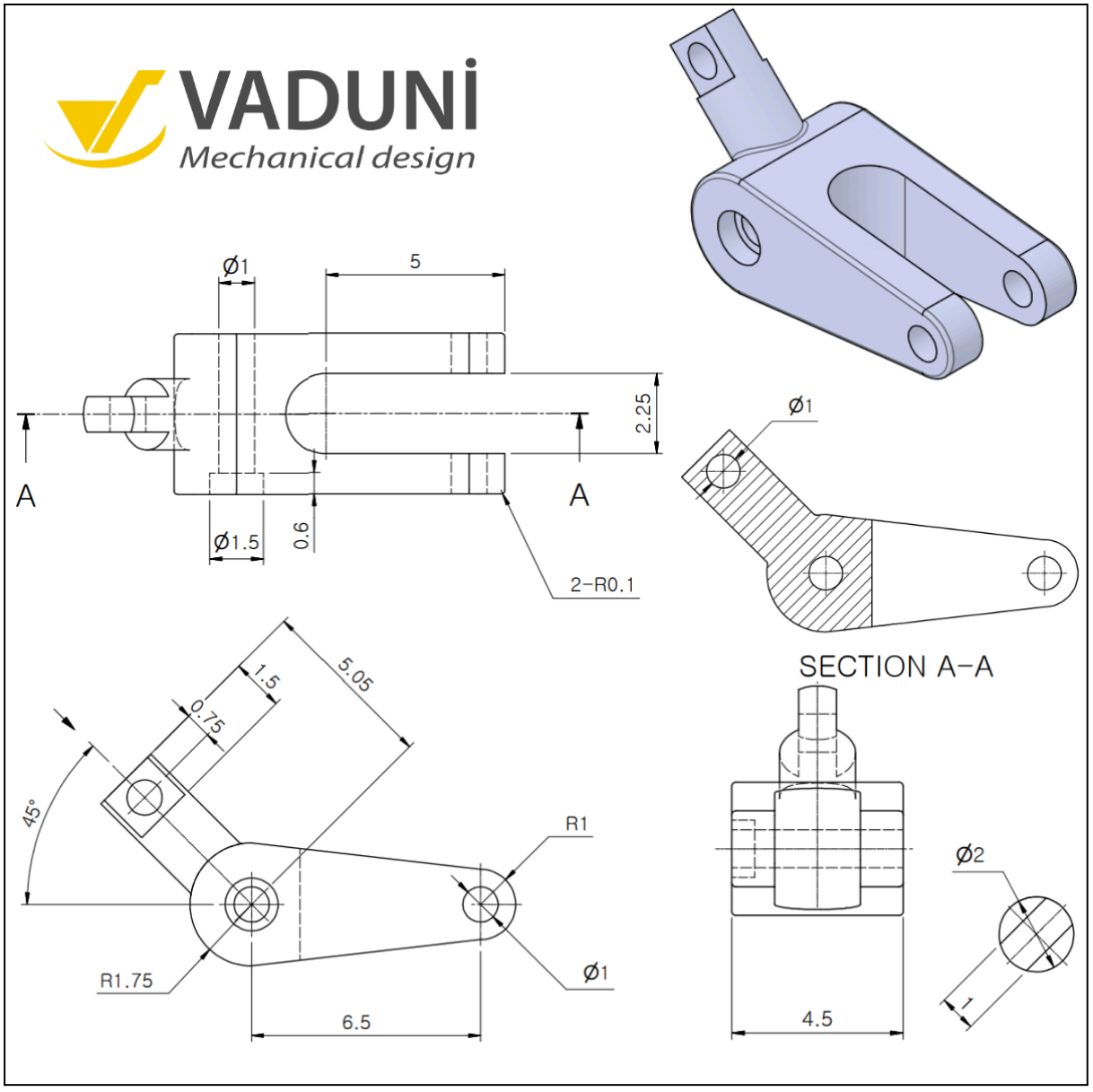
Bài tập 654


VADUNİ
Mechanical design
2-Ø20
12
4-R6
62
31
75
2-R22
4-R6
12
135
12
12
R6
R40
12
40
z R40
30°
12
20
20
175
R6
R6

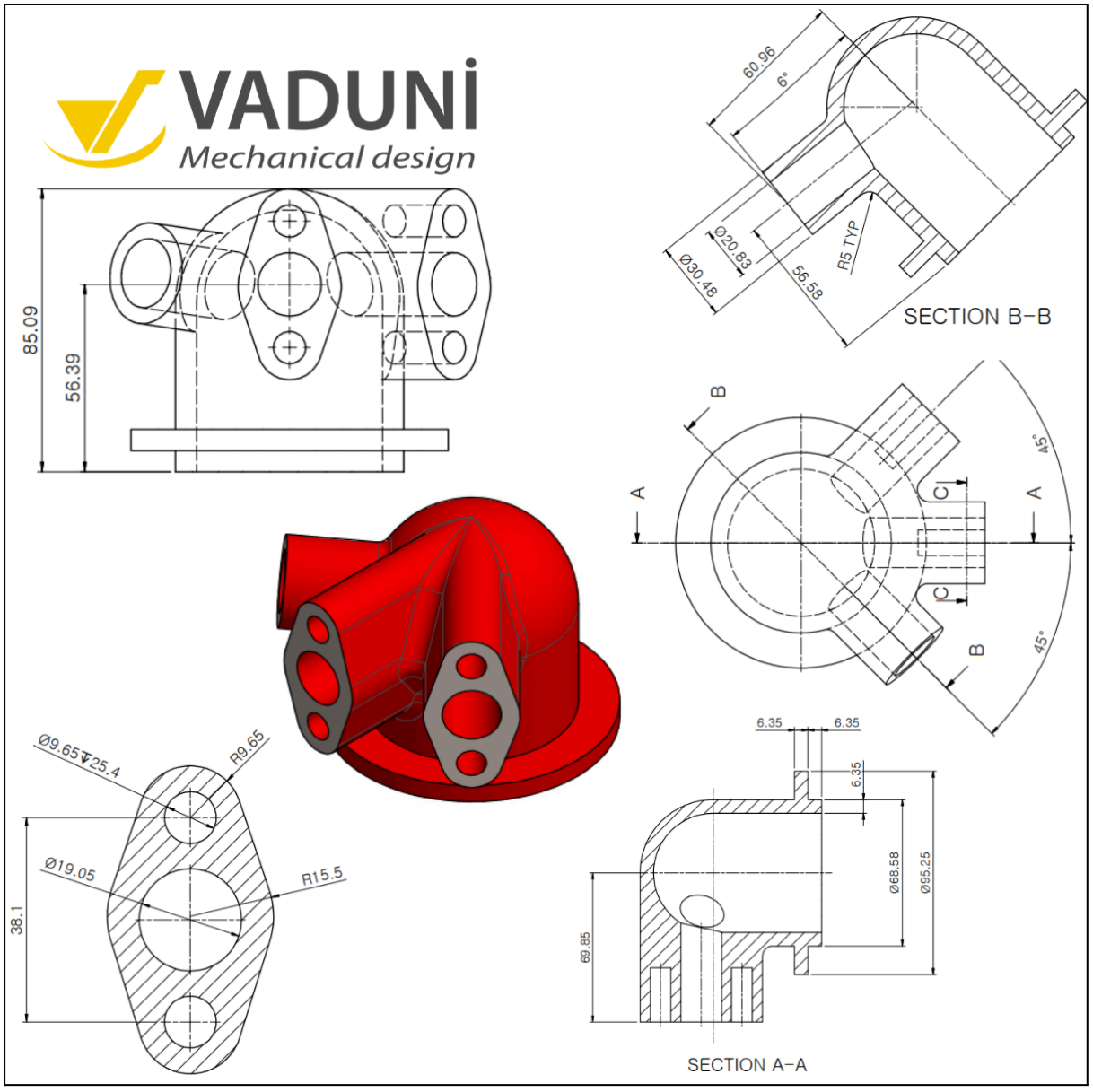
Bài tập 655


VIEW A
VADUNİ
Mechanical design
Ø18.5 DP20
140
60
R50
80
140
188
130
230
50
500
250
A
200
138
10
Ø50
15
30
30°
Ø37.5
R150
150
100
75
40
2-Ø30
200
100
60

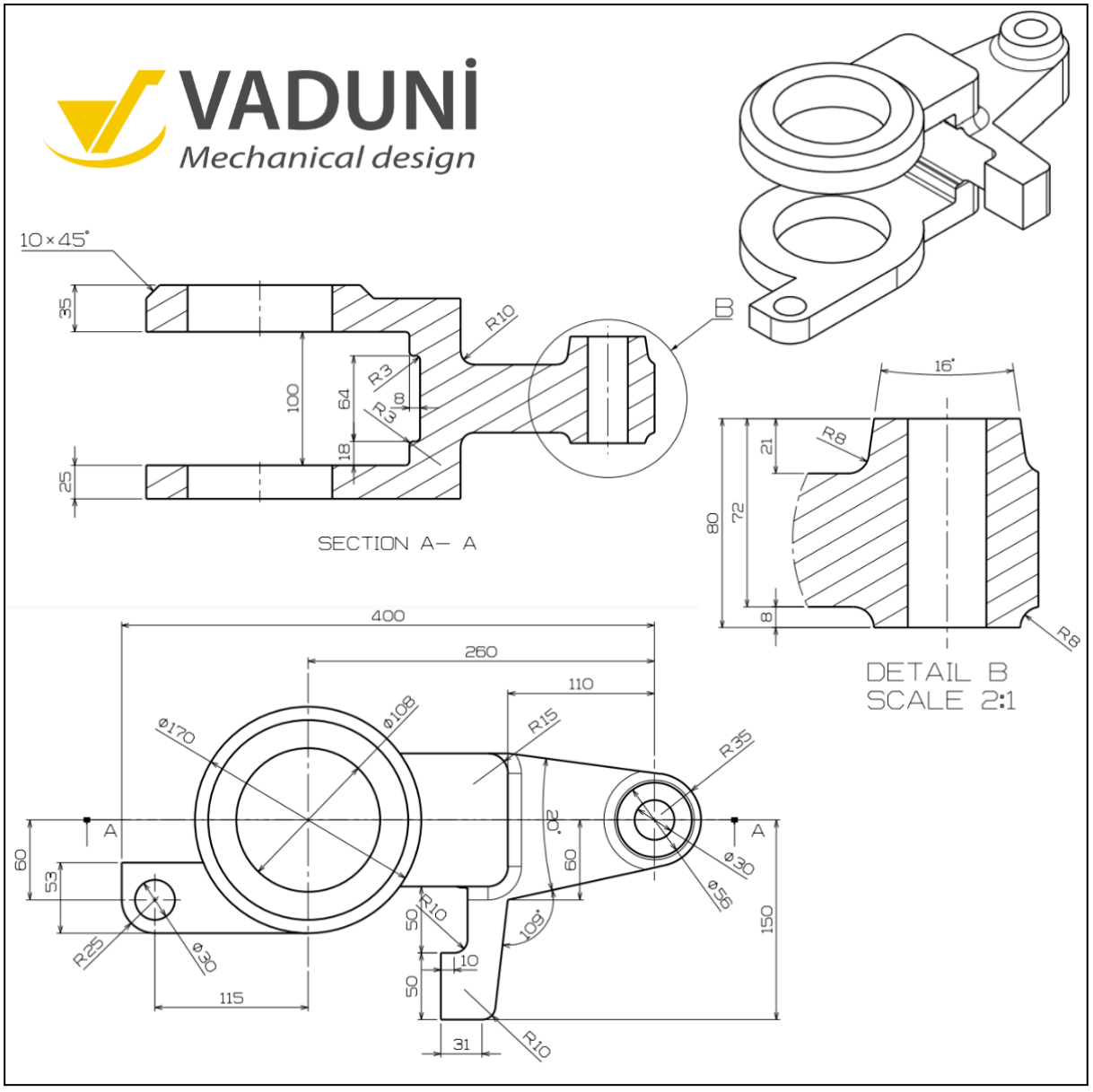
Bài tập 656


VADUNI
Mechanical design
Ø1
5
2.25
A
A
Ø1.5
0.6
2-R0.1
Ø1
SECTION A-A
1.5
0.75
5.05
45°
R1
R1.75
Ø1
6.5
Ø2
4.5
1

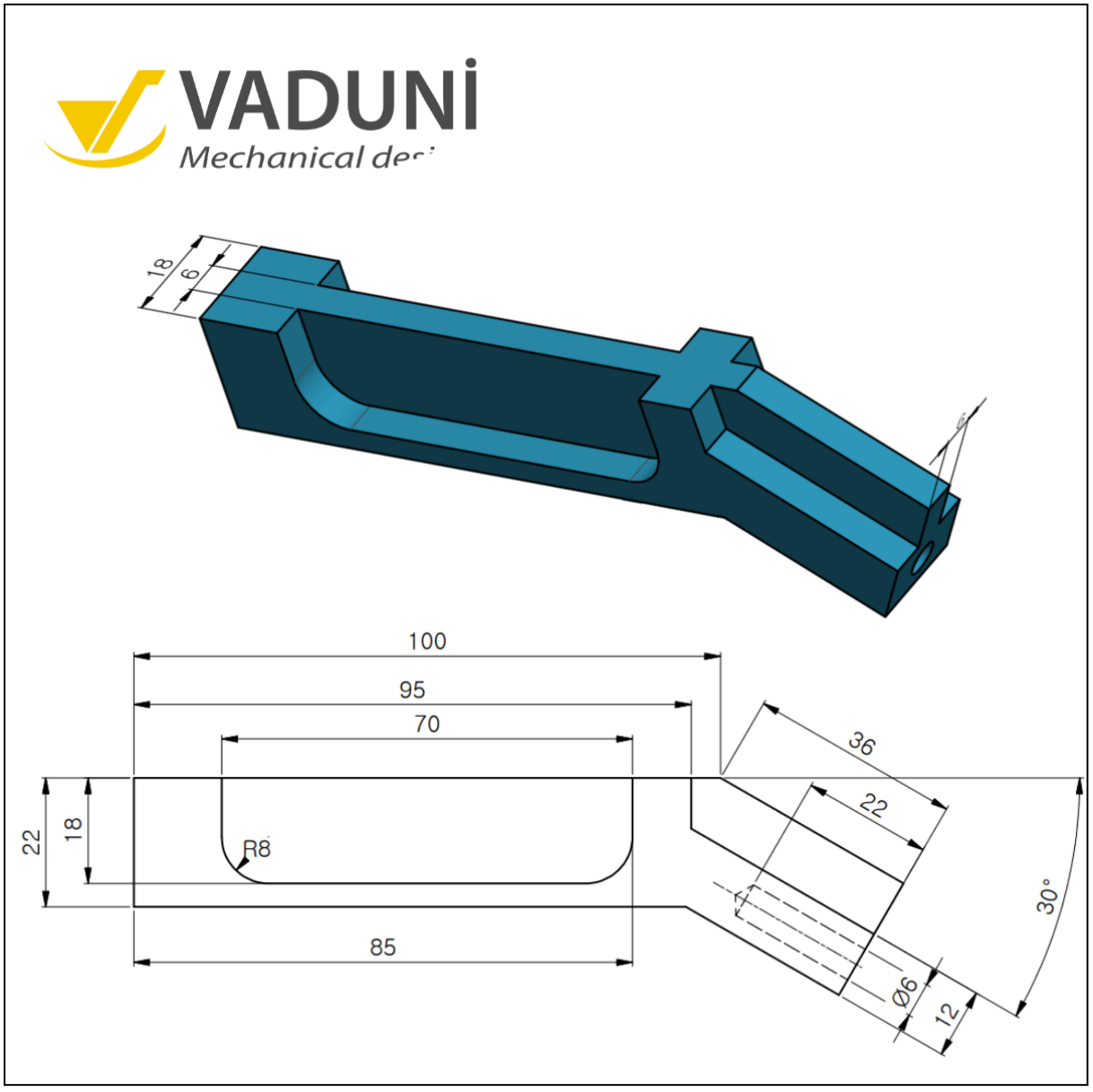
Bài tập 657


VADUNI
Mechanical design
85.09
56.39
60.96
6°
Ø20.83
Ø30.48
56.58
R5 TYP
SECTION B–B
A
B
C
45°
Ø9.65▼25.4
R9.65
Ø19.05
R15.5
38.1
6.35
6.35
6.35
Ø68.58
Ø95.25
69.85
SECTION A–A

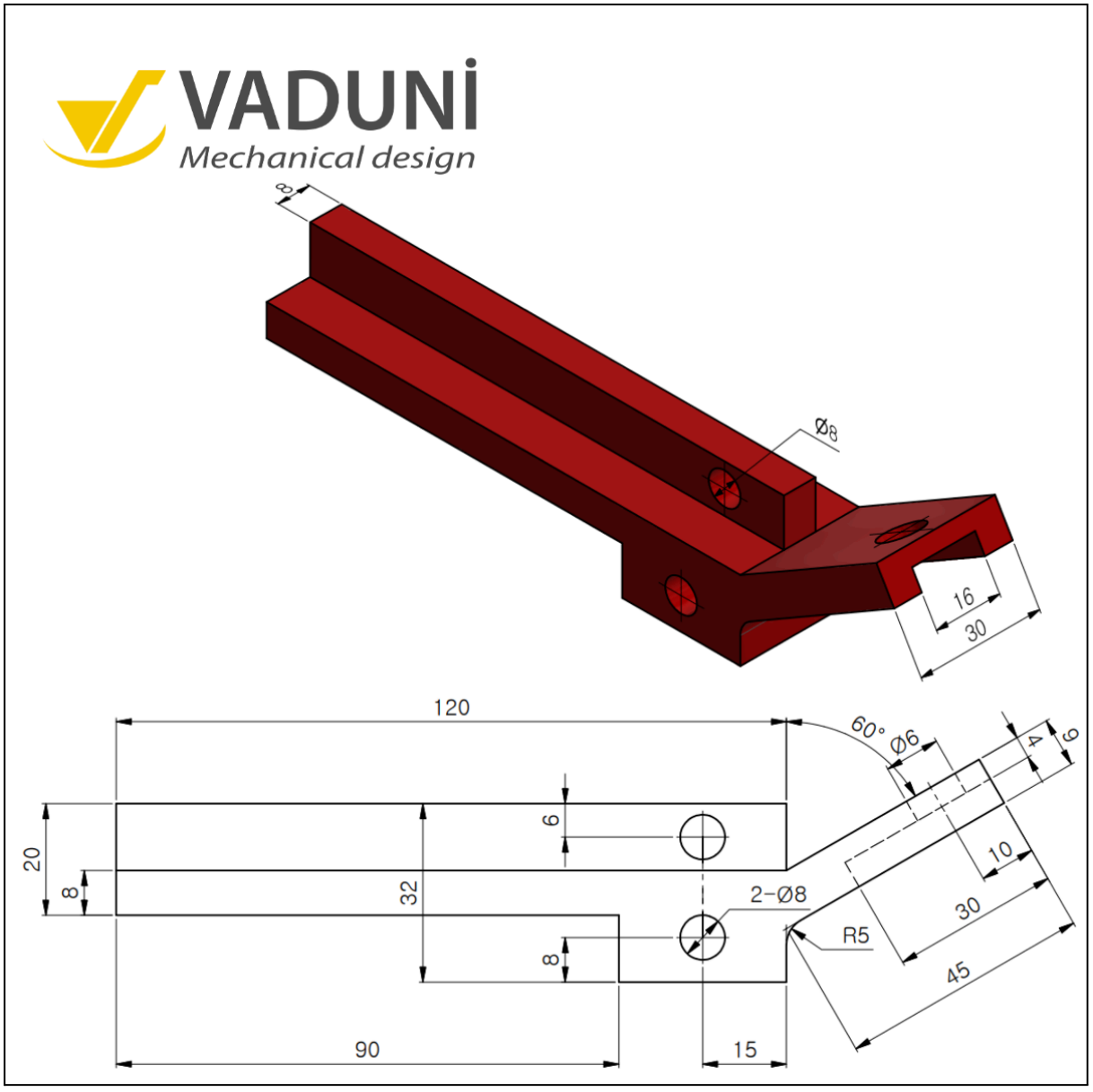
Bài tập 658


VADUNİ
Mechanical design
10×45°
35
25
100
64
18
R3
R3
R10
B
SECTION A– A
16°
21
R8
80
72
8
R8
DETAIL B
SCALE 2:1
400
260
110
ø170
ø108
R15
R35
A
A
60
53
R25
ø30
115
20°
60
ø30
ø56
50
R10
10
50
105°
150
31
R10

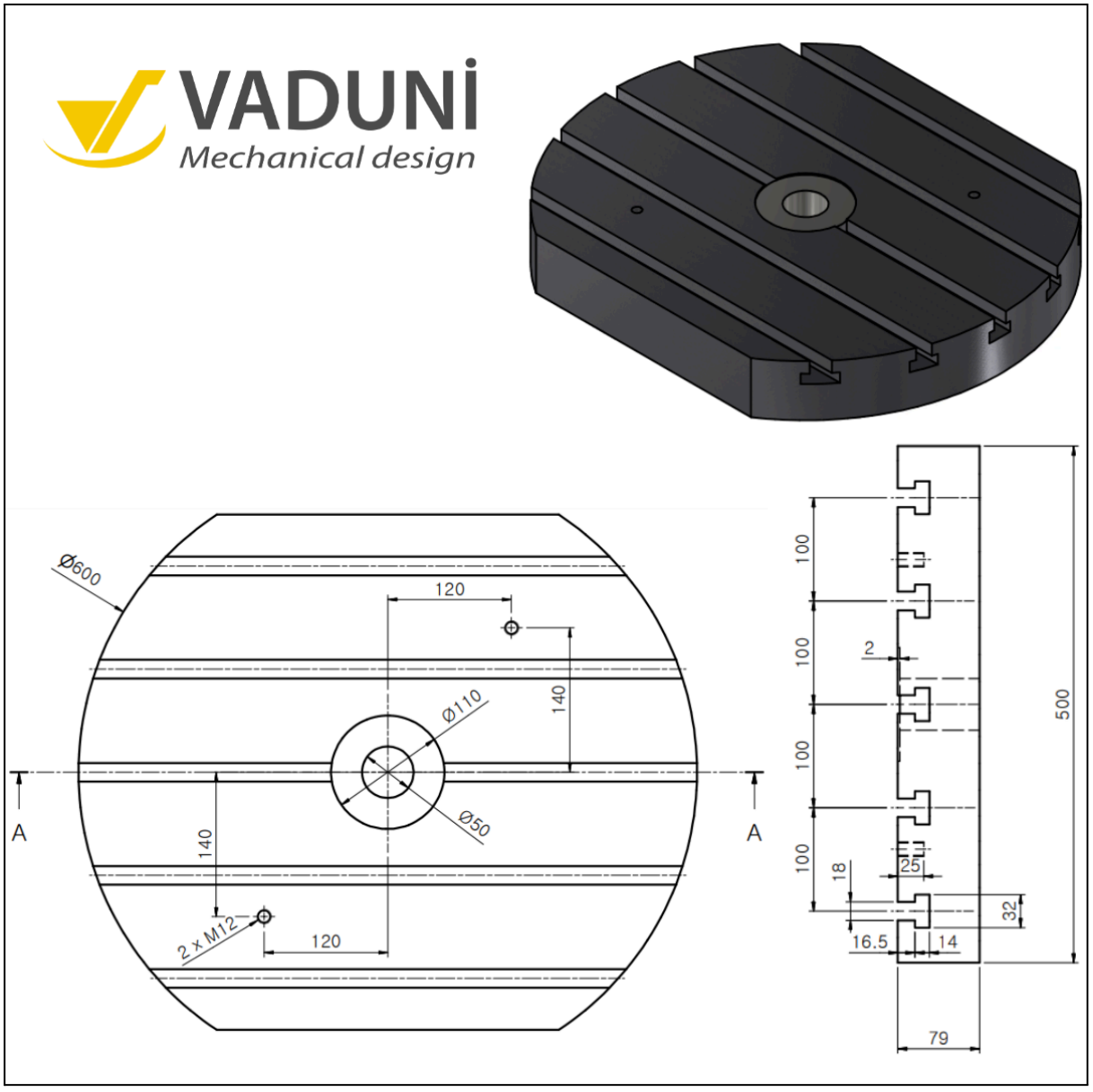
Bài tập 659



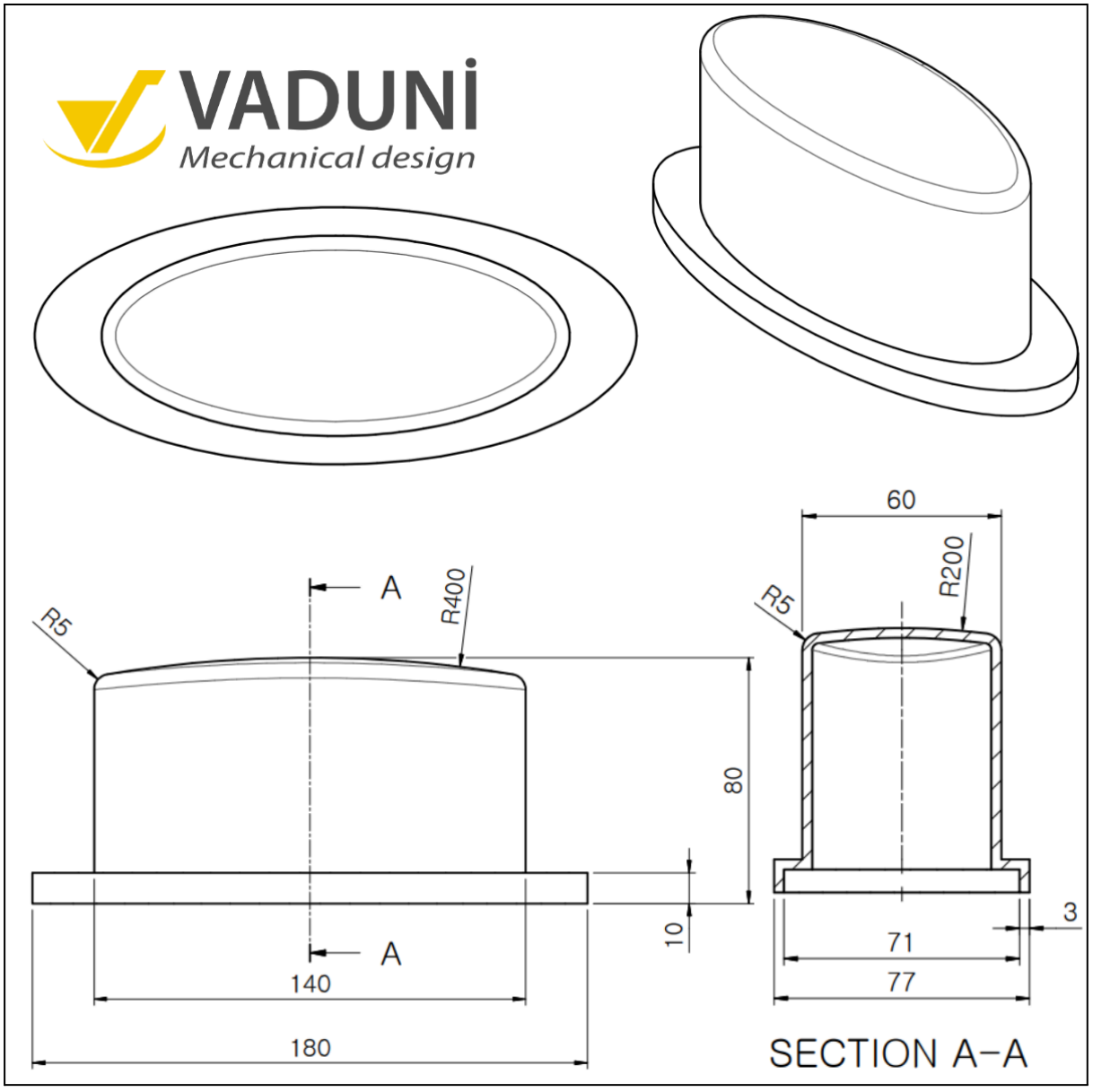
Bài tập 660


VADUNİ
Mechanical design
8
Ø8
16
30
120
60°
Ø6
4
6
10
30
45
20
8
6
32
8
2–Ø8
R5
90
15

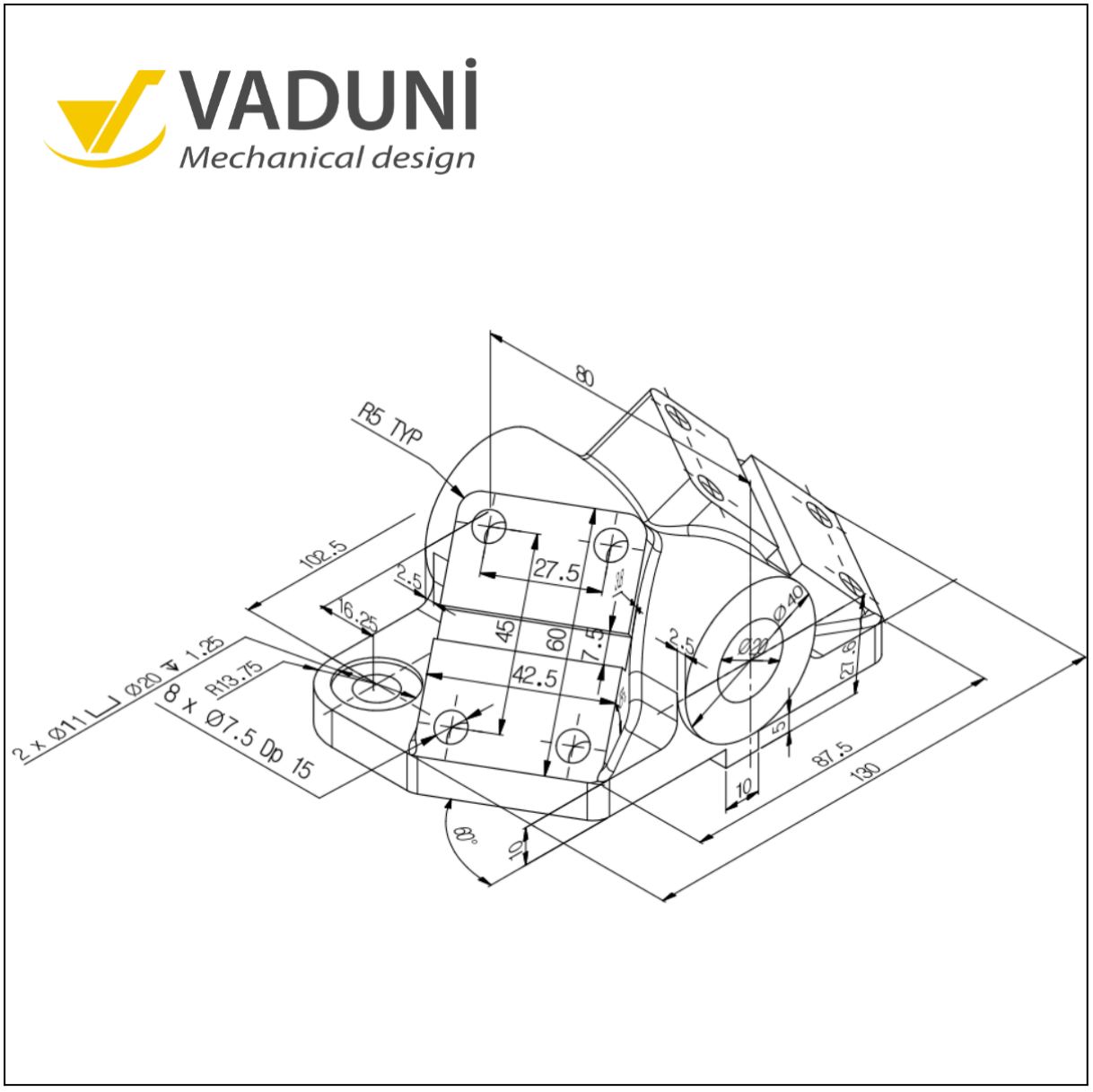
Bài tập 661


VADUNİ
Mechanical design
Ø600
120
Ø110
140
Ø50
A
A
140
2 x M12
120
100
100
100
100
2
500
18
25
32
16.5
14
79

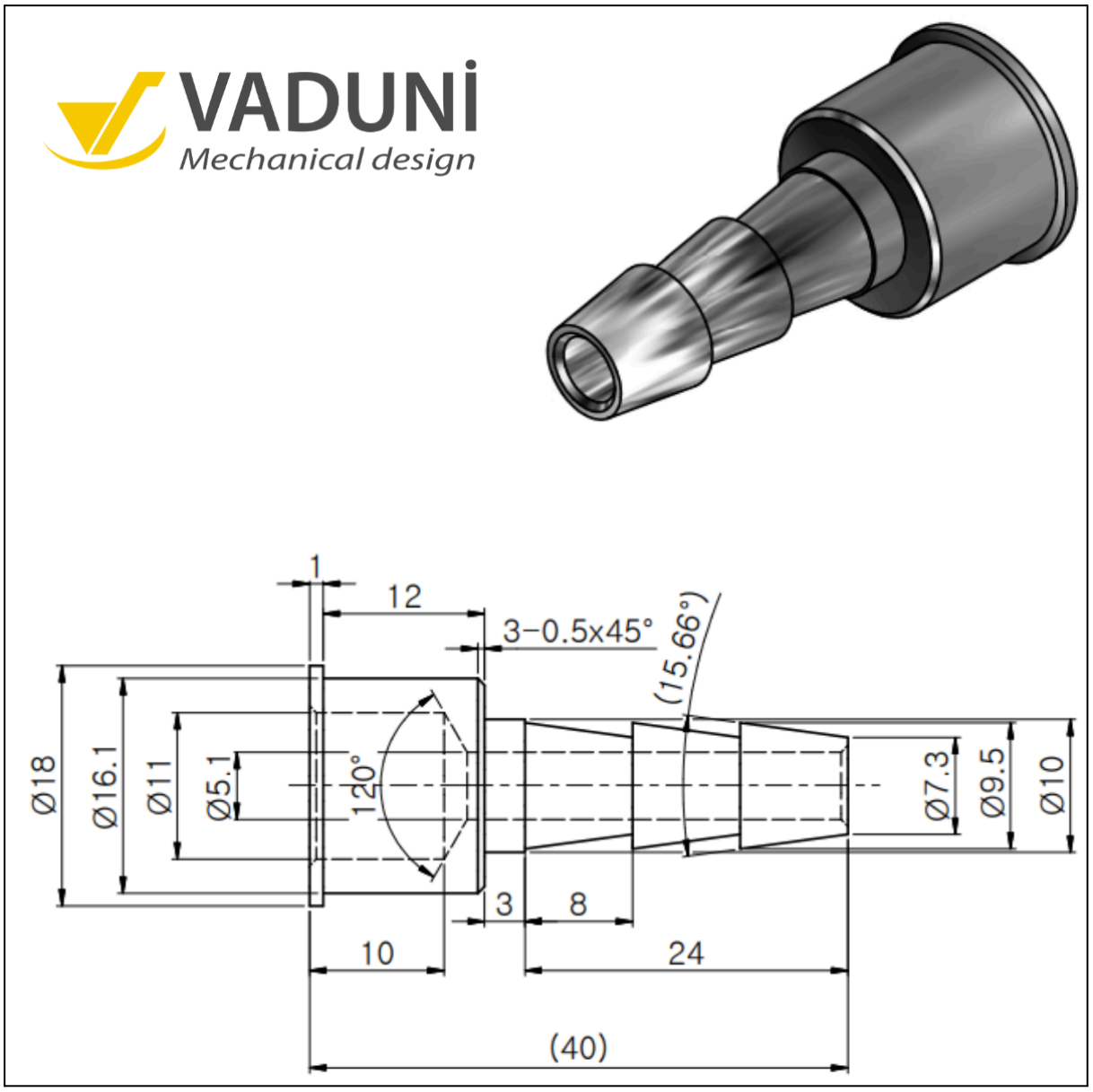
Bài tập 662


VADUNİ
Mechanical design
R5
A
R400
80
10
A
140
180
60
R200
R5
71
77
3
SECTION A–A

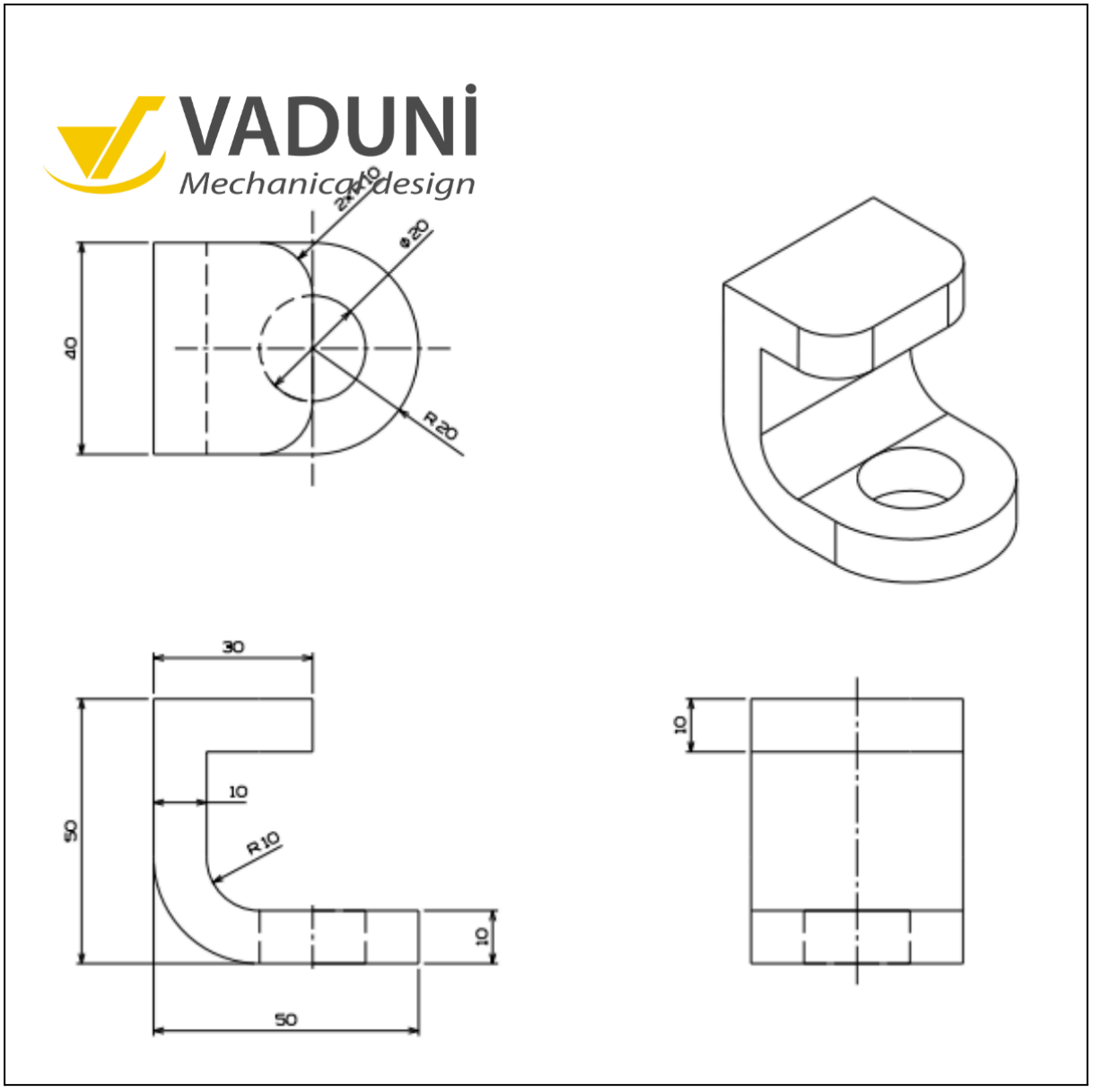
Bài tập 663


VADUNİ
Mechanical design
80
R5 TYP
102.5
2.5
16.25
27.5
45
60
42.5
2.5
Ø40
Ø20
47.5
5
87.5
130
10
60°
10
2 x Ø11 ⌴ Ø20 ▼ 1.25
8 x R13.75
8 x Ø7.5 Dp 15

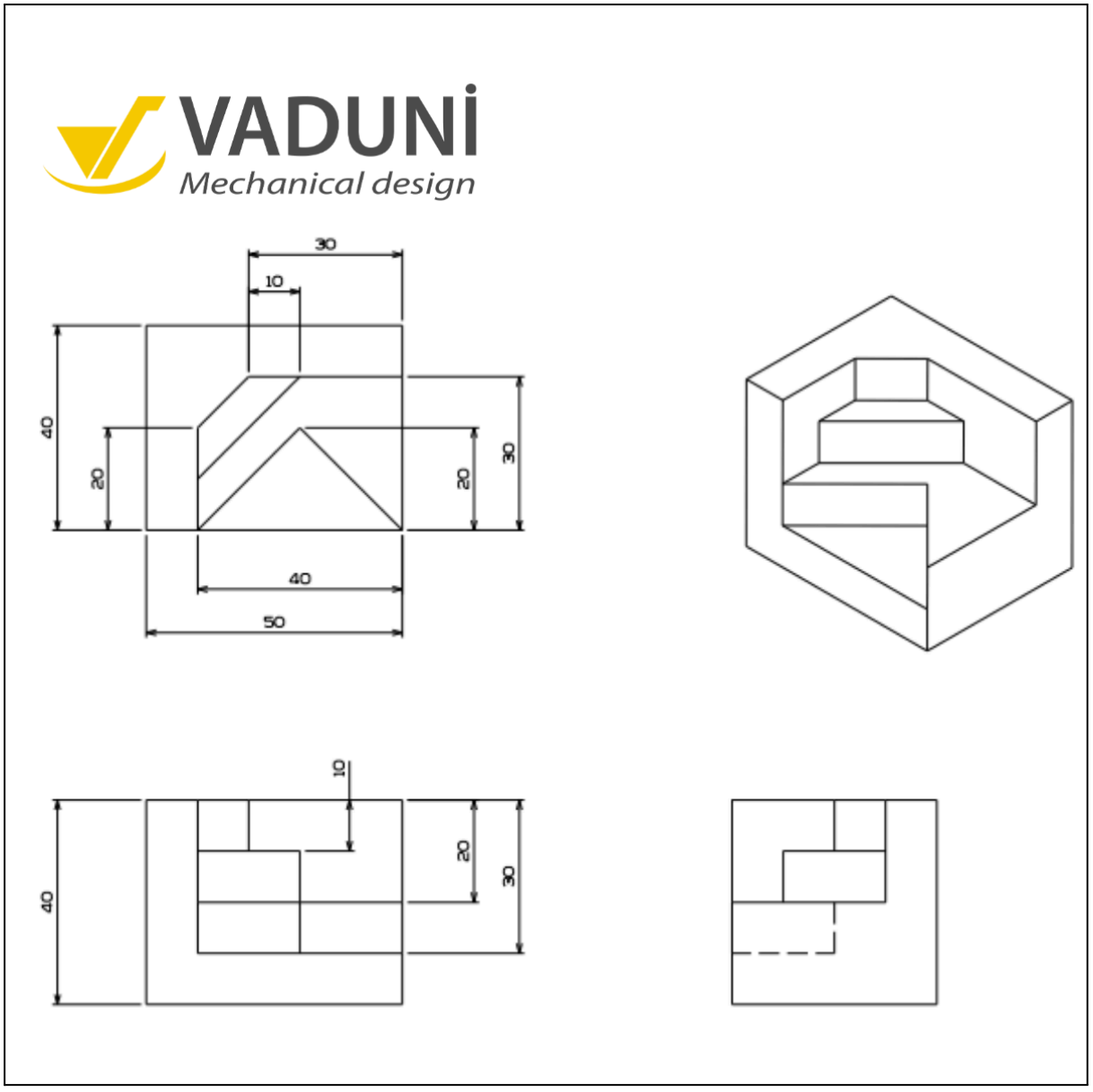
Bài tập 664


VADUNİ
Mechanical design
1
12
3−0.5x45°
(15.66°)
Ø18
Ø16.1
Ø11
Ø5.1
120°
Ø7.3
Ø9.5
Ø10
3
8
10
24
(40)

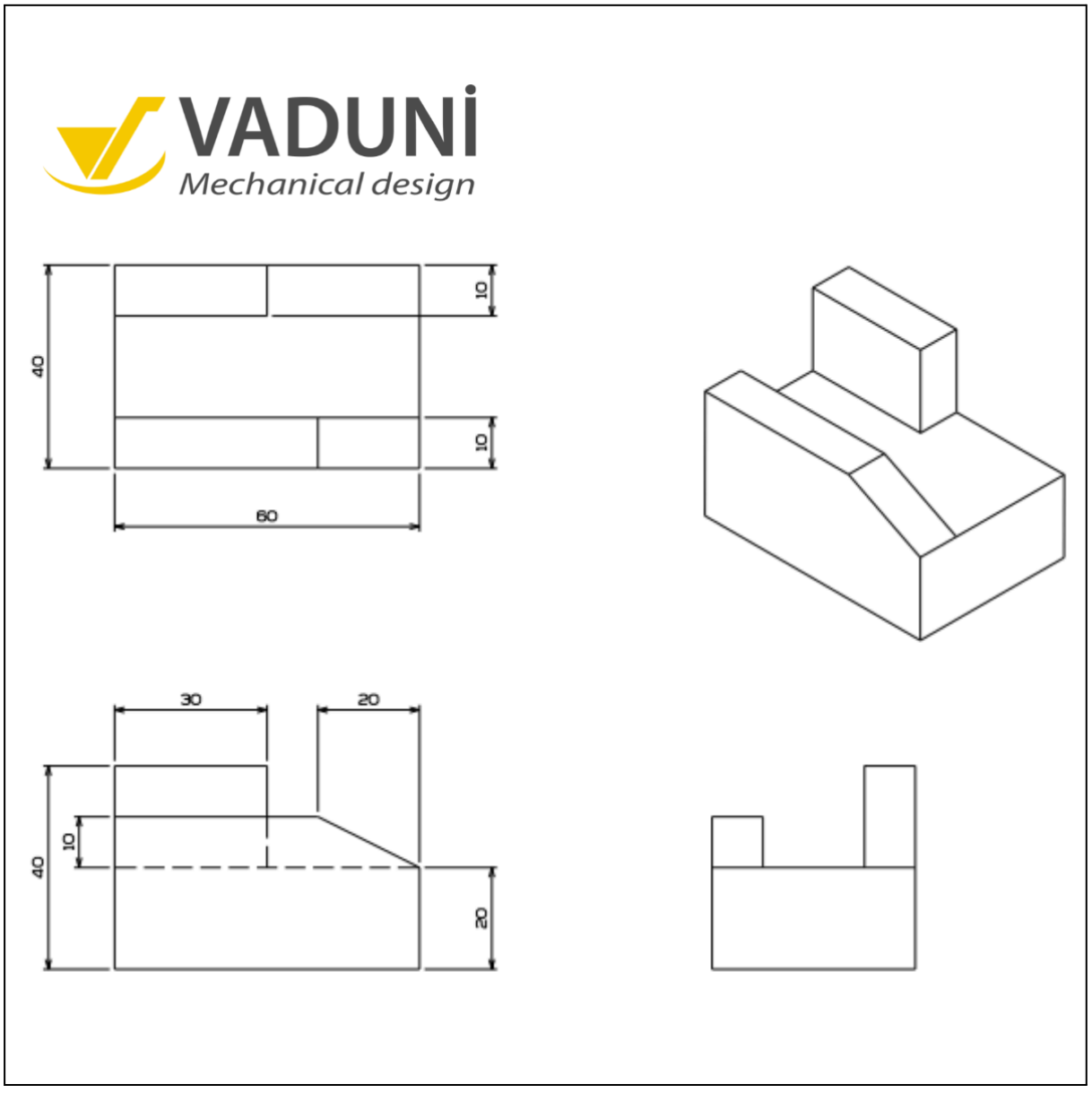
Bài tập 665



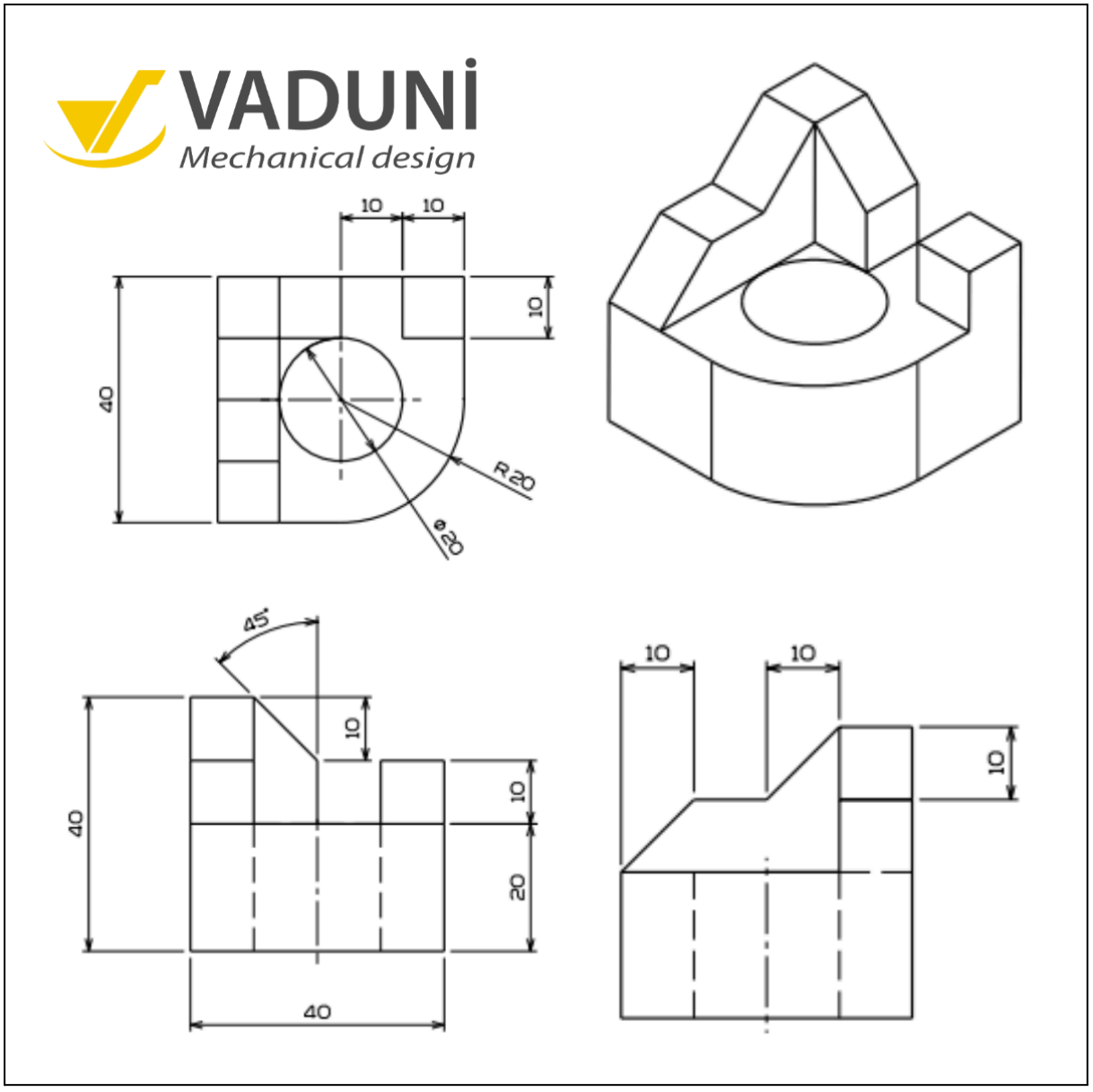
Bài tập 666



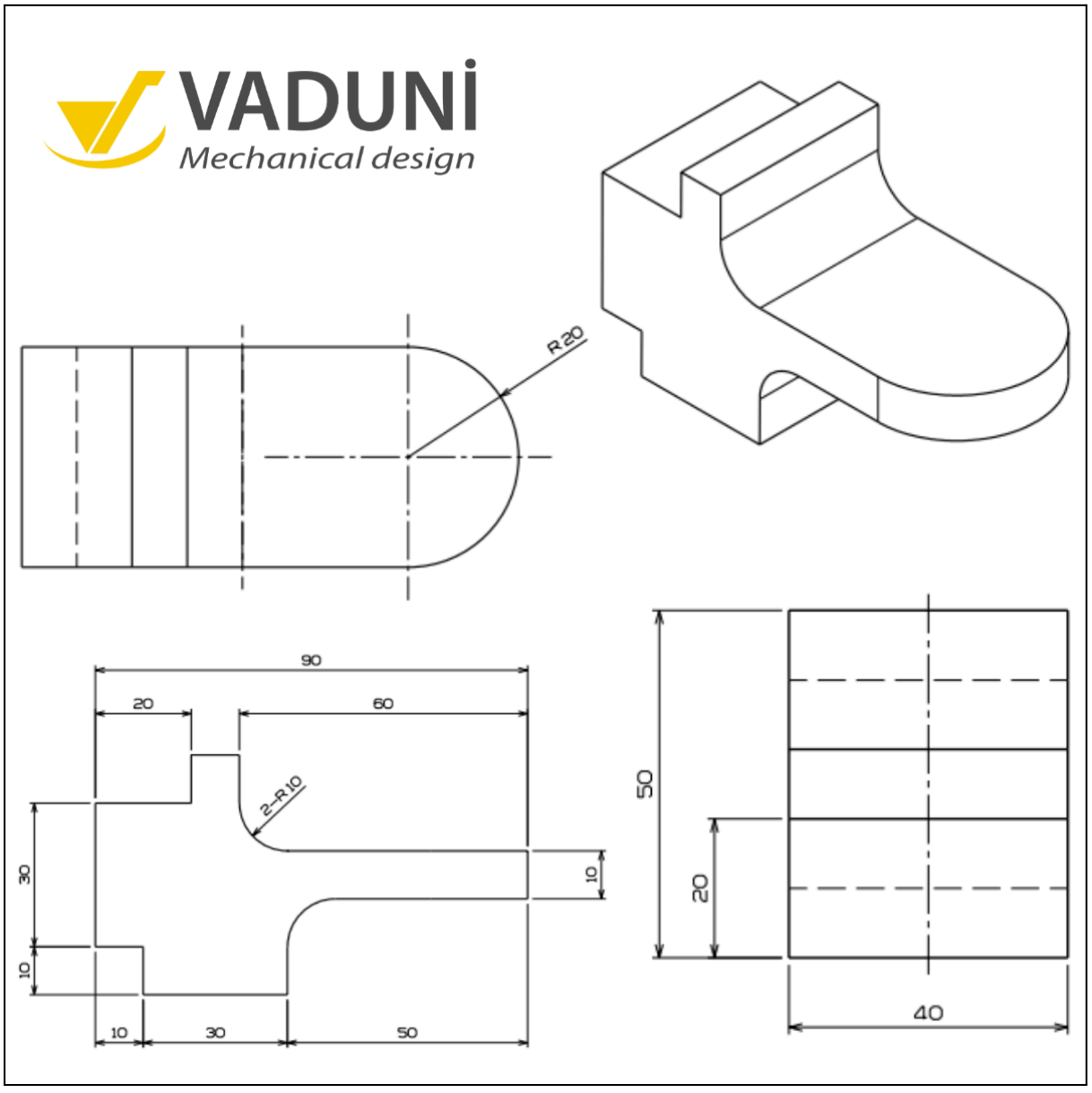
Bài tập 667



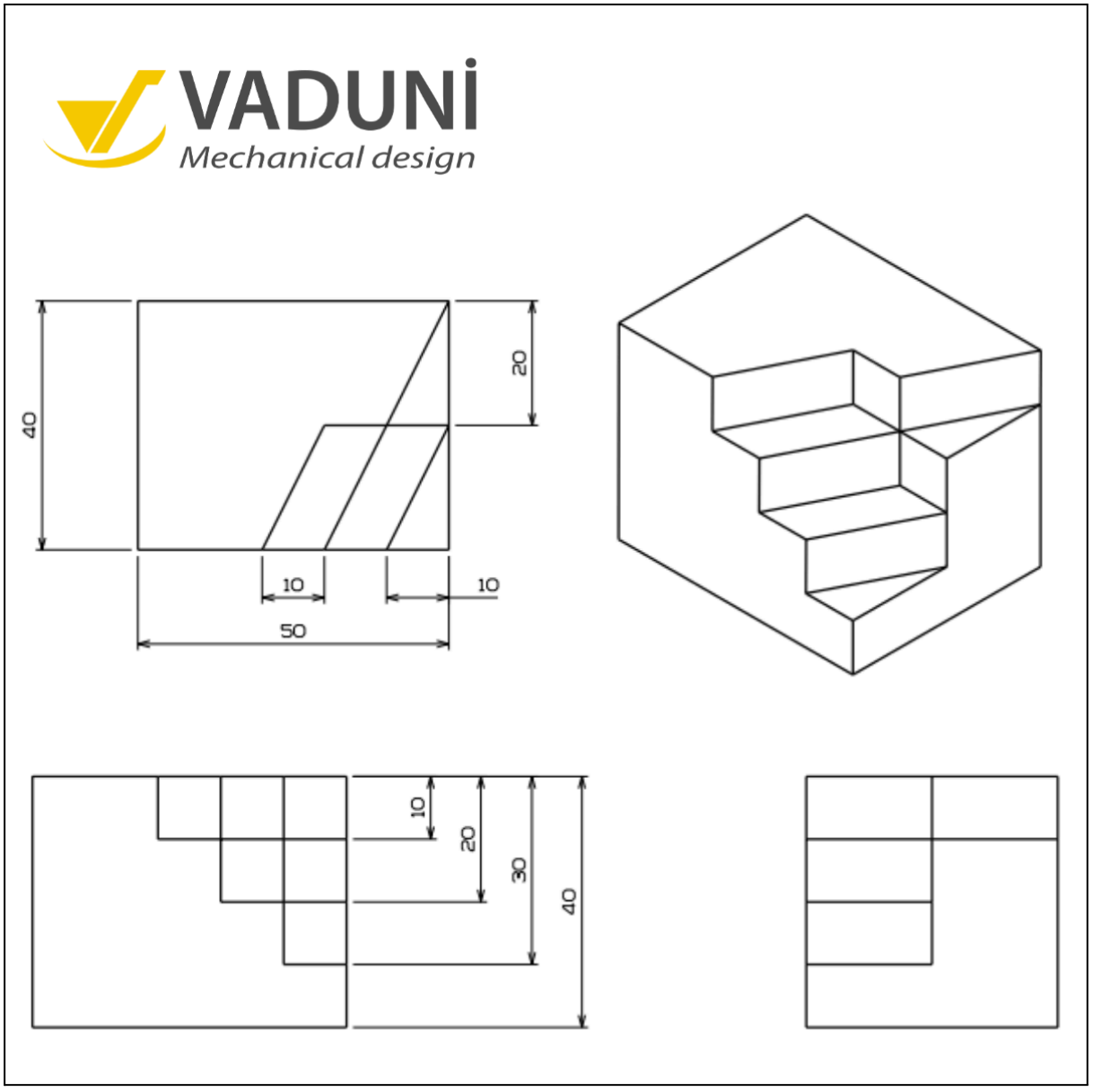
Bài tập 668


VADUNI
Mechanical design
10
10
10
40
R20
ø20
45°
10
10
40
10
20
40
10
10
10

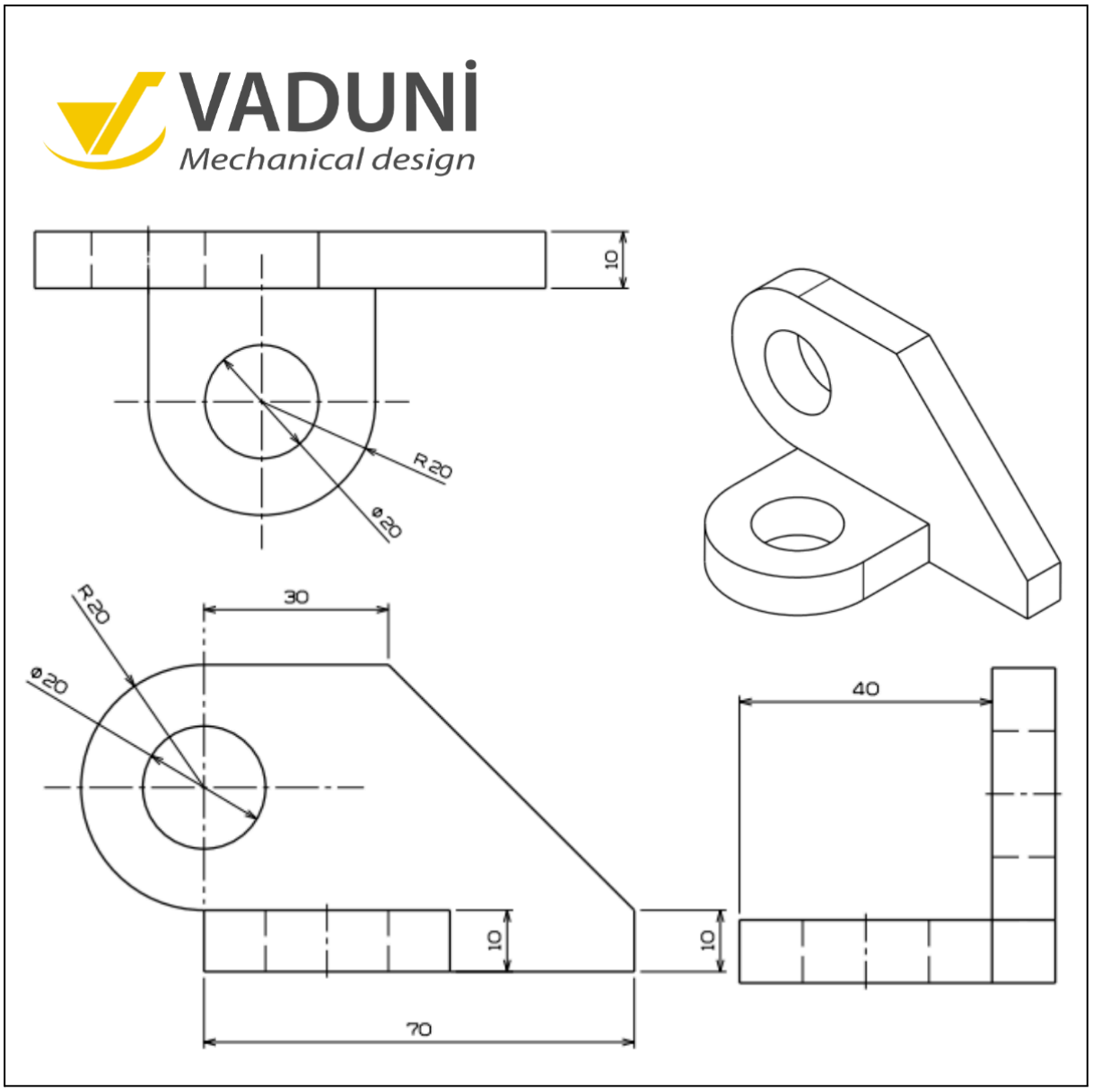
Bài tập 669


VADUNI
Mechanical design
R20
90
20
60
2-R10
30
10
10
30
50
50
20
40

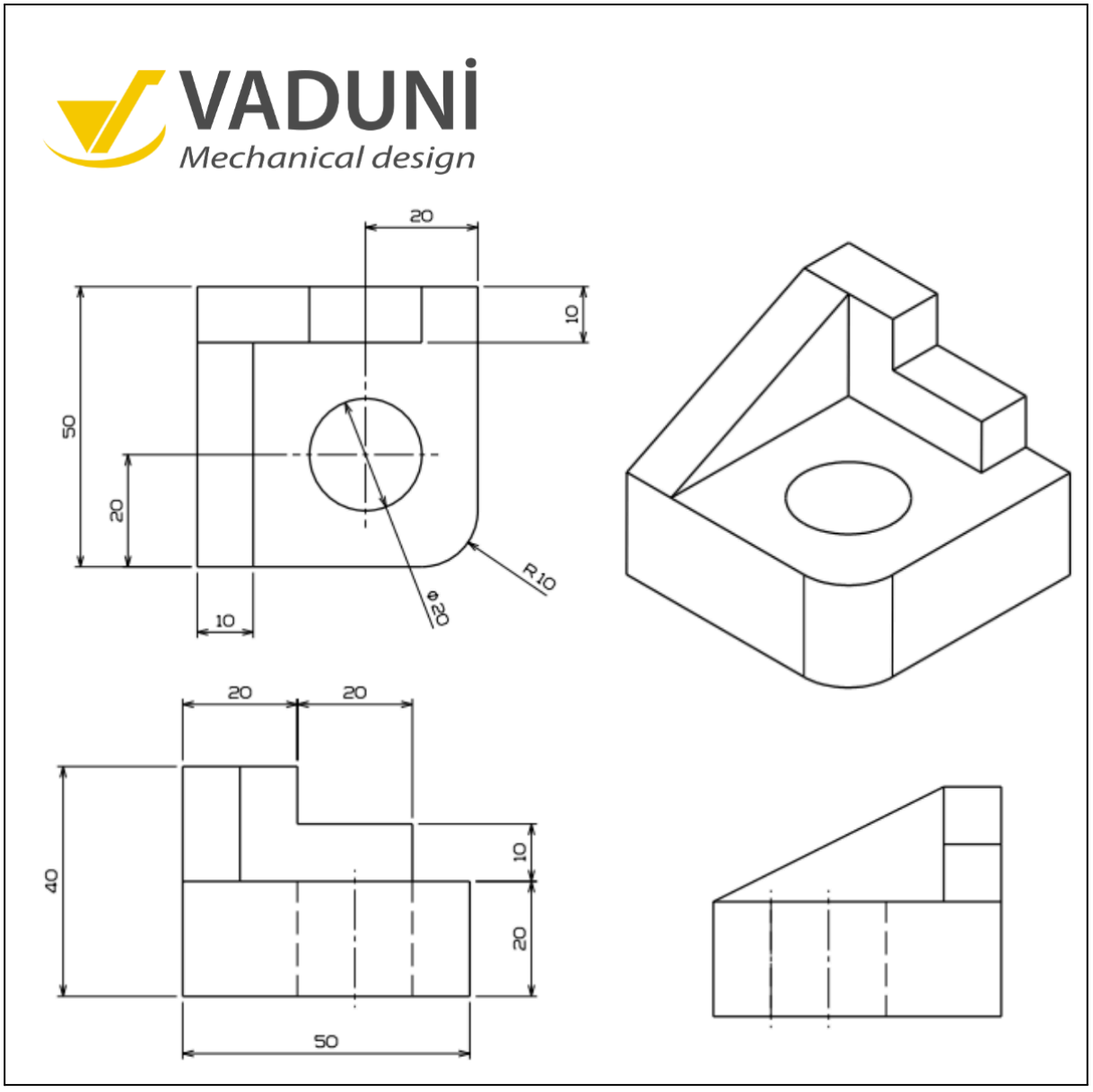
Bài tập 670



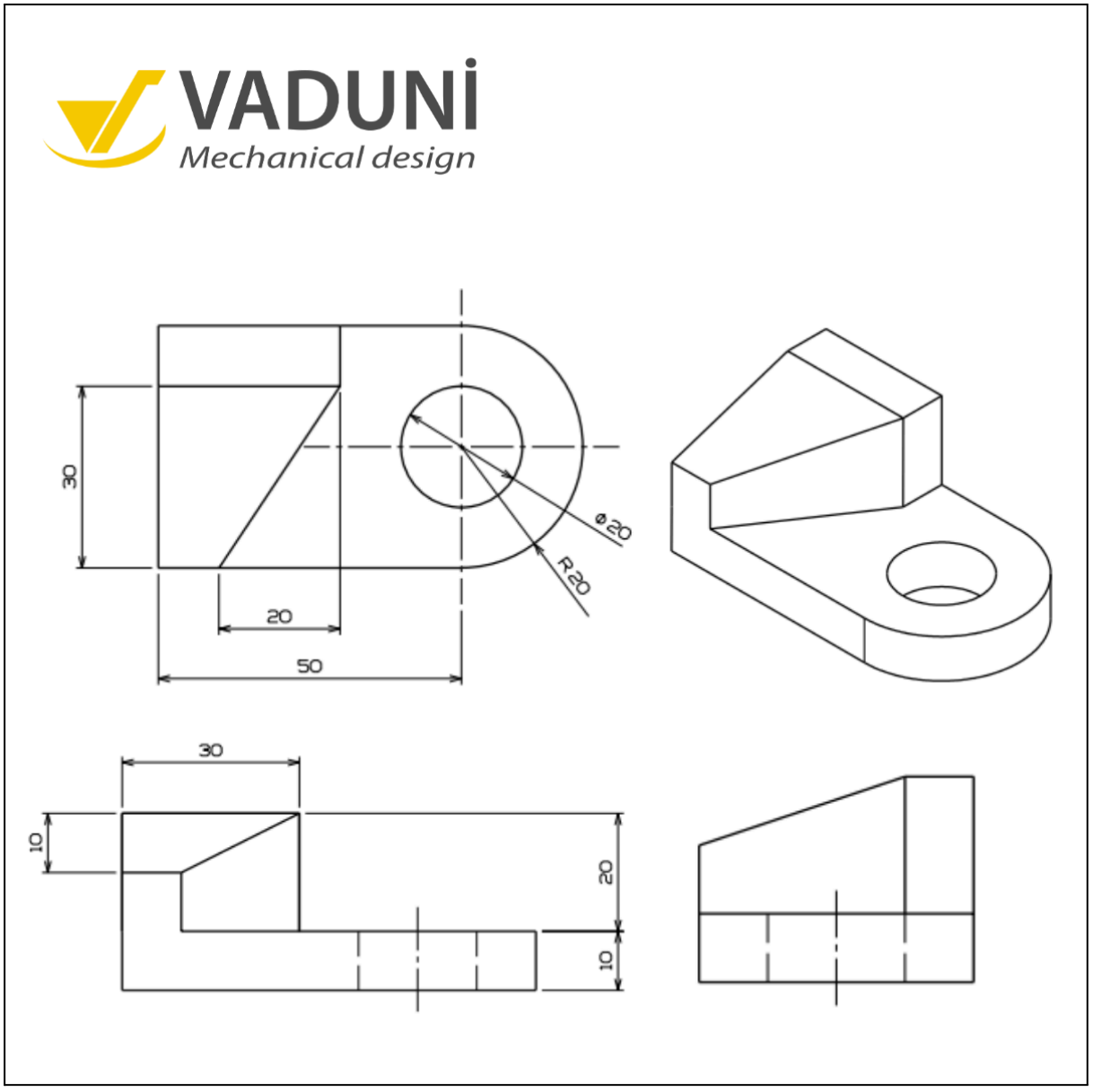
Bài tập 671



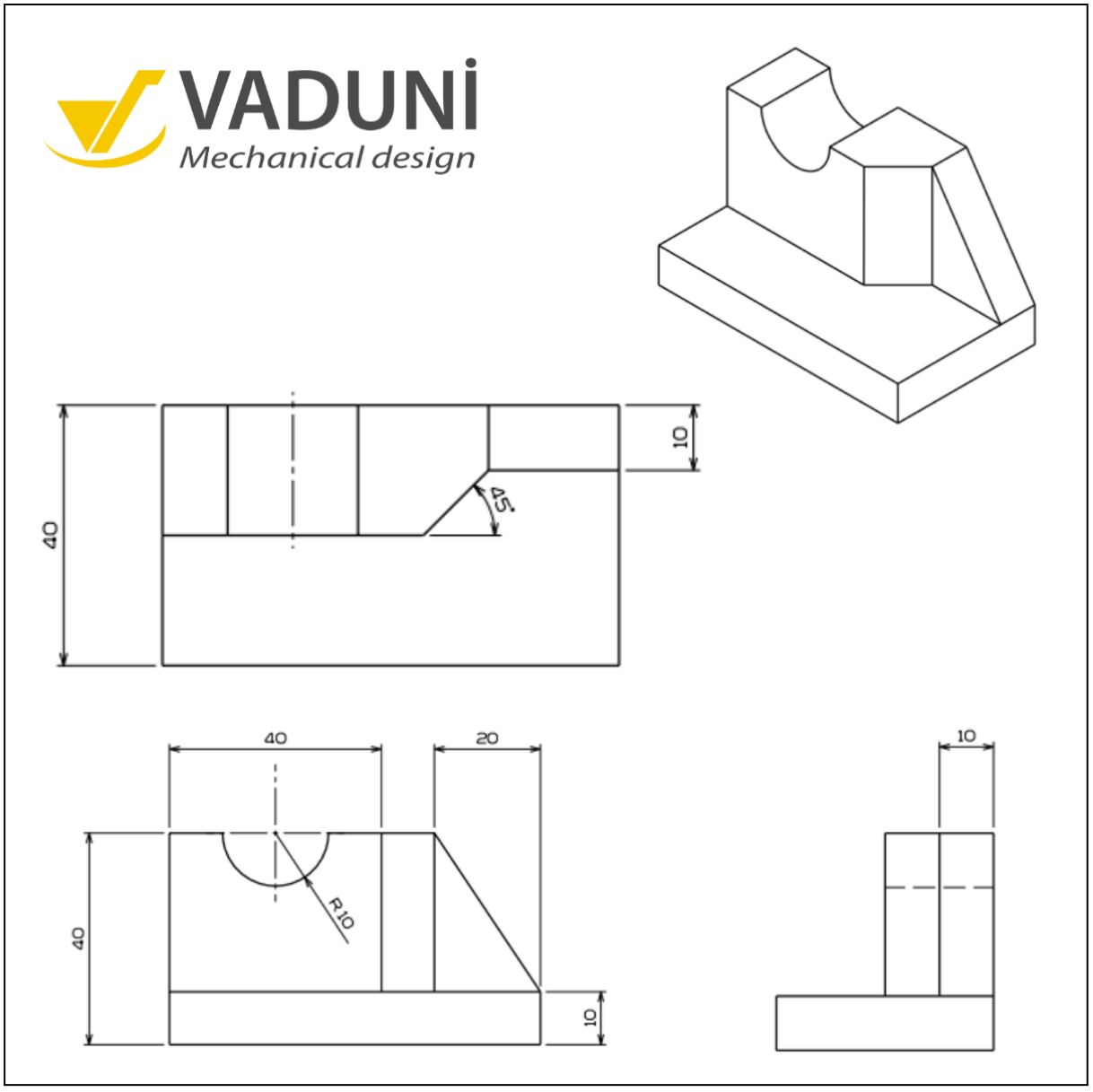
Bài tập 672


VADUNI
Mechanical design
20
10
50
20
10
R10
Φ20
20
20
40
10
20
50

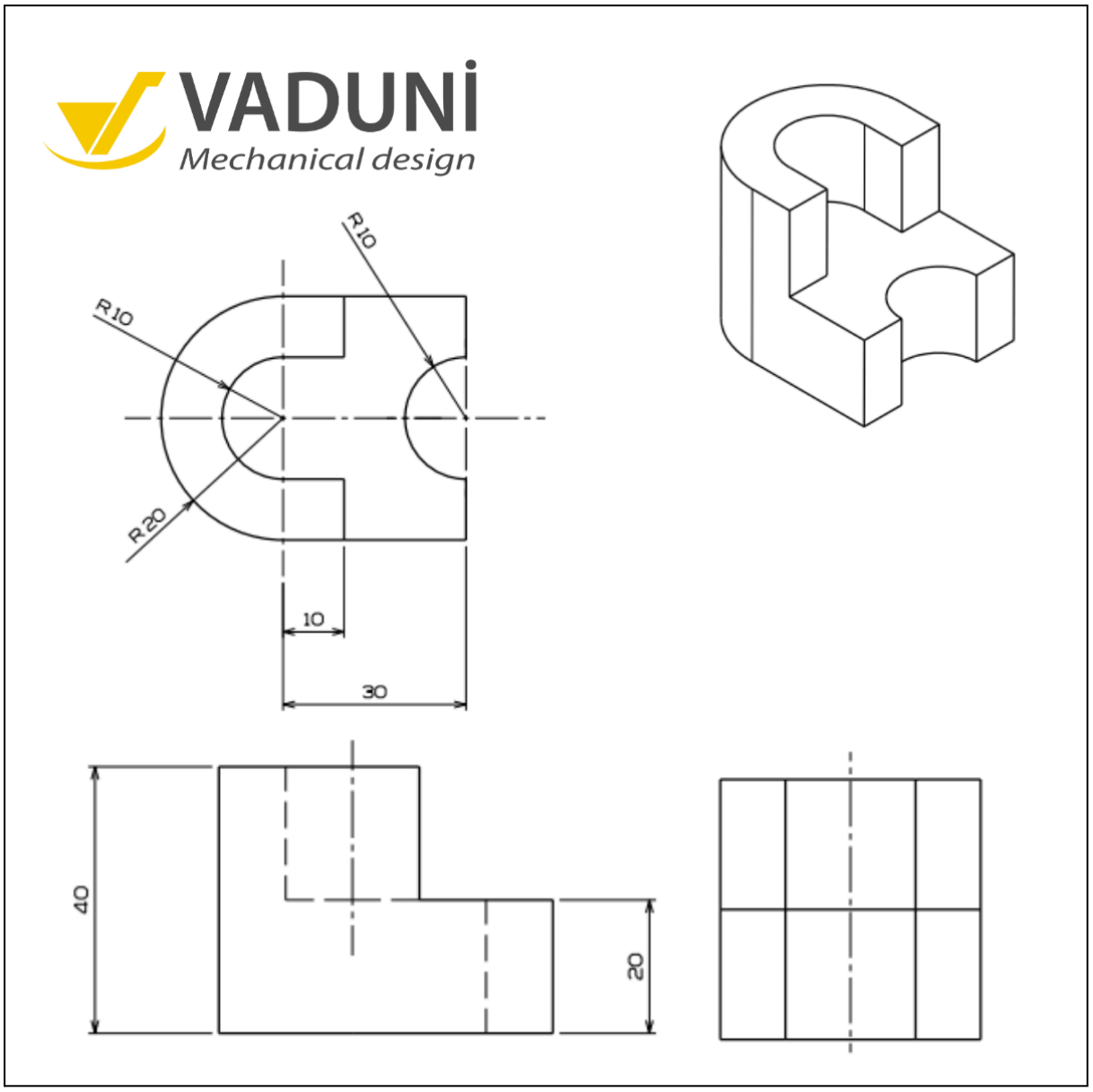
Bài tập 673



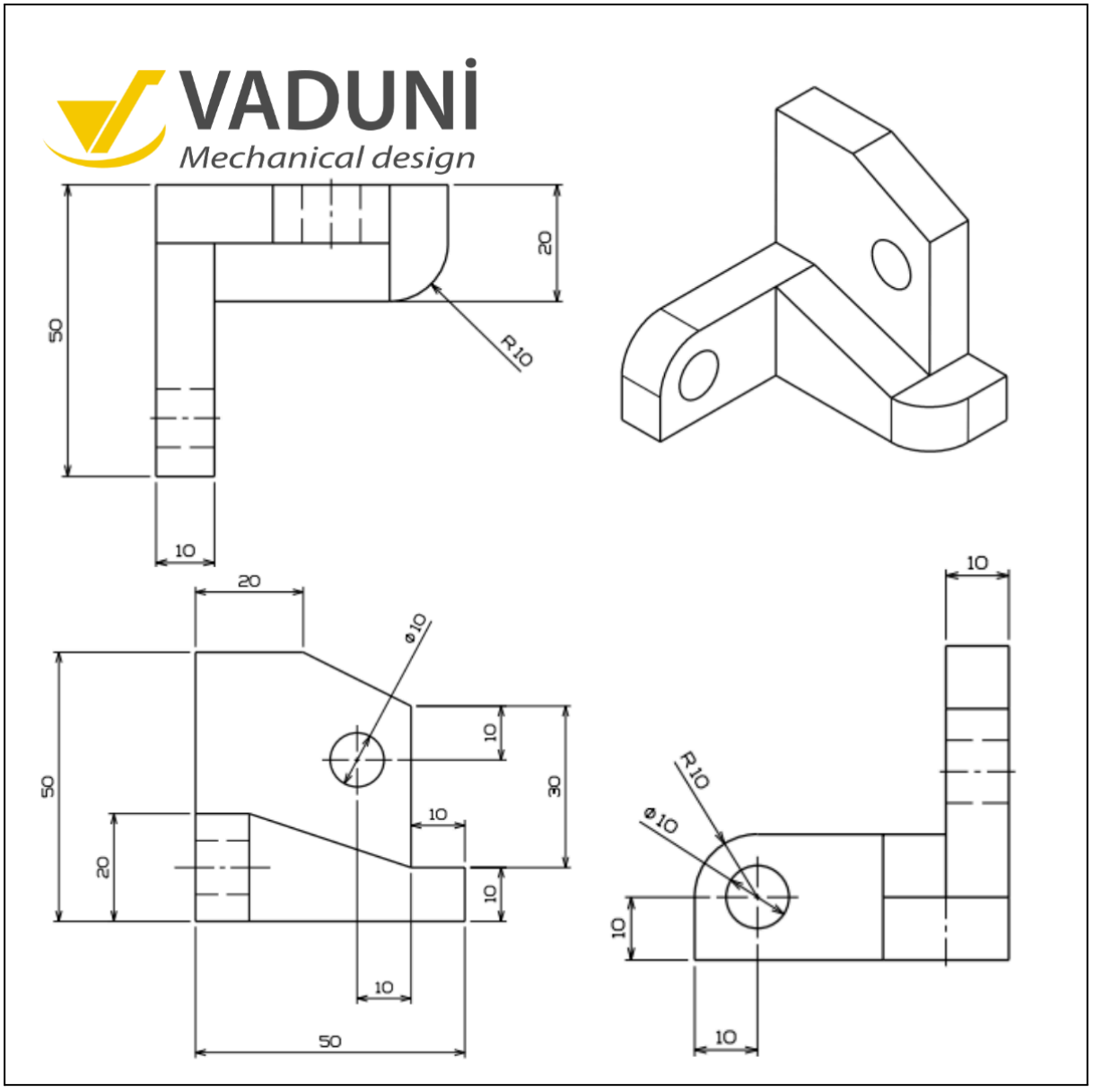
Bài tập 674



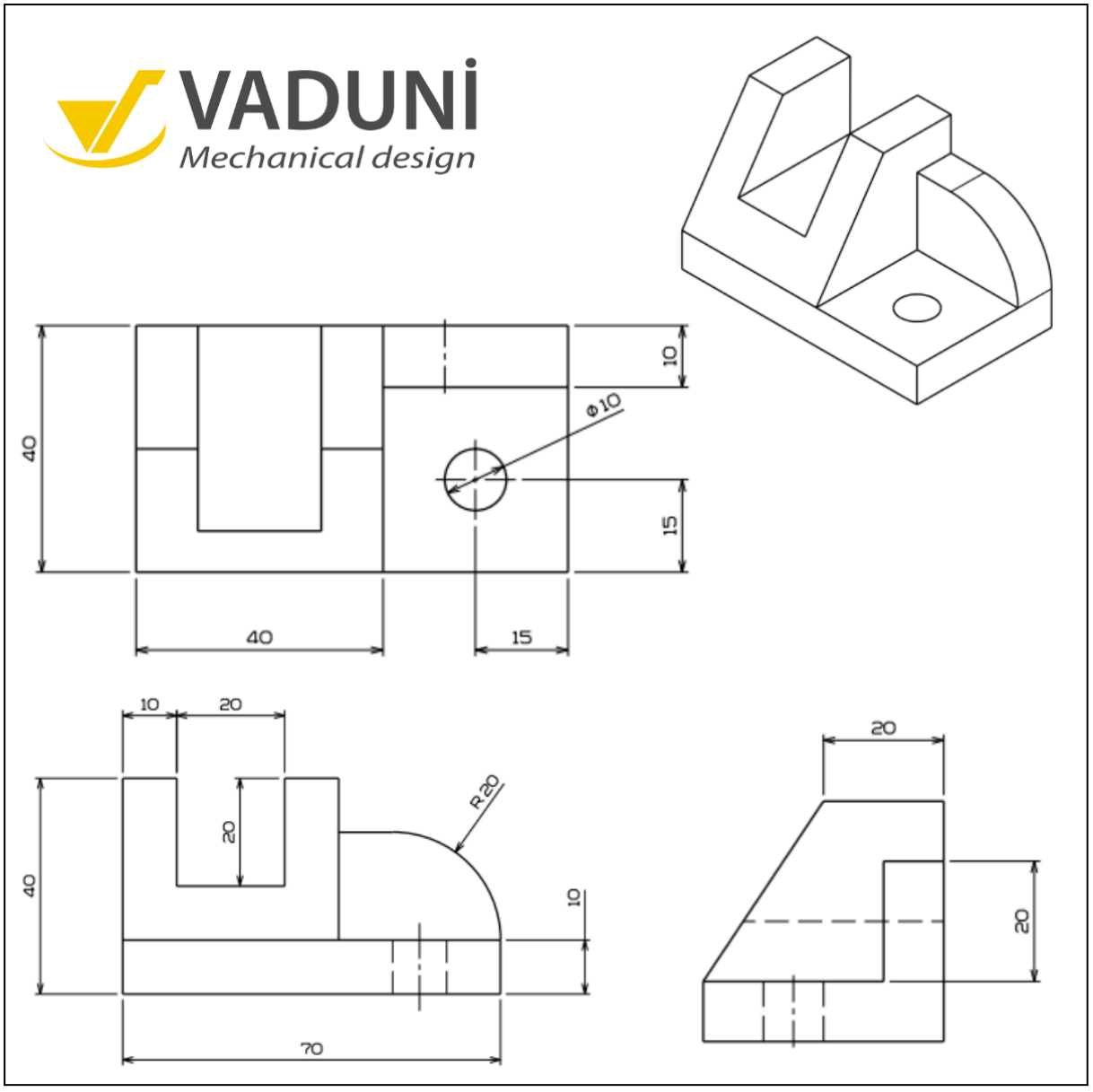
Bài tập 675



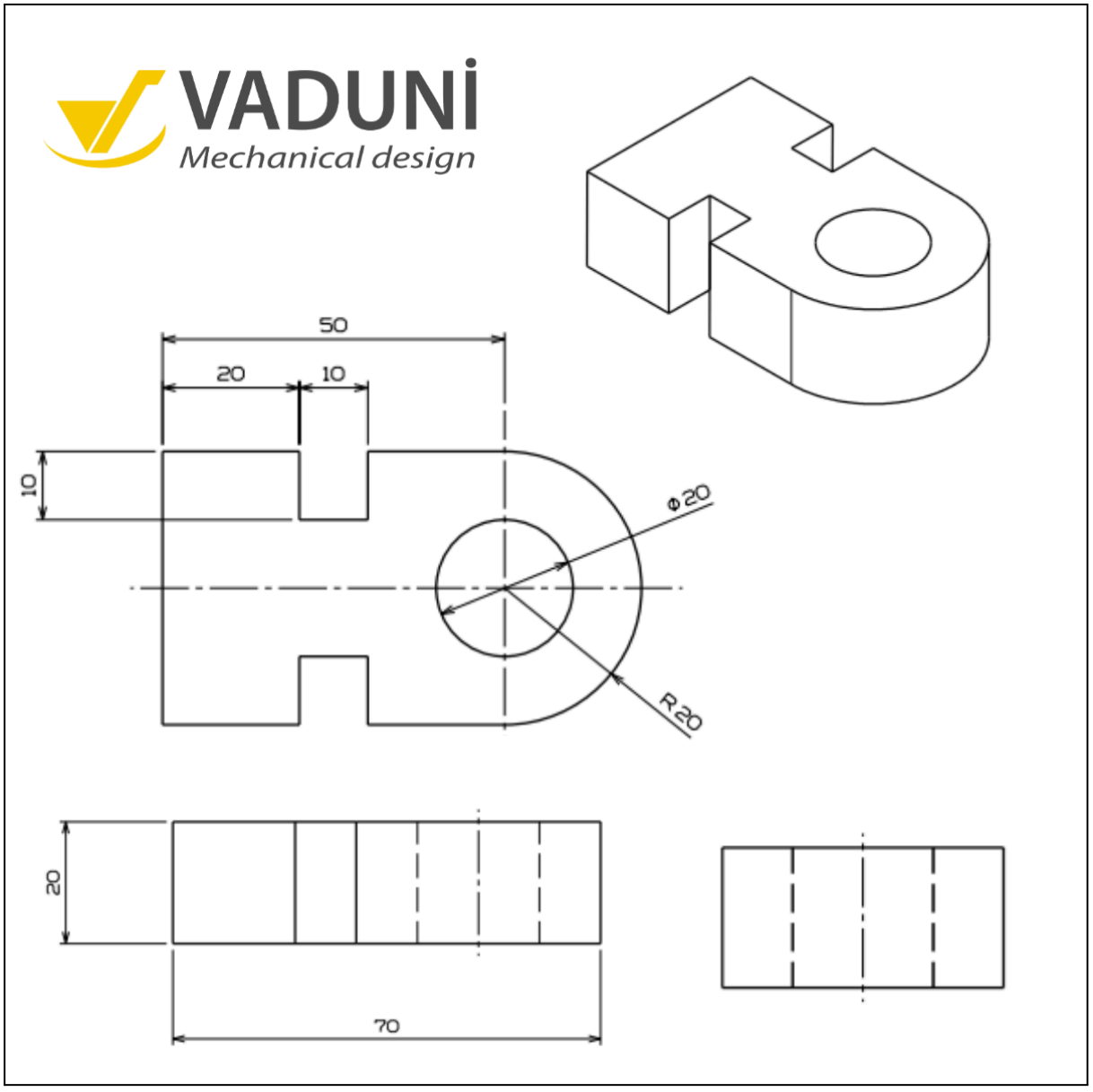
Bài tập 676


VADUNİ
Mechanical design
50
20
R10
10
20
ø10
10
30
10
10
50
20
10
10
50
R10
ø10
10
10

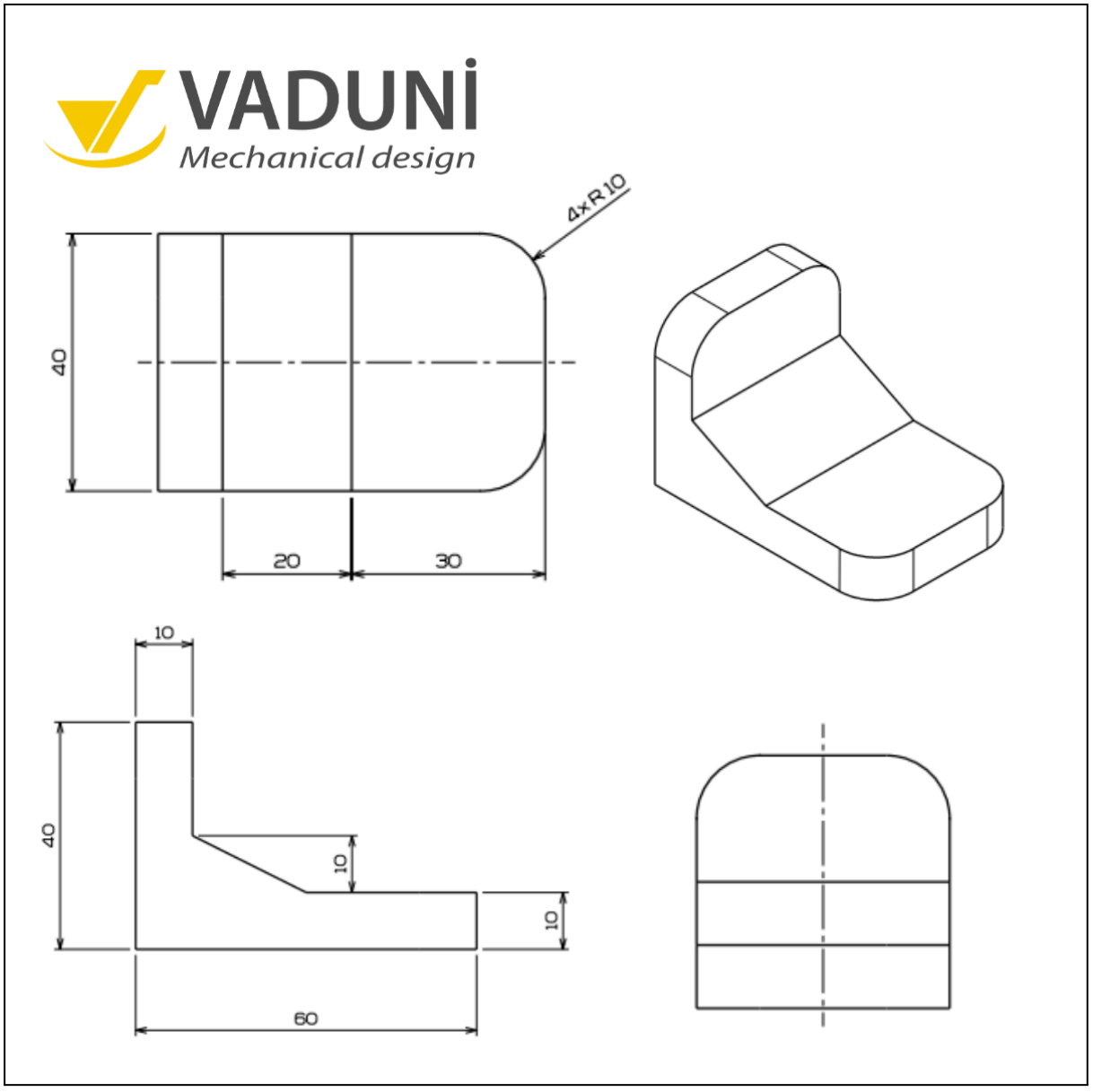
Bài tập 677


VADUNI
Mechanical design
10
ø10
40
15
40
15
10
20
20
R20
40
10
70
20
20

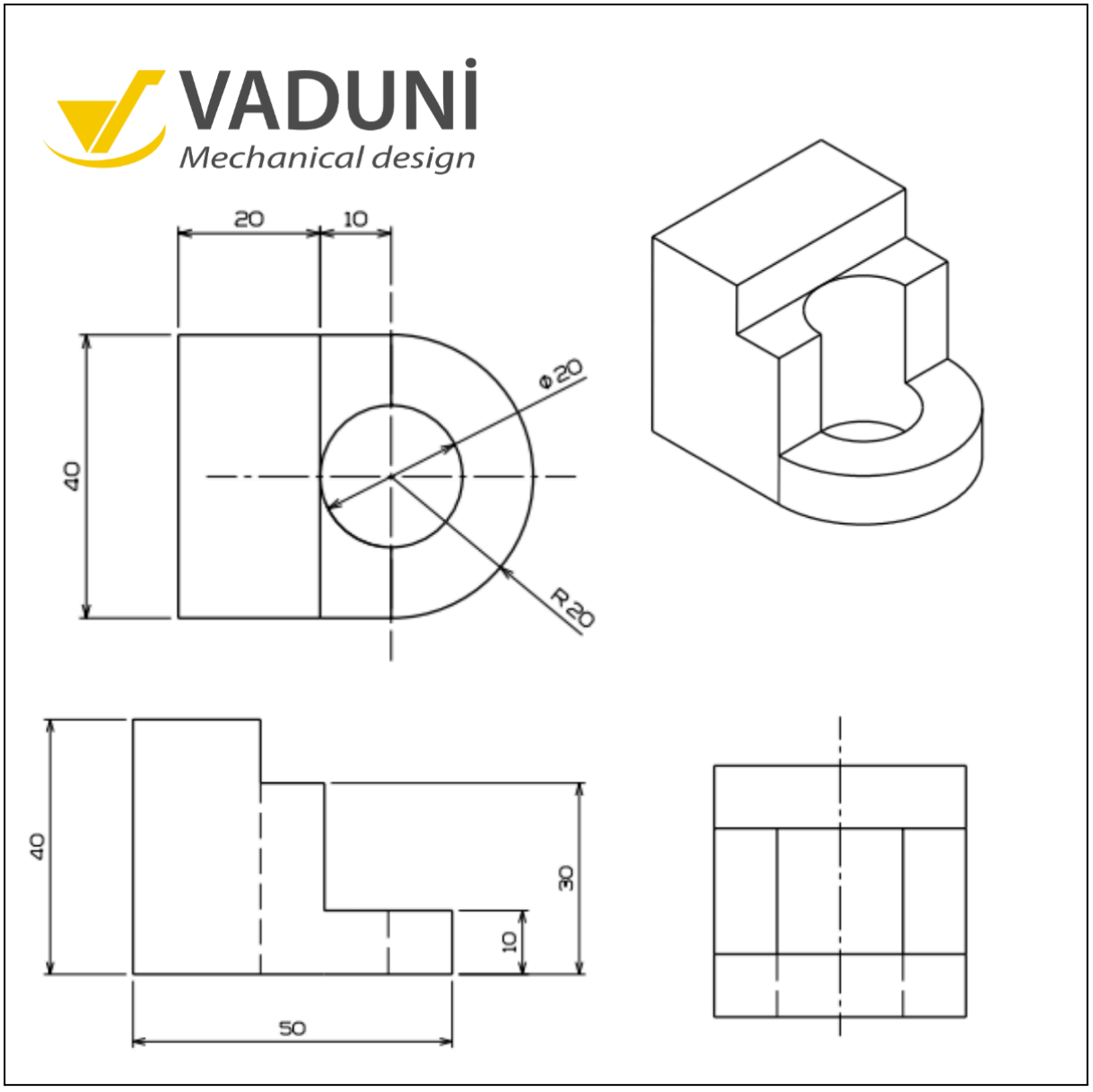
Bài tập 678



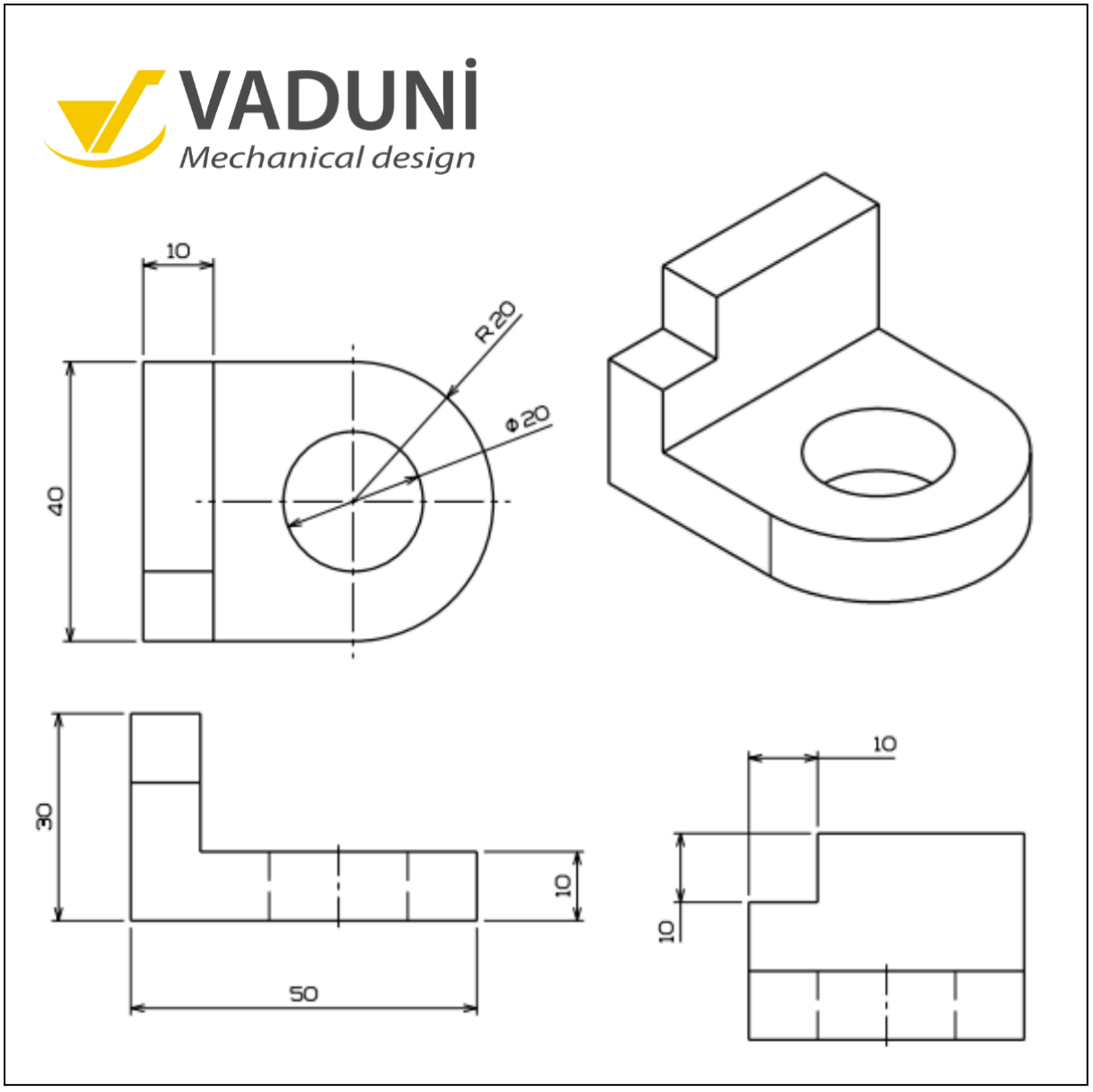
Bài tập 679



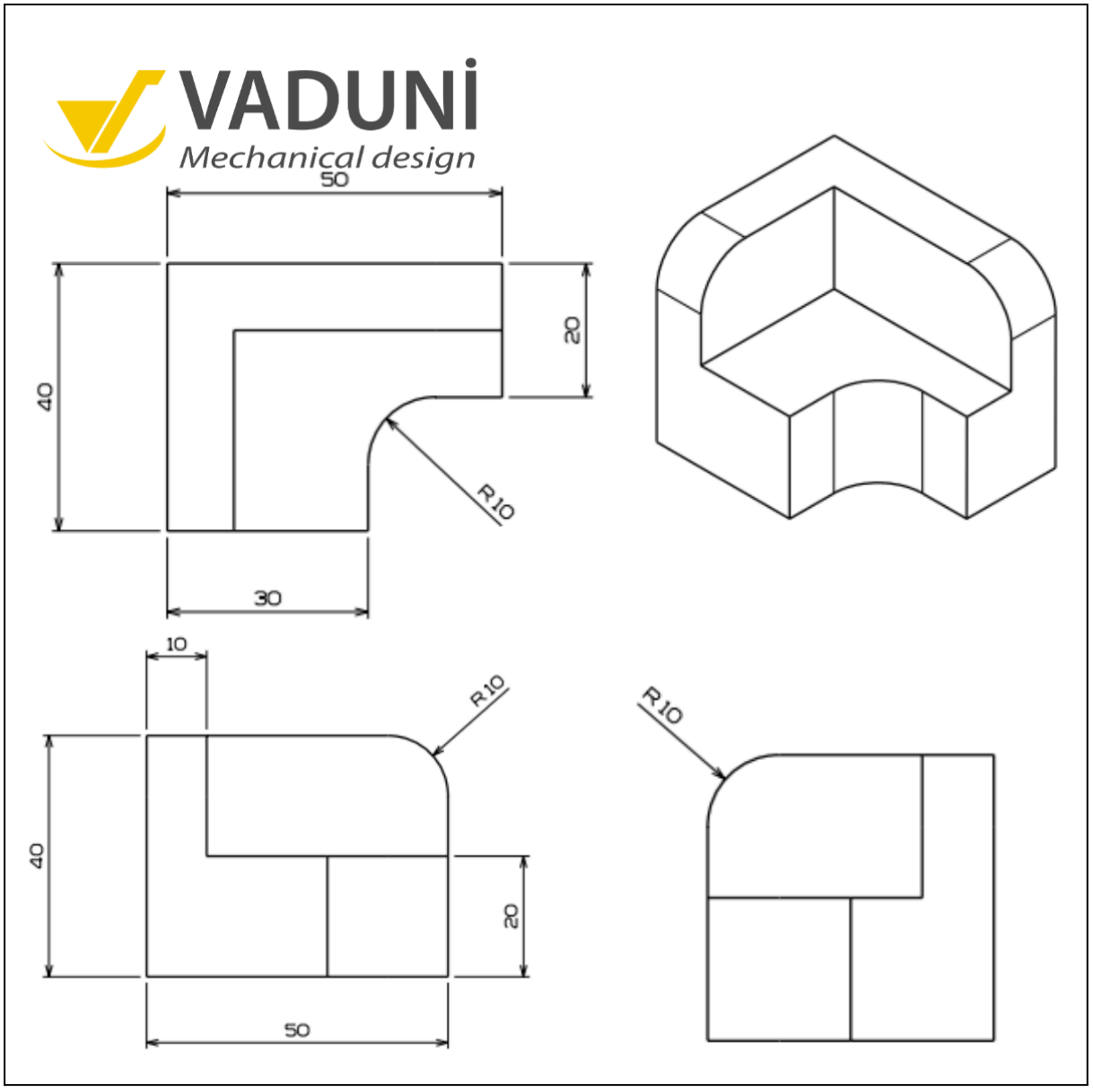
Bài tập 680



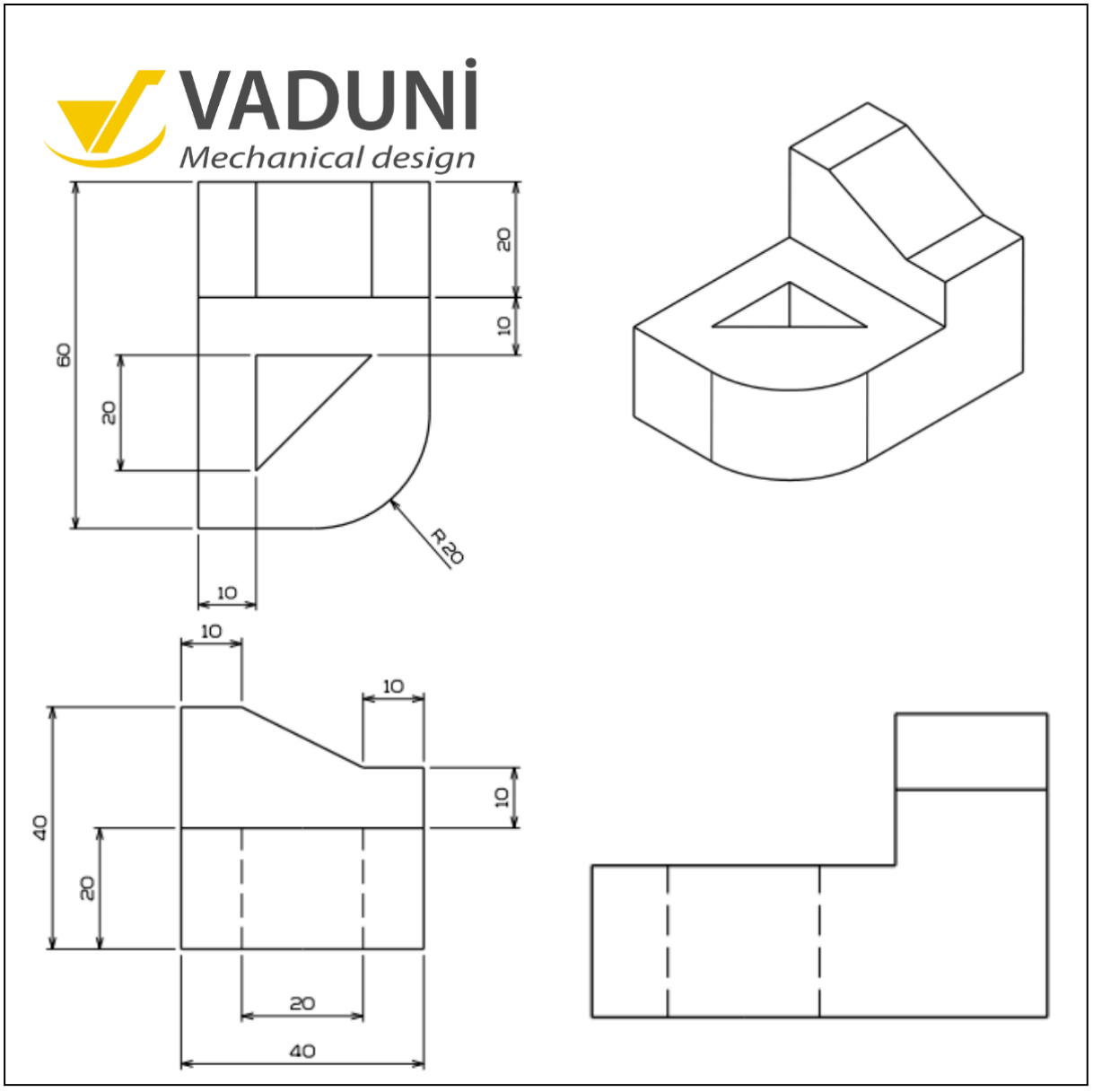
Bài tập 681



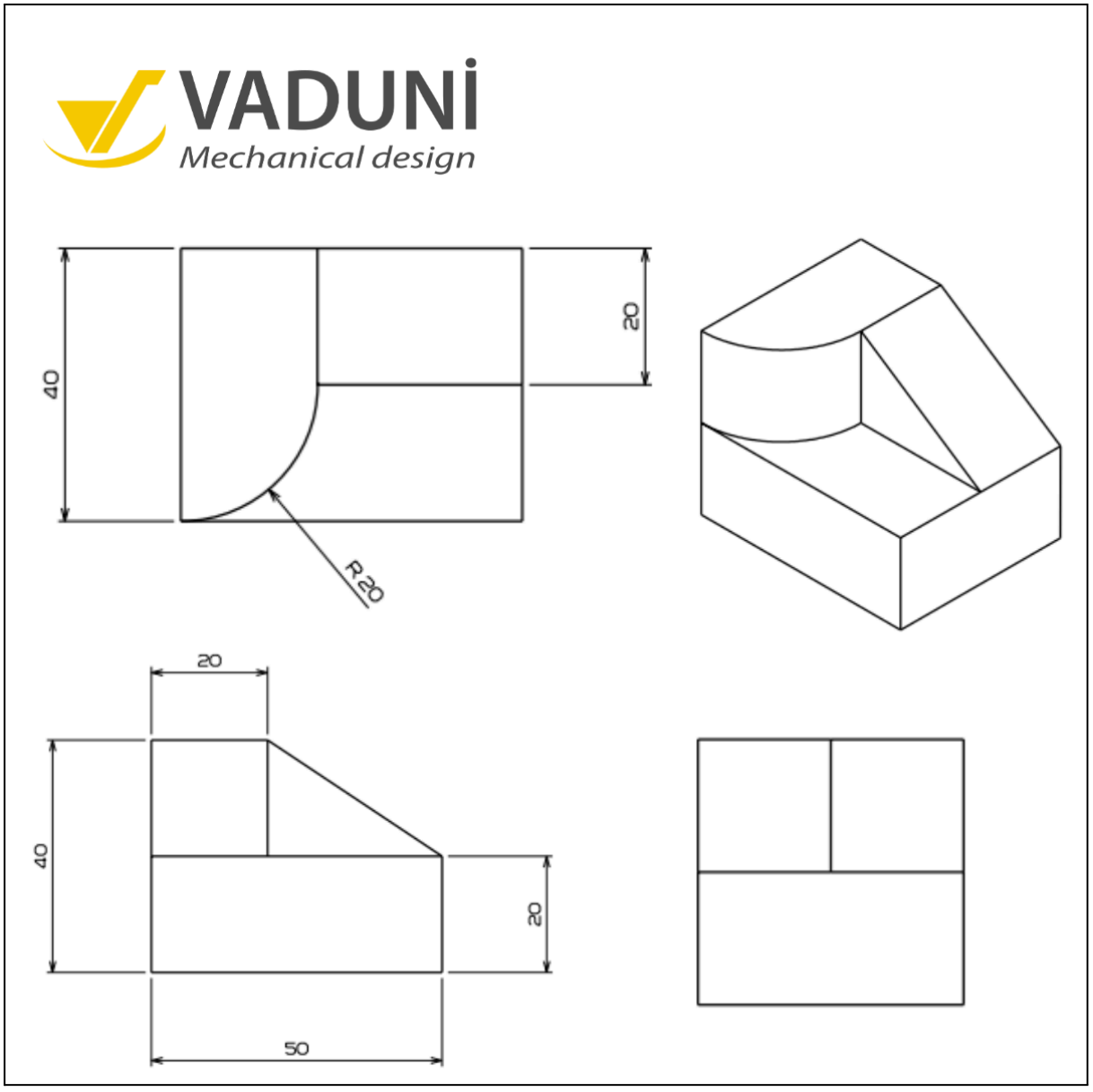
Bài tập 682



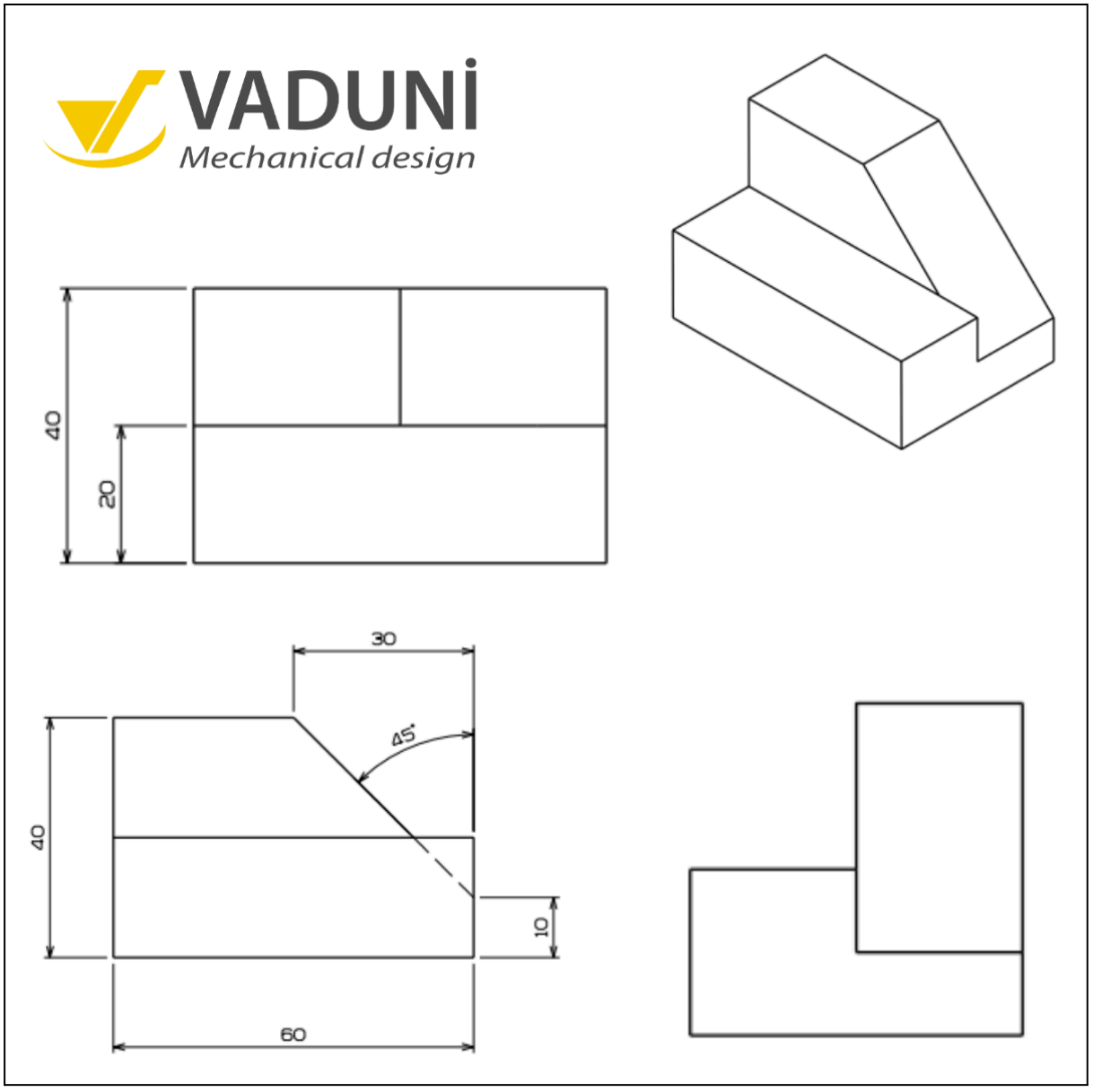
Bài tập 683



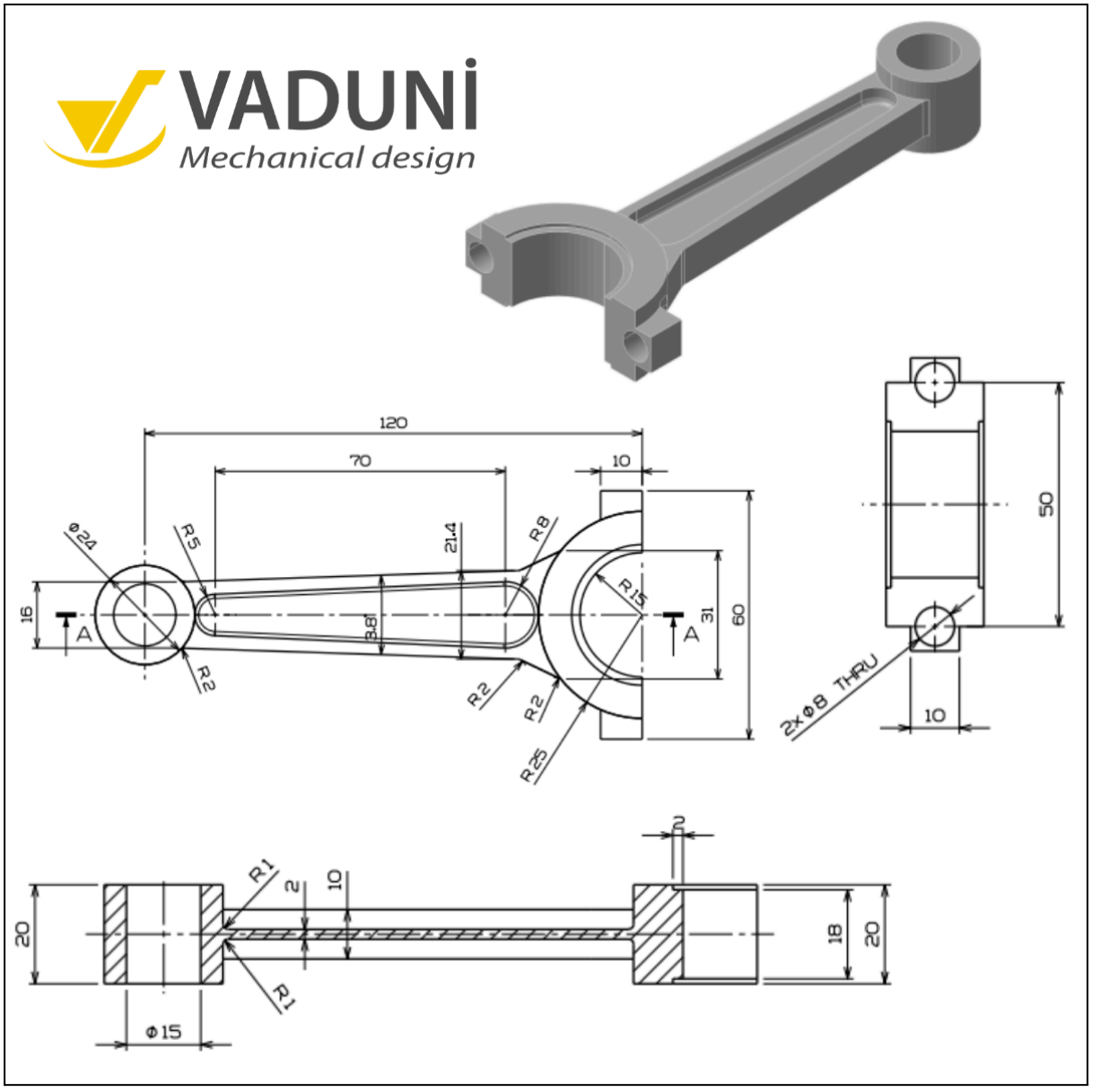
Bài tập 684



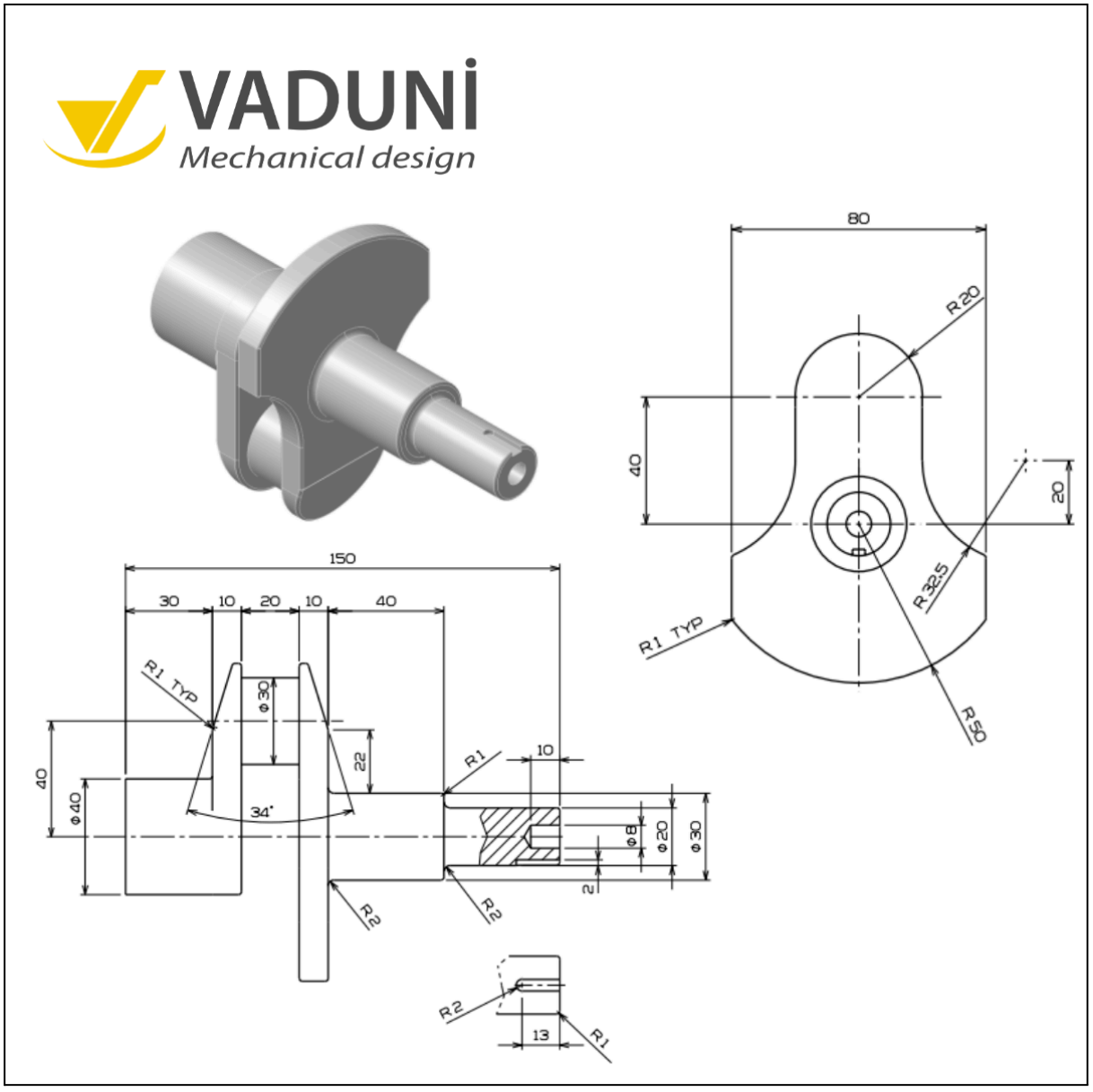
Bài tập 685



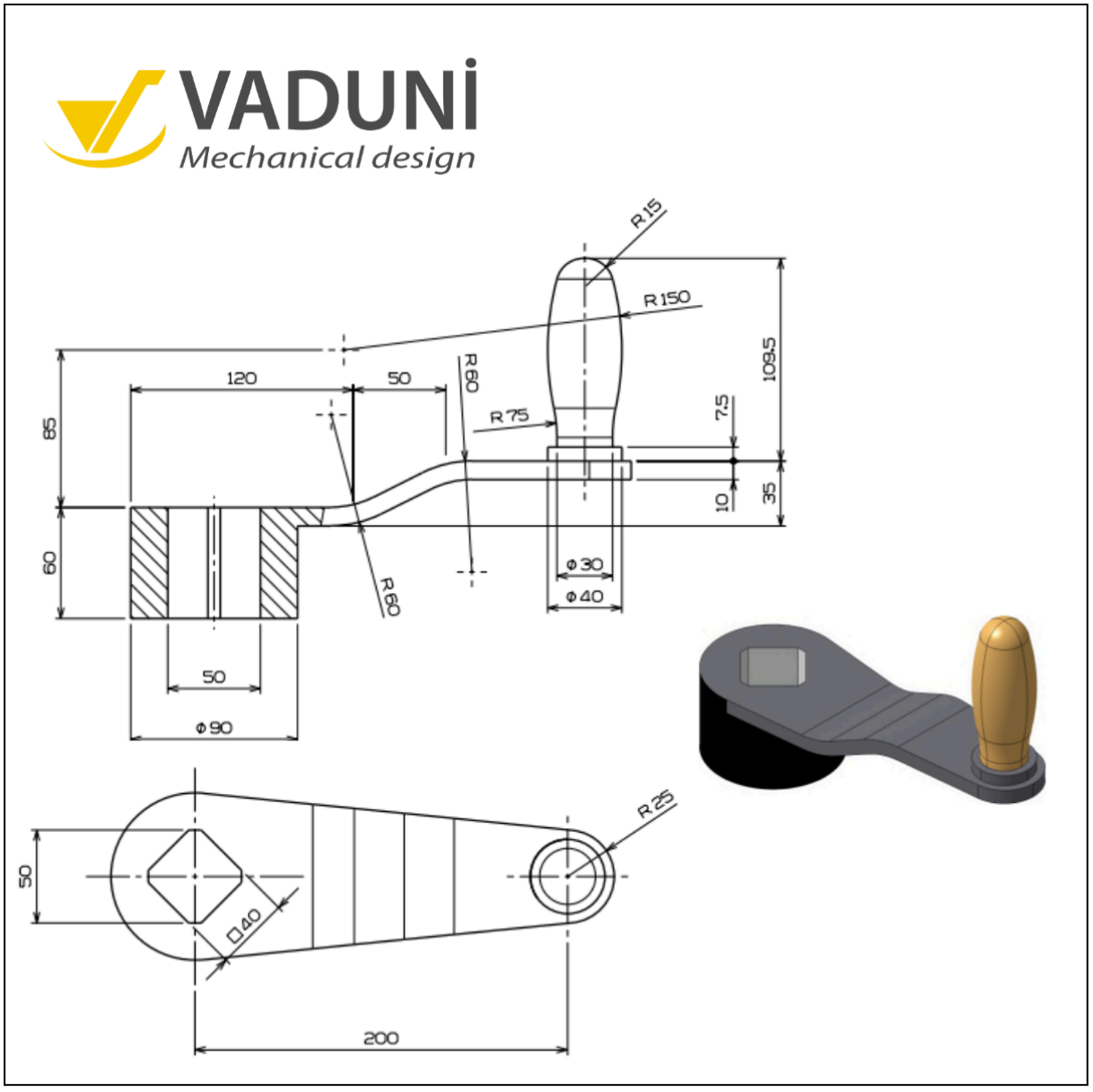
Bài tập 686


VADUNİ
Mechanical design
120
70
10
Φ24
R5
21.4
R8
16
A
38.1
R15
A
31
60
R2
R2
R2
R25
50
2xΦ8 THRU
10
R1
2
10
20
18
20
R1
Φ15

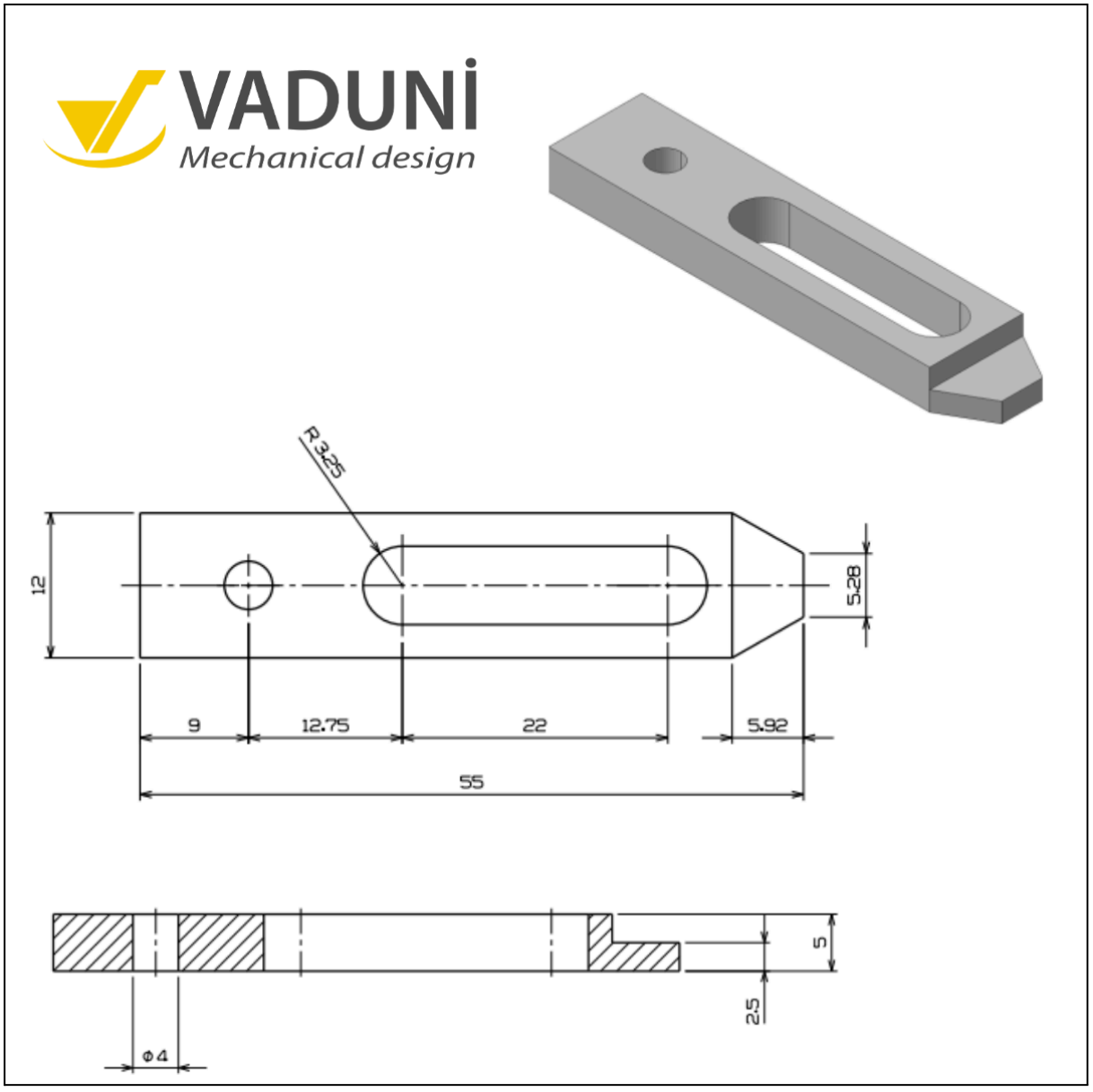
Bài tập 687


VADUNİ
Mechanical design
80
R20
40
20
R1 TYP
R32.5
R50
150
30
10
20
10
40
R1 TYP
ϕ30
22
40
ϕ40
34°
R1
10
ϕ18
ϕ20
ϕ30
2
R2
R2
R2
13
R1

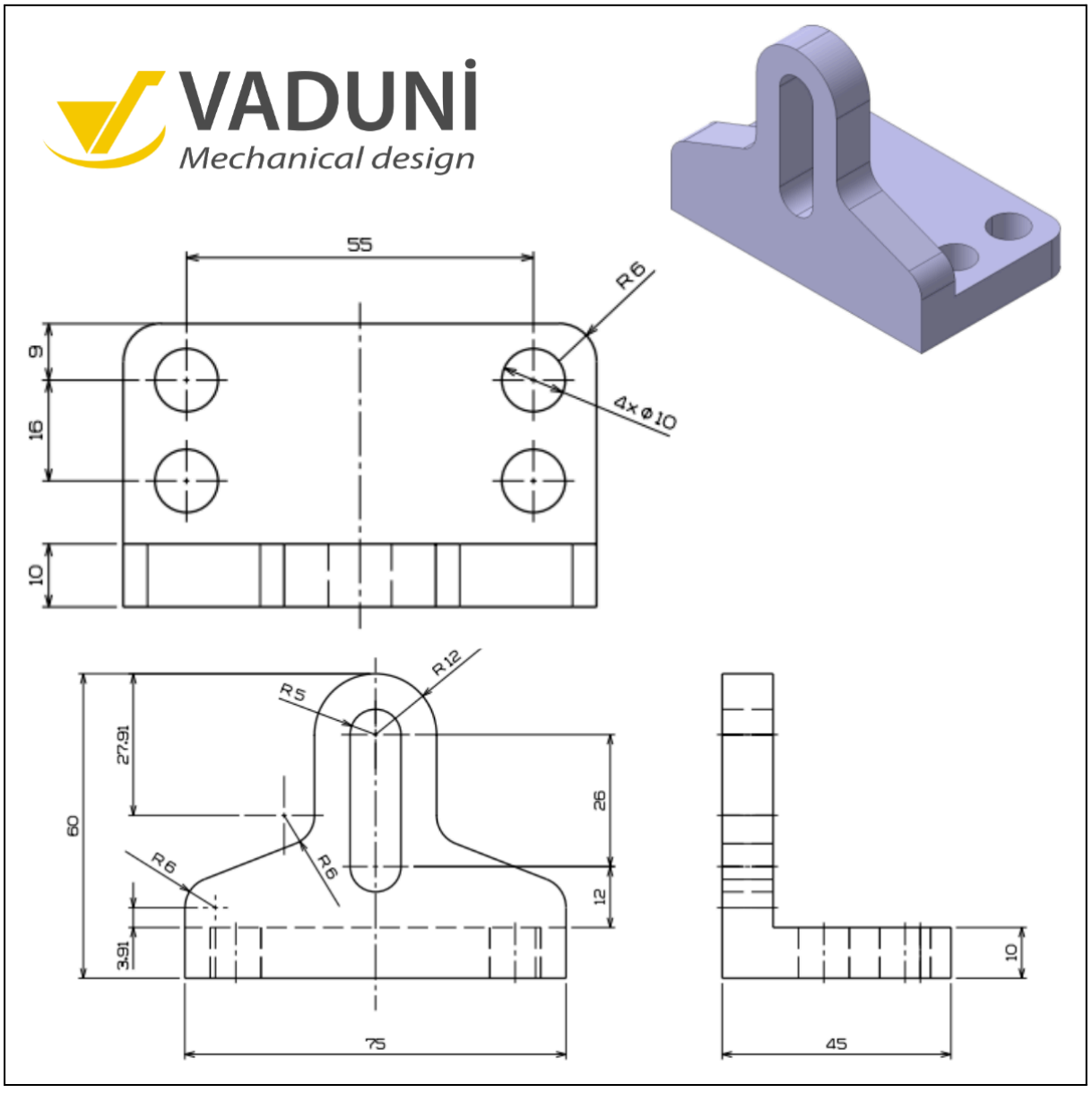
Bài tập 688


VADUNİ
Mechanical design
R15
R150
109.5
120
50
R60
R75
7.5
85
10
35
60
R60
Φ30
Φ40
50
Φ90
R25
50
□40
200

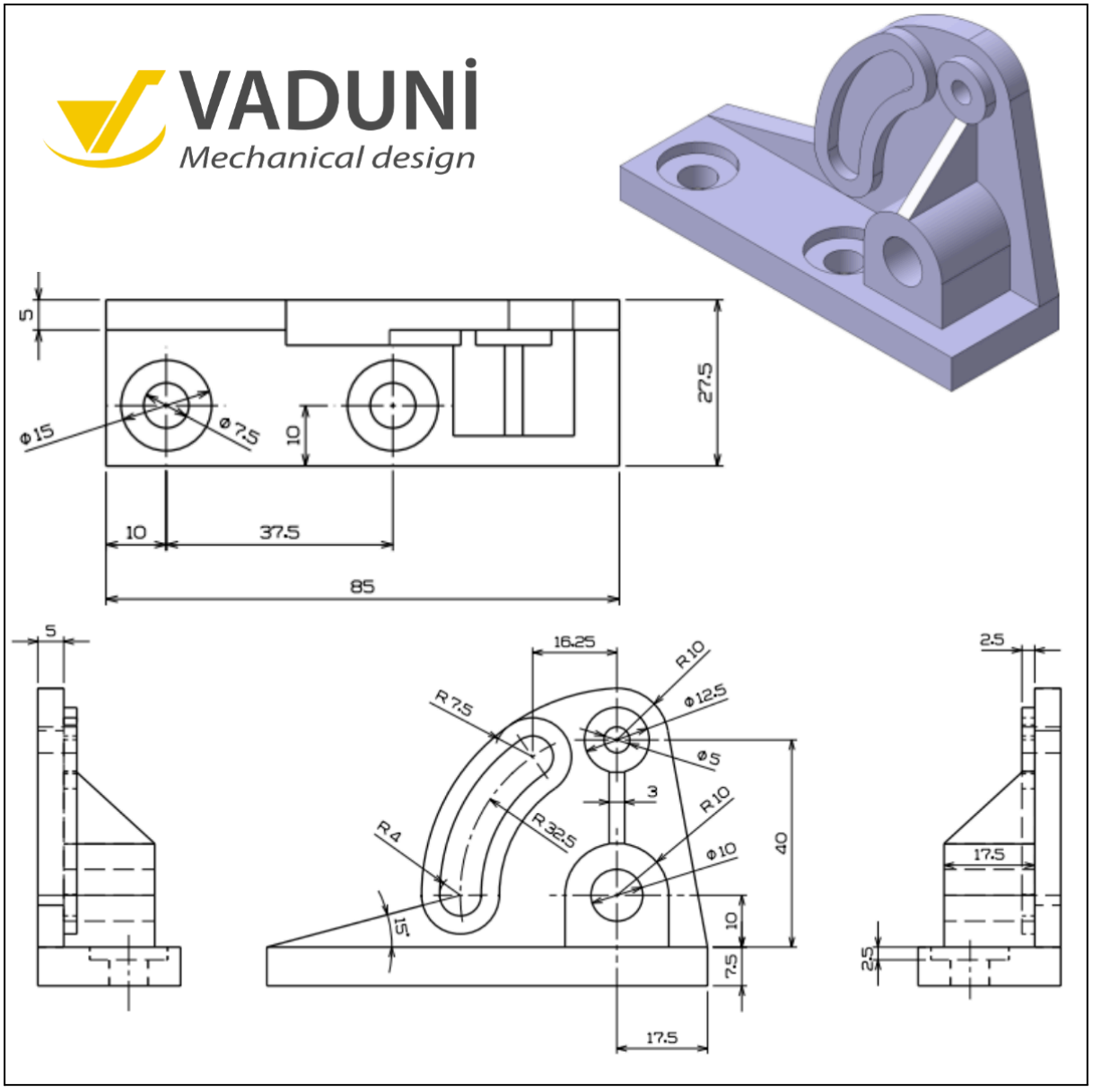
Bài tập 689



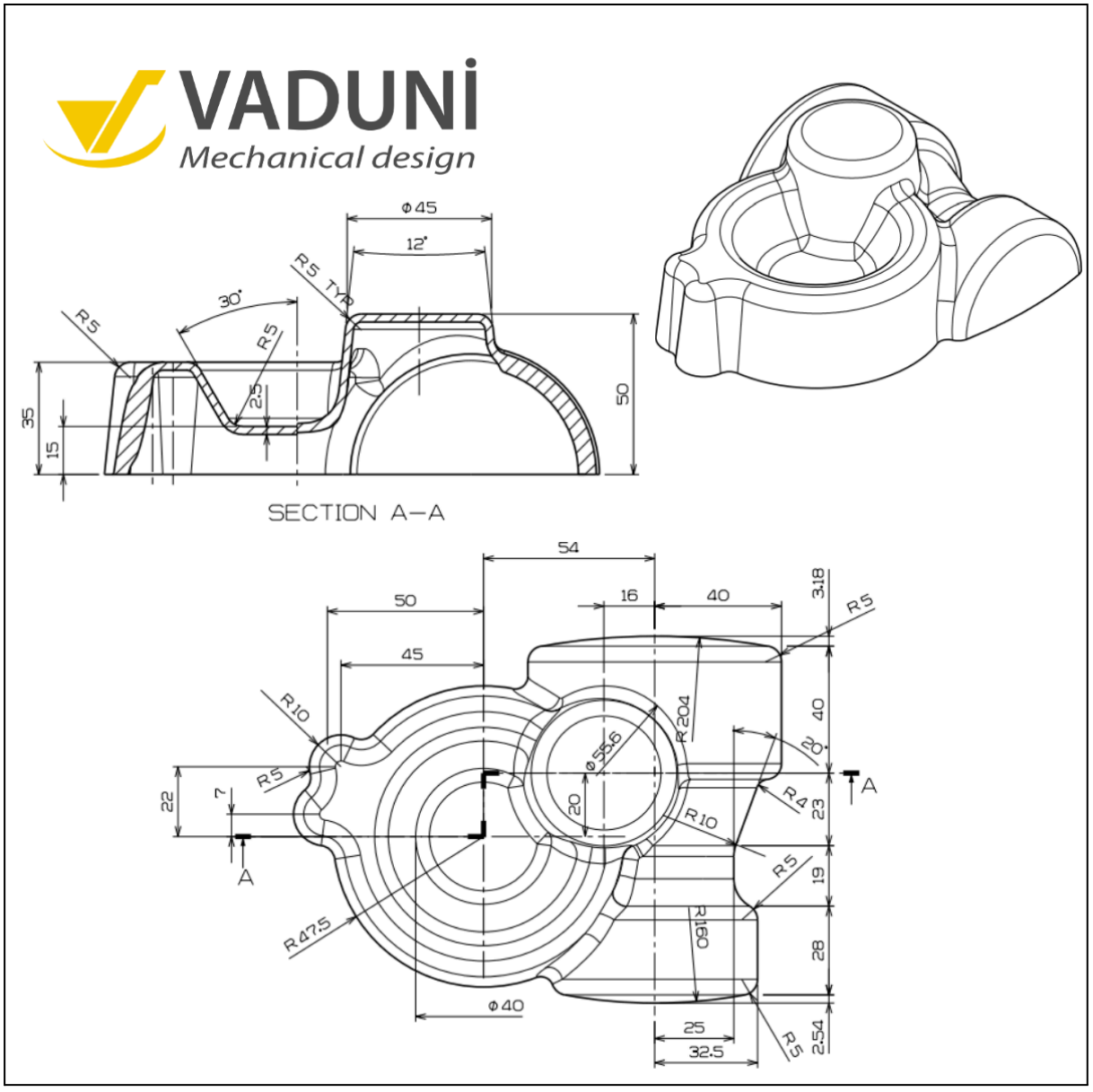
Bài tập 690


VADUNİ
Mechanical design
55
R6
4x Ø10
9
16
10
R12
R5
27.91
60
26
12
3.91
R6
R6
75
45
10

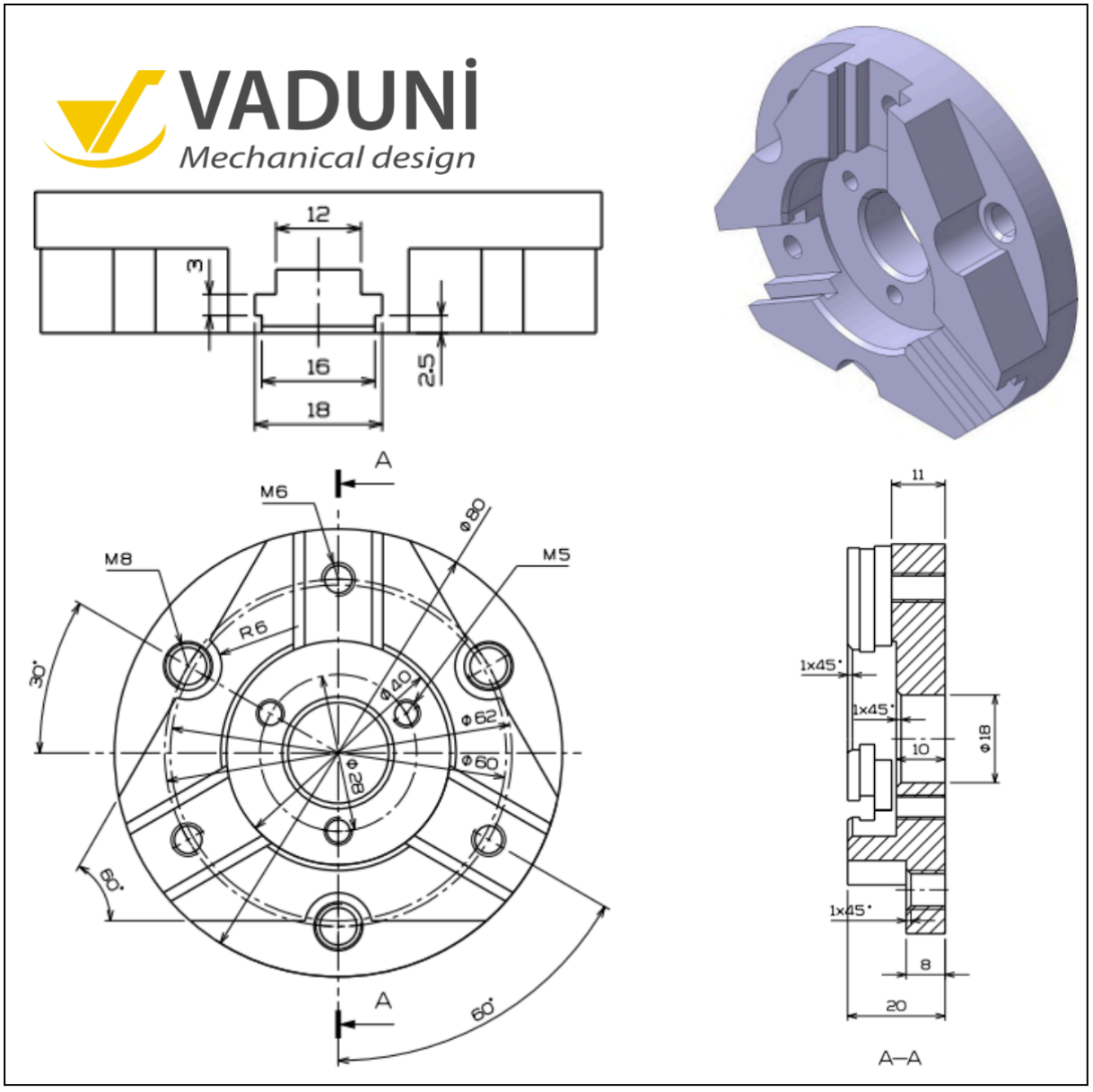
Bài tập 691


VADUNİ
Mechanical design
5
27.5
ϕ15
ϕ7.5
10
10
37.5
85
5
16.25
R10
R7.5
ϕ12.5
ϕ5
3
R10
R4
R32.5
ϕ10
40
15
10
7.5
17.5
2.5
17.5
2.5

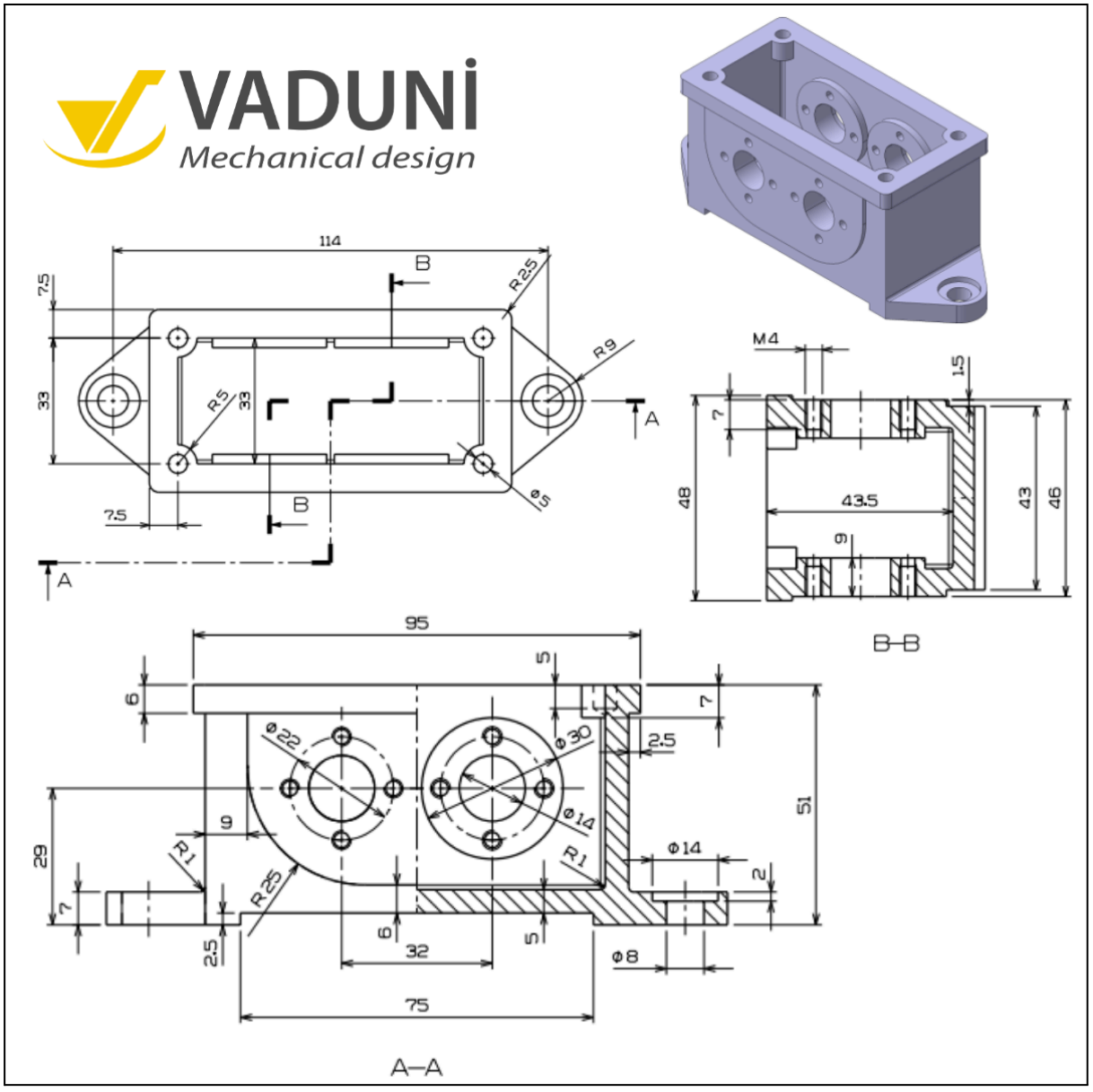
Bài tập 692


VADUNI
Mechanical design
Φ45
12°
R5 TYP
30°
R5
R5
2.5
35
15
50
SECTION A–A
54
50
16
40
3.18
R5
45
R10
R5
22
7
A
R47.5
R204
Φ56.6
20
R10
R4
23
A
40
19
R5
R160
28
Φ40
25
32.5
R5
2.54

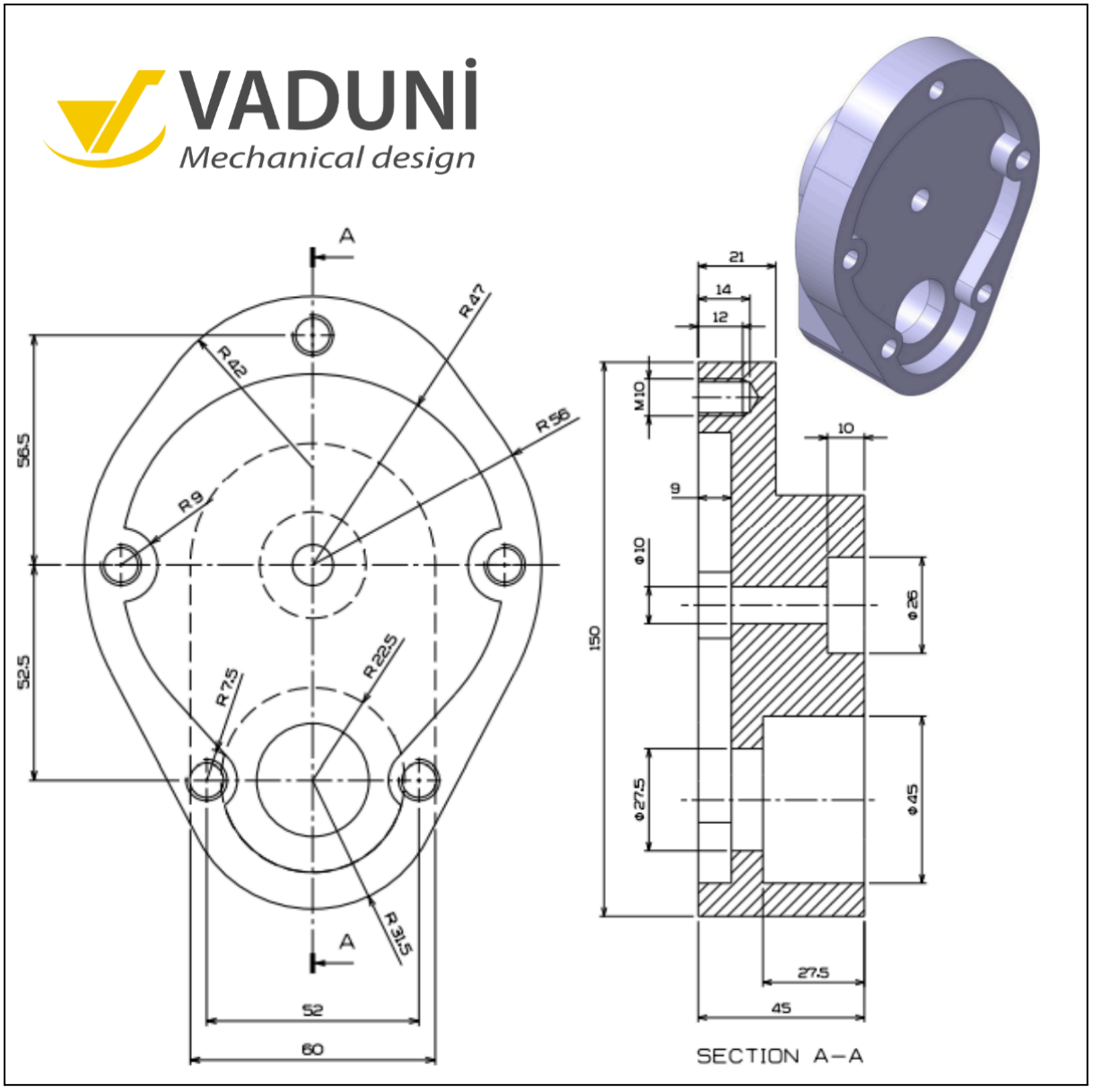
Bài tập 693


VADUNİ
Mechanical design
12
3
16
18
2.5
A
M6
M8
M5
ø80
R6
30°
ø40
ø62
ø60
ø28
60°
A
60°
11
1x45°
1x45°
10
ø18
1x45°
8
20
A–A

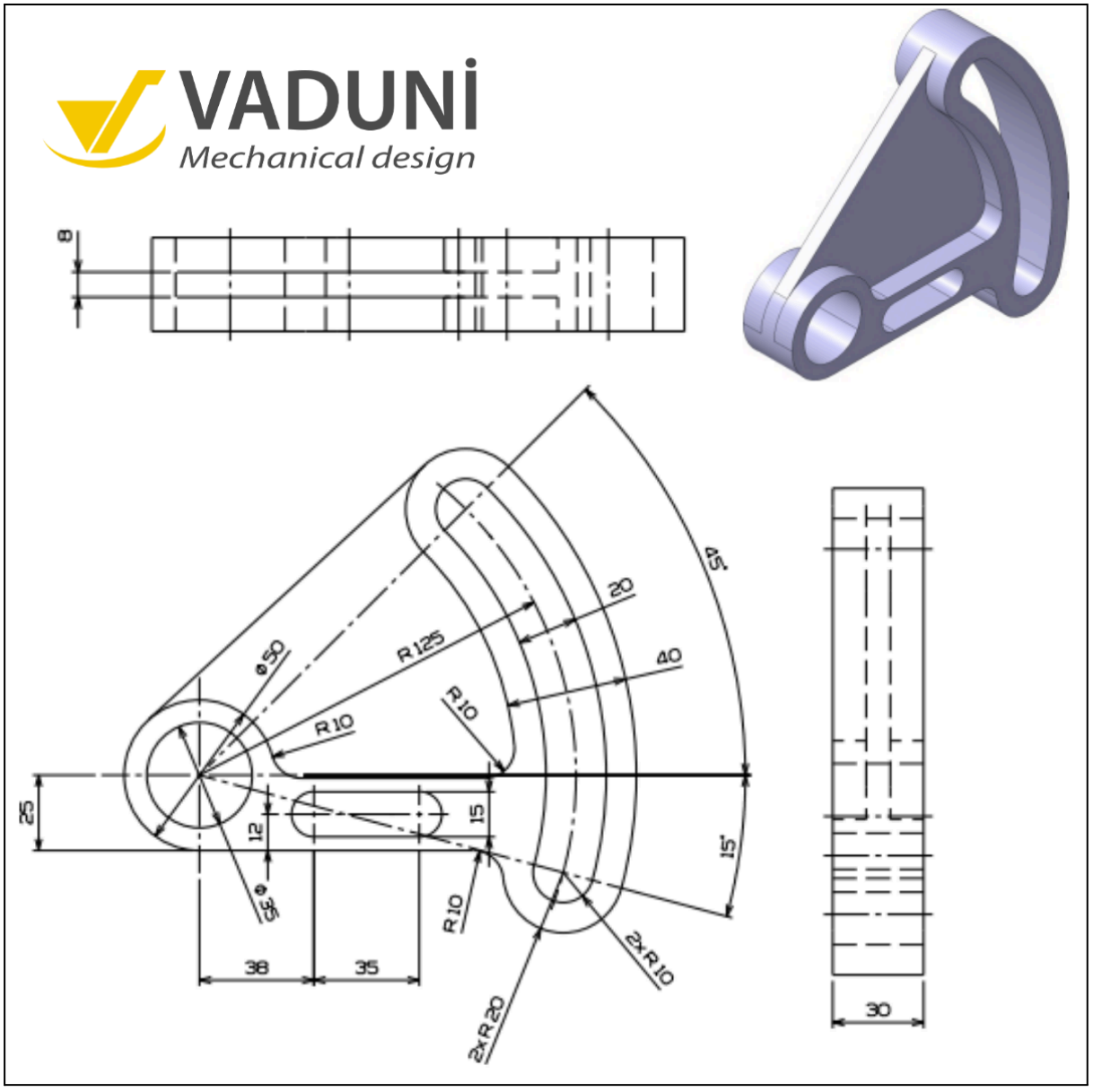
Bài tập 694


VADUNİ
Mechanical design
114
B
R2.5
7.5
33
R5
33
R9
A
ø5
7.5
B
A
M4
1.5
7
48
43.5
43
46
9
B–B
95
5
6
7
ø22
ø30
2.5
51
9
R1
29
ø14
R1
ø14
2
7
R25
6
5
2.5
32
ø8
75
A–A

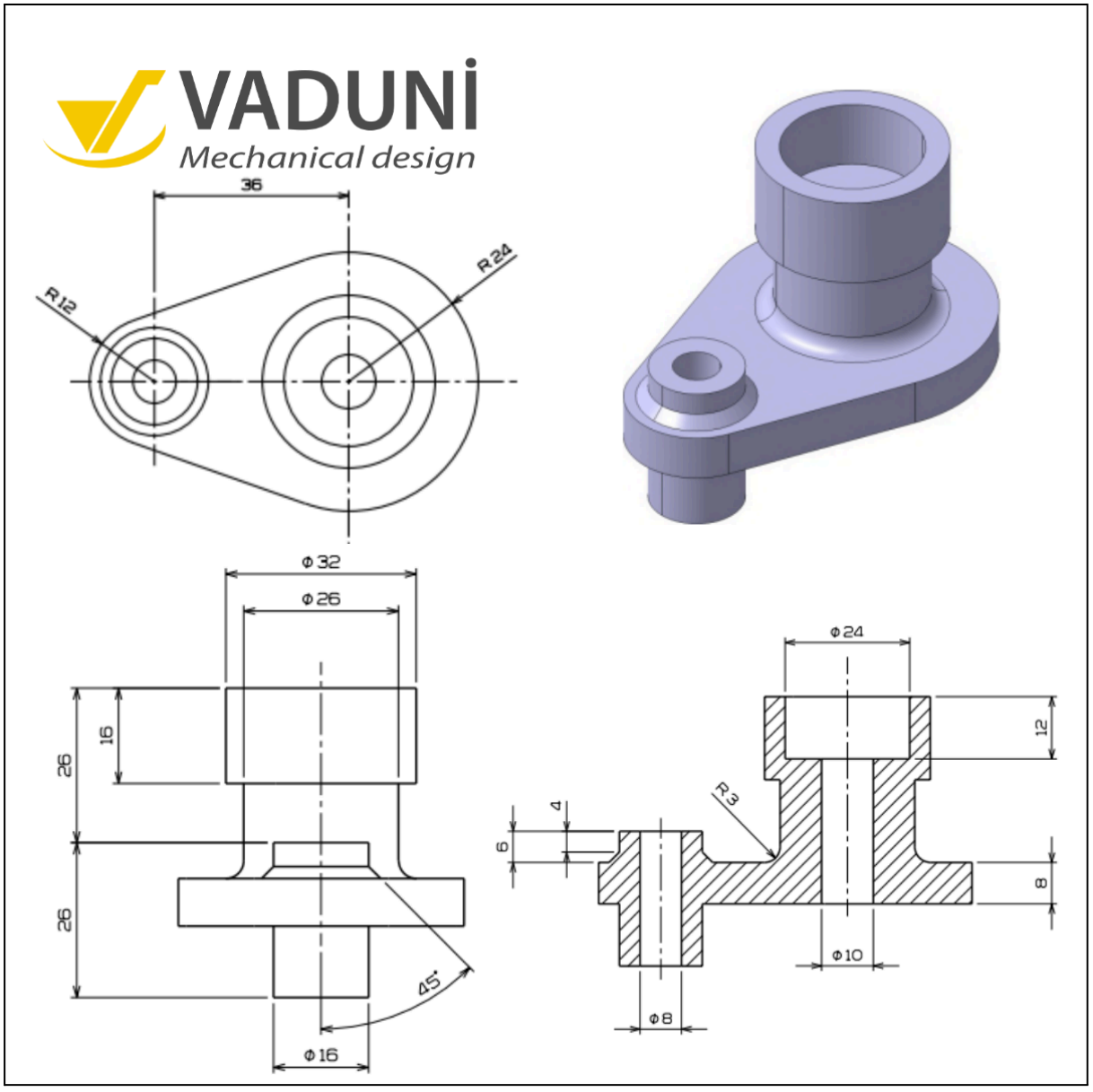
Bài tập 695


VADUNİ
Mechanical design
A
R47
R42
R56
R9
56.5
52.5
R7.5
R22.5
R31.5
52
60
21
14
12
M10
10
9
Φ10
Φ26
150
Φ27.5
Φ45
27.5
45
SECTION A–A

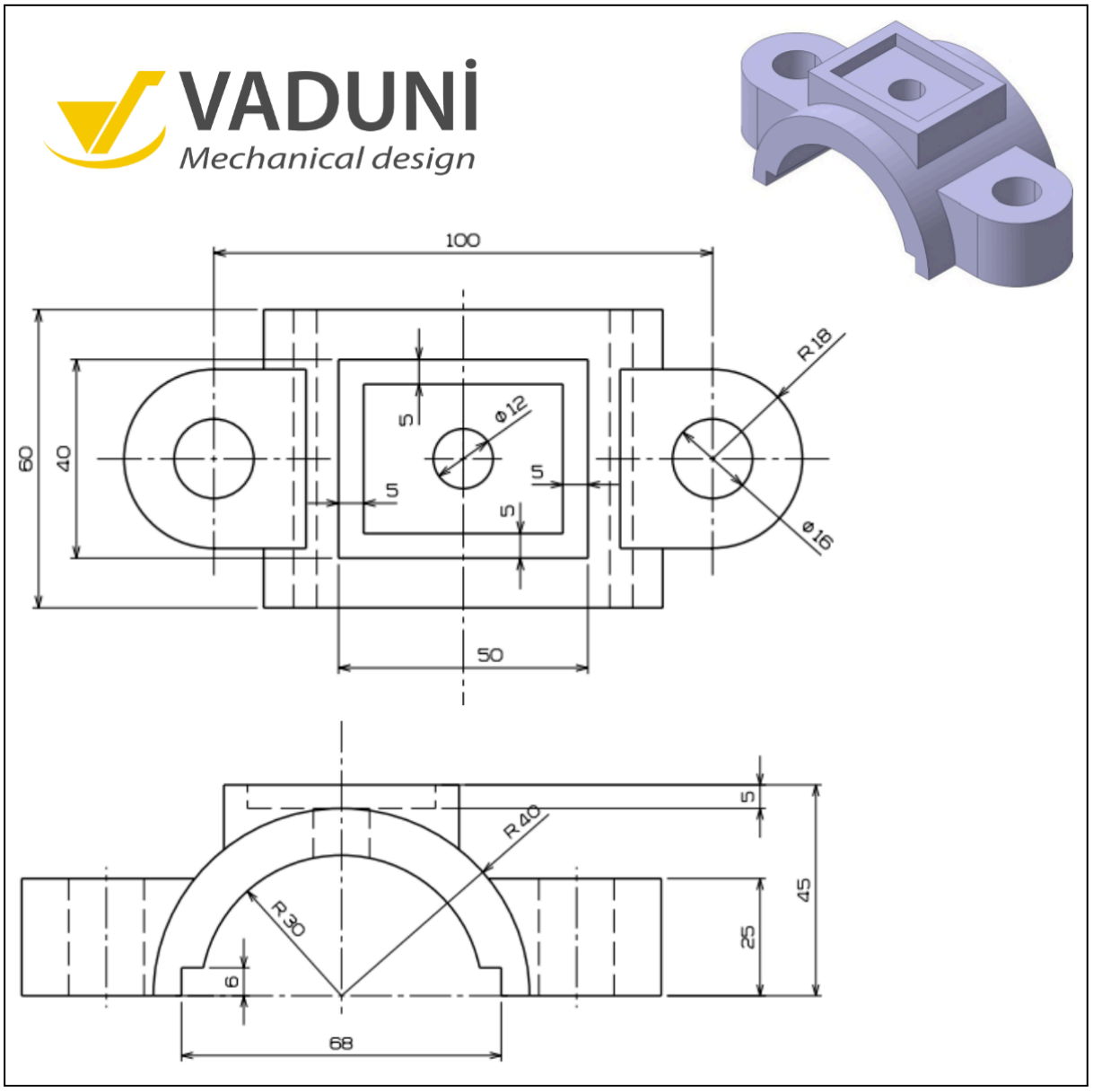
Bài tập 696


VADUNİ
Mechanical design
8
45°
20
40
R125
R10
R10
ø50
25
12
15
15°
ø35
R10
2xR10
2xR20
38
35
30

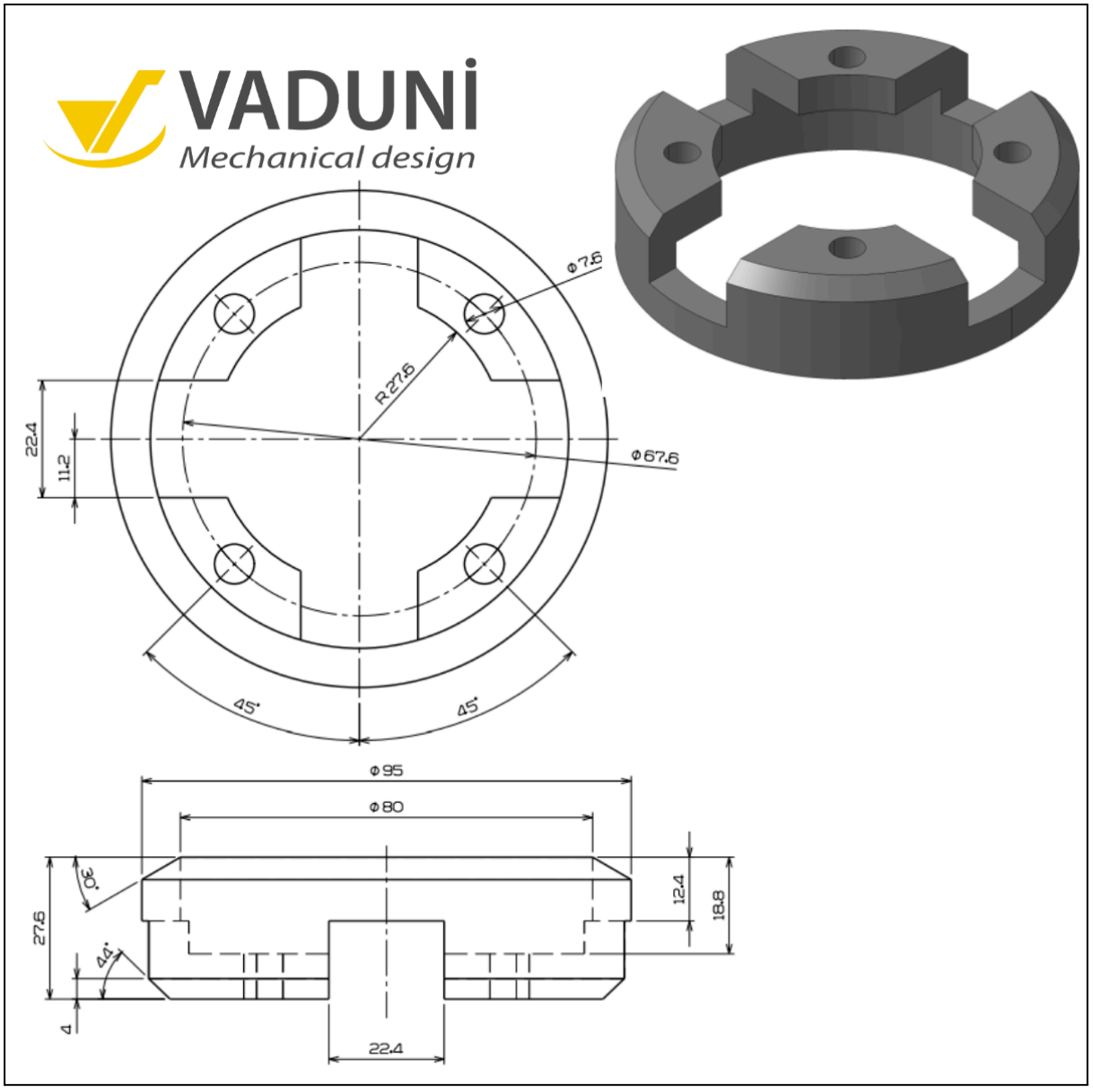
Bài tập 697


VADUNİ
Mechanical design
36
R12
R24
Φ32
Φ26
16
26
26
45°
Φ16
Φ24
12
4
6
R3
8
Φ10
Φ8

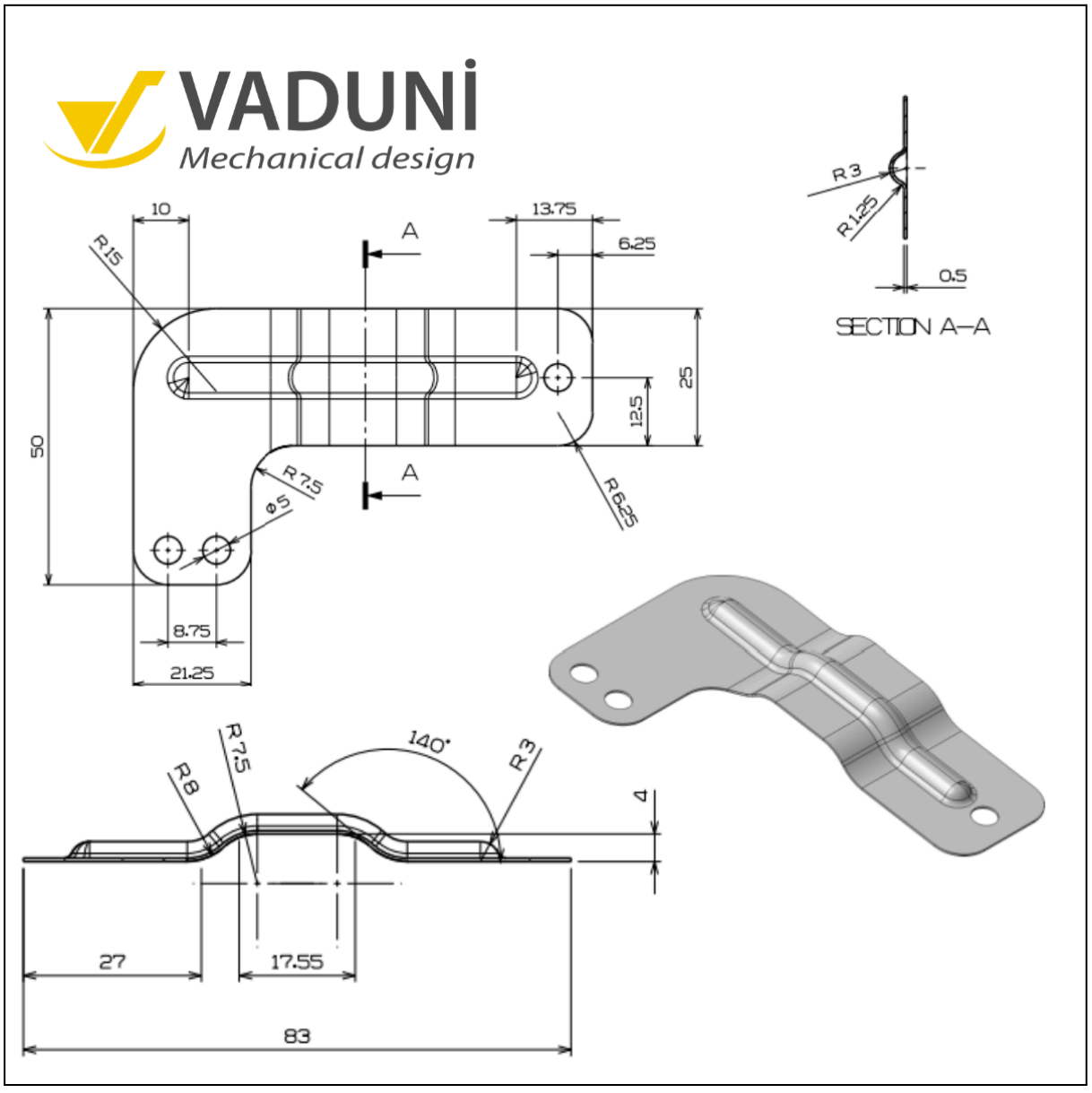
Bài tập 698


VADUNİ
Mechanical design
100
60
40
5
5
5
5
Ø12
R18
Ø16
50
5
R40
R30
45
25
6
68

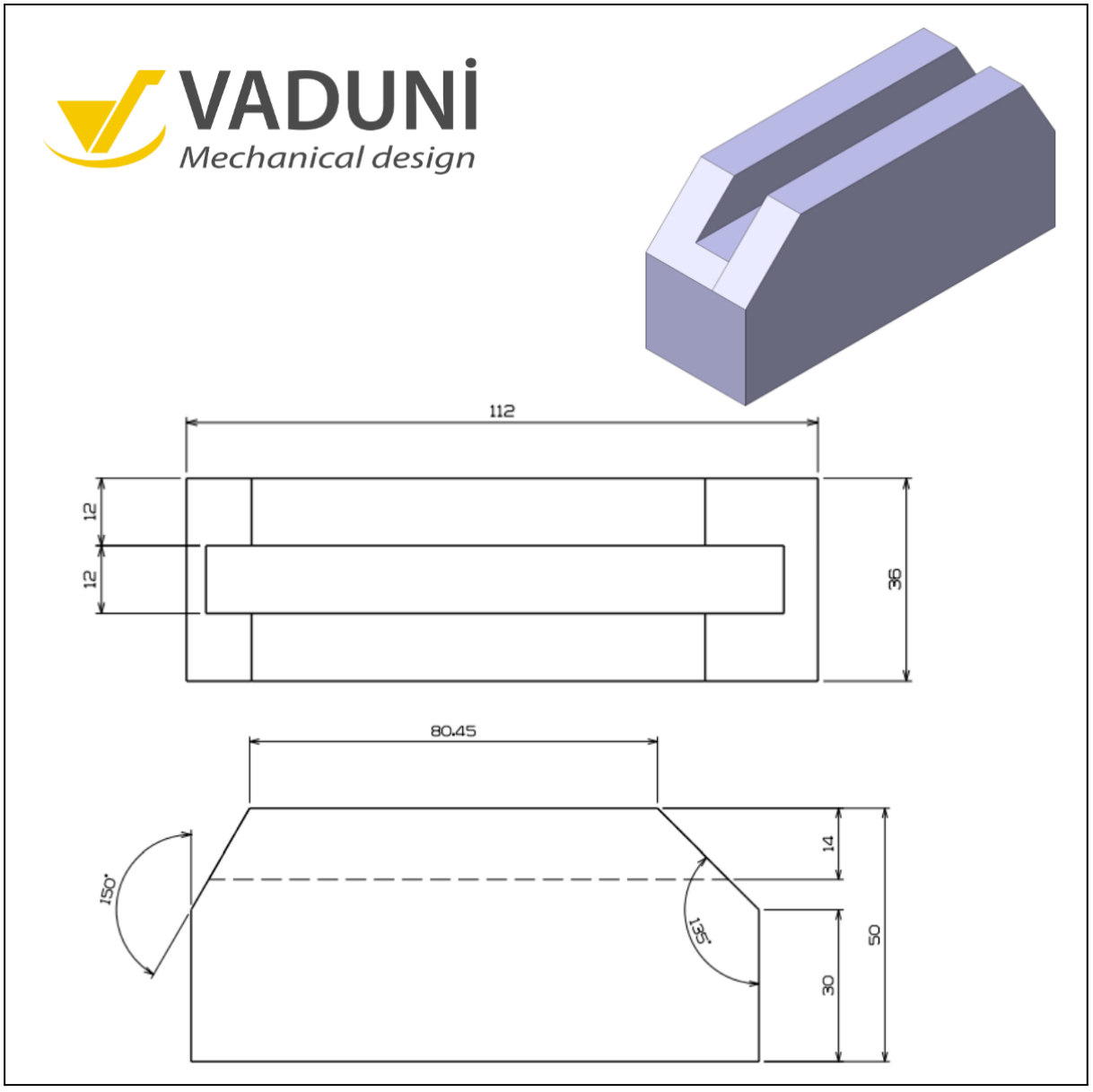
Bài tập 699


VADUNİ
Mechanical design
Φ7.6
R27.6
Φ67.6
22.4
11.2
45°
45°
Φ95
Φ80
30°
44°
27.6
4
22.4
12.4
18.8

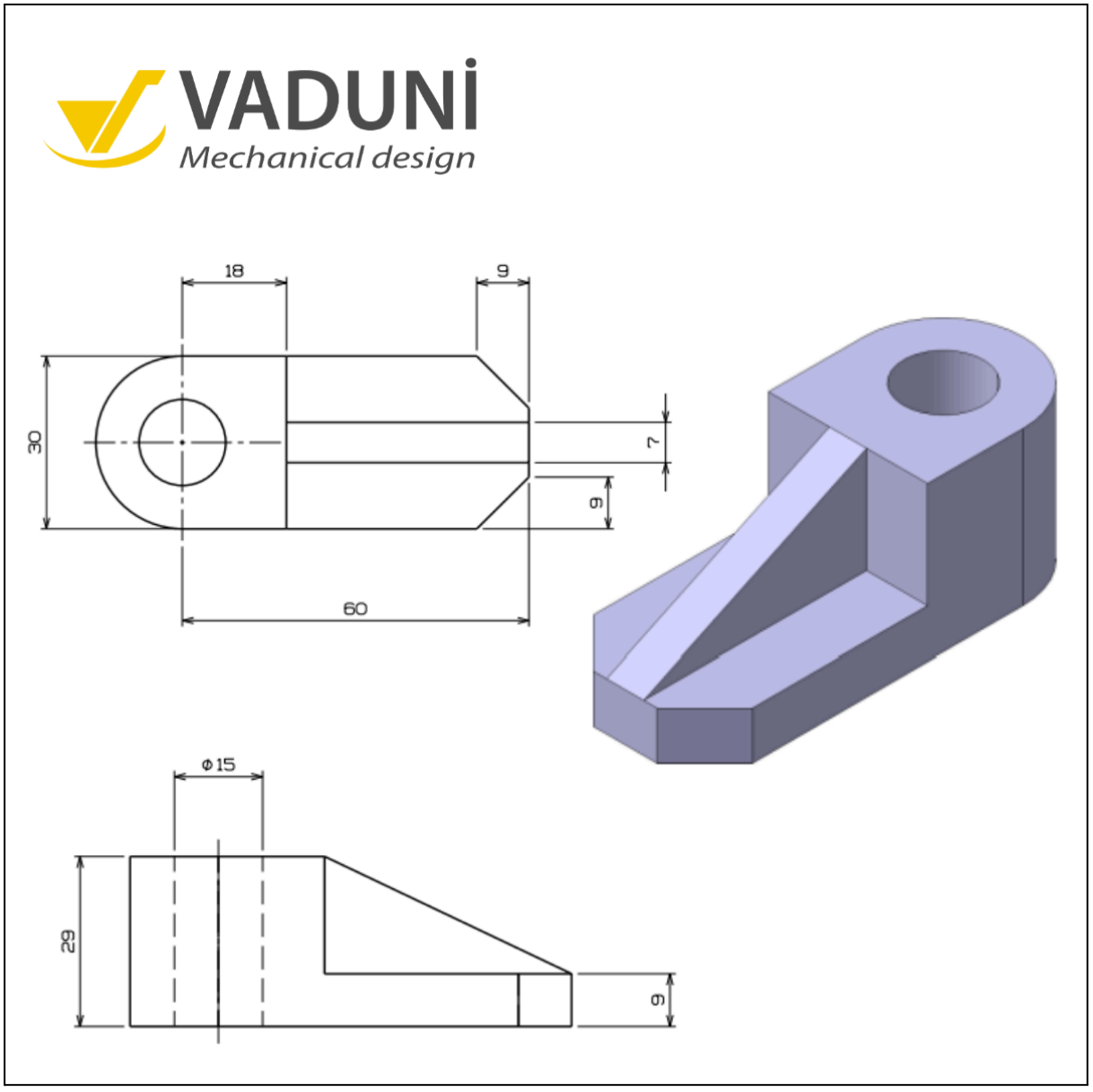
Bài tập 700


VADUNİ
Mechanical design
10
13.75
6.25
R15
A
A
50
25
12.5
R7.5
ø5
R6.25
8.75
21.25
R3
R1.25
0.5
SECTION A–A
140°
R7.5
R8
R3
4
27
17.55
83

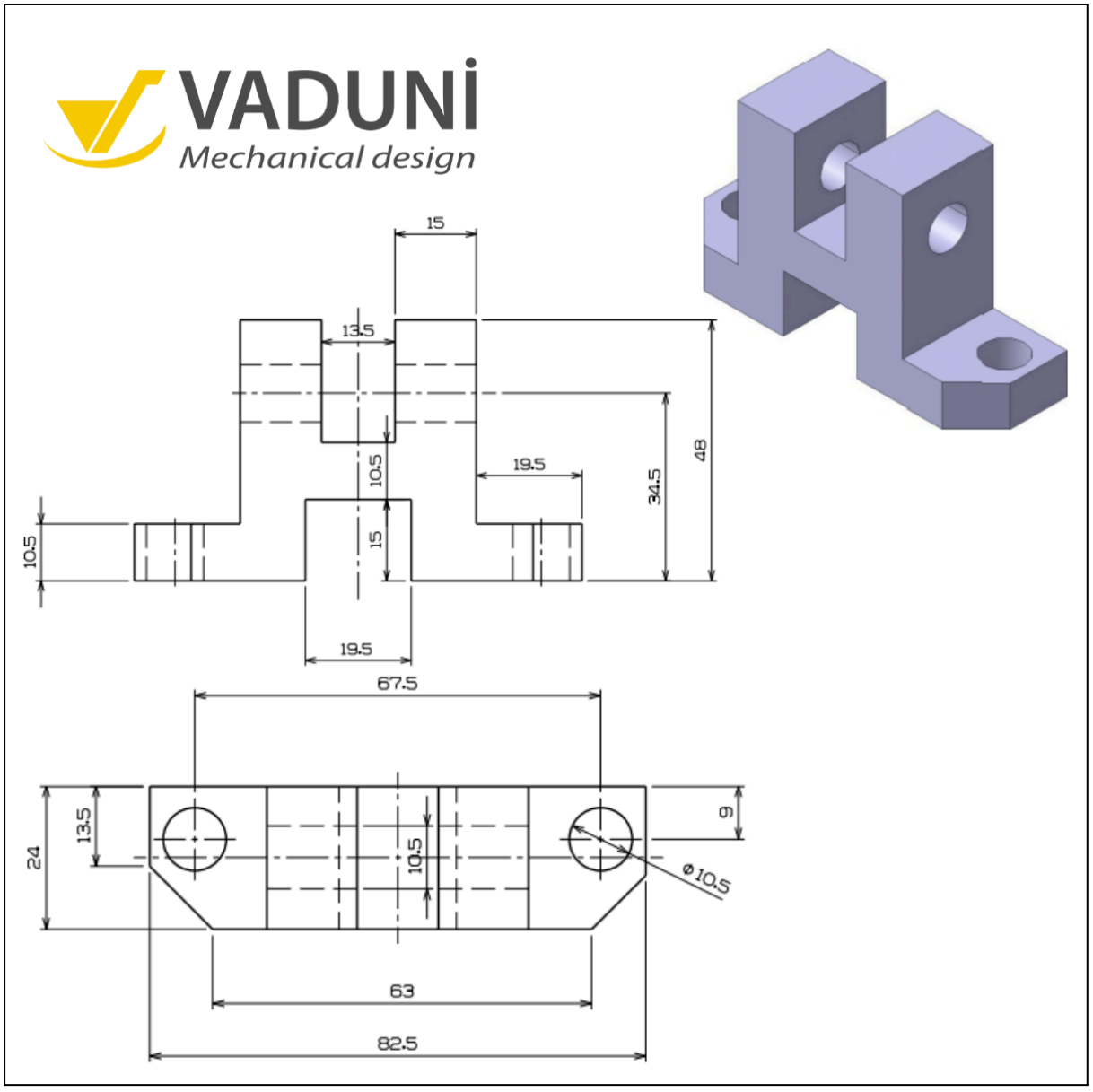
Bài tập 701



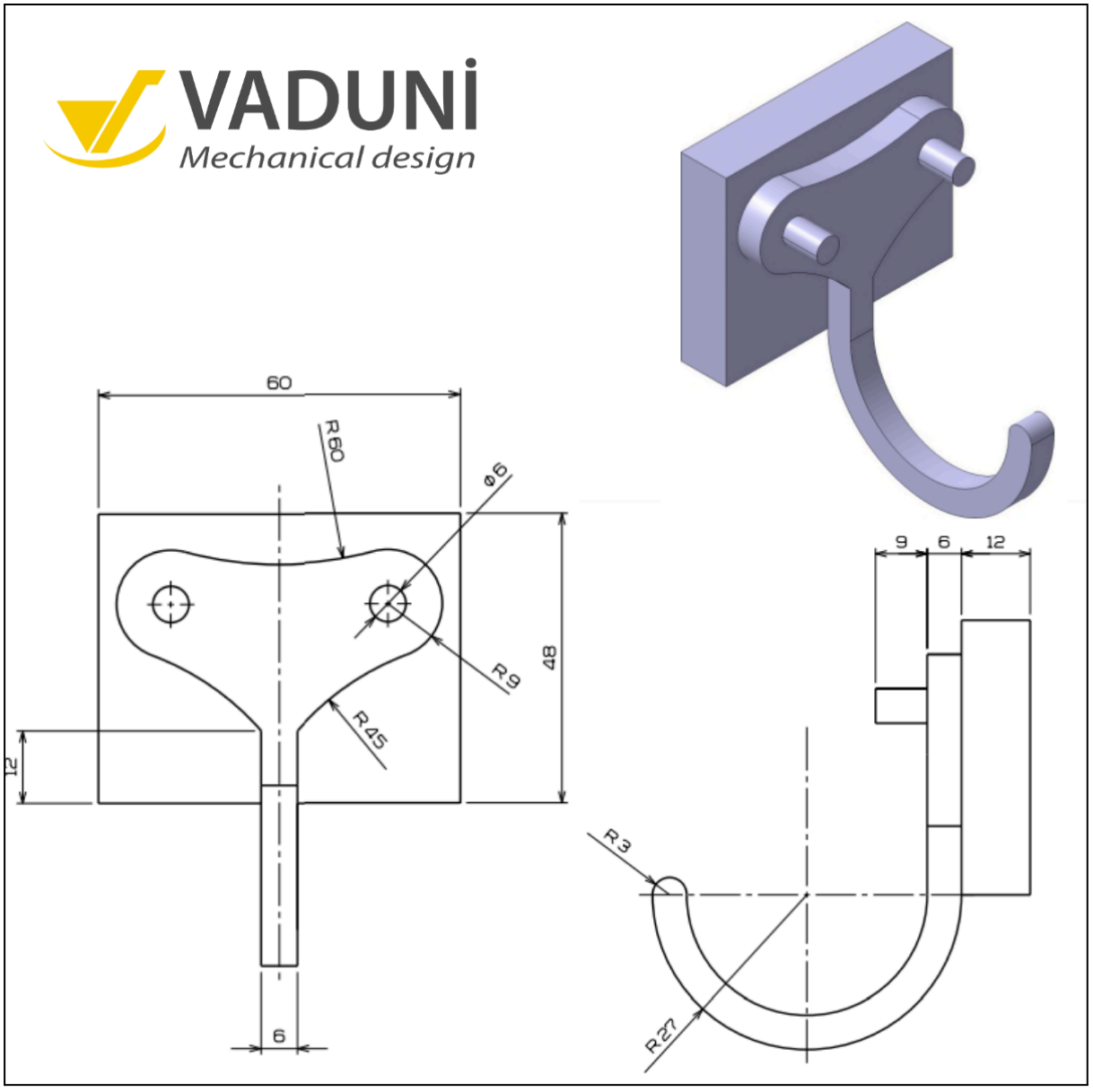
Bài tập 702



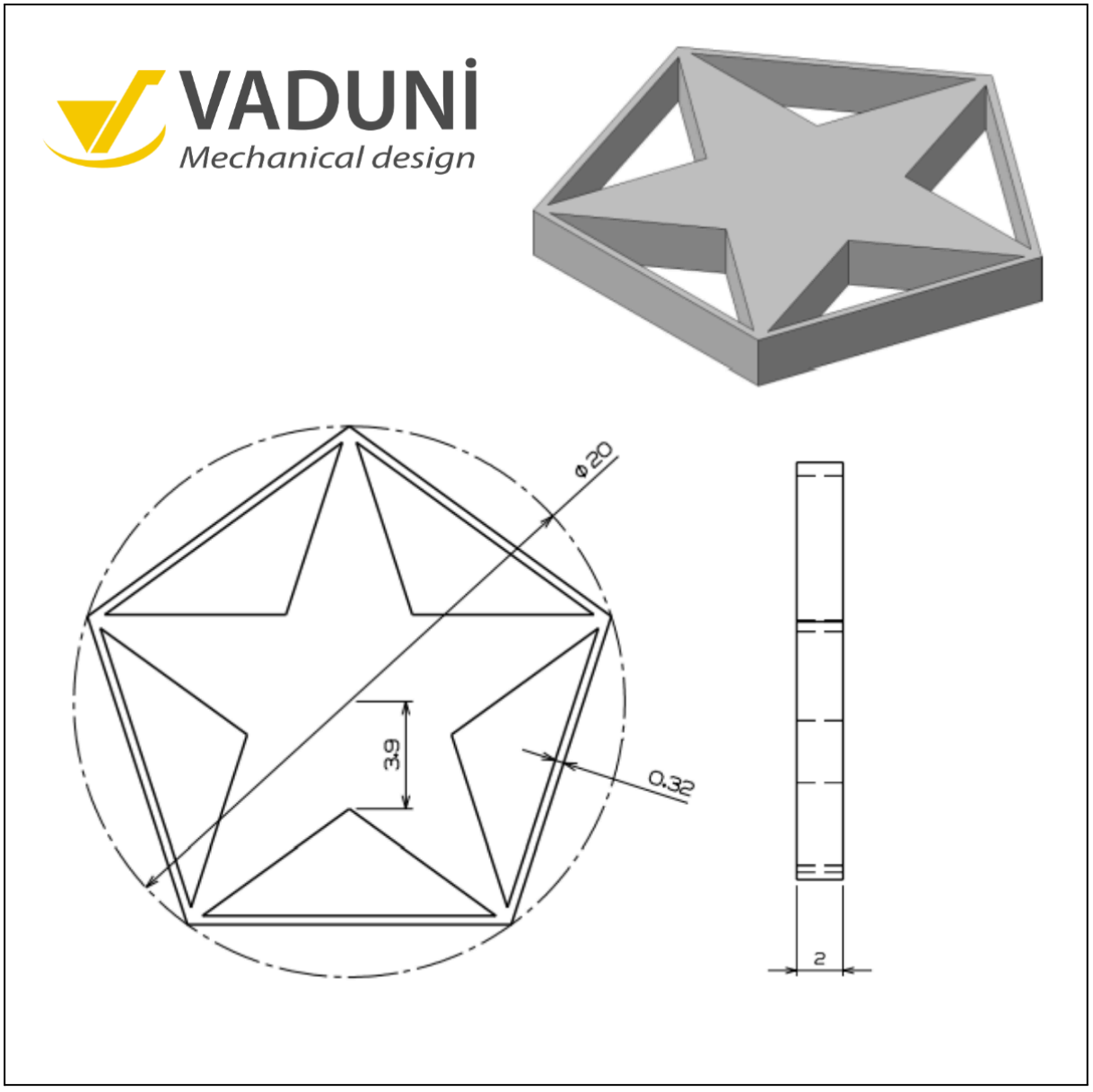
Bài tập 703


VADUNİ
Mechanical design
15
13.5
10.5
19.5
34.5
48
10.5
15
19.5
67.5
24
13.5
10.5
9
Ø10.5
63
82.5

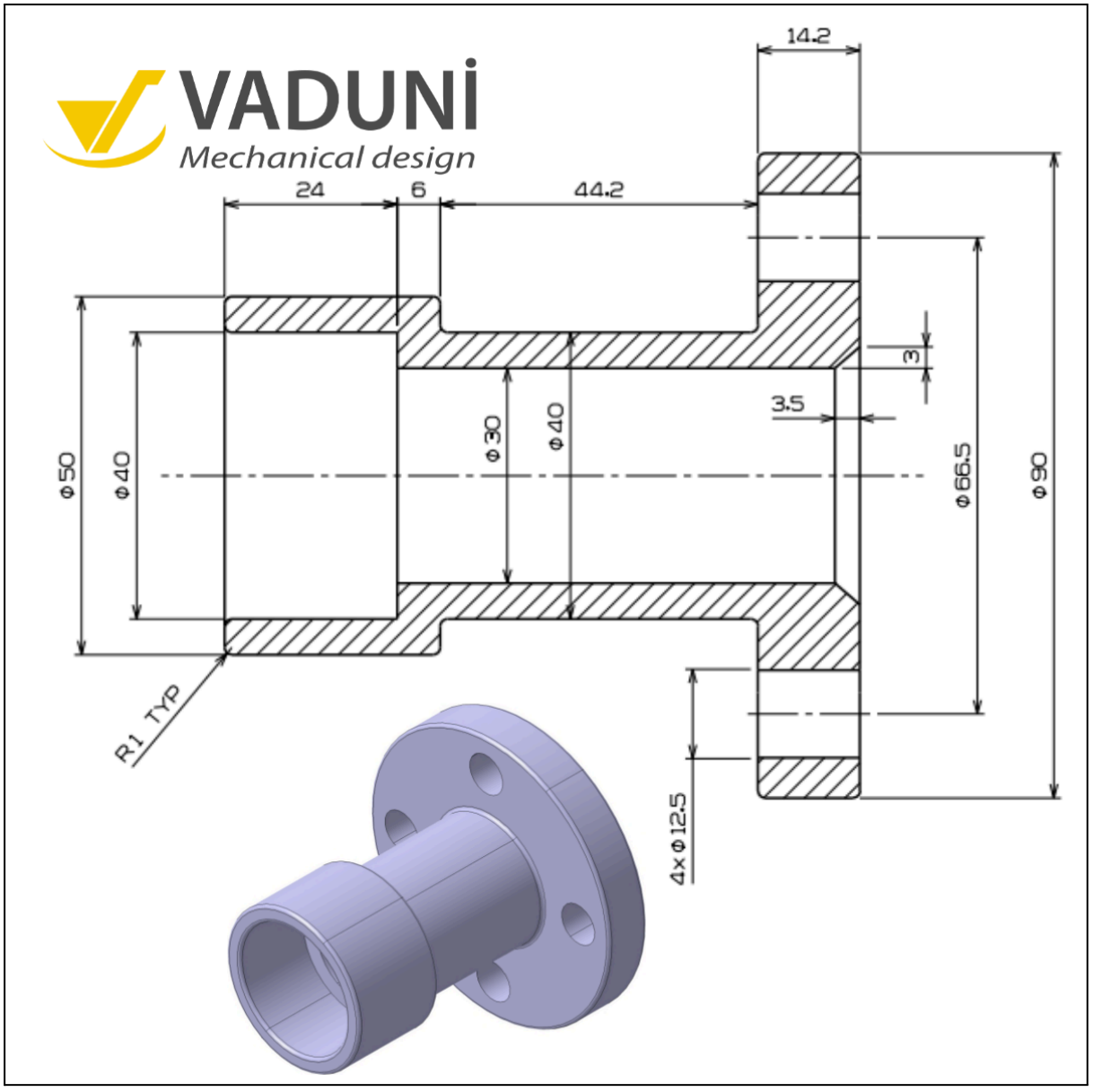
Bài tập 704



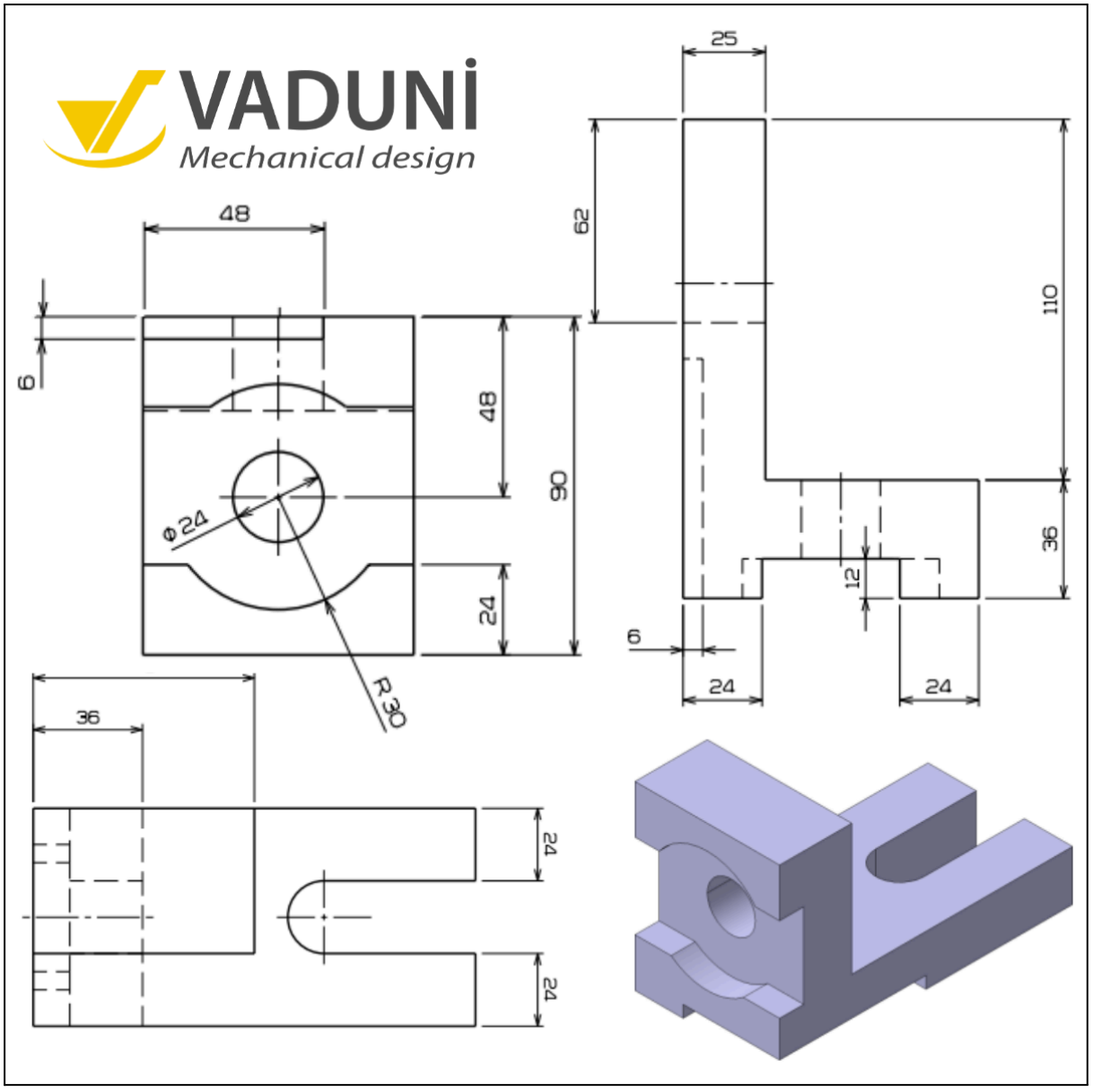
Bài tập 705



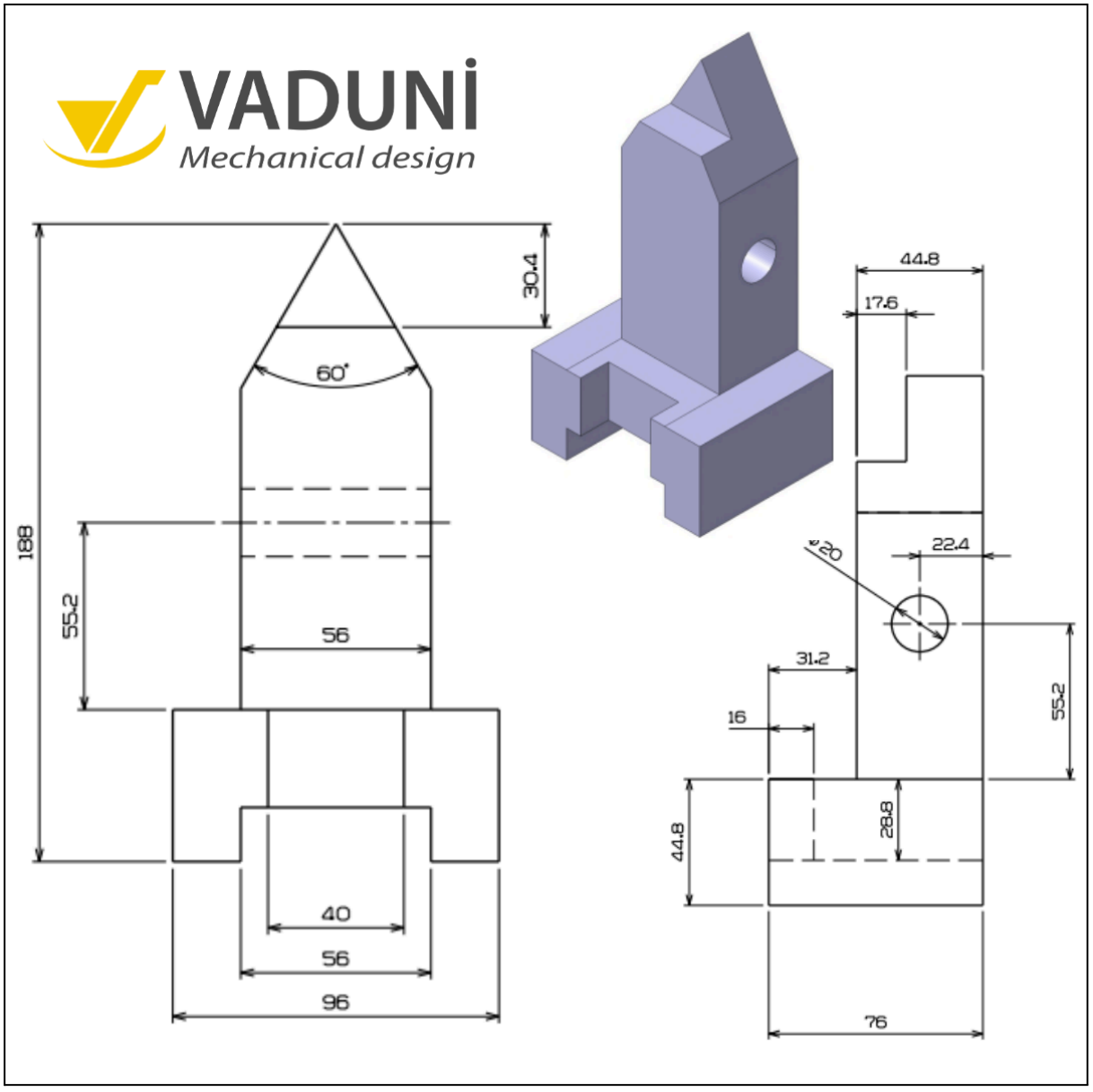
Bài tập 706


VADUNİ
Mechanical design
14.2
24
6
44.2
3
3.5
Φ50
Φ40
Φ30
Φ40
Φ66.5
Φ90
R1 TYP
4xΦ12.5

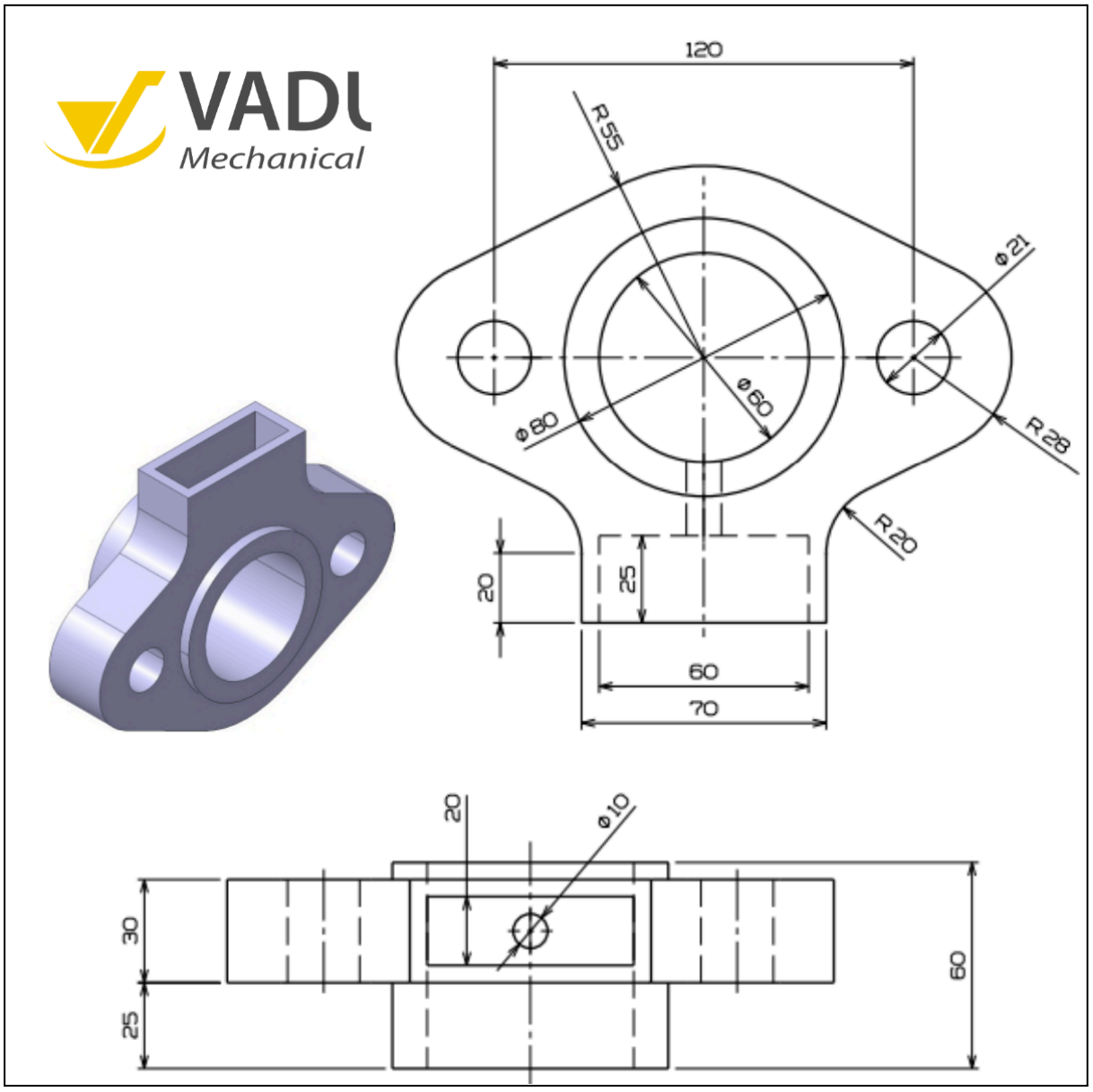
Bài tập 707


VADUNİ
Mechanical design
48
6
48
90
24
ø24
R30
25
62
110
36
12
6
24
24
36
24
24

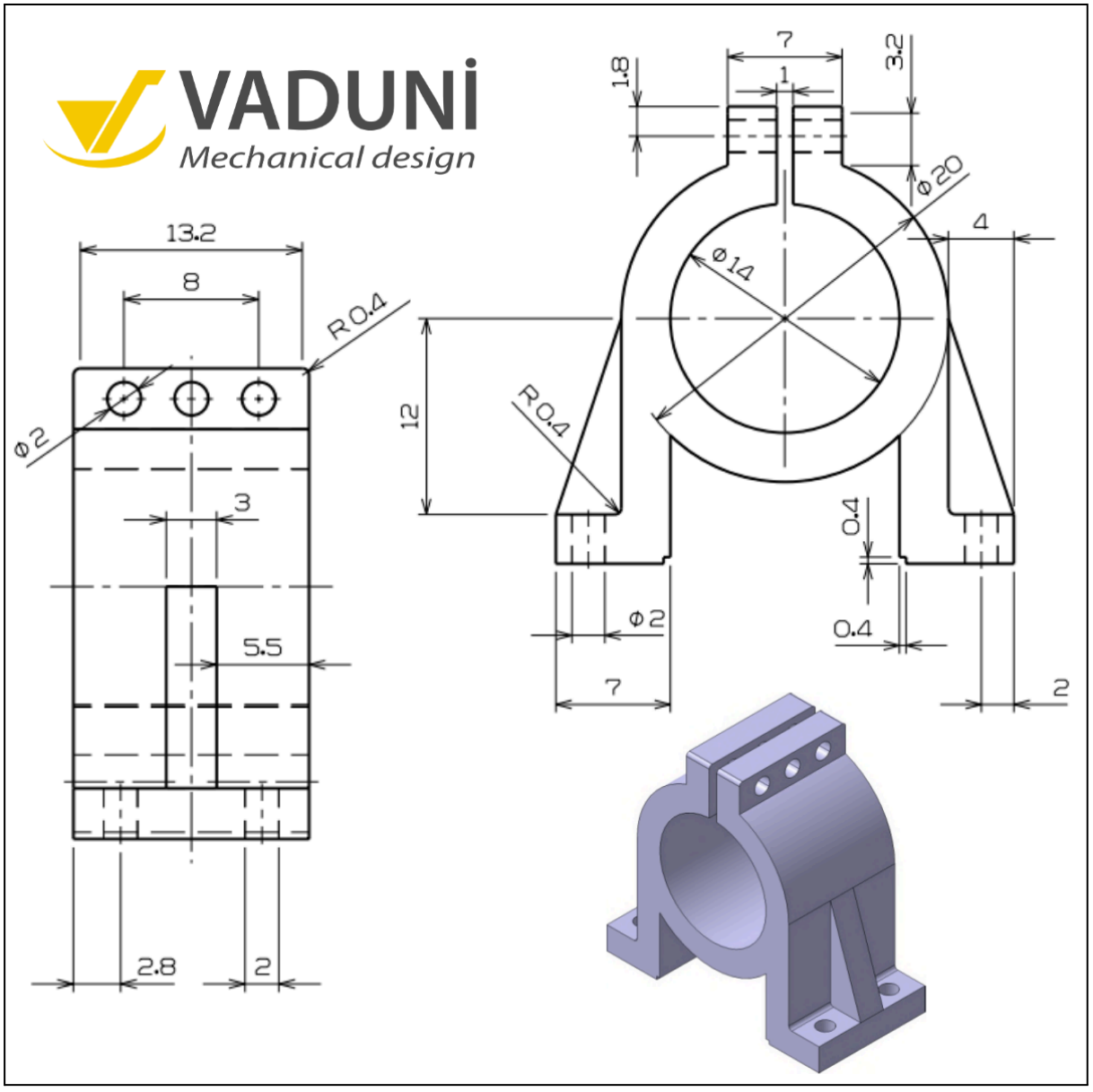
Bài tập 708


VADUNİ
Mechanical design
30.4
60°
188
55.2
56
40
56
96
44.8
17.6
ø20
22.4
31.2
16
55.2
44.8
28.8
76

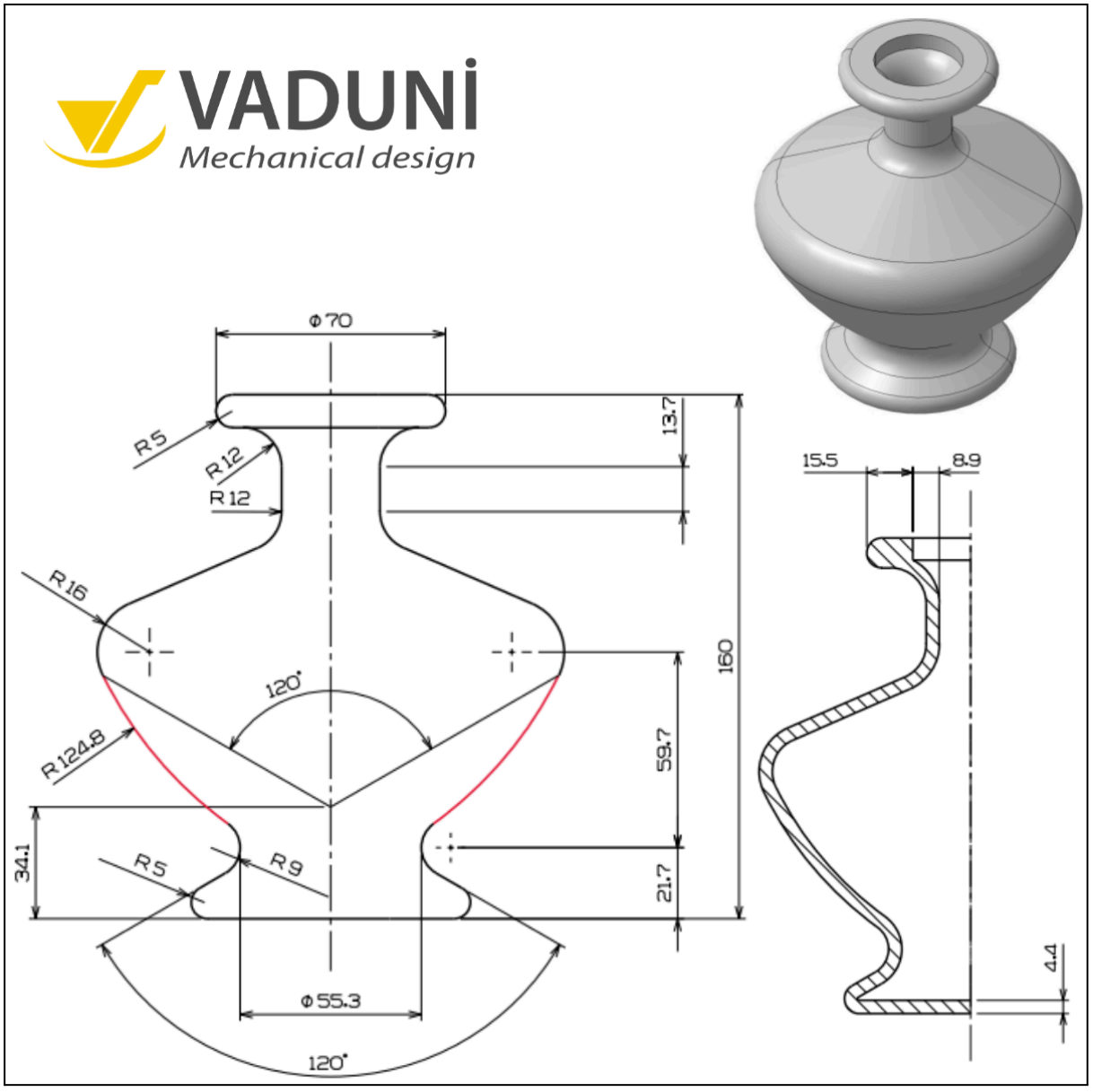
Bài tập 709


VADL
Mechanical
120
R55
ø21
ø60
ø80
R28
R20
20
25
60
70
20
ø10
30
25
60

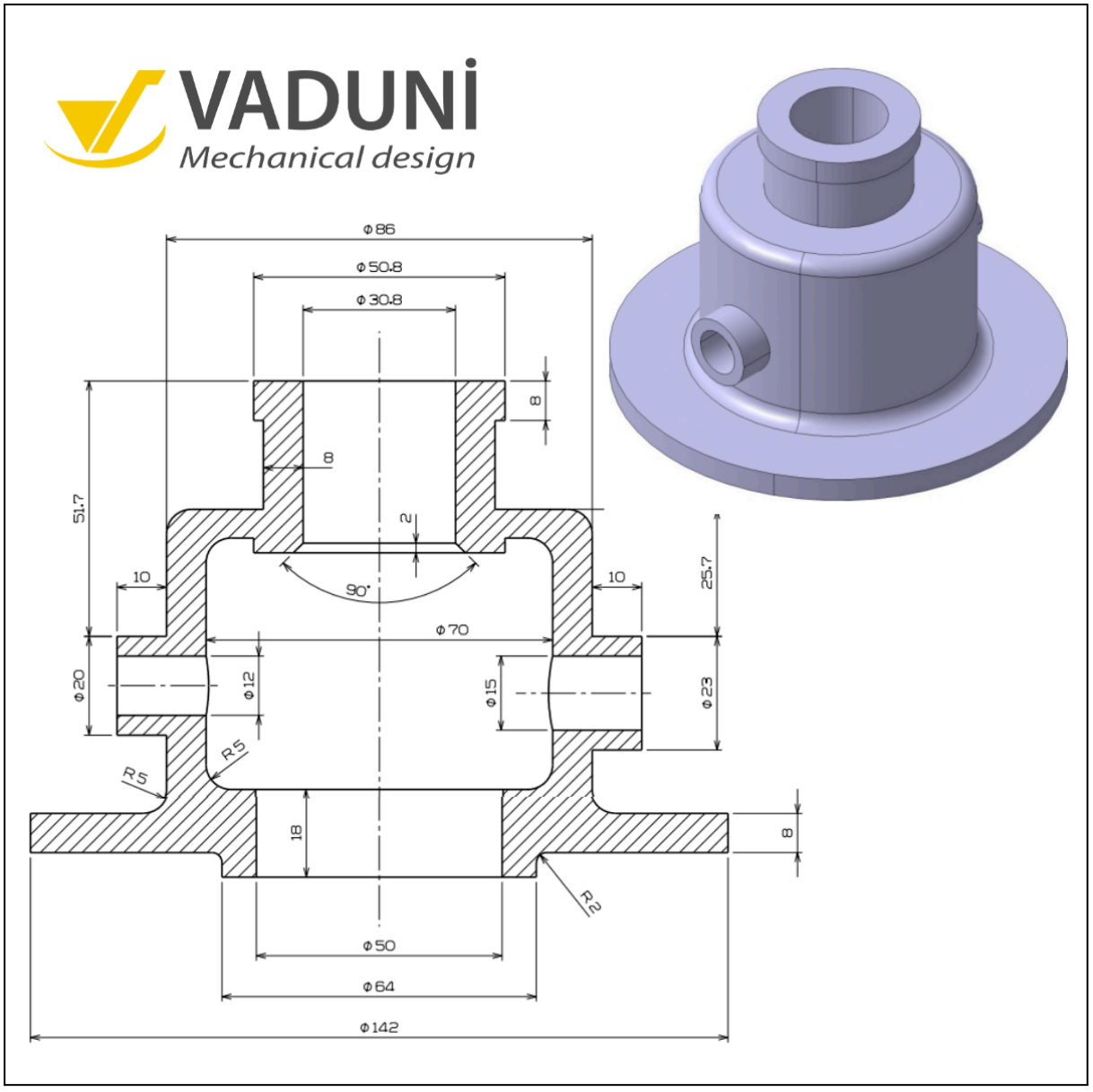
Bài tập 710


VADUNİ
Mechanical design
13.2
8
R0.4
ø2
3
5.5
2.8
2
7
1
1.8
3.2
ø20
4
ø14
12
R0.4
0.4
0.4
ø2
7
2

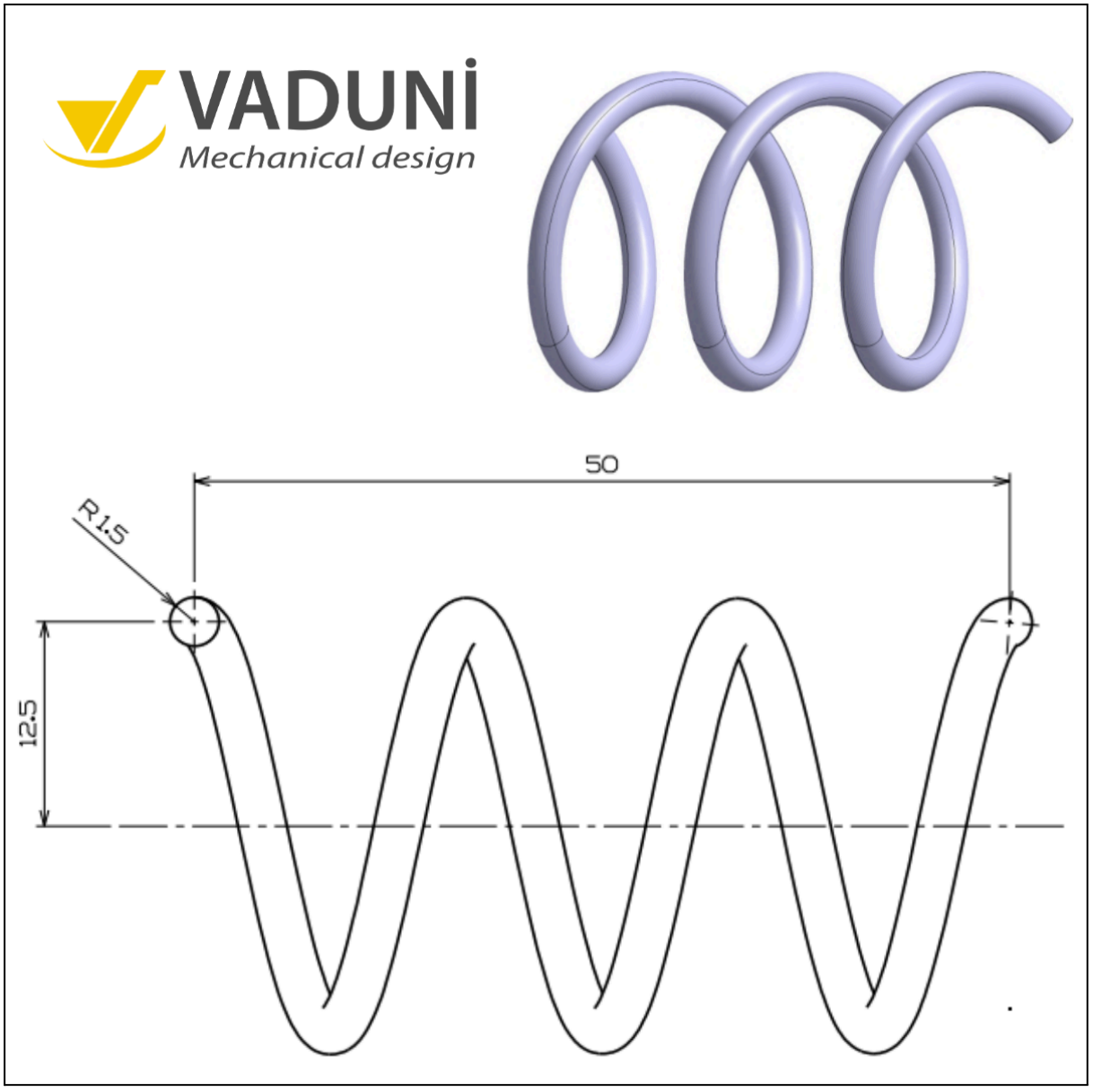
Bài tập 711


VADUNİ
Mechanical design
Φ70
R5
R12
R12
R16
120°
R124.8
34.1
R5
R9
Φ55.3
120°
13.7
160
59.7
21.7
15.5
8.9
4.4

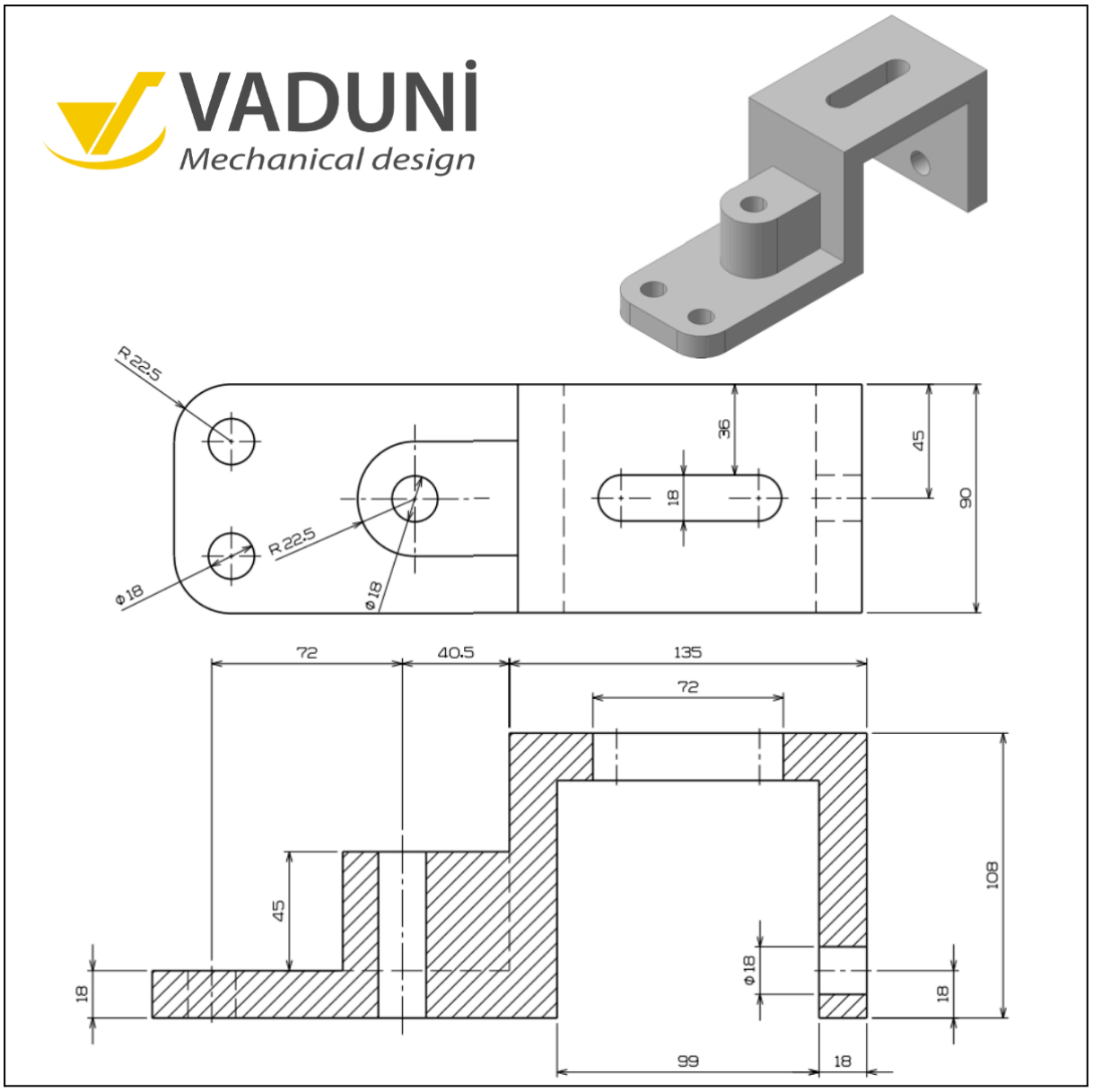
Bài tập 712


VADUNI
Mechanical design
Φ86
Φ50.8
Φ30.8
8
8
51.7
2
90°
10
10
25.7
Φ70
Φ20
Φ12
Φ15
Φ23
R5
R5
18
8
R2
Φ50
Φ64
Φ142

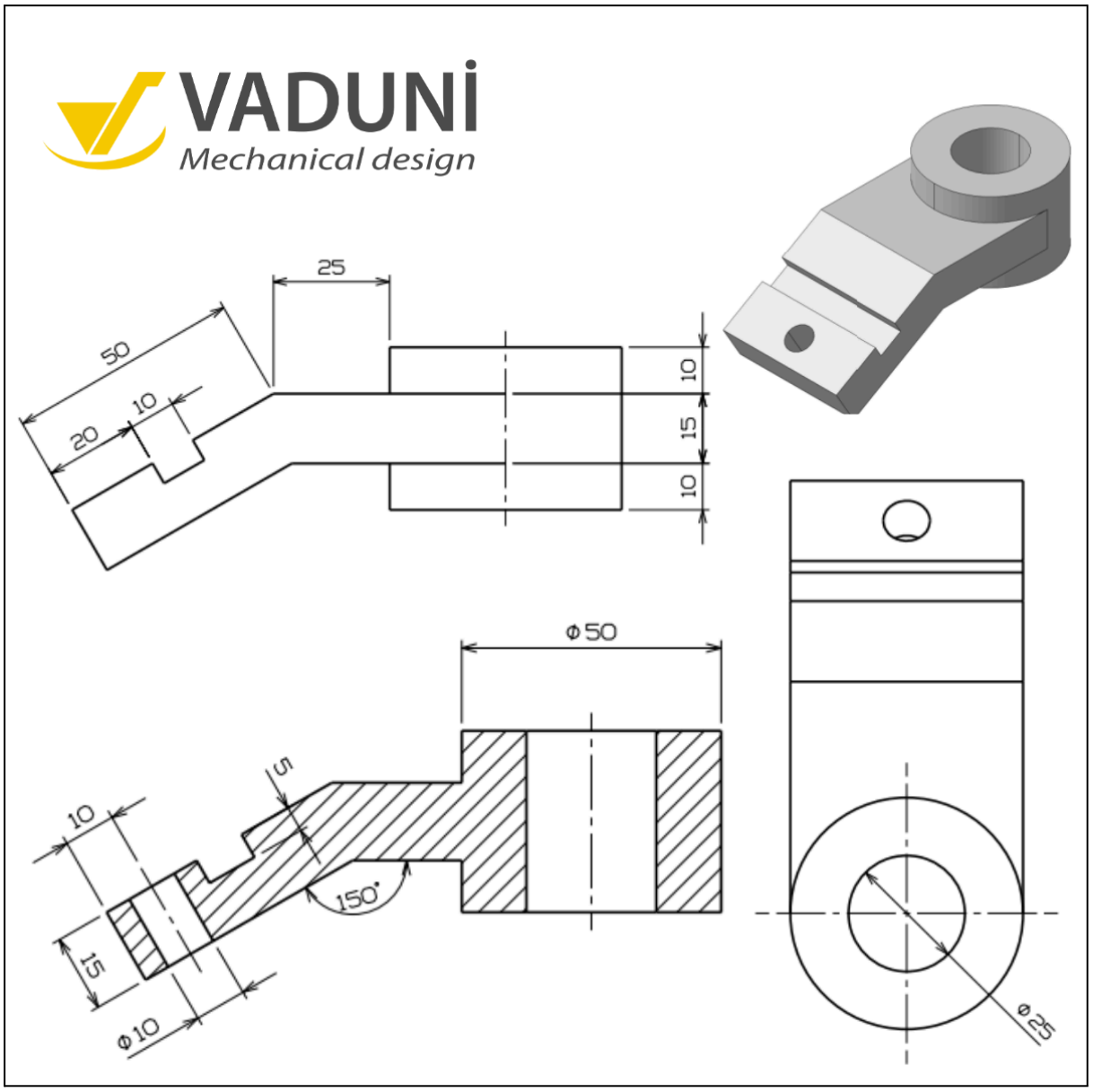
Bài tập 713



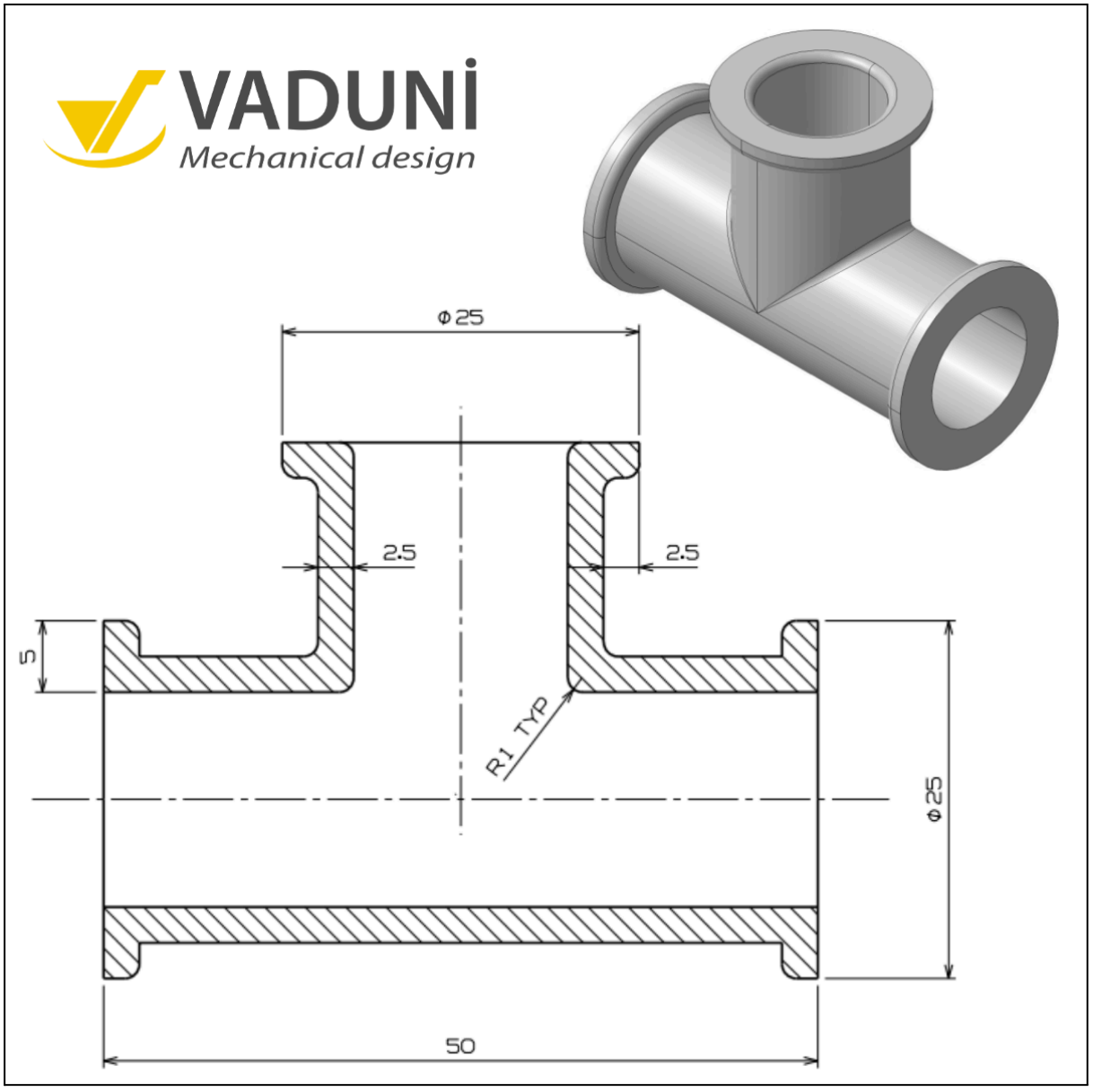
Bài tập 714


VADUNİ
Mechanical design
R 22.5
R 22.5
ø 18
ø 18
36
18
45
90
72
40.5
135
72
45
18
ø 18
18
108
99
18

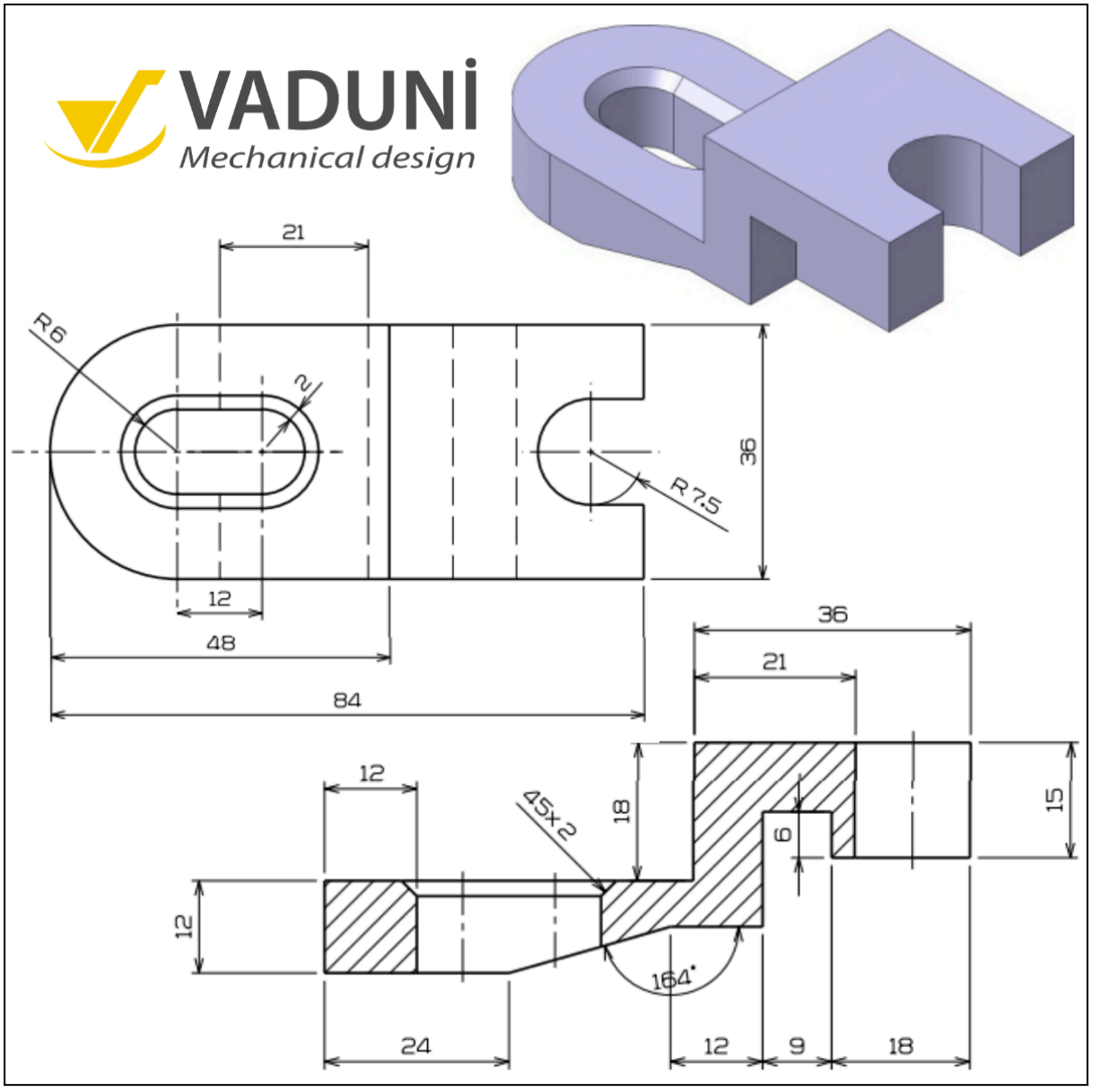
Bài tập 715


VADUNİ
Mechanical design
25
50
20
10
10
15
10
ϕ50
5
10
150°
15
ϕ10
ϕ25

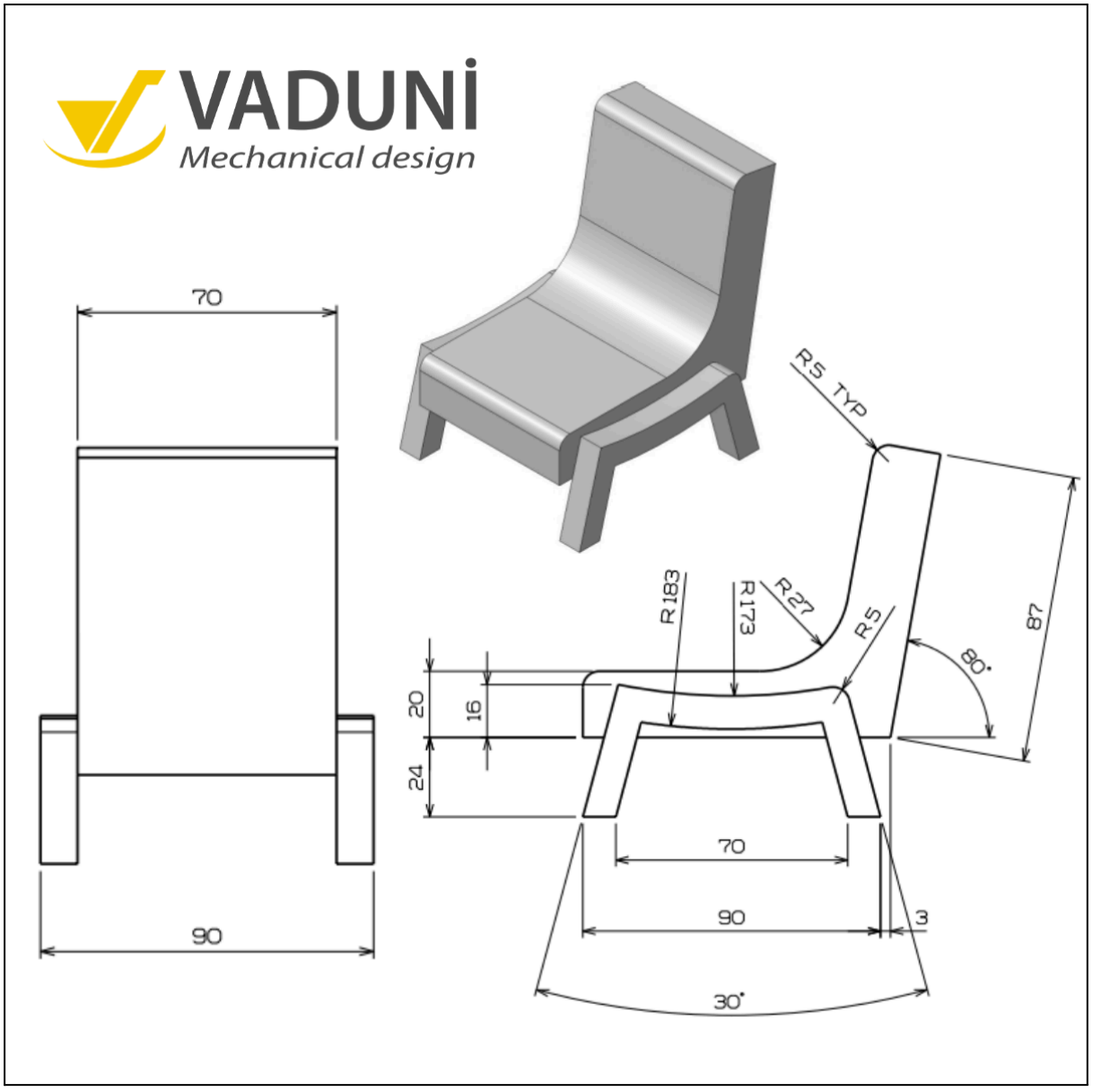
Bài tập 716



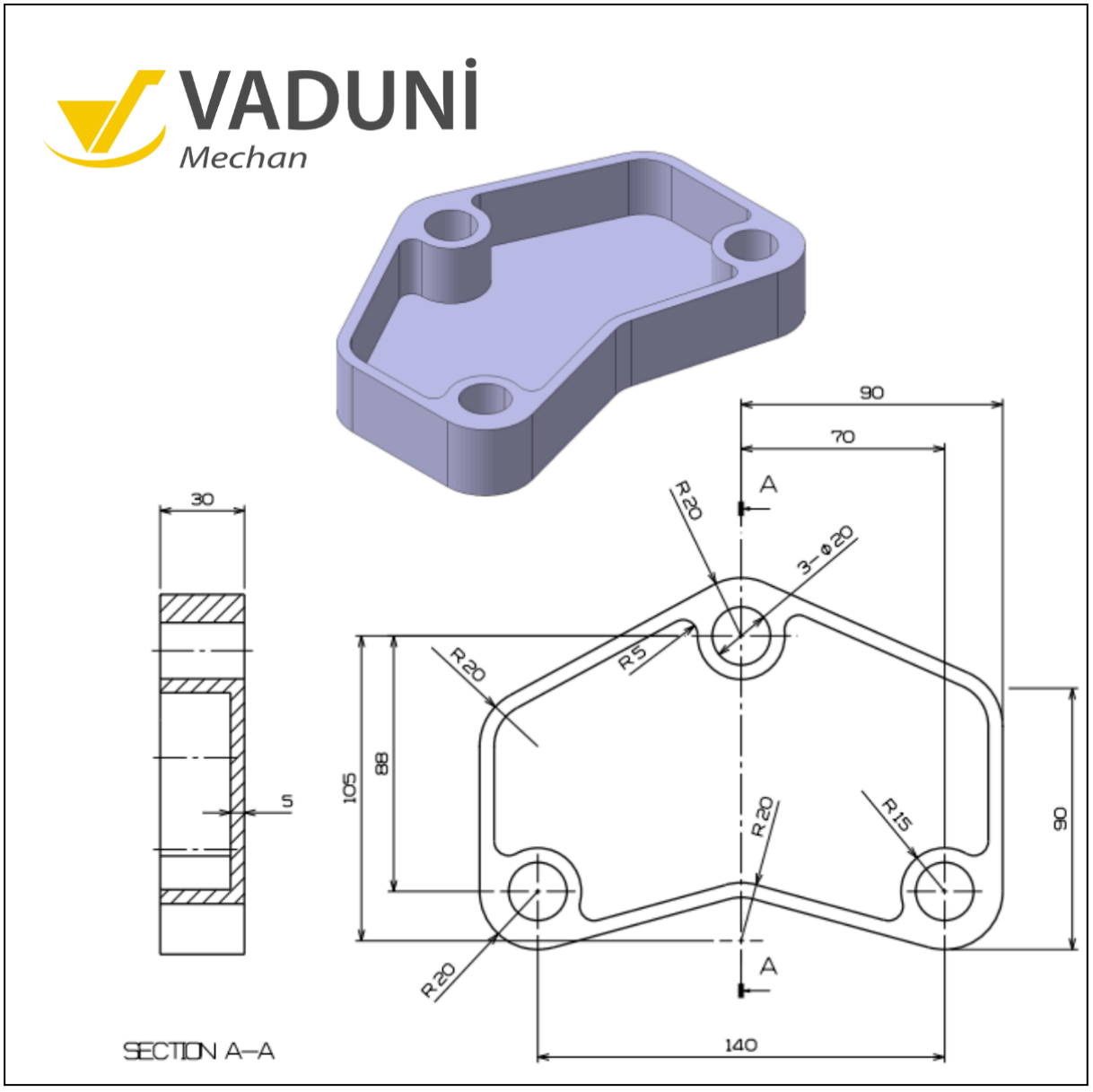
Bài tập 717


VADUNI
Mechanical design
21
R6
2
36
R 7.5
12
48
84
36
21
12
45x2
18
6
15
12
164°
24
12
9
18

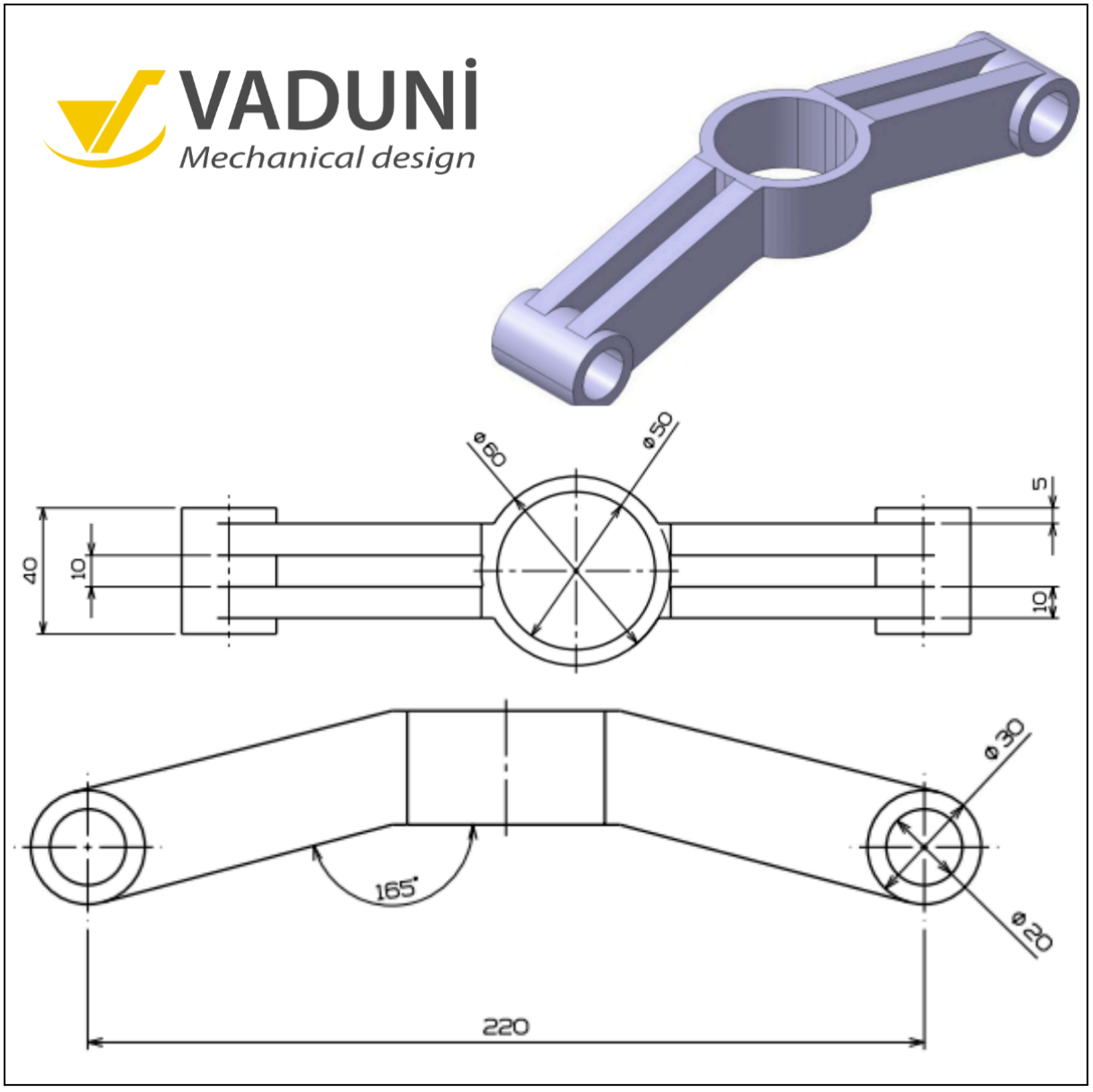
Bài tập 718


VADUNİ
Mechanical design
70
90
R5 TYP
R183
R173
R27
R5
87
80°
20
16
24
70
90
3
30°

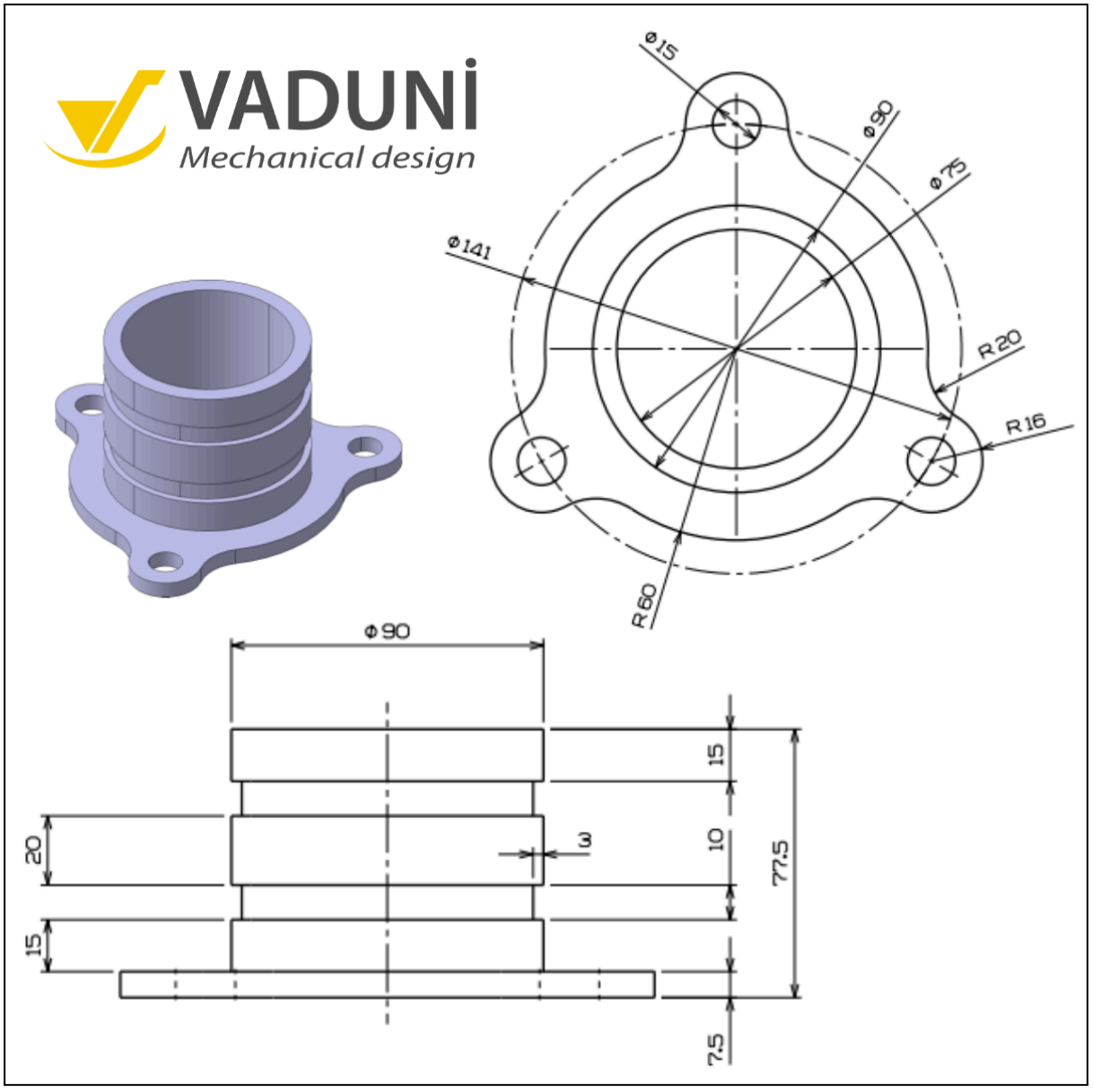
Bài tập 719


VADUNİ
Mechan
90
70
A
R20
3-ø20
R5
R20
105
88
R20
R15
90
R20
A
140
30
5
SECTION A–A

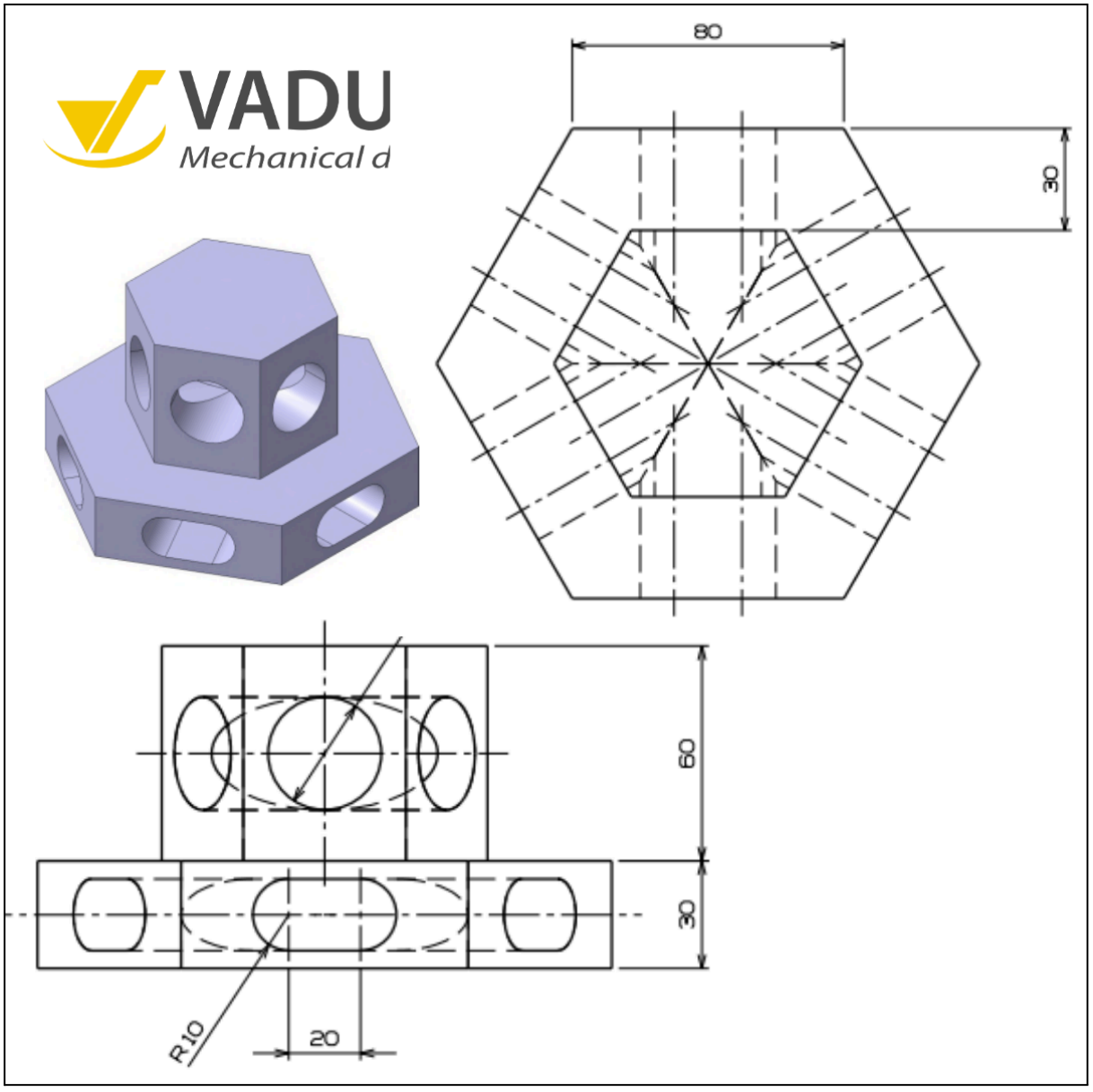
Bài tập 720



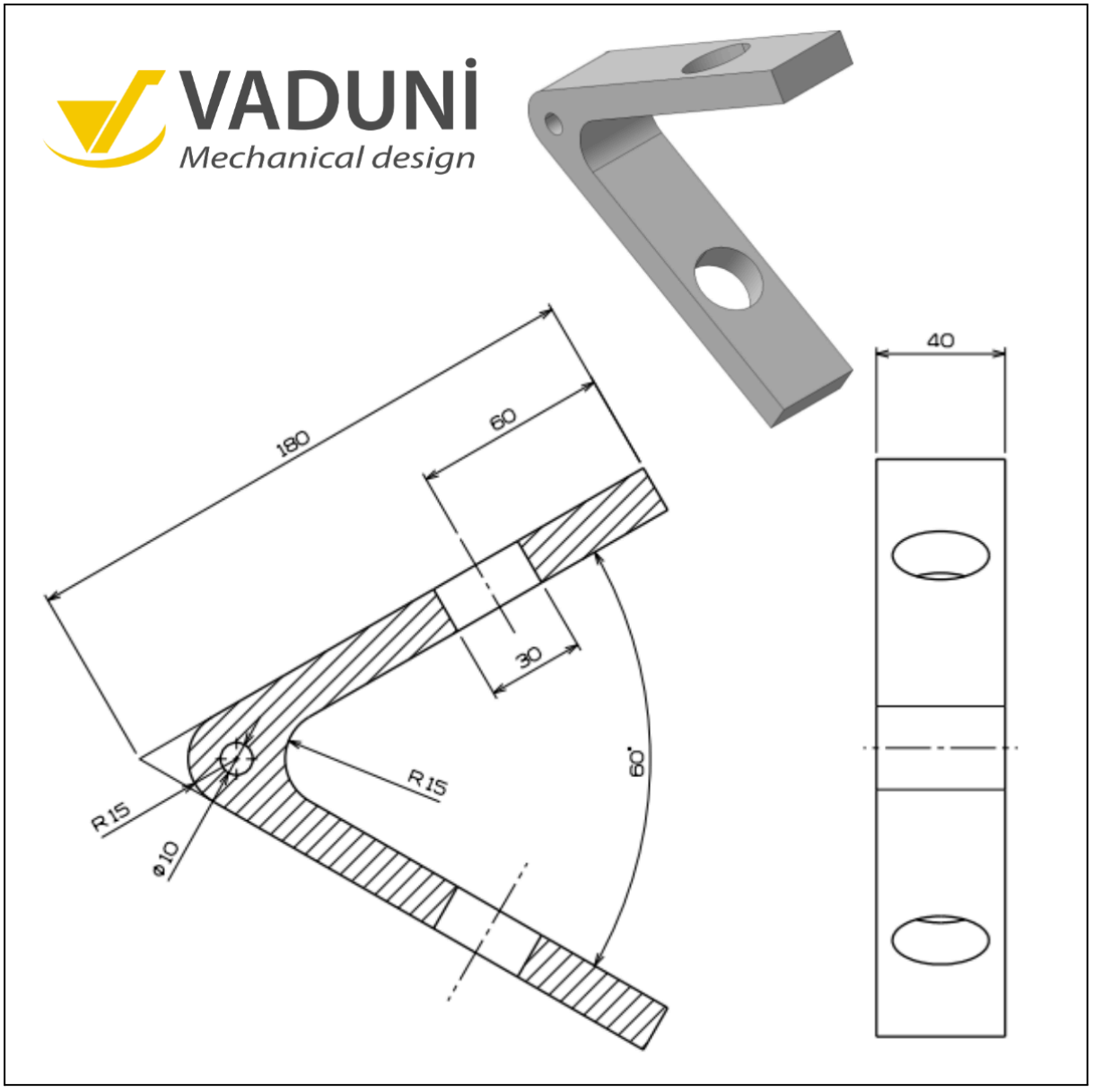
Bài tập 721


VADUNİ
Mechanical design
ø15
ø90
ø75
ø141
R20
R16
R60
ø90
15
10
77.5
20
15
3
7.5

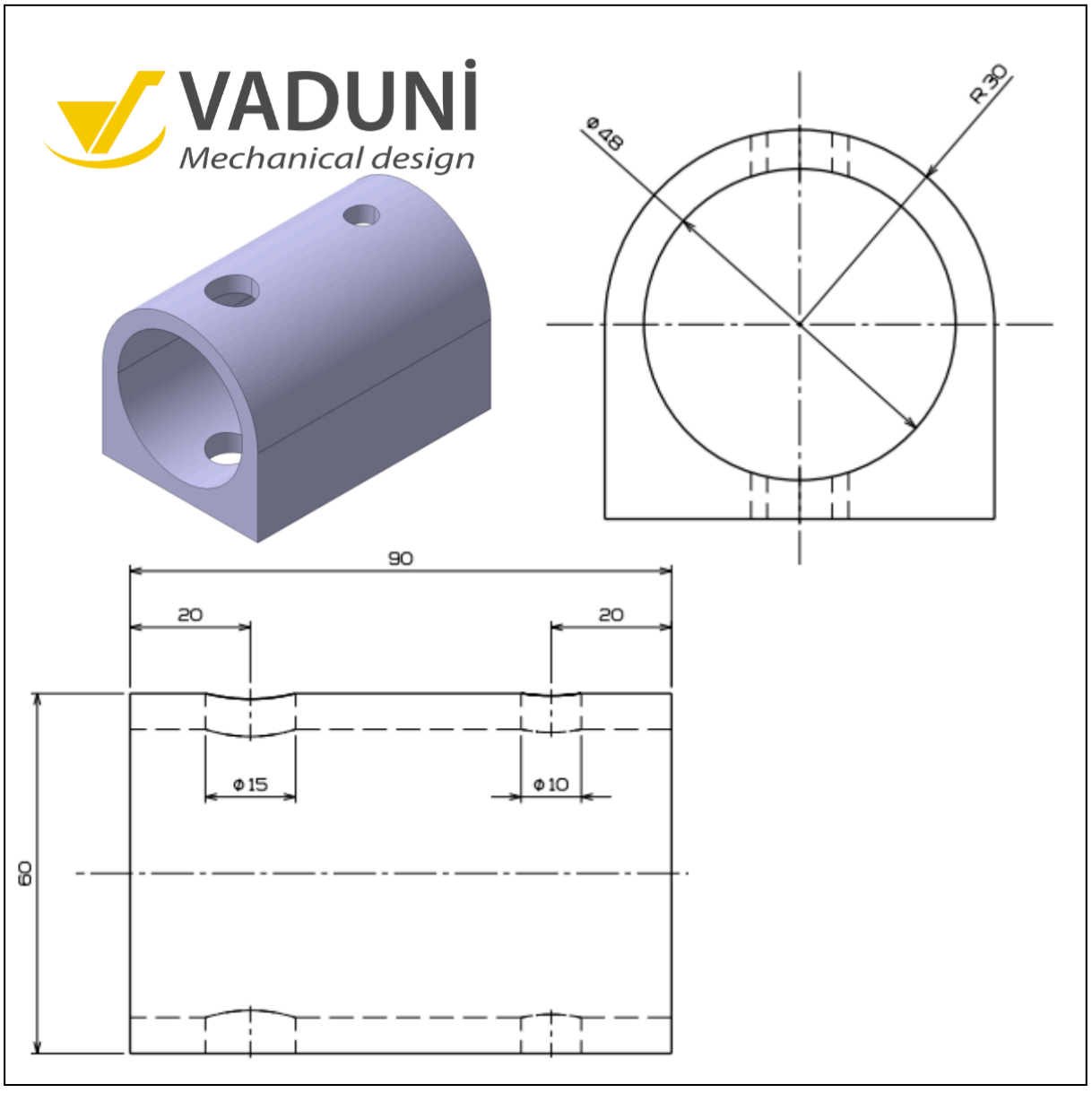
Bài tập 722



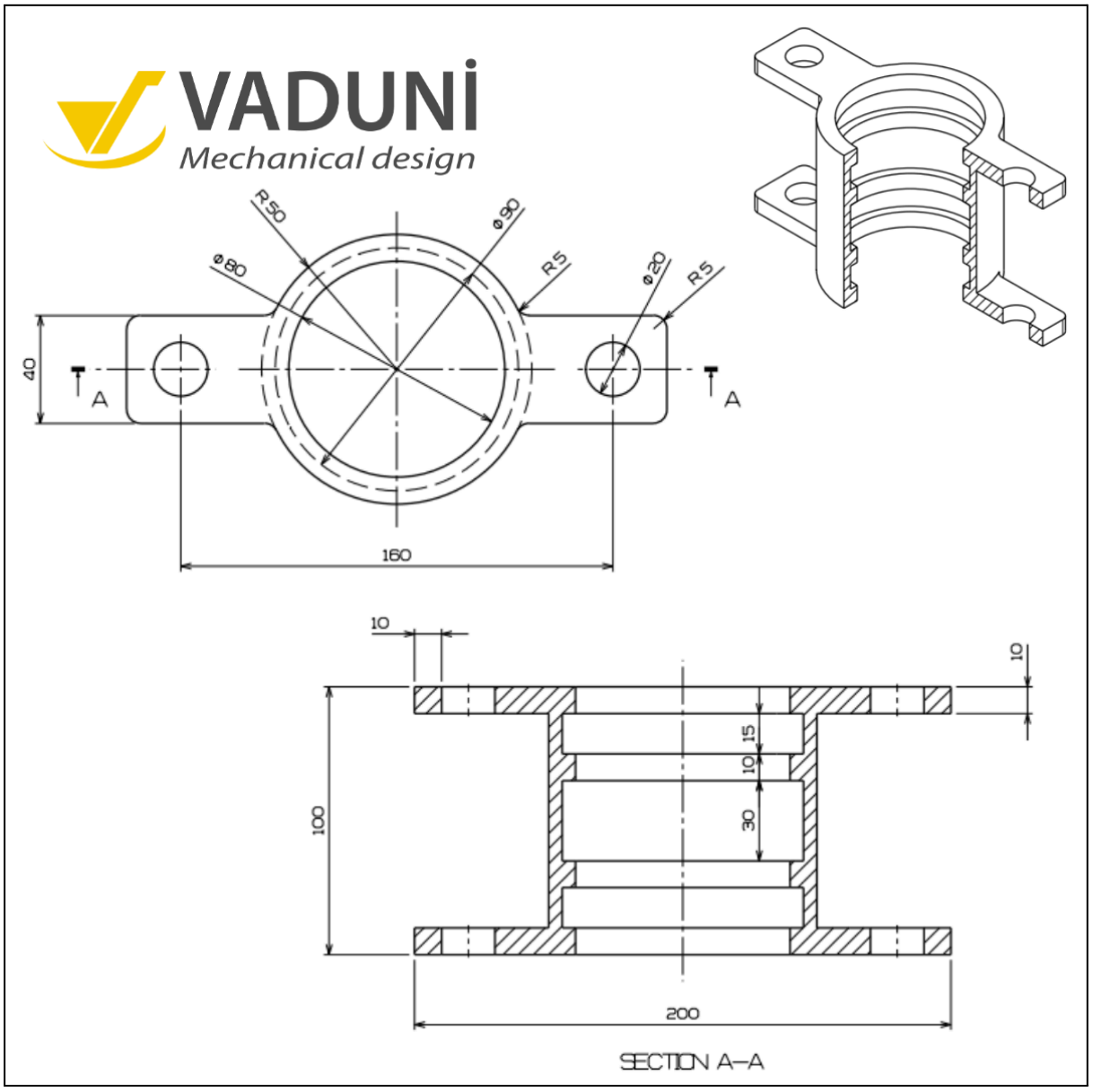
Bài tập 723



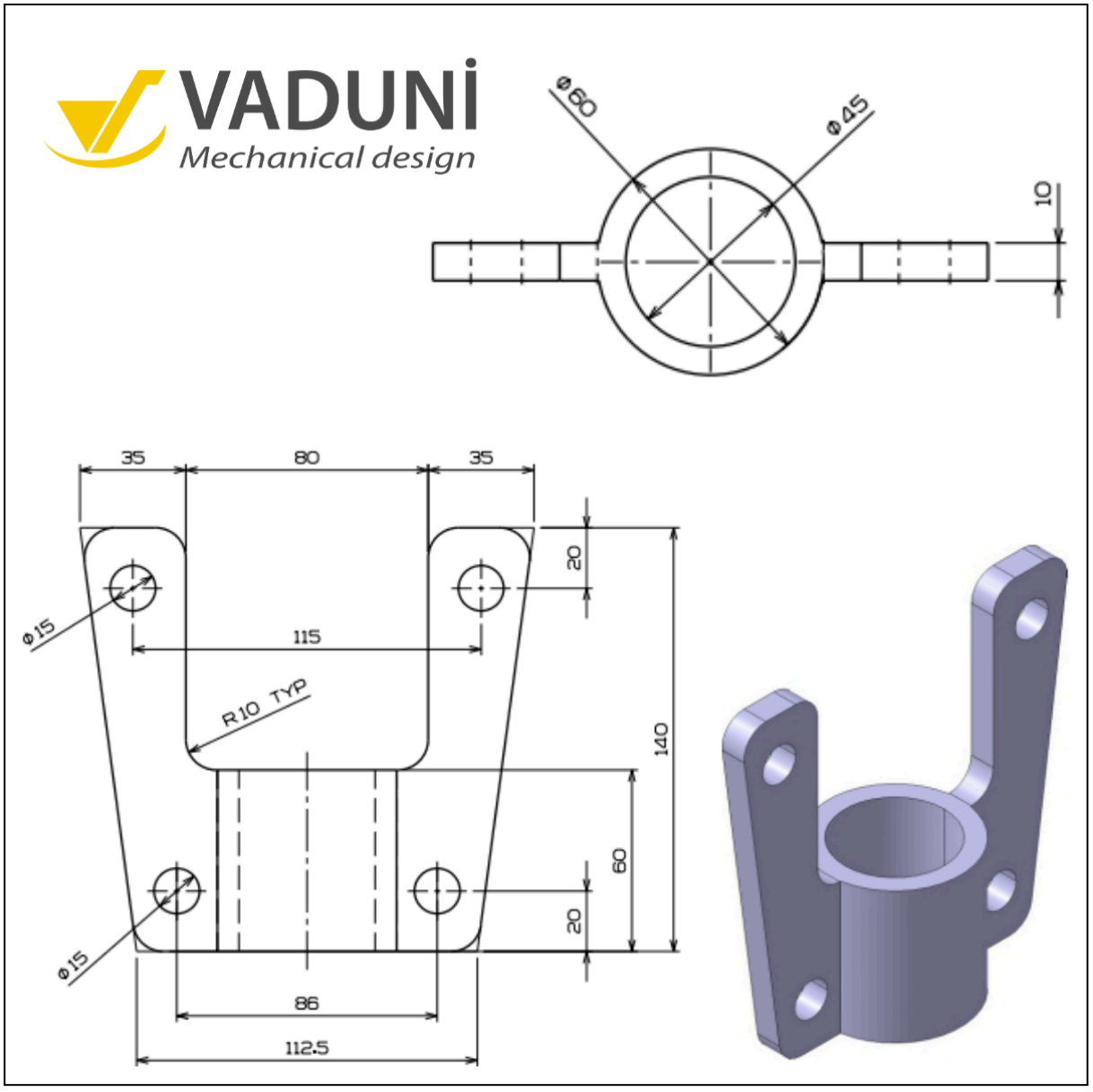
Bài tập 724



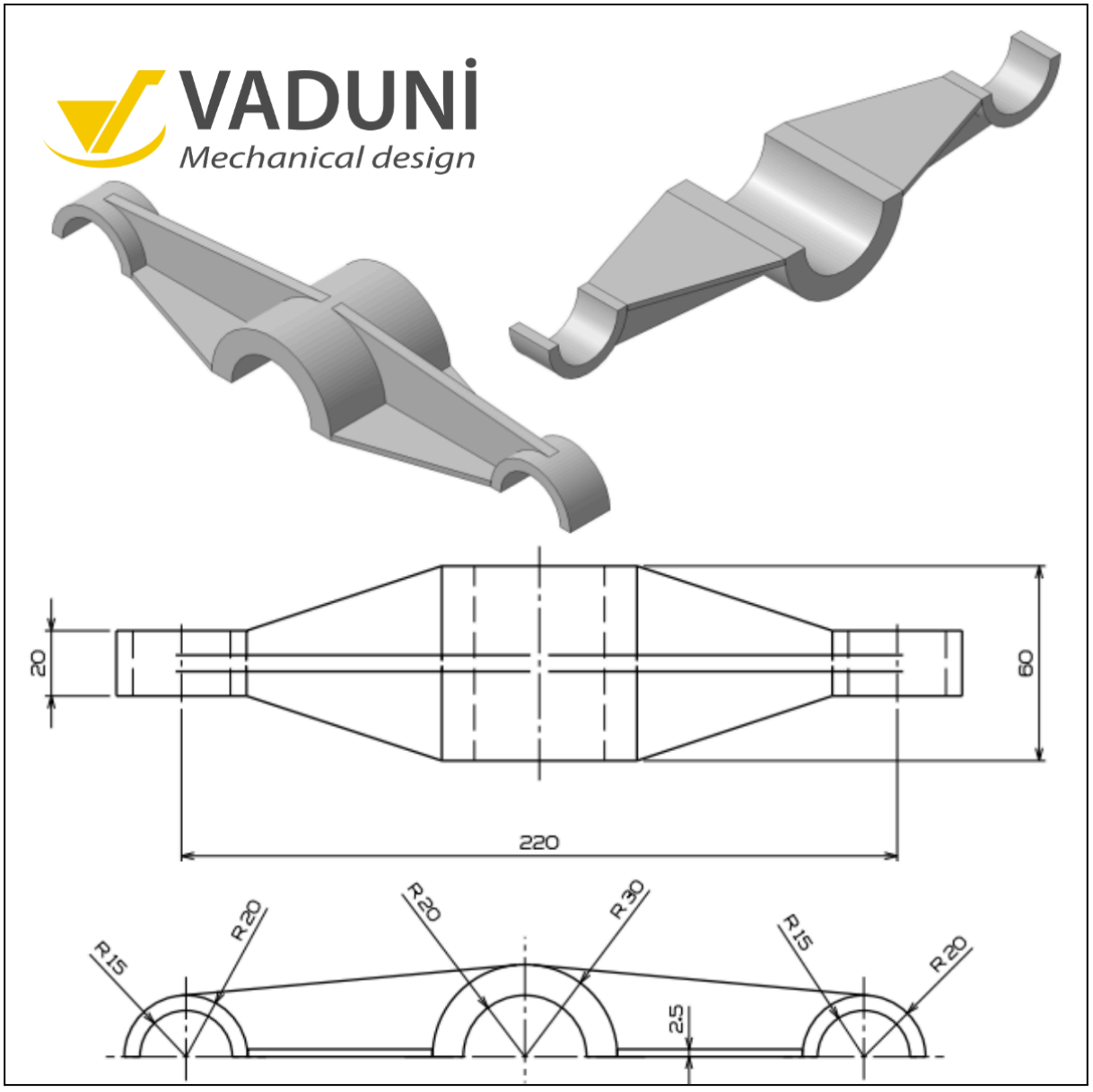
Bài tập 725


VADUNİ
Mechanical design
R50
ø90
ø80
R5
ø20
R5
40
A
A
160
10
10
15
10
30
100
200
SECTION A–A

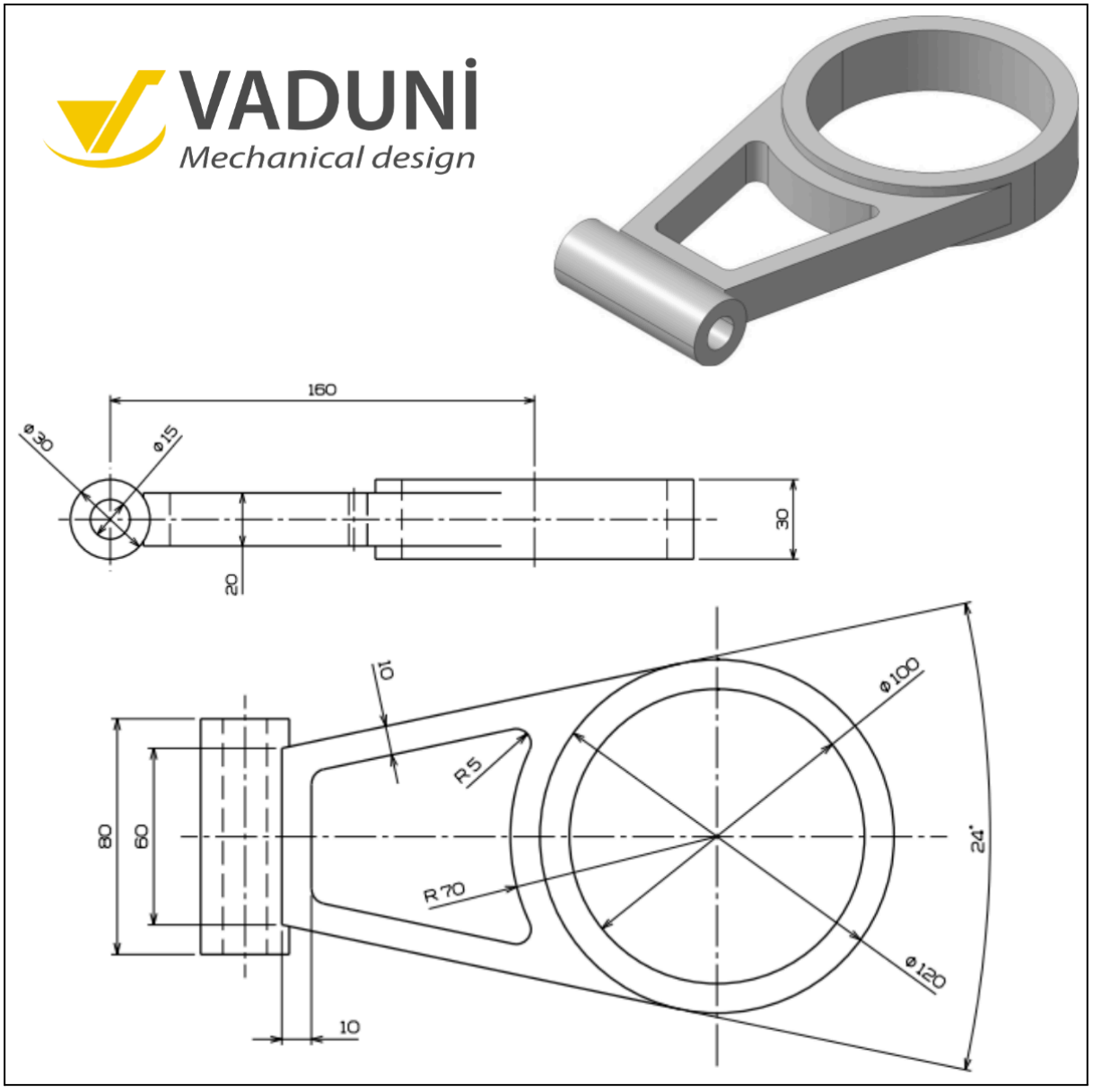
Bài tập 726


VADUNI
Mechanical design
ø60
ø45
10
35
80
35
20
ø15
115
R10 TYP
140
60
20
ø15
86
112.5

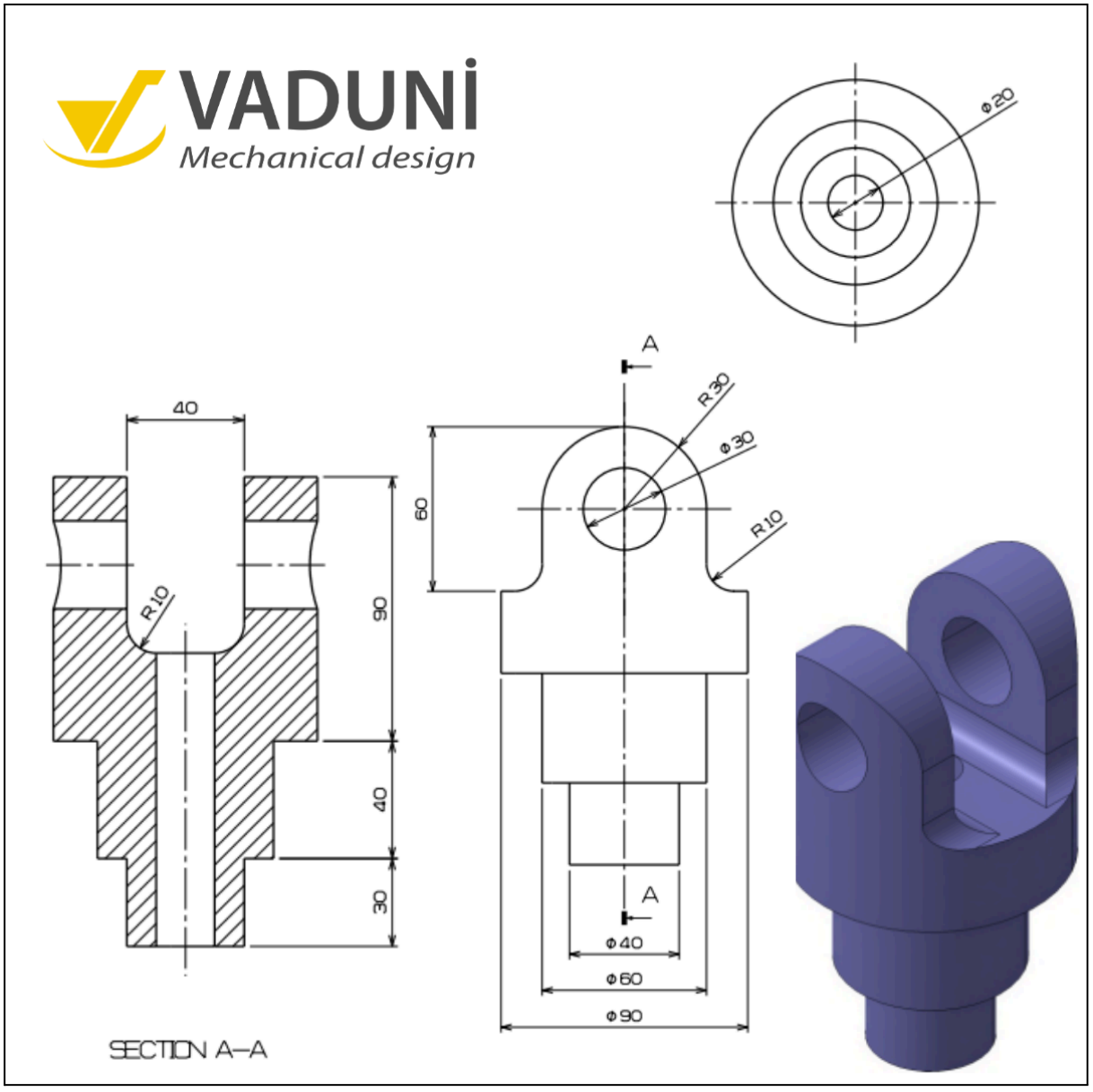
Bài tập 727



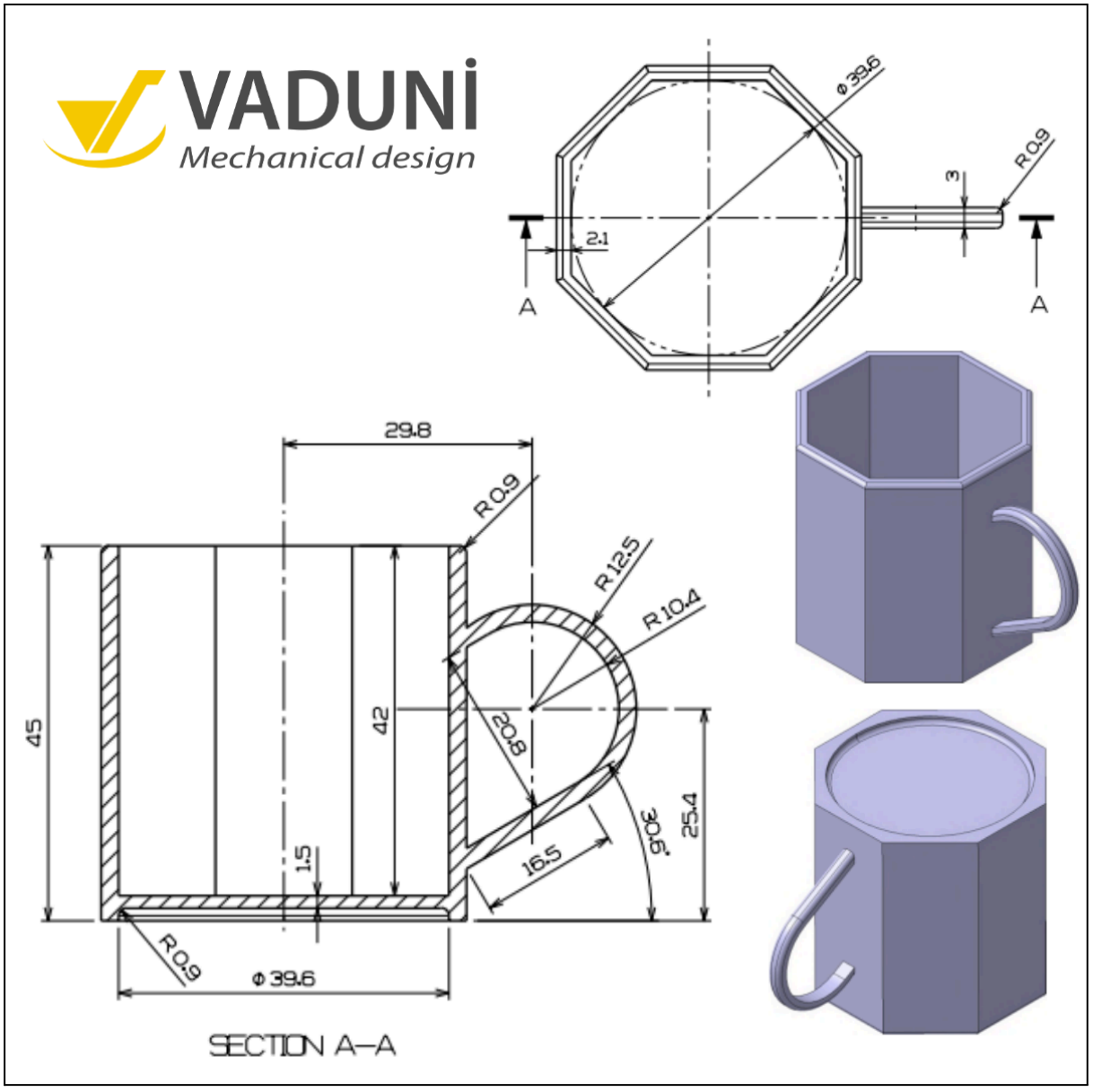
Bài tập 728


VADUNİ
Mechanical design
160
ø30
ø15
30
20
10
R5
ø100
80
60
24°
R70
ø120
10

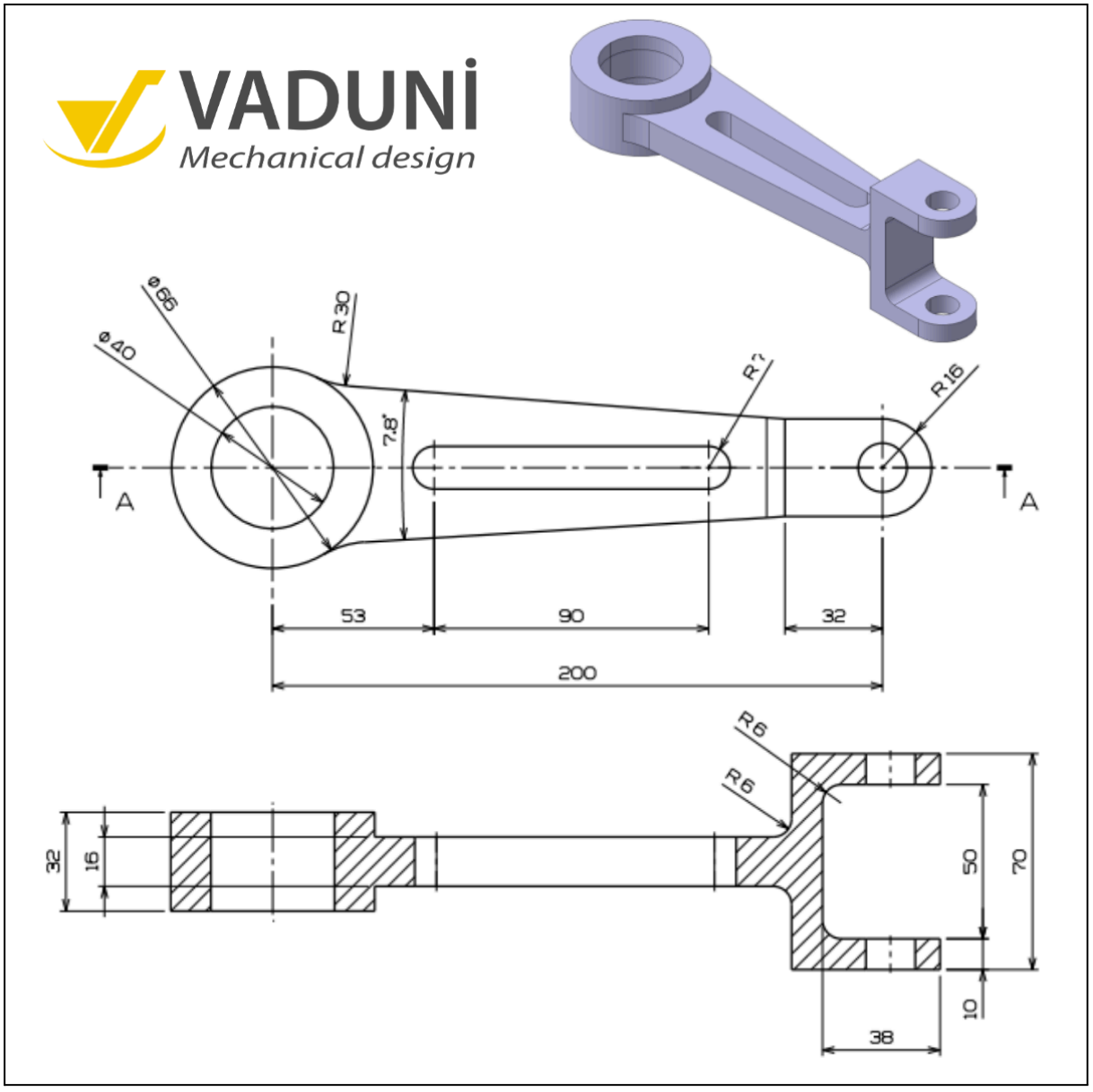
Bài tập 729


VADUNİ
Mechanical design
ø20
A
R30
ø30
R10
60
40
R10
90
40
30
A
ø40
ø60
ø90
SECTION A–A

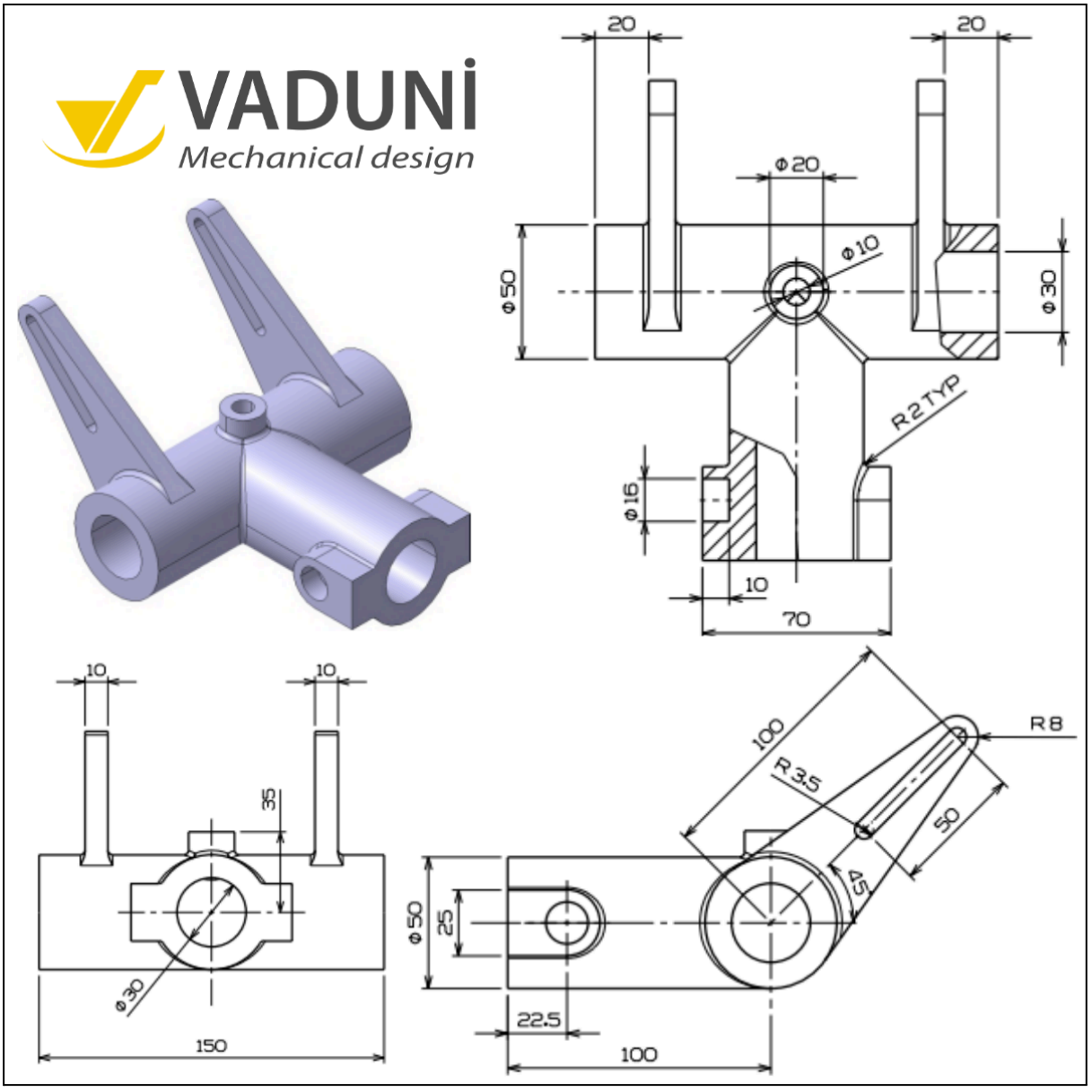
Bài tập 730


VADUNİ
Mechanical design
ø 39.6
R0.9
3
2.1
A
A
29.8
R0.9
R12.5
R10.4
45
42
20.8
25.4
30°
16.5
1.5
R0.9
ø 39.6
SECTION A–A

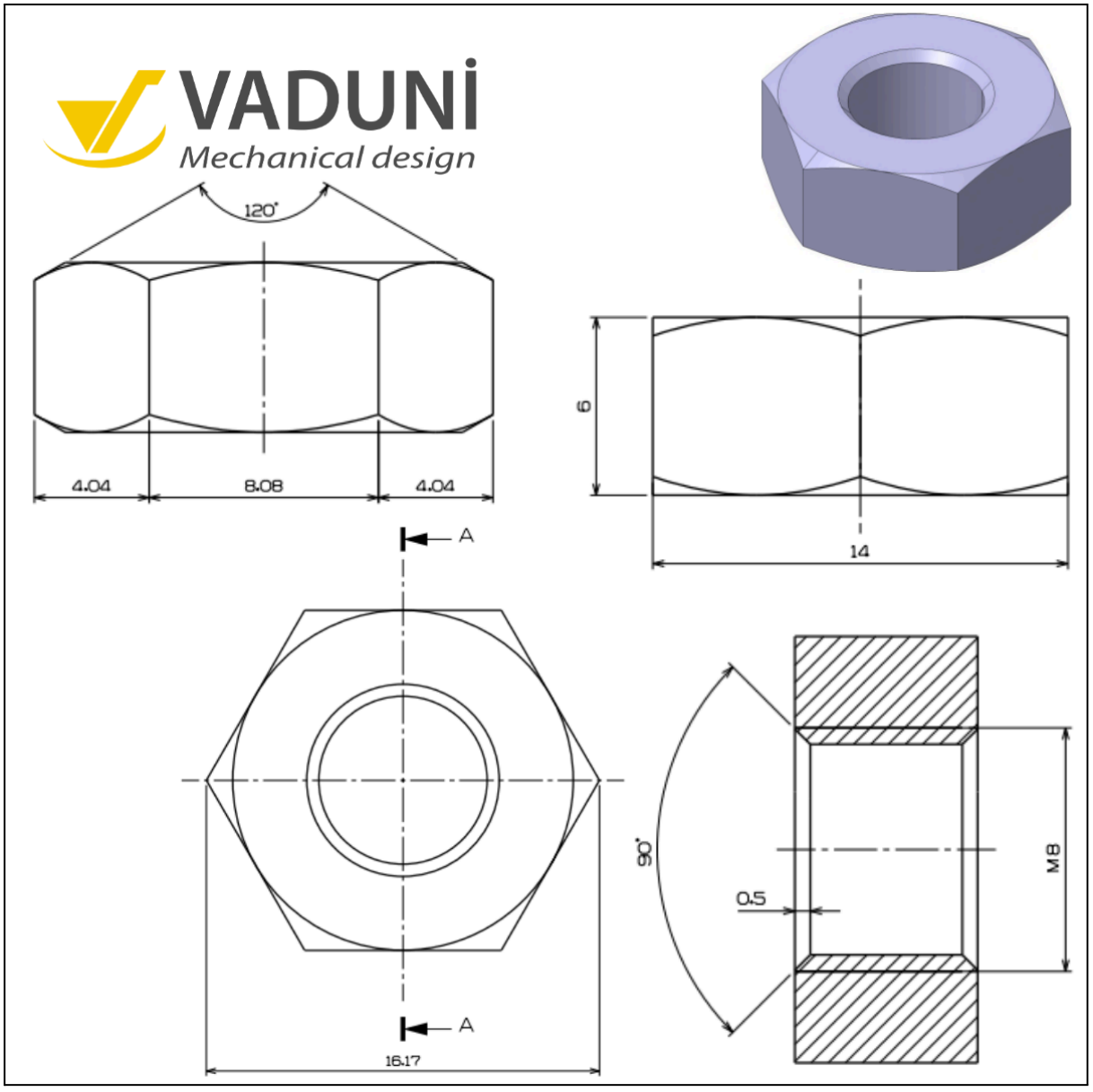
Bài tập 731


VADUNI
Mechanical design
Ø66
Ø40
R30
7.8
R?
R16
A
A
53
90
32
200
R6
R6
32
16
50
70
10
38

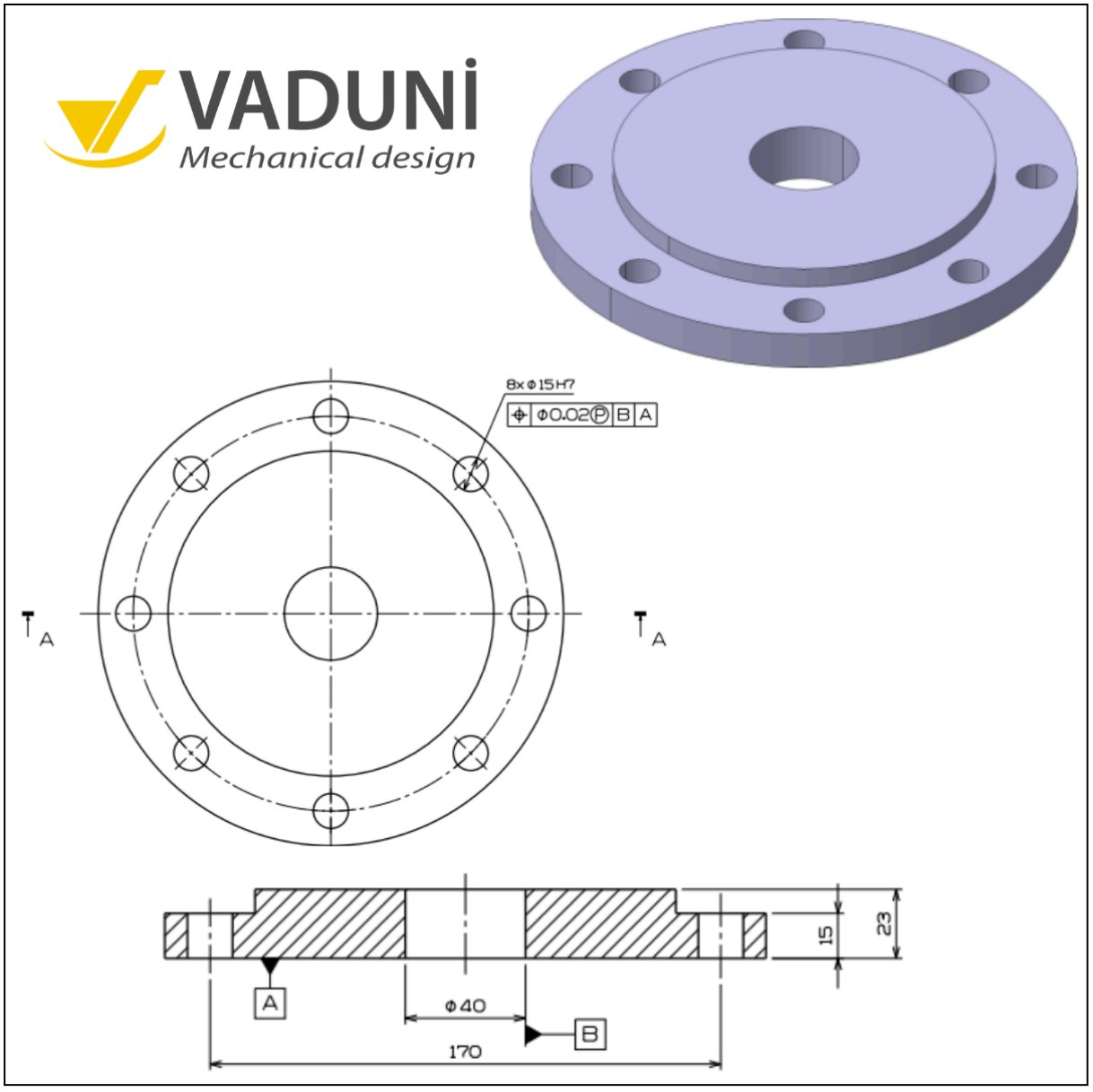
Bài tập 732


VADUNİ
Mechanical design
20
20
Φ20
Φ10
Φ50
Φ30
R2 TYP
Φ16
10
70
10
10
35
Φ30
150
100
R8
R3.5
50
45
Φ50
25
22.5
100

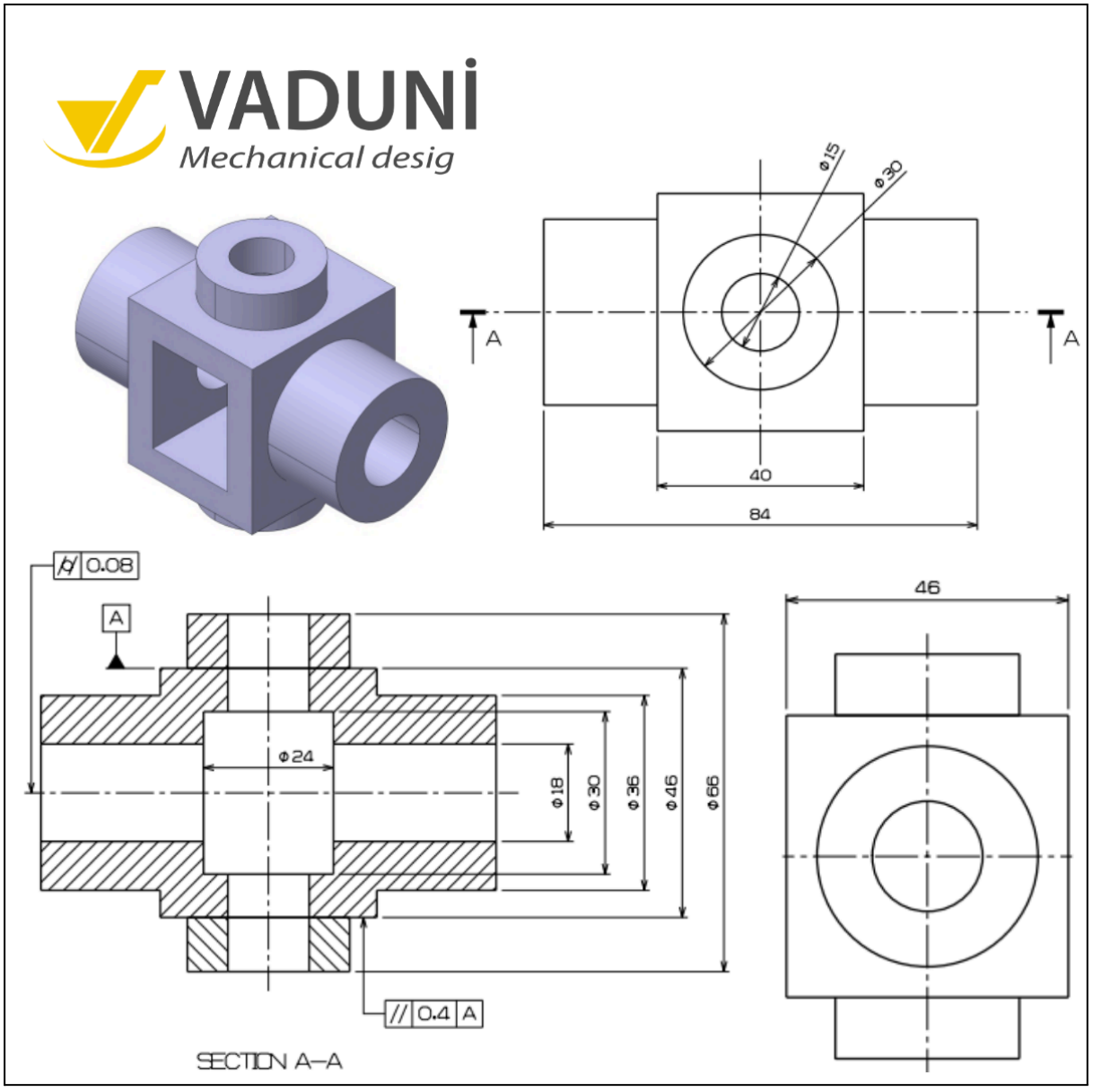
Bài tập 733



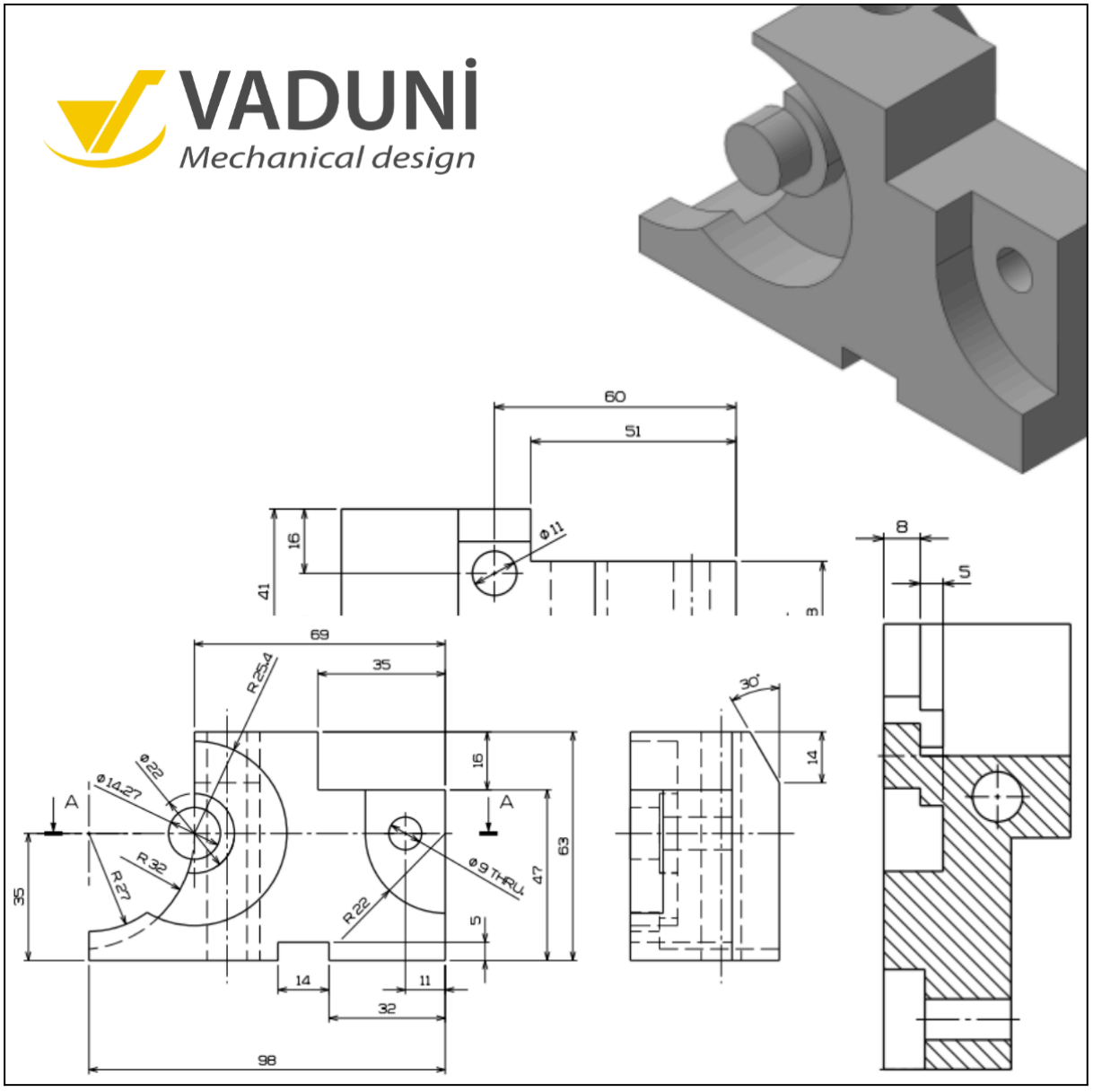
Bài tập 734



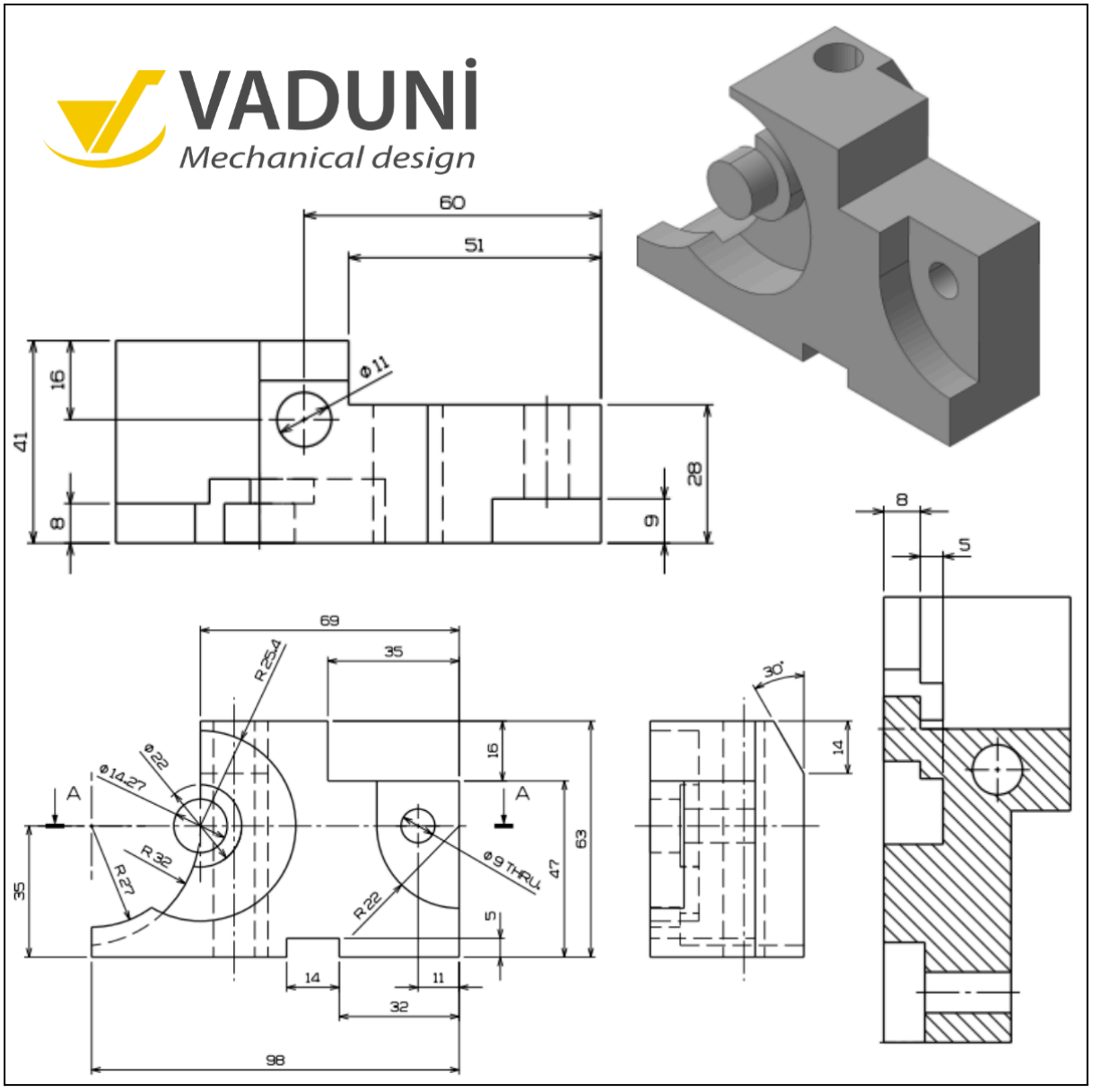
Bài tập 735


VADUNİ
Mechanical desig
ø15
ø30
A
A
40
84
0.08
A
46
ø24
ø18
ø30
ø36
ø46
ø66
// 0.4 A
SECTION A–A

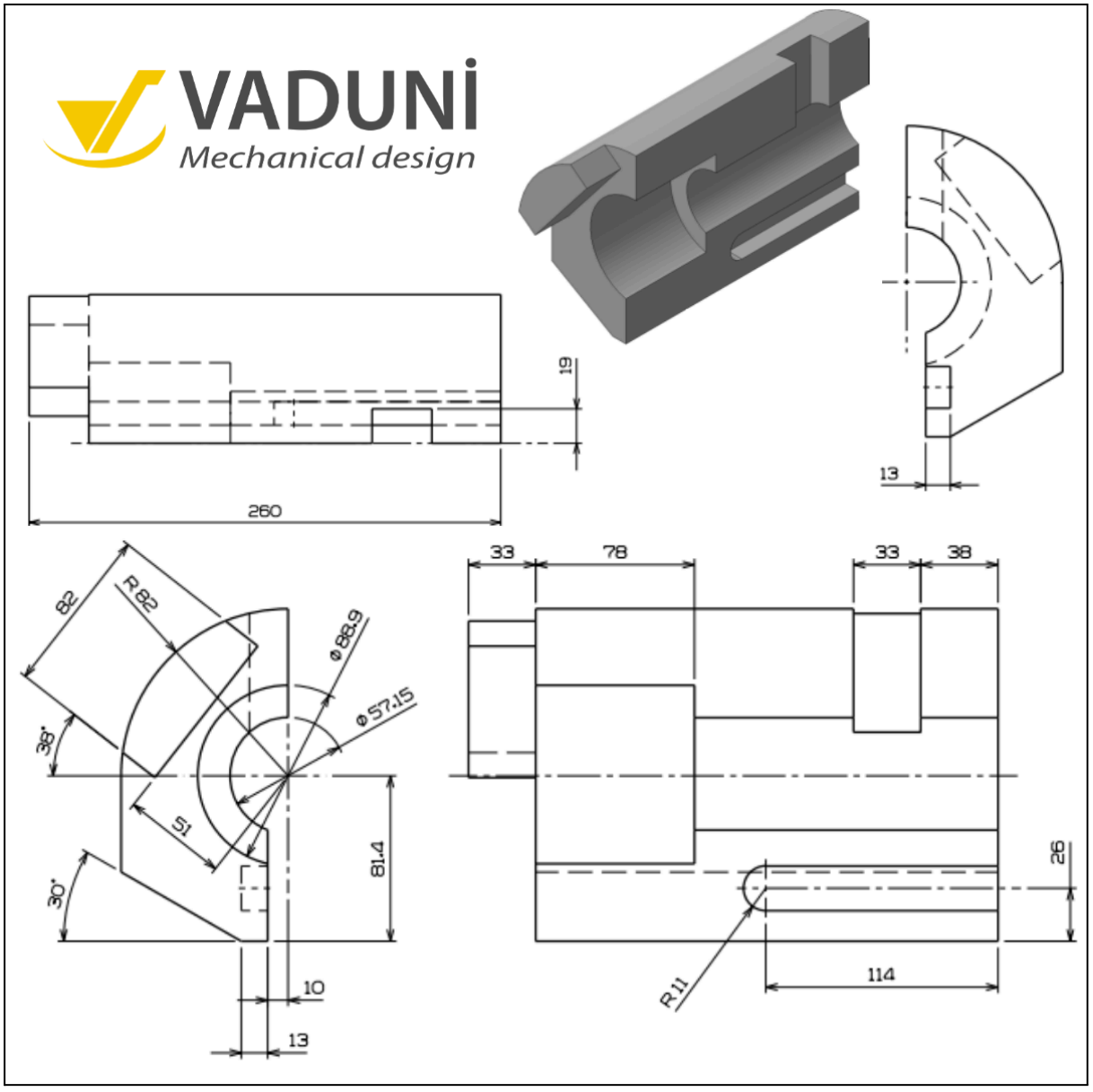
Bài tập 736


VADUNI
Mechanical design
60
51
16
41
ø11
8
5
69
35
R25.4
ø22
ø14.27
R32
R27
A
A
16
63
47
35
R22
ø9 THRU
5
14
11
32
98
30°
14

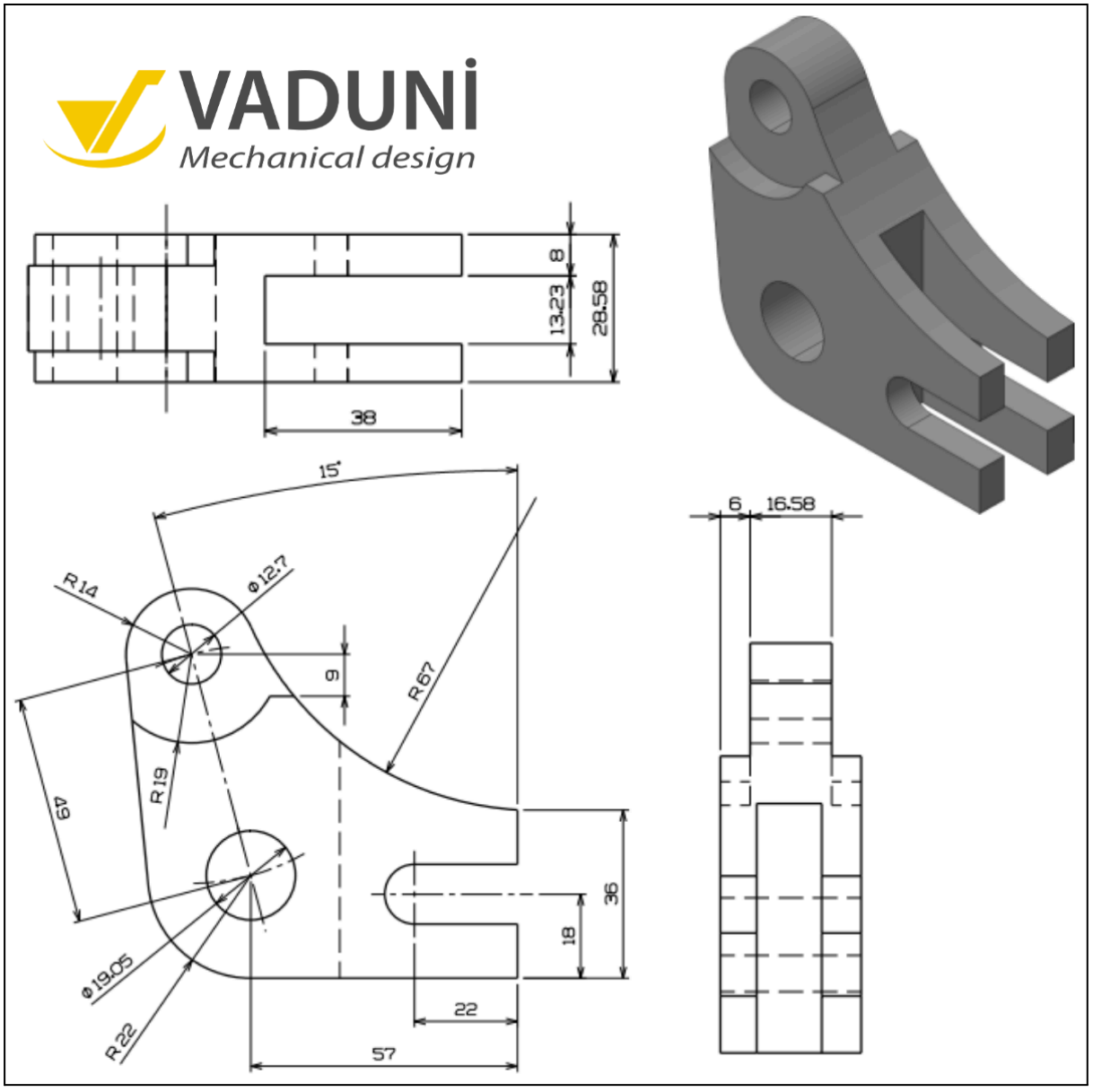
Bài tập 737


VADUNİ
Mechanical design
60
51
16
41
8
Ø11
28
9
8
5
69
35
R25.4
Ø22
Ø14.27
A
R32
R27
35
16
A
Ø9 THRU
47
63
R22
5
14
11
32
98
30°
14

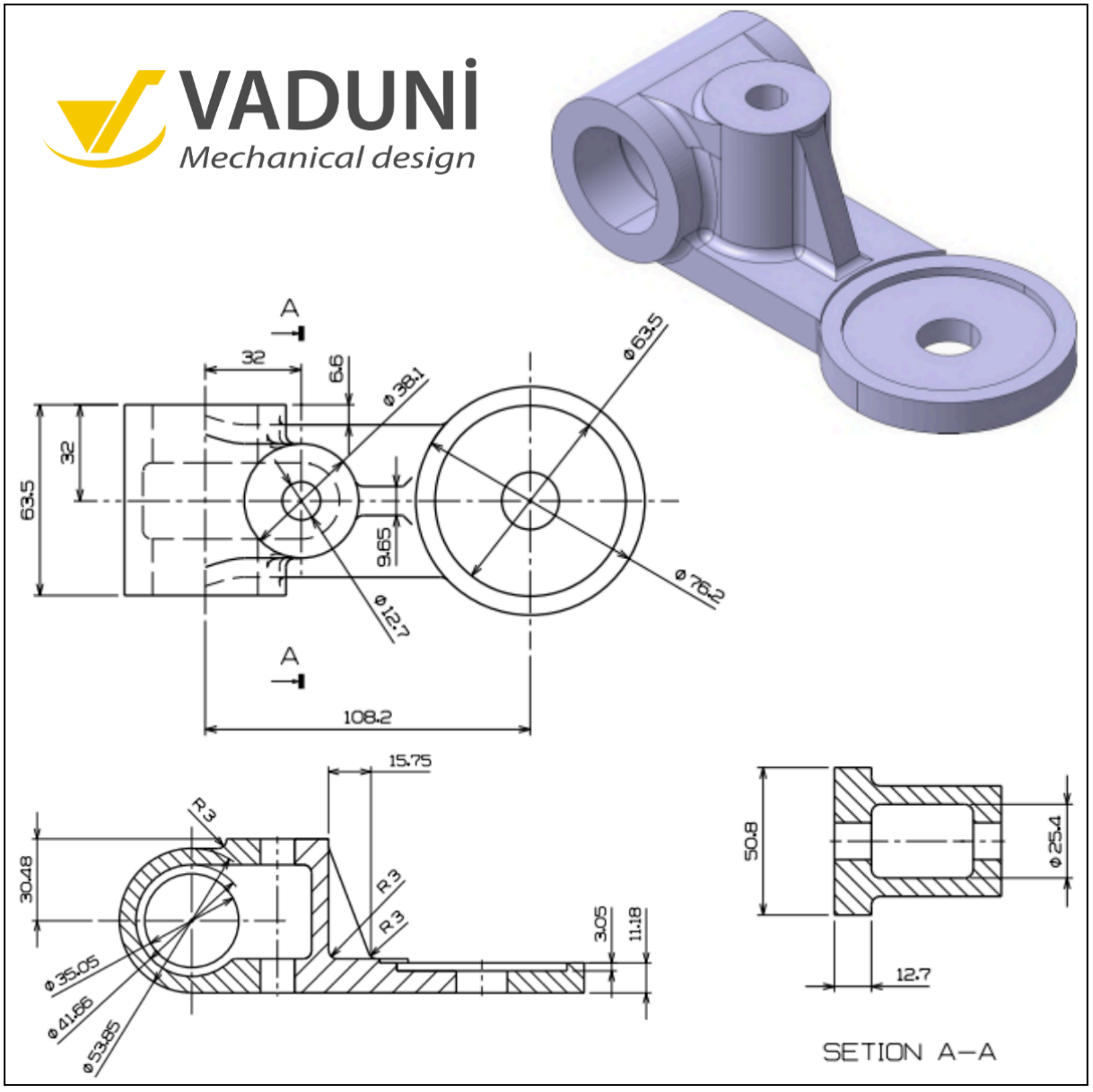
Bài tập 738


VADUNİ
Mechanical design
19
260
13
82
R82
38°
51
30°
81.4
10
13
ø88.9
ø57.15
33
78
33
38
26
R11
114

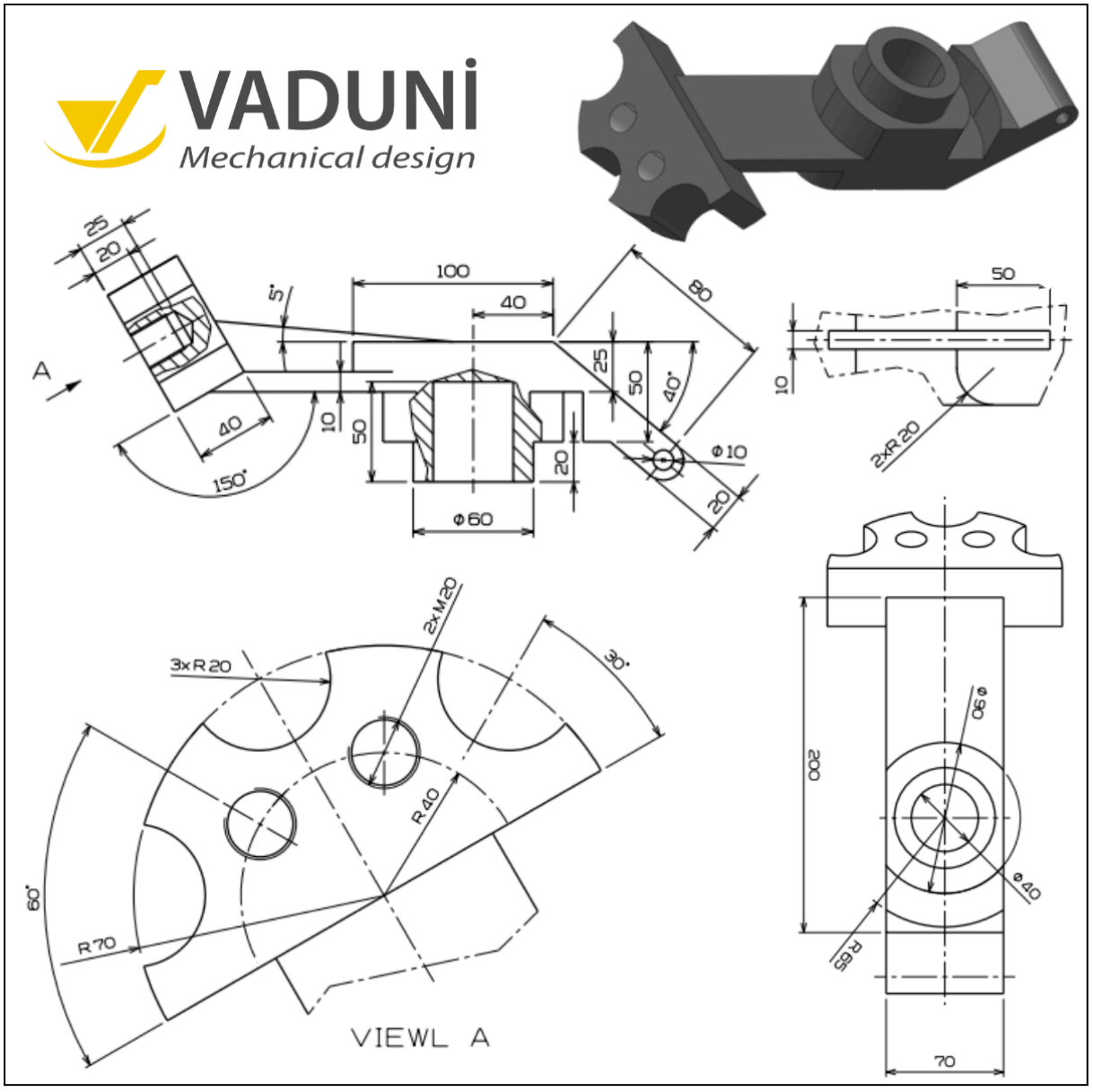
Bài tập 739


VADUNİ
Mechanical design
8
13.23
28.58
38
15°
R14
ø12.7
9
R67
R19
69
ø19.05
R22
36
18
22
57
6
16.58

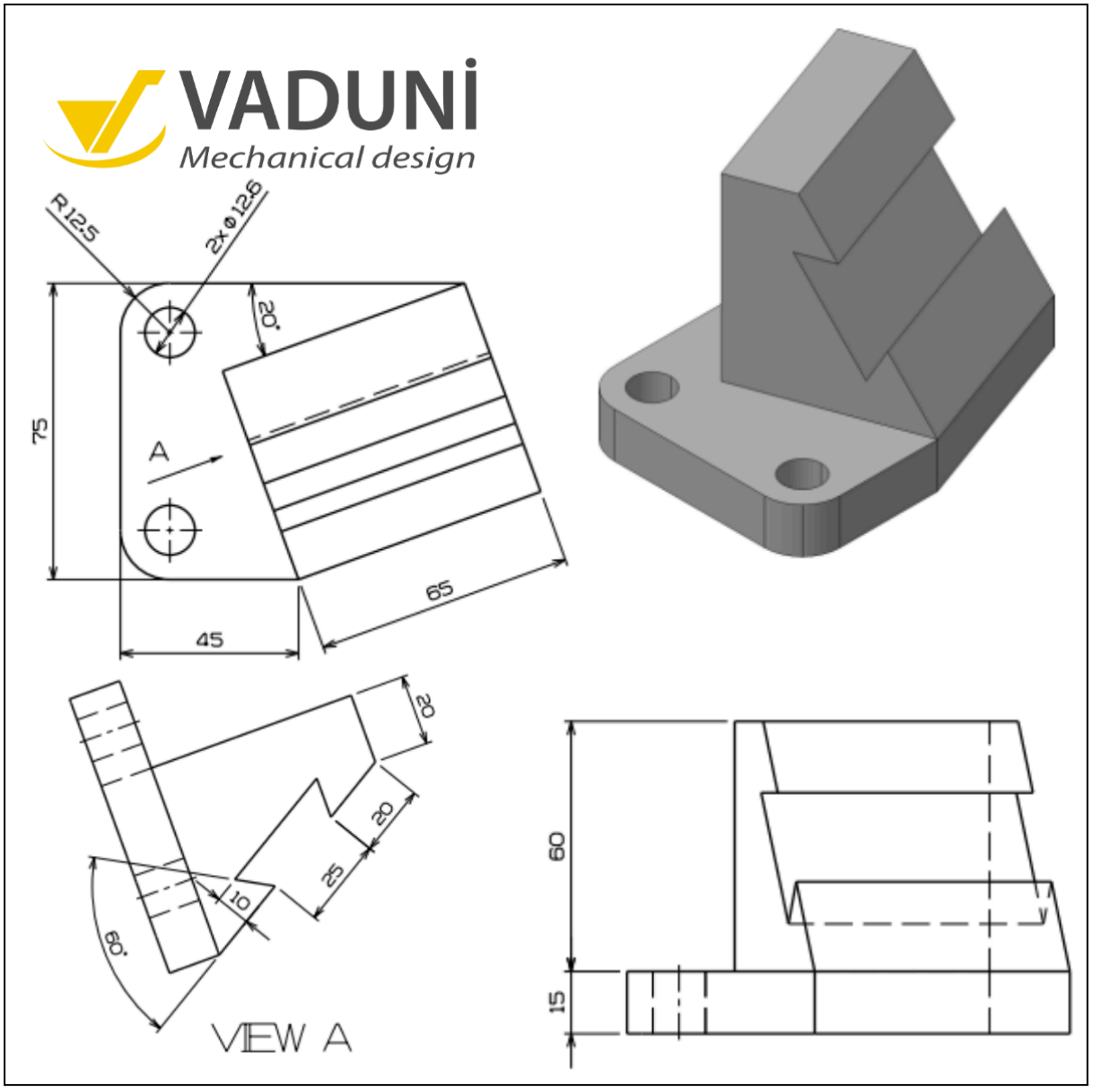
Bài tập 740


VADUNİ
Mechanical design
A
32
6.6
ø38.1
ø63.5
63.5
32
9.65
ø12.7
ø76.2
A
108.2
15.75
R3
30.48
R3
R3
3.05
11.18
ø35.05
ø41.66
ø53.85
50.8
ø25.4
12.7
SETION A–A

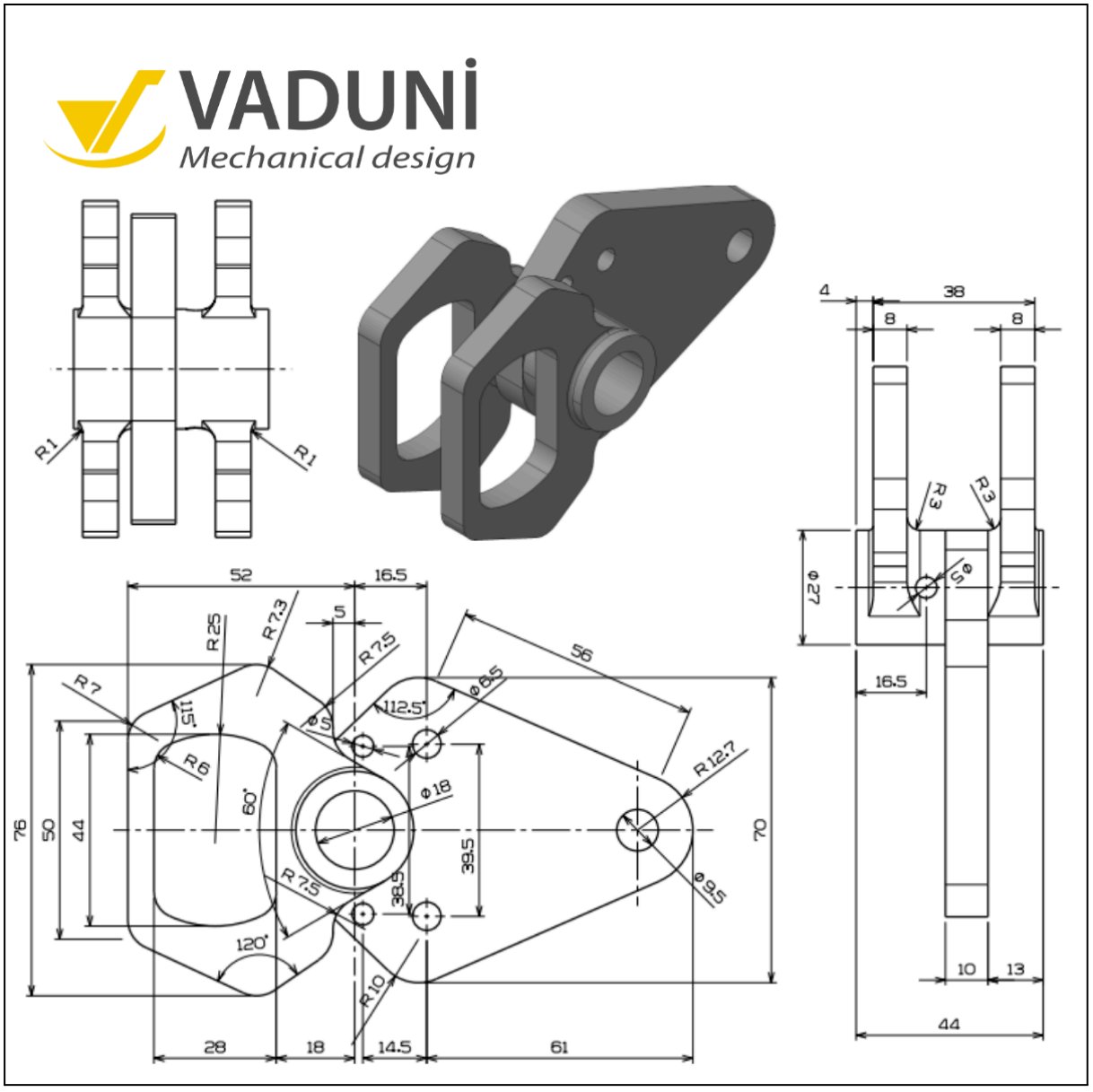
Bài tập 741


VADUNI
Mechanical design
25
20
5
100
40
80
A
40
150°
10
50
25
50
40°
Φ10
20
Φ60
50
10
2xR20
2xM20
3xR20
30°
R40
60°
R70
VIEWL A
200
Φ90
Φ40
R65
70

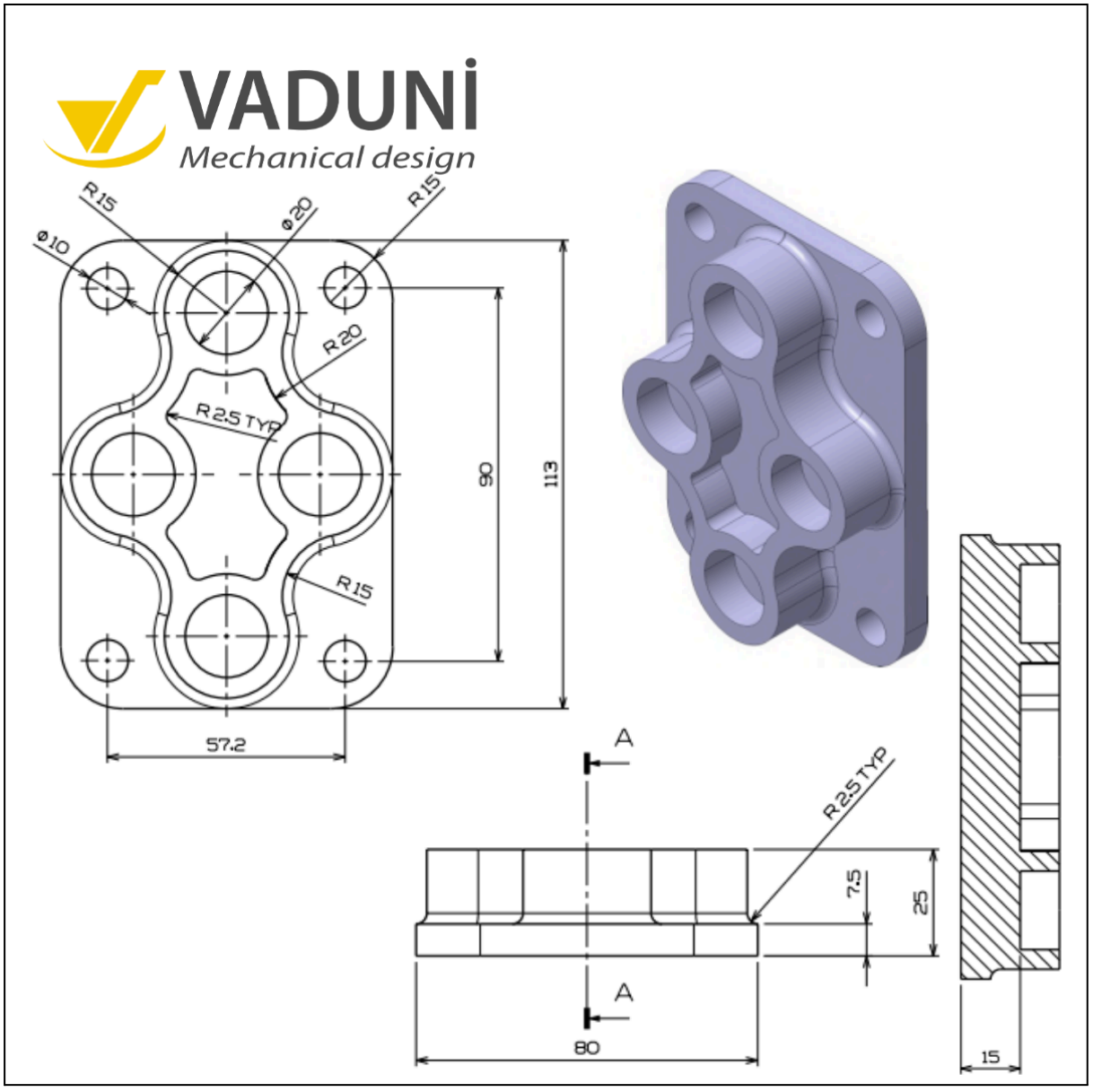
Bài tập 742


VADUNİ
Mechanical design
R125
2x ⌀126
20
75
A
65
45
20
20
25
10
60°
VIEW A
60
15

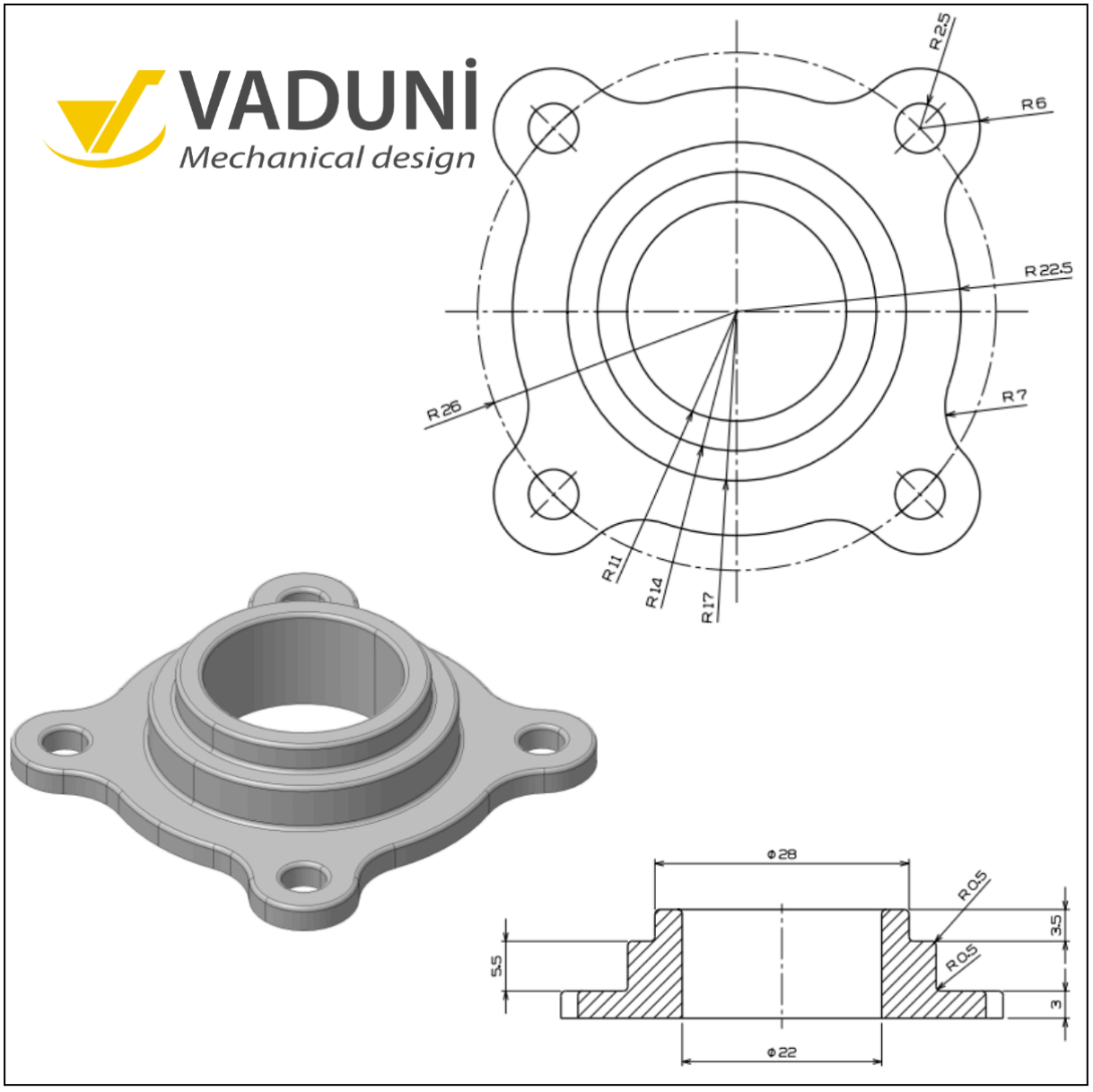
Bài tập 743


VADUNİ
Mechanical design
R1
R1
52
16.5
R25
R7.3
5
R7.5
56
R7
115°
112.5°
ø6.5
ø5
R6
60°
ø18
R12.7
76
50
44
39.5
70
R7.5
38.5
ø9.5
120°
R10
28
18
14.5
61
4
38
8
8
R3
R3
ø27
ø5
16.5
10
13
44

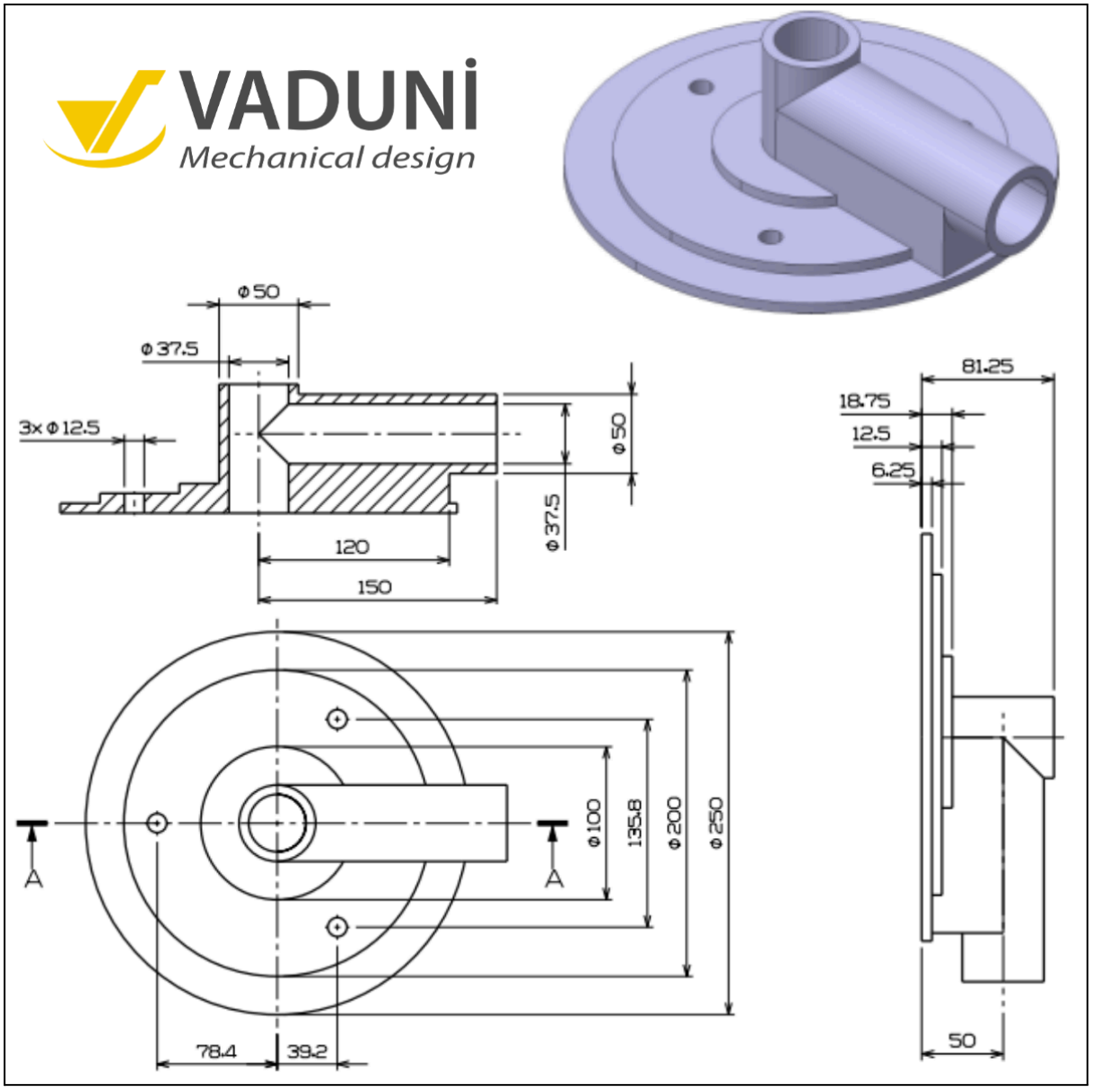
Bài tập 744


VADUNİ
Mechanical design
R15
ø20
R15
ø10
R20
R2.5 TYP
90
113
R15
57.2
A
R2.5 TYP
7.5
25
A
80
15

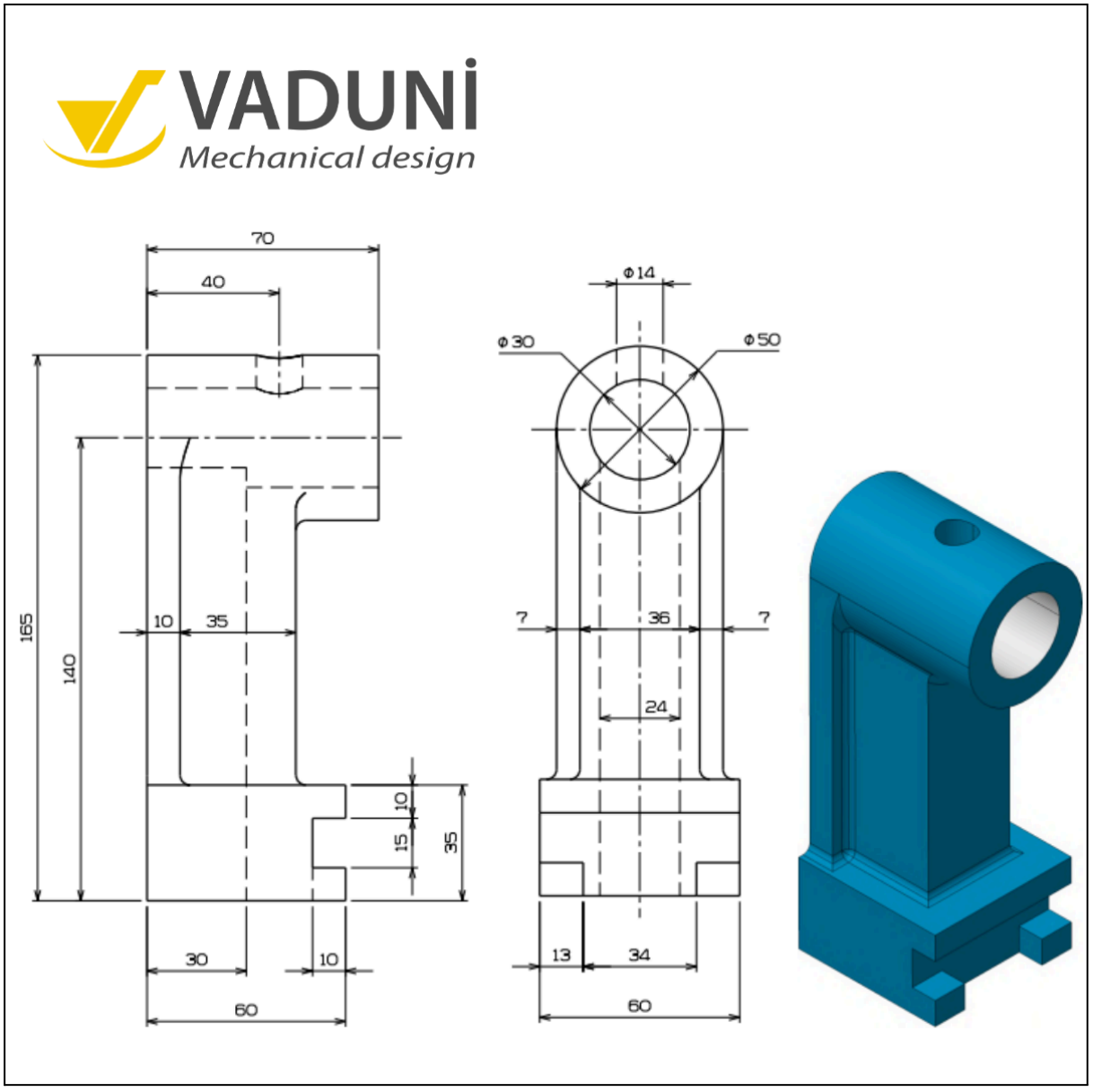
Bài tập 745


VADUNI
Mechanical design
R2.5
R6
R22.5
R26
R7
R11
R14
R17
Φ28
R0.5
3.5
R0.5
5.5
3
Φ22

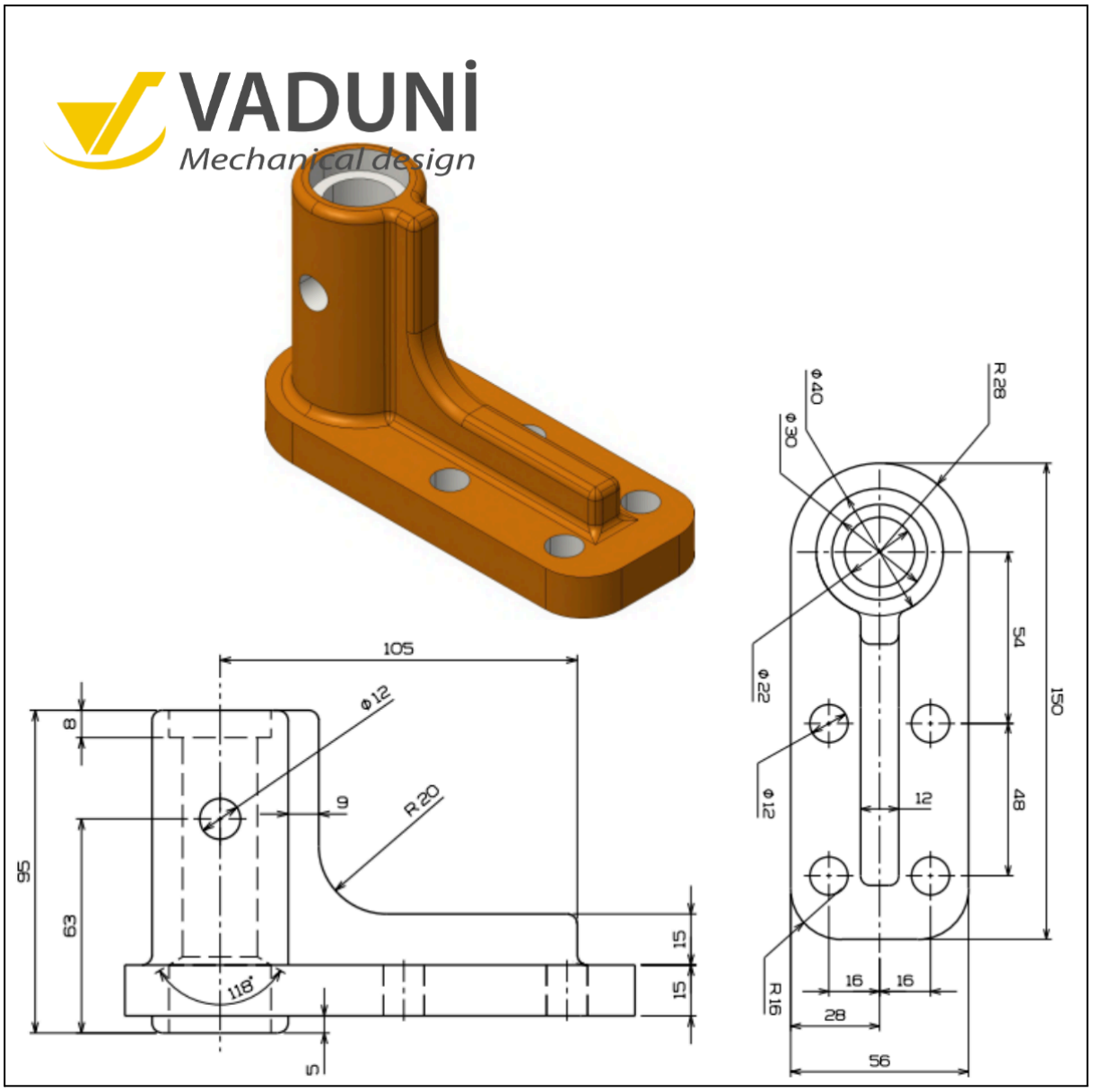
Bài tập 746


VADUNİ
Mechanical design
Φ50
Φ37.5
3xΦ12.5
Φ50
Φ37.5
120
150
81.25
18.75
12.5
6.25
50
A
A
Φ100
135.8
Φ200
Φ250
78.4
39.2

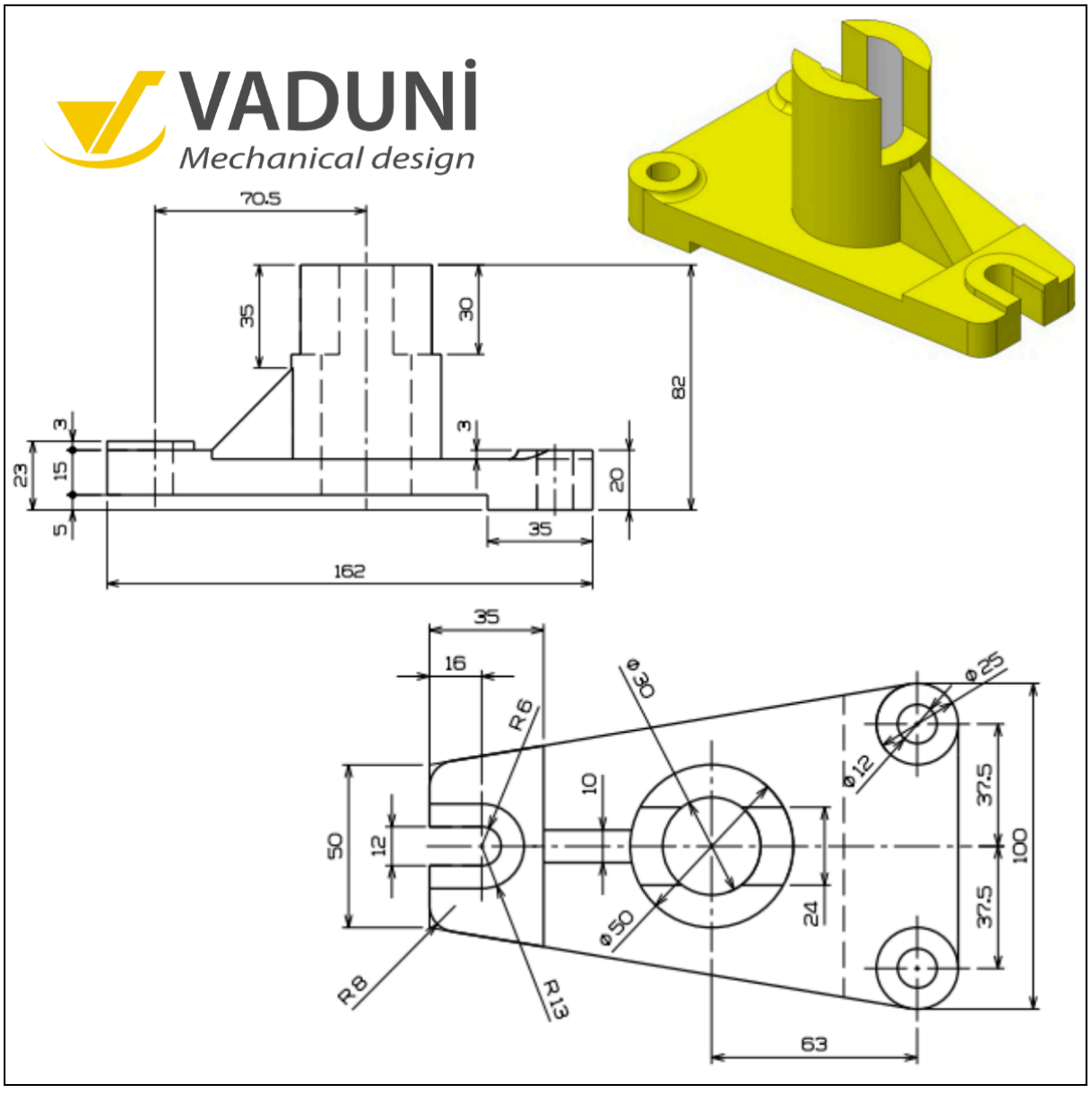
Bài tập 747


VADUNİ
Mechanical design
70
40
165
140
10
35
10
15
35
30
10
60
Φ14
Φ30
Φ50
7
36
7
24
13
34
60

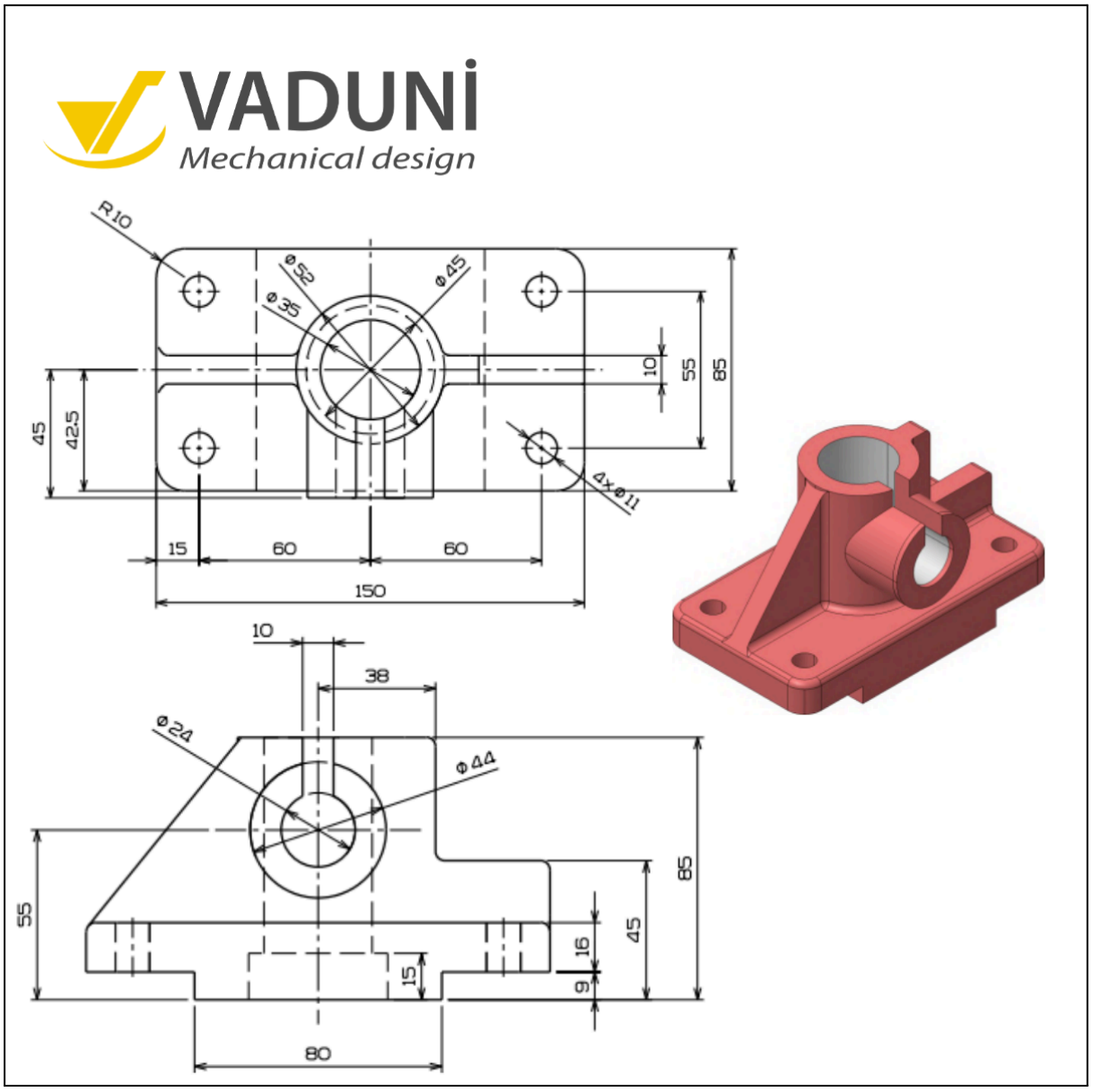
Bài tập 748


VADUNİ
Mechanical design
105
ϕ12
8
9
R20
95
63
118°
15
15
5
ϕ40
ϕ30
R28
54
150
ϕ22
ϕ12
12
48
16
16
28
56
R16

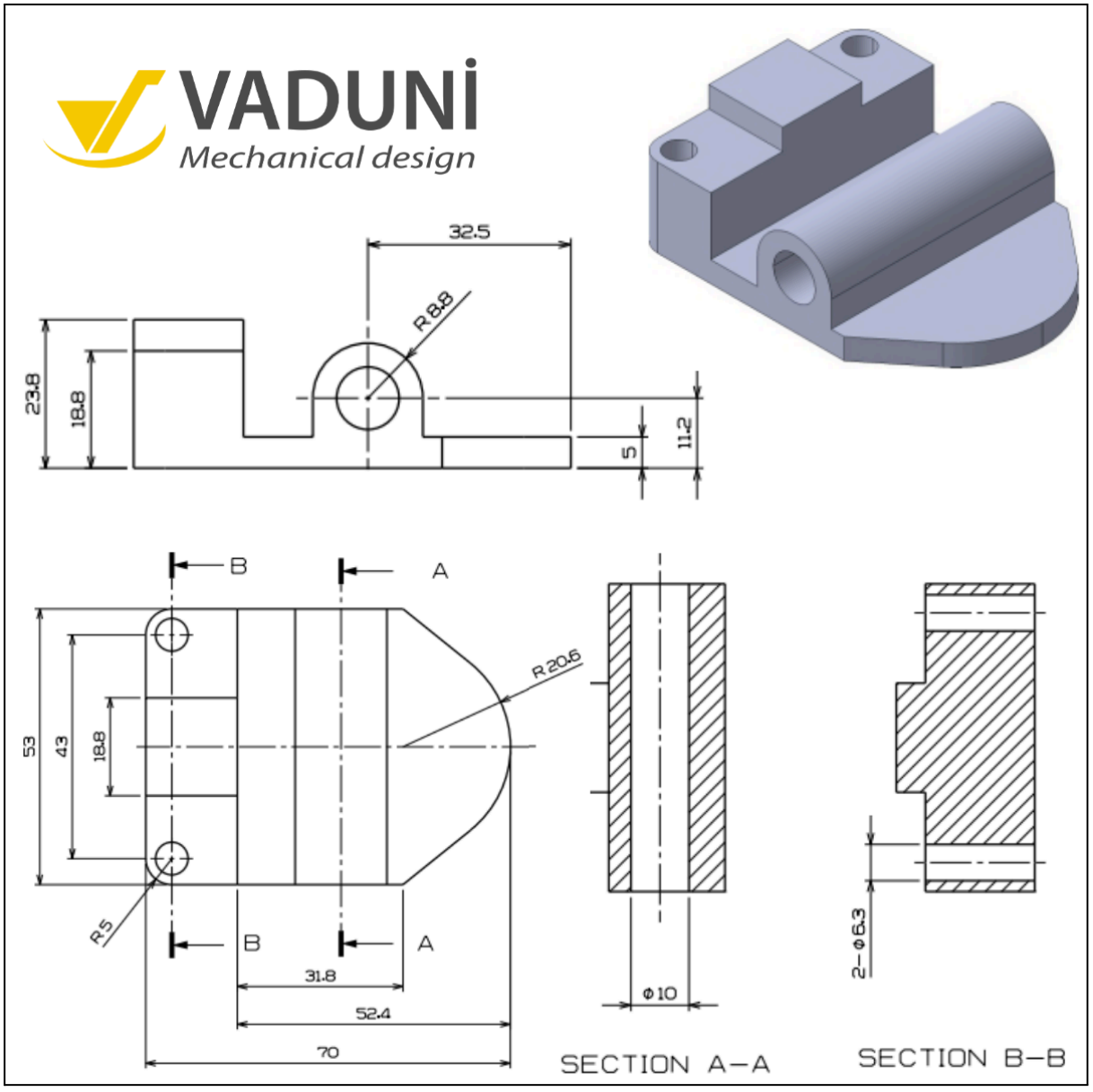
Bài tập 749


VADUNI
Mechanical design
70.5
35
30
82
3
23
15
5
3
20
35
162
35
16
R6
ø30
ø25
ø12
10
50
12
37.5
100
37.5
24
ø50
R8
R13
63

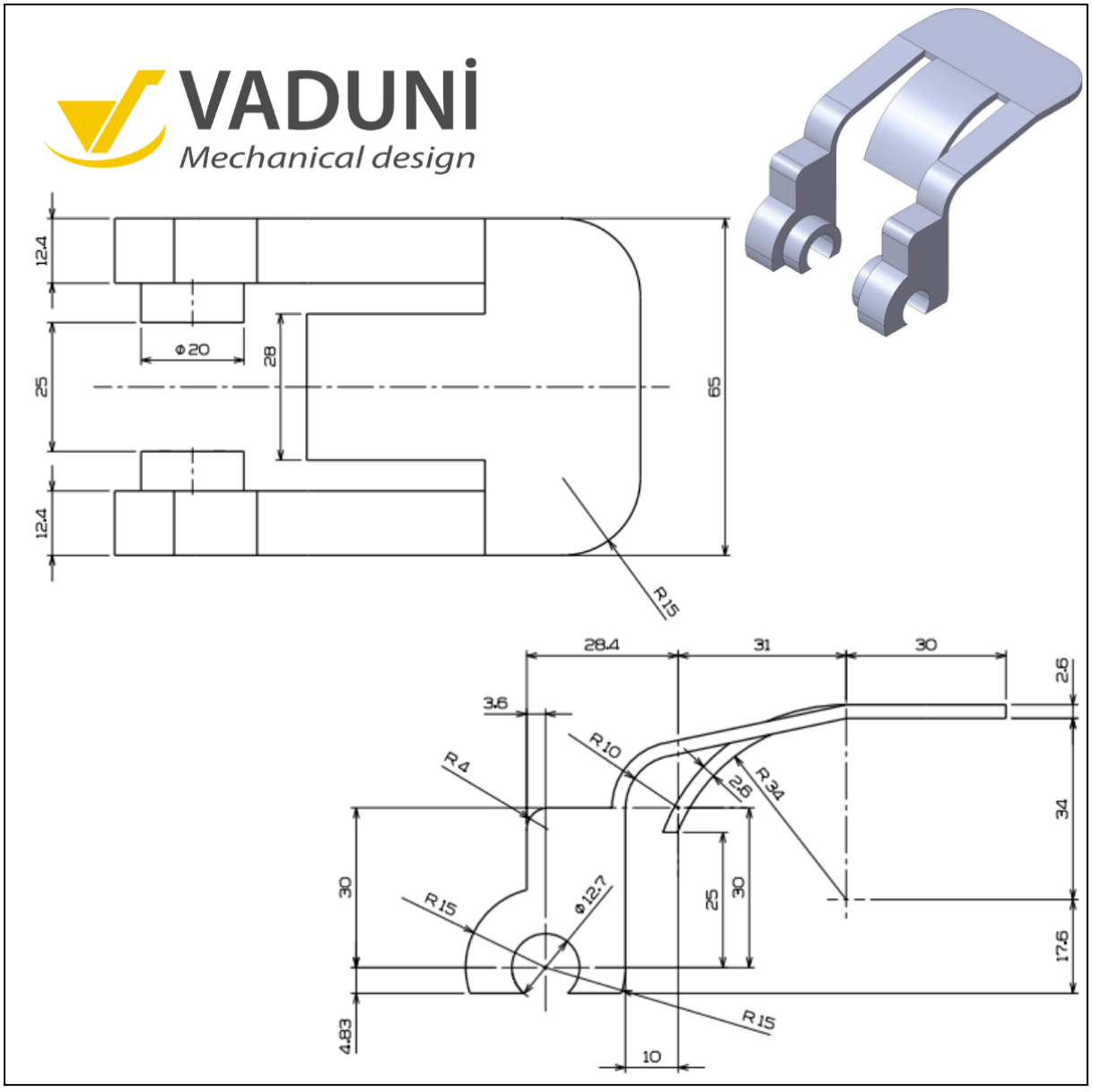
Bài tập 750


VADUNİ
Mechanical design
R10
ø52
ø35
ø45
10
55
85
45
42.5
4xø11
15
60
60
150
10
38
ø24
ø44
55
85
45
16
9
15
80

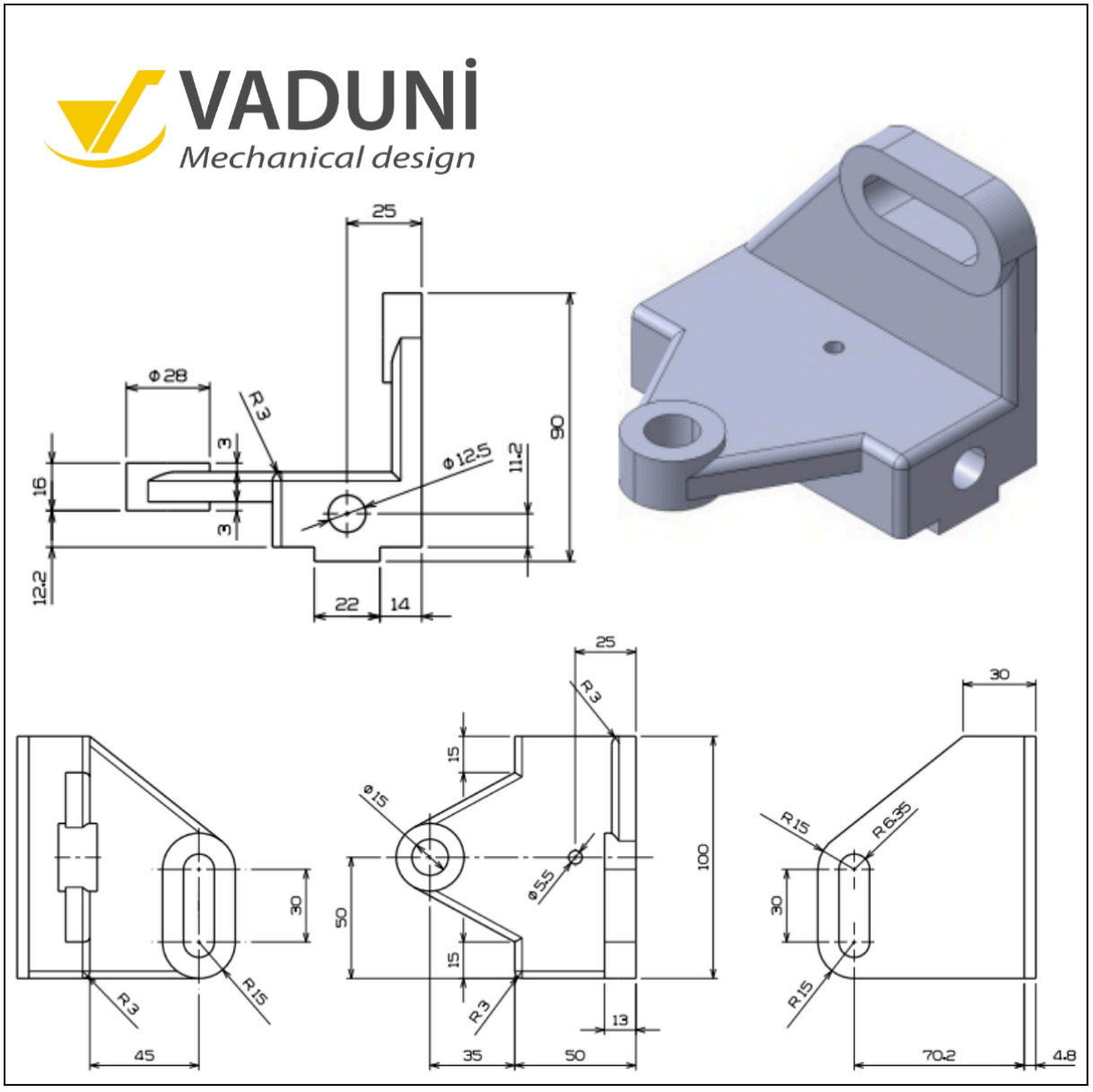
Bài tập 751


VADUNI
Mechanical design
32.5
R8.8
23.8
18.8
5
11.2
B
A
R20.6
53
43
18.8
R5
B
A
31.8
52.4
70
ϕ10
SECTION A–A
2–ϕ6.3
SECTION B–B

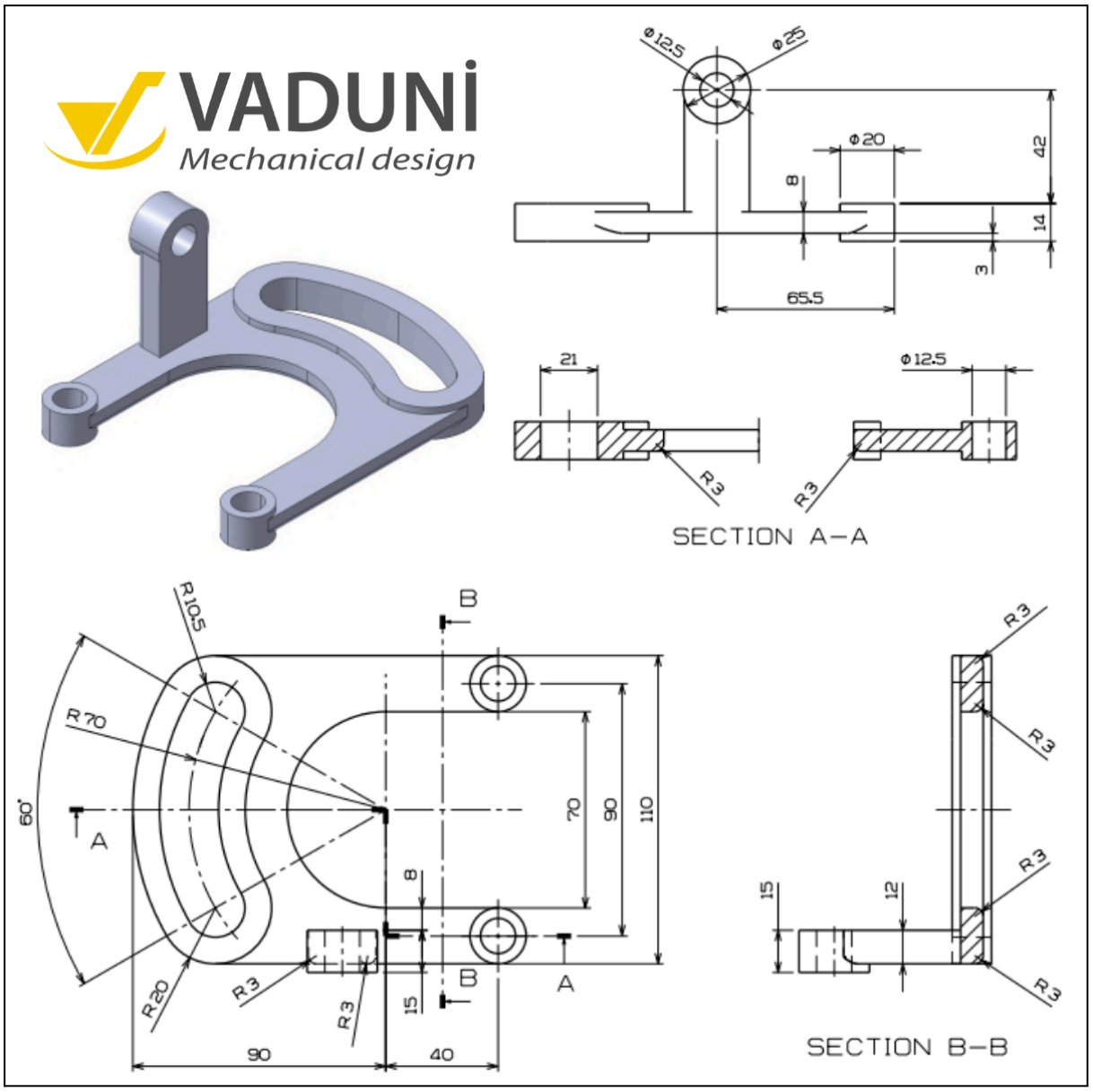
Bài tập 752


VADUNİ
Mechanical design
12.4
ø20
28
25
65
12.4
R15
28.4
31
30
2.6
3.6
R10
R4
2.6
R34
34
30
R15
ø12.7
25
30
17.6
4.83
R15
10

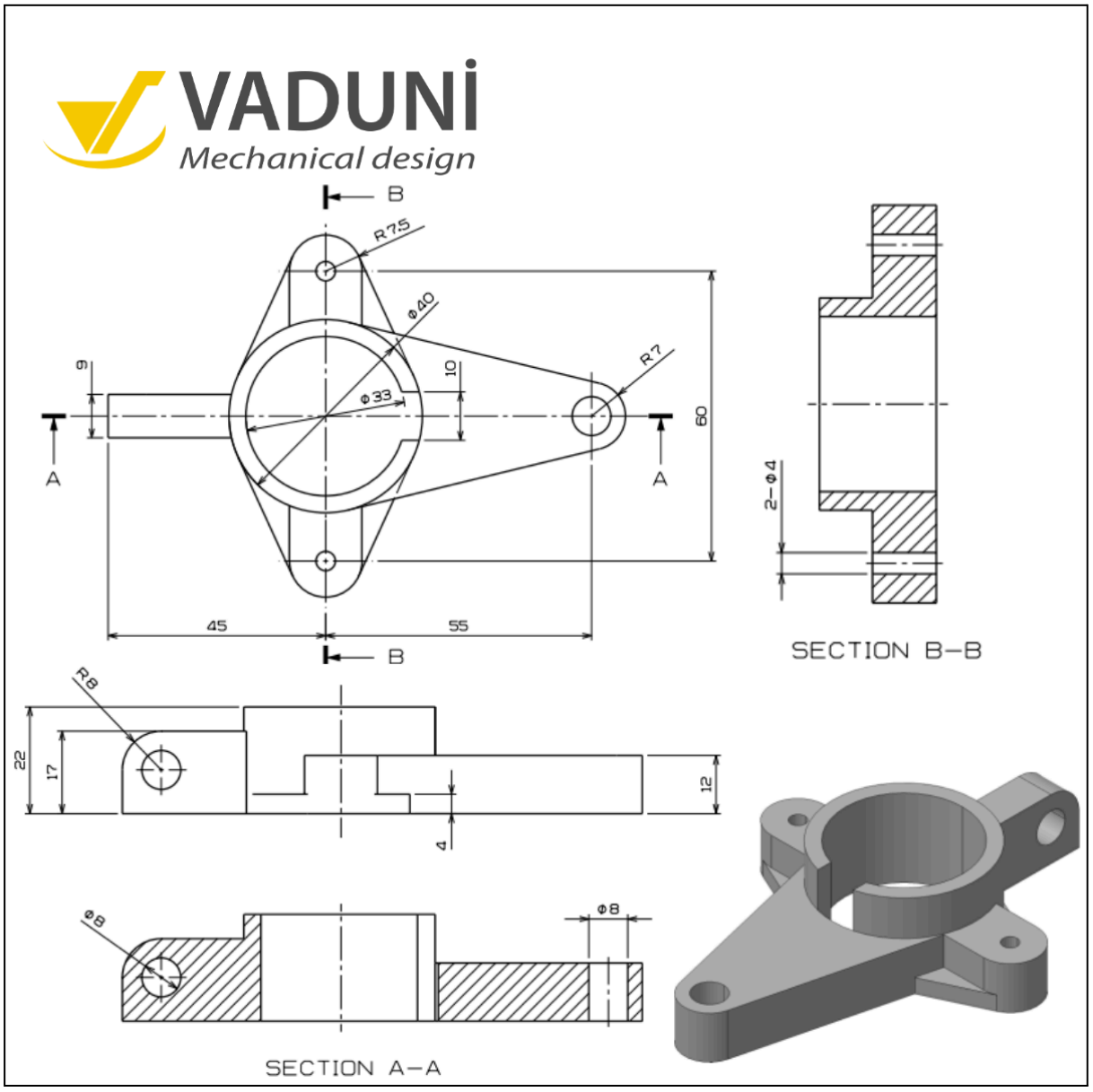
Bài tập 753


VADUNİ
Mechanical design
25
Φ28
R3
3
3
16
12.2
Φ12.5
11.2
90
22
14
25
R3
15
Φ15
Φ5.5
100
50
15
R3
13
35
50
30
R15
R3
45
30
R15
R6.35
30
R15
70.2
4.8

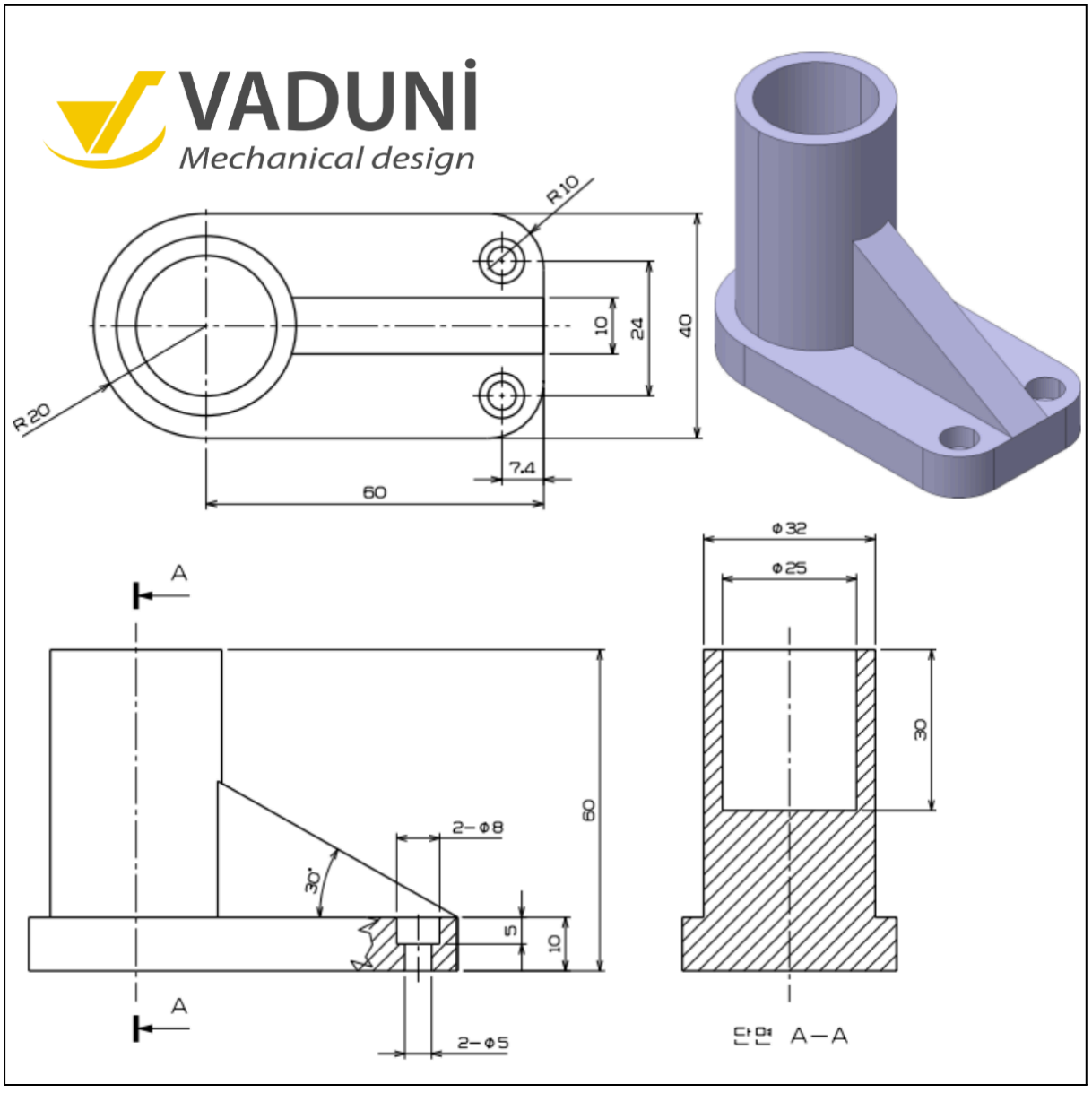
Bài tập 754


VADUNİ
Mechanical design
Φ12.5
Φ25
Φ20
42
8
14
3
65.5
21
Φ12.5
R3
R3
SECTION A–A
R105
R70
60°
A
B
70
90
110
8
15
R20
R3
R3
90
40
B
A
R3
R3
R3
R3
15
12
SECTION B–B

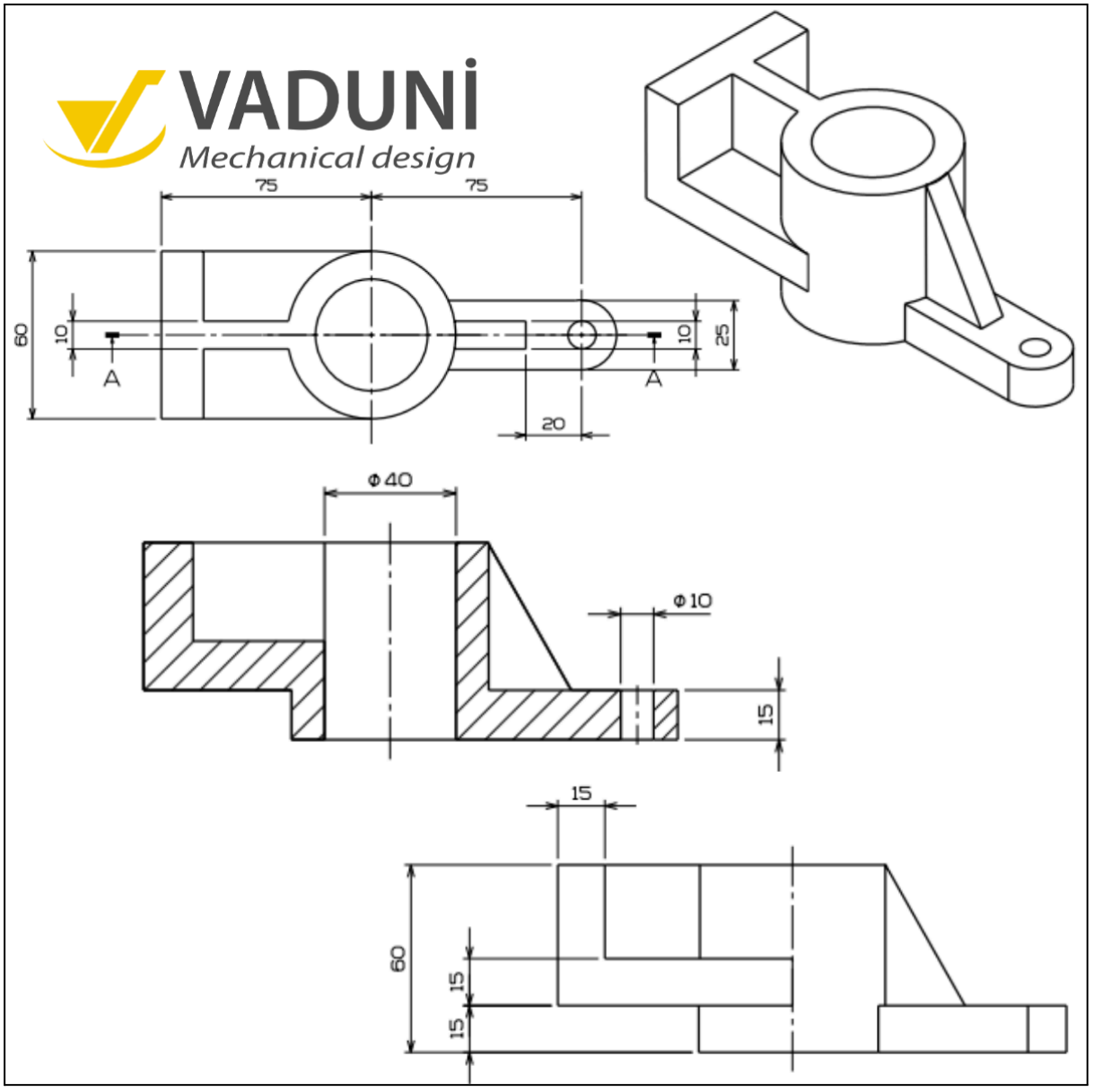
Bài tập 755


VADUNİ
Mechanical design
B
R7.5
ø40
R7
9
10
ø33
60
A
A
45
55
B
2-ø4
SECTION B-B
R8
22
17
12
4
ø8
ø8
SECTION A-A

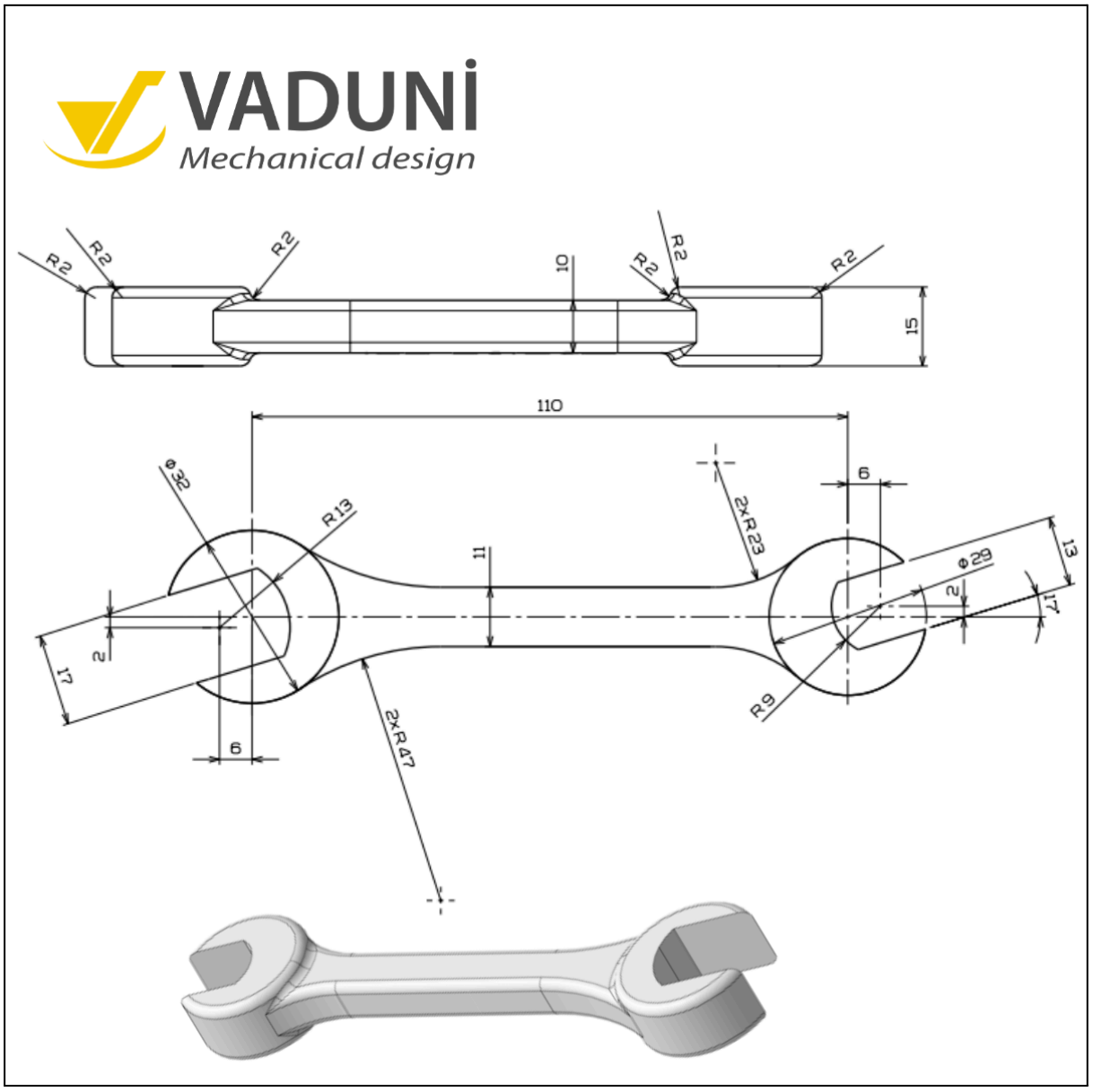
Bài tập 756


VADUNİ
Mechanical design
R10
R20
10
24
40
7.4
60
A
A
2-Φ8
30°
5
10
60
2-Φ5
Φ32
Φ25
30
단면 A-A

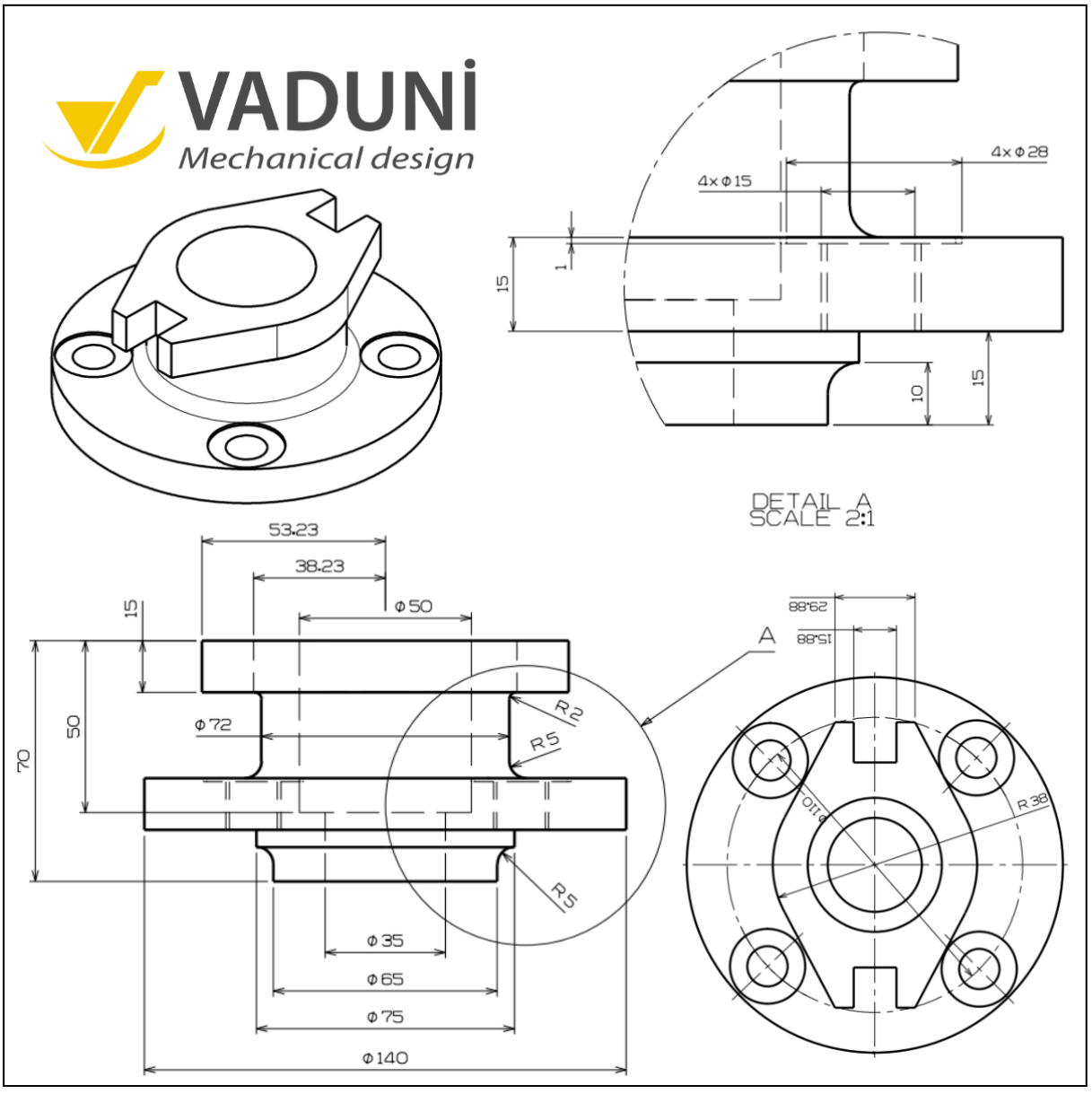
Bài tập 757


VADUNI
Mechanical design
75
75
60
10
A
A
10
25
20
Φ40
Φ10
15
15
60
15
15

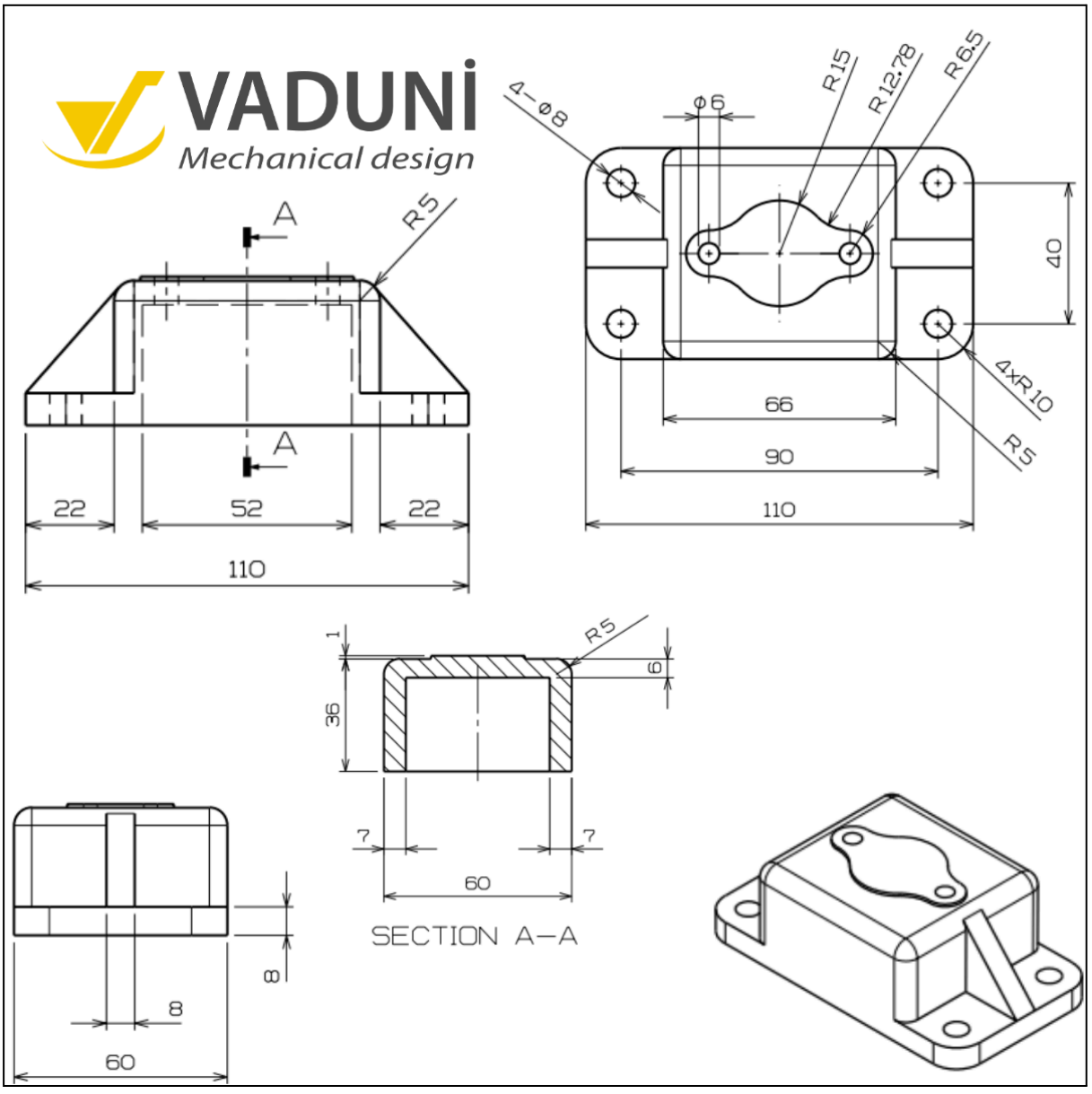
Bài tập 758


VADUNİ
Mechanical design
R2
R2
R2
10
R2
R2
R2
15
110
Φ32
R13
11
2xR23
6
Φ29
13
2
17
2
17
6
2xR47
R9

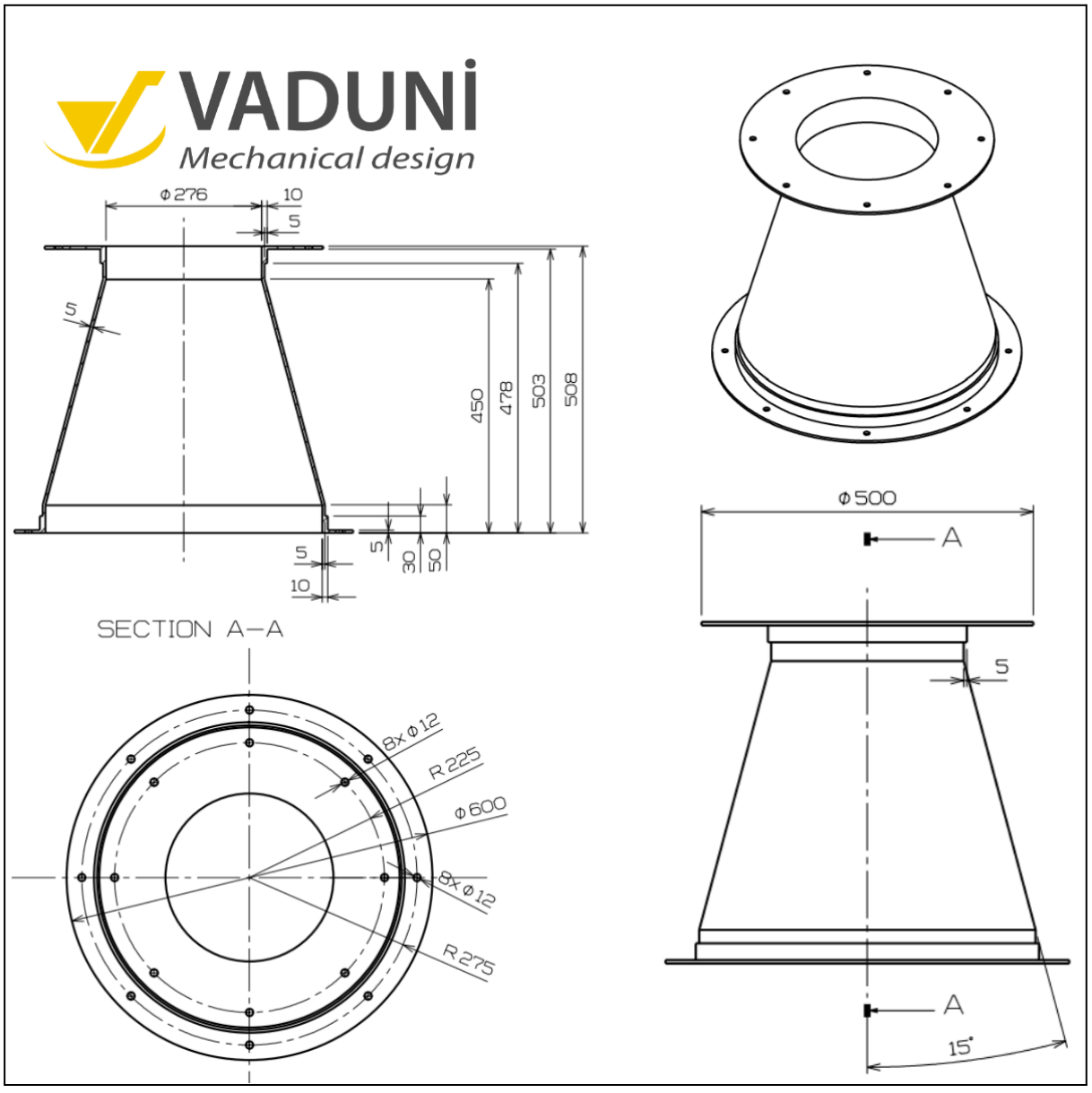
Bài tập 759


VADUNİ
Mechanical design
4x Φ28
4x Φ15
1
15
10
15
DETAIL A
SCALE 2:1
53.23
38.23
Φ50
15
50
70
Φ72
R2
R5
R5
Φ35
Φ65
Φ75
Φ140
A
29.88
15.88
R38

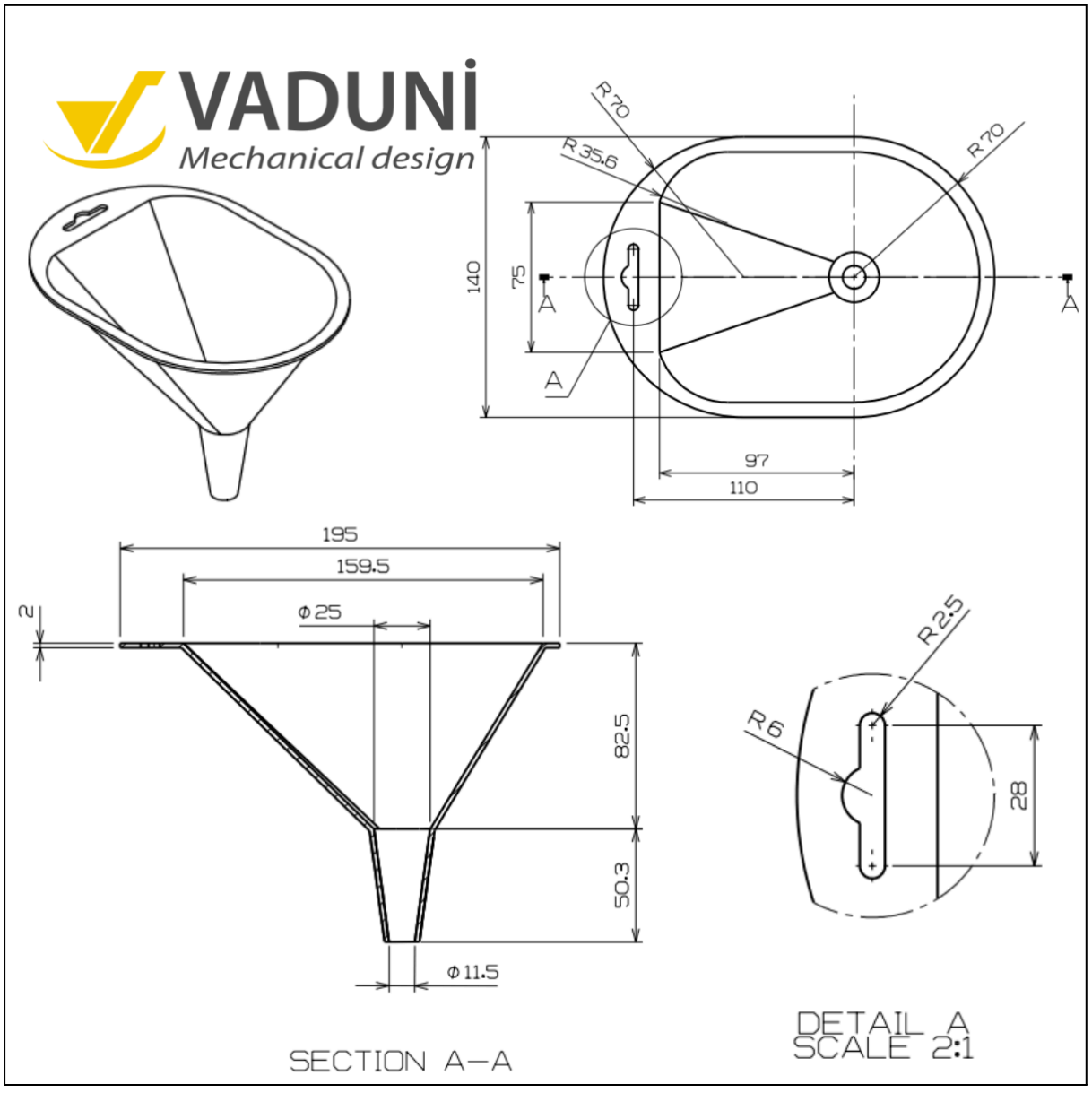
Bài tập 760


VADUNI
Mechanical design
A
R5
A
22
52
22
110
4−ø8
ø6
R15
R12.78
R6.5
40
4xR10
R5
66
90
110
R5
1
6
36
7
7
60
SECTION A−A
8
8
60

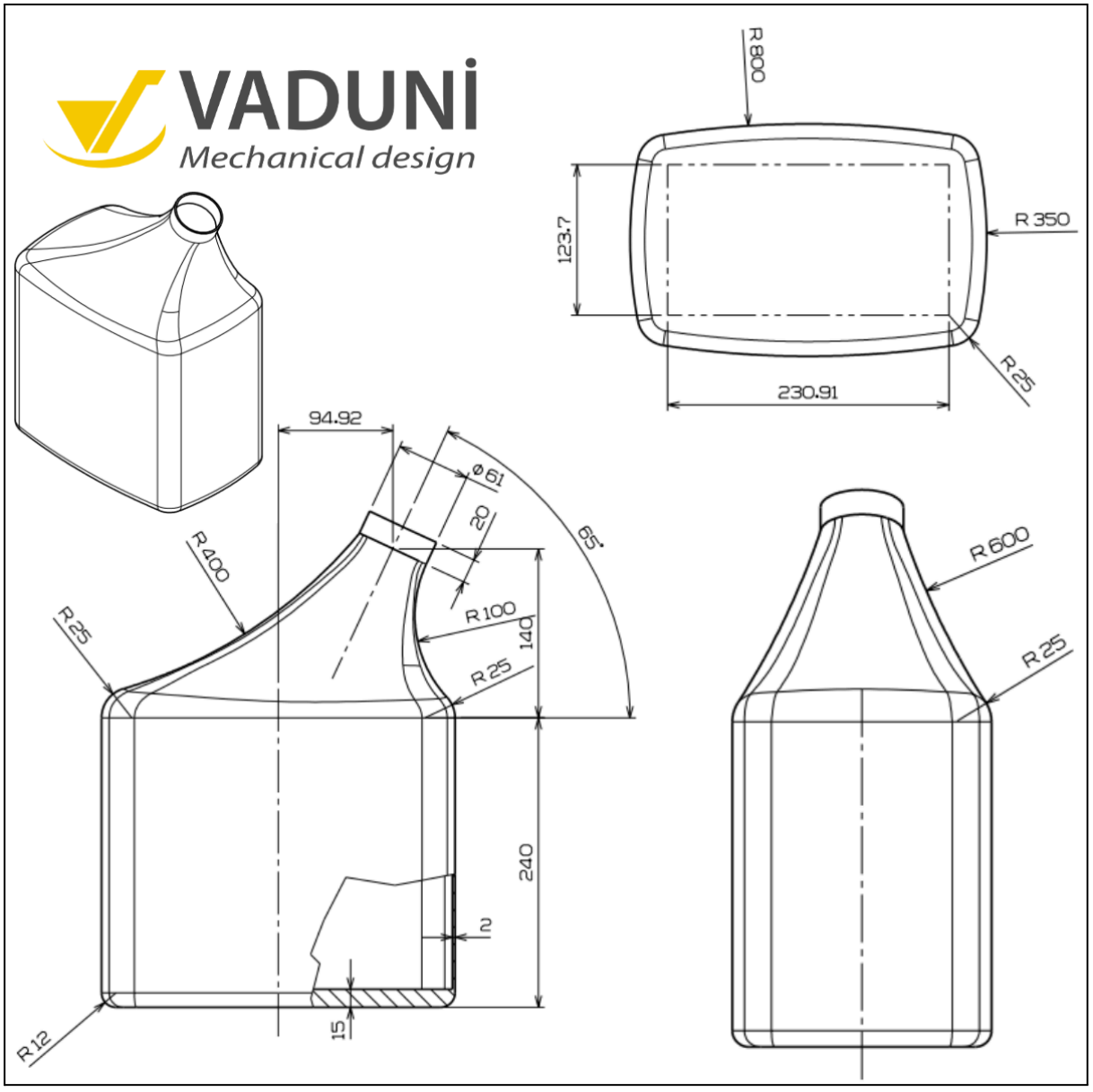
Bài tập 761


VADUNİ
Mechanical design
Φ276
10
5
5
450
478
503
508
5
5
30
50
10
SECTION A–A
8x Φ12
R225
Φ600
8x Φ12
R275
Φ500
A
5
A
15°

Bài tập 762


VADUNİ
Mechanical design
R70
R35.6
R70
140
75
A
A
A
97
110
195
159.5
Φ25
2
82.5
50.3
Φ11.5
SECTION A–A
R2.5
R6
28
DETAIL A
SCALE 2:1

Bài tập 763


VADUNİ
Mechanical design
R800
123.7
R 350
R25
230.91
94.92
ø61
20
65°
R400
R25
R100
140
R25
240
2
15
R12
R600
R25