flat bars

Equal angles

Unequal angles

Bulb plates

with attached plating of: width = 610 mm thickness = plate thickness

ANNEX 6-A

STANDARD ROLLED SECTIONS

11 Following tables give section moduli of standard rolled sections as normally used in most countries:

- Table 6-A-III: UNE standard

Tolled sections as normally used in

- Table 6-A-IV: JIS standard

- Table 6-A-I: AFNOR standard

- Table 6-A-V: BS standard

- Table 6-A-II: DIN standard

Table 6-A-I

| | | | | | | | | **** |
|-----------------|--|--|----------------------------|--|-------------|-------------------|--------|-------------------|
| cm ³ | Fla | t bars | Equal a | ngles | Unequa | angles | Bul | b flats |
| 12,0 | 75 × 6 | (4,50. 12,0. 0,3) | | | | | | |
| 12,5 | 55 x 10 65 x 8 | (5,50. 12,6. 0,5) (5,20. 12,8. 0,4) | 45 × 45 × 5 50 × 50 × 4 | (4,30. 12,5. 0,3) (3,89. 12,6. 0,3) | 50 x 30 x 6 | (4,47. 12,5. 0,3) | | |
| 13,5 | 80 x 6 90 x 5 | (4,80. 13,5. 0,3) (4,50. 13,8. 0,3) | : | | 60 × 30 × 5 | (4,29. 13,8. 0,3) | | |
| 14,5 | 60 x 10 70 x 8 | (6,00. 14,5. 0,5) (5,60. 14,6. 0,4) | 45 × 45 × 6 | (5,09. 14,7. 0,4) | | | | |
| 15,5 | | | 50 x 50 x 5 | (4,80. 15,5. 0,3) | 60 x 30 x 6 | (5,08. 16,3. 0,3) | | |
| 16,0 | 80 x 7 | (5,60. 16,0. 0,4) | | | | | | |
| 16,5 | 75 x 8 65 x 10 90 x 6 100 x 5 | (6,00. 16,5. 0,4) (6,50. 16,7. 0,5) (5,40. 16,8. 0,3) (5,00. 16,9. 0,3) | | | 60 x 40 x 5 | (4,79. 16,6. 0,3) | | |
| 18,0 | 60 x 12 | (7,20. 18,4. 0,6) | 50 x 50 x 6 60 x 60 x 4 | (5,69. 18,2. 0,4) (4,71. 18,3. 0,3) | | | | |
| 18,5 | 80 × 8 70 × 10 | (6,40. 18,5. 0,4) (7,00. 18,9. 0,5) | | · | | | | |
| 19,5 | 90 x 7 | (6,30. 19,9. 0,4) | | | 60 × 40 × 6 | (5,68. 19,6. 0,4) | | |
| 20,0 | 100 × 6 65 × 12 | (6,00. 20,5. 0,4) (7,80. 20,9. 0,6) | 50 × 50 × 7 | (6,56. 20,9. 0,5) | | | | |
| 21,0 | 75 × 10 | (7,50. 21,4. 0,5) | | | 65 × 50 × 5 | (5,54. 21,6. 0,4) | | |
| 22,0 | | | 60 × 60 × 5 | (5,82. 22,5. 0,4) | 60 × 40 × 7 | (6,55. 22,5. 0,5) | 80 x 5 | (5,71. 22,9. 0,4) |
| 23,0 | 90 × 8 70 × 12 85 × 9 80 × 10 | (7,20. 23,0. 0,4) (8,40. 23,6. 0,6) (7,65. 23,7. 0,5) (8,00. 23,9. 0,5) | 50 x 50 x 8 | (7,41. 23,7. 0,6) | 70 × 50 × 5 | (5,79. 23,8. 0,4) | | |
| 24,0 | 110 × 6 100 × 7 | (6,60. 24,6. 0,4) (7,00. 24,2. 0,5) | • . | | 80 × 40 × 5 | (5,80, 24,8, 0,4) | | - |
| 25,0 | | | | | 65 × 50 × 6 | (6,58. 25,5. 0 5) | | |
| 26,0 | 75 x 12 90 x 9 | (9,00. 26,6. 0,7) (8,10. 26,3. 0,6) | 60 × 60 × 6 | (6,91. 26,5. 0,5) | 75 × 50 × 5 | (6,05. 26,2. 0,4) | - | |
| 28,0 | 100 × 8 70 × 14 110 × 7 | (8,00. 28,0. 0,5) (9,80. 28,8. 0,8) (7,70. 29,0. 0,5) | | : | 70 × 50 × 6 | (6,88. 28,1. 0,5) | 80 x 7 | (7,31. 28,0. 0,5) |

Table 6-A-I (continued)

| | Т | | | NDARD AFIN | | | | |
|-----------------|---------------------------------|--|----------------------------|---|---|---|---------|--------------------|
| cm ³ | F | lat bars | Equal | angles | Unequ | al angles | В | ulb flats |
| 29,0 | 120 x 6 90 x 10 80 x 12 | (7,20. 29,0. 0,5) (9,00. 29,6. 0,6) (9,60. 29,7. 0,7) | | | 65 × 50 × 7 80 × 40 × 6 | (7,60. 29,3. 0,5) (6,89. 29,3. 0,5) | | |
| 30,0 | | | 70 × 70 × 5 | (6,84. 30,8. 0,5) | 75 × 50 × 6 | (7,19. 31,0. 0,5) | | |
| 32,0 | 75 x 14 | (10,50. 32,2. 0,8) | | | 70 × 50 × 7 | (7,95. 32,4. 0,5) | | - |
| 33,0 | 110 × 8 | (8,80. 33,4. 0,5) | | | 65 × 50 × 8 80 × 40 × 7 | (8,60. 33,2. 0,6) (7,96. 33,7. 0,5) | | |
| 34,0 | | | 60 × 60 × 8 | (9,03. 34,4. 0,6) | 80 × 50 × 6 | (7,53. 34,0. 0,6) | | |
| 35,0 | 75 x 15 100 x 10 80 x 14 | (11,25. 35,2. 0,9) (10,00. 35,8. 0,6) (11,20. 35,9. 0,8) | | | 75 × 50 × 7 | (8,31. 35,7. 0,6) | | - |
| 36,0 | 90 x 12 | (10,80. 36,5. 0,7) | 70 × 70 × 6 | (8,13. 36,3. 0,6) | 70 × 50 × 8 | (9,00. 36,6. 0,6) | | |
| 38,0 | | | | | 80 × 40 × 8 80 × 60 × 6 80 × 50 × 7 | (9,01, 38,0, 0,6) (8,11, 38,4, 0,6) (8,65, 38,9, 0,6) | | |
| 39,0 | 80 x 15 120 x 8 | (12,00. 39,1. 0,9) (9,60. 39,3. 0,6) | | | | | 100 × 6 | (8,17. 39,4. 0,6) |
| 40,0 | | | | | 75 × 50 × 8 | (9,41. 40,2. 0,6) | | |
| 41,0 | | | 70 × 70 × 7 | (9,40. 41,9. 0,7) | | | | |
| 42,0 | 80 x 16 110 x 10 | (12,80, 42,4, 1,0) (11,00, 42,7, 0,7) | (0 x 60 x 10 | (11,10. 42,0. 0,8) | | | | |
| 43,0 | 90 x 14 | (12,60. 43,8. 0,9) | | | | | 100 × 7 | (9,17. 43,1. 0,6) |
| 44,0 | 100 x 12 | (12,00. 44,0. 0 8) | 811 × 80 × 5,5 | (8,61. 44,1. 0,7) | 80 × 60 × 7 | (9,38. 44,3. 0,6) | | |
| 45,0 | 130 x 8 | (10,40. 45,7. 0 7) | · . | | | | | |
| 46,0 | | | | , | 100 x 50 x 6 | (8,73. 46,5. 0,6) | | |
| 47,0 | 90 x 15 | (13,50. 47,7. 0,9) | 70 × 70 × 8 30 × 80 × 6 | (10,60. 47,1. 0,7) (9,35. 47,7. 0,7) | 90 × 65 × 6 | (9,01. 47,5. 0,7) | | |
| 49,0 | | | | | 80 × 60 × 8 | (10,60. 49,9. 0,7) | | |
| 50,0 | 120 x 10 90 x 16 | (12,00, 50,1, 0,7) (14,40, 51,6, 1,0) | 80 × 80 × 6,5 | (10,10. 51,5. 0,7) | | | | |
| 52,0 | 110 x 12 140 x 8 100 x 14 | (13,20, 52,3, 0,8) (11,20, 52,6, 0,8) (14,00, 52,7, 0,9) | '0 × 70 × 9 | (11,90. 52,7. 0,9) | 100 × 50 × 7 | (10,10. 53,4. 0,7) | | |
| 54,0 | | | 0 × 80 × 7 | (10,80. 55,0. 0,8) | 90 × 65 × 7 | (10,40. 54,7. 0,7) | | |
| 56,0 | 100 x 15 | (15,00. 57,2. 1,0) | 7(× 70 × 10 | (13,10. 57,8. 0,9) | | | 120 × 6 | (9,98. 57,8. 0,8) |
| 58,0 | 130 x 10 150 x 8 | (13,00. 58,1. 0,8) (12,00. 59,9. 0,8) | , | | | | | - |
| 60,0 | 120 x 12 100 x 16 | (14,40. 61,3. 0,9) (16,00. 61,8. 1,1) | 50 x 90 x 6 | (10,60. 60,8. 0,8) | 100 x 50 x 8 90 x 65 x 8 | (11,40, 60,1, 0,8) (11,80, 61,7, 0,8) | | |
| 62,0 | 110 x 14 | (15,40, 62,4, 1,0) | 10 × 80 × 8 | (12,30. 62,1. 0,9) | 100 x 65 x 7 | (11,20. 63,6. 0,8) | | |
| 64,0 | 140 x 10 110 x 15 | (14,00. 66,7. 0,9) (16,50. 67,6. 1,0) | | | 90 x 70 x 8 | (12,23. 64,7. 0,9) | | |
| 68,0 | | | 90×90×7 | (12,20. 69,9. 1,0) | | | 120 x 8 | (12,40. 68,6. 0,9) |

| W cm ³ | Fla | t bars | Equal an | gles | Unequal | angles | Bul | b flats |
|----------------------|----------------------------------|--|---------------------------------|--|--|---|---------|--------------------|
| 70,0 | 130 × 12 100 × 18 | (15,60, 71,0, 1,0) (18,00, 71,4, 1,3) | | | 100 x 65 x 8 | (12,70. 71,9. 0,9) | | |
| 72,0 | 110 × 16 120 × 14 | (17,60. 72,9. 1,1) (16,80. 72,9. 1,0) | | | 100 × 50 × 10 | (14,10. 73,8. 0,9) | | |
| 74,0 | 150 x 10 | (15,00. 75,9. 1,0) | 80 × 80 × 10 | (15,10, 75,8, 1,1) | 90 x 65 x 10 | (14,60. 75,7. 1,0) | | |
| 78,0 | 120 x 15 | (18,00. 78,9. 1,1) | 90 x 90 x 8 | (13,90. 79,0. 1,0) | 100 x 75 x 8 | (13,50. 79,3. 1,0) | | |
| 80,0 | 100 × 20 140 × 12 | (20,00. 81,3. 1,4) (16,80. 81,4. 1,0) | 100 × 100 × 6,5 | (12,70. 80,9. 1,0) | 90 × 70 × 10 | (15,09. 80,0. 1,1) | | . <u> </u> |
| 84,0 | 130 x 14 150 x 11 120 x 16 | (18,20, 84,3, 1,1) (16,50, 84,2, 1,1) (19,20, 85,0, 1,2) | | | | | | |
| 86,0 | | | 90 x 90 x 9 100 x 100 x 7 | (15,50. 87,9. 1,1) (13,70. 87 0. 1,1) | 100 x 65 x 10 | (15,60. 87,6. 1,1) | 140 x 7 | (13,30. 87,9. 1,1) |
| 88,0 | | | 80 x 80 x 12 | (17,90. 89,6. 1,3) | | | | |
| 90,0 | 130 × 15 | (19,50. 91,1. 1,2) | | | | | | |
| 92,0 | 150 x 12 | (18,00. 92,4. 1,1) | | | 100 x 80 x 9 | (15,48. 92,4. 1,1) | | |
| 94,0 | 110 × 20 | (22,00. 95,4. 1,5) | | | | | 140 × 8 | (14,70. 94,8. 1,2) |
| 96,0 | 140 x 14 | (19,60. 96,5. 1,2) | 90 x 90 x 10 | (17,10. 96,6. 1,2) | 100 × 75 × 10 | (16,60. 96,7. 1,2) | | |
| 98,0 | 130 × 16 | (20,80. 98,1. 1,3) | 100 x 100 x 8 | (15,50. 98,0. 1,2) | | | | |
| 100,0 | | · . | | | 100 × 80 × 10 | (17,10. 101,2. 1,2) | | |
| 103,0 | 140 × 15 | (21,00. 104,2. 1,3) | | | 120 × 80 × 8 130 × 65 × 8 | (15,50. 105,7. 1,2) (15,10. 103,2. 1,2) | | |
| 106,0 | | | | | 125 × 75 × 8 | (15,50. 106,8. 1,2) | | |
| 109,0 | 150 × 14 120 × 20 | (21,00, 109,4, 1,3) (24,00, 110,7, 1,5) | 100 x 100 x 9 | (17,30. 109,0. 1,3) | | | | |
| 112,0 | 140 × 16 | (22,40. 112,0. 1,4) | 90 x 90 x 12 | (20,30, 114,0, 1,4) | 100 x 75 x 12 | (19,70. 114,1. 1,3) | | |
| 118,0 | 150 x 15 | (22,50. 118,1. 1,4) | 100 x 100 x 10 | (19,20. 120,5. 1,4) | | | 160 × 7 | (15,50. 118,4. 1,5 |
| 124,0 | | | | | 130 x 65 x 10 | (18,60. 126,1. 1,4) | | |
| 127,0 | 150 x 16 130 x 20 | (24,00. 127,0. 1,5) (16,00. 127,1. 1,6) | | | 120 × 80 × 10 | (19,10. 129,3. 1,4) | 160 x 8 | (17,10. 127,5. 1,5 |
| 130,0 | | | | · | 125 × 75 × 10 | (19,10. 130,7. 1,4) | | |
| 136,0 | | | | | | | 160 × 9 | (18,70. 136,7. 1,5 |
| 139,0 | | | 120 × 120 × 8 100 × 100 × 12 | (18,70, 141,4, 1,5) (22,70, 141,6, 1,6) | | | | |
| 142,0 | 140 × 20 | (28,00. 144,8. 1,7) | | | | | | |
| 145,0 | | | | | 130 x 65 x 12 | (22,10. 148,7. 1,5) | | |
| 150,0 | | | | | 120 × 80 × 12 150 × 75 × 9 125 × 75 × 12 | (22,70, 152,7, 1,6) (19,60, 153,2, 1,6) (22,70, 154,4, 1,6) | | |
| 160,0 | 150 × 20 | (30,00. 163,6. 1,8) | | | | | | |
| 165,0 | 130 × 25 | (32,50. 166,5. 2,1) | | | 150 x 75 x 10 | (21,60. 168,2. 1,7) | 180 × 8 | (19,90. 169,4. 2,0 |

| cm ³ | _ Fla | at bars | | Equal a | ngles | Unequa | l angles | Bu | lb flats |
|-----------------|----------|---------------------|-------|------------------------------|--|--------------------------------|--|----------|---------------------------------------|
| 170,0 | | | |) x 100 x 15) x 120 x 10 | (27,90. 172,6. 1,9) (23,20. 174,3. 1,8) | | | · . | |
| 185,0 | 140 × 25 | (35,00. 188,8. 2,2) | 120 |) x 120 x 11 | (25,40. 189,9. 2,0) | 150 × 90 × 10 | (23,20, 189,7, 1,9) | | |
| 190,0 | | | | | | | | 180 x 10 | (23,50. 193,4. 2,0) |
| 195,0 | | | | | | 150 x 75 x 12 | (25,70. 198,6. 1,9) | | |
| 205,0 | 150 × 25 | (37,50. 212,6. 2,4) | 130 |) x 120 x 12 | (27,50. 205,1. 2,0) | 150 × 90 × 11 | (25,30. 206,9. 2,0) | | |
| 220,0 | | | | | | 150 x 90 x 12 | (27,50. 223,8. 2,1) | | |
| 230,0 | | | 140 |) x 120 x 14 | (31,80. 236,2. 2,3) | | | 200 × 9 | (24,90. 232,4. 2,6) |
| 240,0 | | | | | | 150 x 90 x 13 150 x 75 x 15 | (29,70. 241,4. 2,3) (31,60. 242,5. 2,2) | | |
| 250,0 | | | 1: (|) x 120 x 15 | (33,90, 251,1, 2,4) | | | | |
| 258,0 | 150 x 30 | (45,00. 265,3. 2,9) | | | | | | 200 x 11 | (28,90. 261,6. 2,6) |
| 266,0 | | | | | | 150 x 90 x 15 | (33,90. 273,3. 2,4) | | |
| 274,0 | | | 110 | 0 x 150 x 10 | (29,30. 274,5. 2,6) | | | 200 x 12 | (30 90. 277,5. 2,6) |
| 290,0 | | • | | | | | | 220 × 9 | (28,30. 296,5. 3,3) |
| 298,0 | | | | | | 200 x 100 x 10 | (29,20. 301,8. 2,9) | | · · · · · · · · · · · · · · · · · · · |
| 322,0 | | | 114 | 0 × 150 × 12 | (34,80. 323,9. 2,9) | | | 220 x 11 | (32,70, 329,7, 3,3) |
| 346,0 | | | | | | | | 220 x 12 | (34,90. 349,0. 3,3) |
| 354,0 | | | 116 | 0 x 150 x 14 | (40,30. 372,3. 3,2) | 200 x 100 x 12 | (34,80. 356,9. 3,1) | | |
| 378,0 | | | | | | | | 240 × 10 | (34,10. 385,0. 4,0) |
| 386,0 | | | | | | 200 x 150 x 10 | (34,20. 393,7. 3,6) | | |
| 394,0 | | | 1- je | 0 × 150 × 15 | (43,00. 396,2. 3,3) | | | | |
| 420,0 | | | | | - | | | 240 x 12 | (38,90. 423,8. 4,0) |
| 430,0 | | | | | | 200 x 100 x 15 | (43,00. 437,7. 3,5) | | |
| 460,0 | | | 1 ; | 0 × 150 × 18 | (51,00. 466,3. 3,8) | 200 x 150 x 12 | (40,80, 466,3, 3,9 | | |
| 470,0 | | | | | | | | 260 x 10 | (37,90. 470,3. 5,0) |
| 515,0 | | | | | | | | 260 x 12 | (43,10. 518,1. 4,9 |
| 560,0 | | | 13 | 0 x 180 x 15 | (52,10. 574,5. 4,5) | 200 x 150 x 15 | (50,50, 572,3, 4,4) | | |
| 575,0 | | | | | | | | 280 x 11 | (44,60. 588,9. 5,9 |
| 605,0 | | | | | | | | 280 x 12 | (47,40. 616,8. 5,8 |
| 665,0 | | | 13 | 0 x 180 x 18 | (61,90. 677,8. 5,0) | 200 x 150 x 18 | (60,00. 675,9. 4,9) | | |
| 695,0 | | | | | | | | 300 x 11 | (49,10. 701,1. 7,2 |
| 725,0 | | | | | | | | 300 × 12 | (52,10. 734,6. 7,0 |
| 740,0 | | | | 0 × 180 × 20 0 × 200 × 16 | (68,30, 743,8, 5,3) (61,80, 752,6, 5,5) | | | 300 x 13 | (55,10. 759,4. 6,9 |
| 820,0 | | | 20 | 0 × 200 × 18 | (69,10. 837,7. 5,9) | | | | |
| 840,0 | | | | | | | | 320 x 12 | (56,80, 854,9, 8,3 |

| W cm ³ | Flat bars | Equal angles | Unequal angles | Bulb flats | | |
|----------------------|-----------|--------------------------------------|----------------|------------|------------------------|--|
| 880,0 | | | | 320 x 13 | (60,00. 891,9. 8,2) | |
| 920,0 | | 2(0 × 200 × 20 (76,30, 920,7, 6,3) | | | | |
| 980,0 | | | | 340 x 12 | (61,80. 995,9. 9,9) | |
| 1030,0 | | | | 340 x 13 | (65,20. 1039,3. 9,7) | |
| 1060,0 | | 21 0 × 200 × 24 (90,60, 1083,2, 7,1) | | | | |
| 1270,0 | | | | 370 x 13 | (72,90. 1273,1. 12,1) | |
| 1360,0 | | | - | 370 x 15 | (80,30. 1363,9. 11,6) | |
| 1600,0 | | | | 400 x 14 | (85,30. 1602,3. 14,6) | |
| 1700,0 | | | | 400 x 16 | (93,30. 1708,5. 14,1) | |
| 1950,0 | | | | 430 x 15 | (98,30. 1962,7. 17,3) | |
| 2050,0 | | | | 430 x 17 | (107,00. 2085,9. 16,7) | |

Table 6-A-II
SECTION MODULUS WITH ATTACHED PLATING OF 610 MM
OF STANDARD DIN SECTIONS

| W_ | Ele | it bars | Equal a | nales | Unequal | angles | Bulk |) flats |
|-----------------|-----------|--------------------|--------------|-------------------|-------------|-------------------|--------|-------------------|
| cm ³ | - гю | it bars | Equal a | ililities | Onequa | anglos | | |
| 12,0 | 75 × 6 | (4,50. 12,0. 0,3) | | | | | | |
| 12,5 | 70 × 7 | (4,90. 12,5. 0,3) | 45×45×5 | (4,30. 12,5. 0,3) | 50 × 40 × 5 | (4,27. 12,9. 0,3) | 60 × 5 | (4,18. 12,5. 0,3) |
| | 55 x 10 | (5,50. 12,6. 0,5) | 5) x 50 x 4 | (3,89. 12,6. 0,3) | | | | |
| | 65 × 8 | (5,20. 12,8. 0,4) | | | | | | |
| | 60 x 9 | (5,40. 12,8. 0,4) | | | | | | |
| 13,0 | 75 × 6,5 | (4,87. 13,1. 0,3) | | • | | · | | |
| | 61,5 x 9 | (5,53. 13,3. 0,4) | | | · . | | | |
| 13,5 | 80 × 6 | (4,80. 13,5. 0,3) | | | 60 x 30 x 5 | (4,29. 13,8. 0,3) | | |
| | 90 × 5 | (4,50. 13,8. 0,3) | | | | · | | |
| 14,0 | | | | | | | 60 x 6 | (4,78. 14,1. 0,3) |
| 14,5 | 60 × 10 | (6,00. 14,5. 0,5) | 4;×45×6 | (5,09, 14,7, 0,4) | | | | |
| | 70 × 8 | (5,60. 14,6. 0,4) | | | | | | |
| | 65 × 9 | (5,85. 14,7. 0,4) | | | | | | |
| | 80 × 6,5 | (5,20. 14,7. 0,3) | | | | | | |
| | 56,5 x 11 | (6,21. 14,9. 0,5) | | | | | | |
| 15,0 | 72 × 8 | (5,76. 15,3. 0,4) | | | | | | |
| 15,5 | | | 5) × 50 × 5 | (4,80. 15,5. 0,3) | | | | · |
| 16,0 | 80 × 7 | (5,60. 16,0. 0,3) | | | | | | |
| 16,5 | 85 × 6,5 | (5,52. 16,5. 0,3) | 4 i × 45 × 7 | (5,86. 16,9. 0,5) | 60 x 40 x 5 | (4,79. 16,6. 0,3) | | |
| | 75 x 8 | (6,00. 16,5. 0,4) | | | | | | |
| | 65 x 10 | (6,50. 16,7. 0,5) | | | | | | |
| | 82 x 7 | (5,74. 16,7. 0,4) | | | | | | |
| | 90 × 6 | (5,40. 16,8. 0,3) | | 1 | | * * * | | |
| | 100 x 5 | (5,00. 16,9. 0,3) | | | | | | |
| 18,0 | 90 × 6,5 | (5,85. 18,3. 0,4) | 5) x 50 x 6 | (5,69. 18,2. 0,4) | | : | | |
| | 60 x 12 | (7,20. 18,4. 0,6) | · | | | | · | |
| 18,5 | 80 × 8 | (6,40, 18,5, 0,4) | 5 i x 55 x 5 | (5,32. 18,8. 0,4) | 60 x 30 x 7 | (5,85. 18,7. 0,4) | | |
| | 70 × 10 | (7,00. 18,9. 0,5) | | | | | | |
| 19,0 | 61,5 x 12 | (7,38. 19,1. 0,4) | | | | | | |
| 10,0 | 82 × 8 | (6,56. 19,4. 0,4) | | | | | | |
| 19,5 | 72 × 10 | (7,20. 19,9. 0,5) | | | 60 × 40 × 6 | (5,68. 19,6. 0,4) | | |
| 20,0 | 100 x 6 | (6,00. 20,5. 0,4) | 51×50×7 | (6,56. 20,9. 0,5) | | | 80 × 5 | (5,40. 20,8. 0,4) |
| | 65 x 12 | (7,80. 20,9. 0,6) | | (0,00. 20,0. 0,0, | | - | | |
| 21,0 | 75 x 10 | (7,50. 21,4. 0,5) | | | 65 x 50 x 5 | (5,54. 21,6. 0,4) | - | |
| 22,0 | 100 × 6,5 | (6,50. 22,3. 0,4) | 5:i x 55 x 6 | (6,31, 22,2, 0,4) | 60 × 40 × 7 | (6,55. 22,5. 0,5) | | |
| | 100 % 0,0 | (0,00. 22,0. 0, 1) | 60 x 60 x 5 | (5,82. 22,5. 0,4) | | (0,00) 22,00 | | ٠ |
| 23,0 | 90 x 8 | (7,20. 23,0. 0,4) | 51 × 50 × 8 | (7,41. 23,7. 0,6) | | | 80 × 6 | (6,20, 23,4, 0,4) |
| | 65 x 13 | (8,45. 23,2. 0,7) | | | | | | |
| | 70 x 12 | (8,40. 23,6. 0,6) | | ľ | | _ | | |
| | 80 x 10 | (8,00. 23,9. 0,5) | - | | | | | |
| 24,0 | 92 × 8 | (7,36, 24,0, 0,5) | | | | | | |
| | 72 x 12 | (8,64. 24,8. 0,6) | | | | | | |
| 25,0 | 82 x 10 | (8,20. 25,0. 0,5) | | | | | 80 × 7 | (7,00. 25,9. 0,5) |
| 26,0 | 70 x 13 | (9,10. 26,2. 0,7) | 50 x 50 x 9 | (8,24, 26,3, 0,6) | 75 x 50 x 5 | (6,04. 26,1. 0,4) | | |
| | 90 x 9 | (8,10. 26,2. 0,5) | 60 x 60 x 6 | (6,91, 26,5, 0,5) | | | | |
| | 75 x 12 | (9,00. 26,6. 0,7) | | • | | | | |
| | 80 x 11 | (8,80. 26,8. 0,6) | | | | | | |

| W cm ³ | Fla | t bars | Equal a | ngles | Unequal | angles | Bul | b flats |
|----------------------|--|--|--|--|---|--|---------|-------------------|
| 28,0 | 100 × 8 | (8,00. 28,0. 0,5) | 55 × 55 × 8 | (8,23. 28,9. 0,6) | 75 × 55 × 5 70 × 50 × 6 | (6,30. 28,0. 0,4) (6,88. 28,1. 0,5) | | |
| 29,0 | 75 × 13 90 × 10 80 × 12 | (9,75, 29,3, 0,7) (9,00, 29,6, 0,6) (9,60, 29,7, 0,7) | | | 80 × 40 × 6 65 × 50 × 7 | (6,89. 29,3. 0,5) (7,60. 29,4. 0,5) | | |
| 30,0 | 72 × 14 92 × 10 | (10,08, 30,1, 0,8) (9,20, 30,8, 0,6) | | | | | | |
| 31,0 | 82 × 12 | (9,84. 31,0. 0,7) | 65 × 65 × 6 | (7,53. 31,3. 0,5) | | | | ····· |
| 32,0 | 80 x 13 | (10,40. 32,7. 0,7) | | | | | | - |
| 33,0 | 90 x 11 110 x 8 | (9,90. 33,0. 0,6) (8,80. 33,4. 0,5) | | | · | | | |
| 34,0 | | | 60 × 60 × 8 | (9,03. 34,4. 0,6) | | | | |
| 35,0 | 75 x 15 100 x 10 | (11,25, 35,2, 0,9) (10,00, 35,8, 0,6) | 55 × 55 × 10 65 × 65 × 7 | (10,10, 35,3, 0,8) (8,70, 35,9, 0,6) | 75 × 50 × 7 | (8,30. 35,6. 0,6) | 100 x 6 | (7,74. 35,8. 0,5) |
| 36,0 | 90 x 12 | (10,80. 36,5. 0,7) | 70 × 70 × 6 | (8,13. 36,3. 0,6) | 65 × 50 × 9 | (9,58. 36,9. 0,7) | | |
| 37,0 | 82 x 14 | (11,48. 37,4. 0,8) | | | | | | |
| 38,0 | 92 × 12 110 × 9 | (11,04, 38,0, 0,7) (9,90, 38,0, 0,6) | | | 80 x 40 x 8 75 x 55 x 7 | (9,01, 38,0, 0,6) (8,66, 38,0, 0,6) | | |
| 39,0 | 80 x 15 120 x 8 100 x 11 | (12,00, 39,1, 0,9) (9,60, 39,3, 0,6) (11,00, 39,9, 0,7) | | : | | : | 100 x 7 | (8,74. 39,6. 0,6) |
| 40,0 | 90 × 13 122 × 8 | (11,70. 40,1. 0,8) (9,76. 40,6. 0,6) | 65 x 65 x 8 | (9,85. 40,6. 0,7) | 80 × 65 × 6 | (8,41. 40,7. 0,6) | | |
| 41,0 | | | 70 × 70 × 7 | (9,40, 41,9, 0,7) | | | | |
| 42,0 | 80 x 16 110 x 10 | (12,80, 42,4, 1,0) (11,00, 42,7, 0,7) | 75 x 75 x 6 60 x 60 x 10 | (8,75, 42,0, 0,6) (11,10, 42,0, 0,8) | | | | |
| 43,0 | | | | - | | | 100 × 8 | (9,74. 43,4. 0,6) |
| 44,0 | 100 x 12 | (12,00. 44,0. 0,8) | 80 x 80 x 6 | (9,35. 44,6. 0,7) | 75 x 50 x 9 80 x 60 x 7 90 x 60 x 6 | (10,50, 44,8, 0,7) (9,38, 44,3, 0,6) (8,69, 44,8, 0,6) | | |
| 45,0 | 92 x 14 102 x 12 130 x 8 | (12,88. 45,5. 0,9) (12,24. 45,6. 0,8) (10,40. 45,7. 0,7) | 65 x 65 x 9 | (11,00. 45,1. 0,8) | | | | |
| 46,0 | | | | | 100 × 50 × 6 | (8,73. 46,5. 0,6) | | ٠ |
| 47,0 | 110 × 11 90 × 15 | (12,10, 47,4, 0,7) (13,50, 47,7, 0,9) | | | 75 × 55 × 9 | (10,90. 47,7. 0,7) | | |
| 48,0 | 100 × 13 | (13,00. 48,3. 0,8) | 75 × 75 × 7 | (10,10. 48,2. 0,7) | | | | |
| 50,0 | 120 x 10 90 x 16 120 x 10 130 x 9 | (12,00. 50,1. 0,7) (14,40. 51,6. 1,0) (12,20. 51,7. 0,8) (11,70. 51,9. 0,7) | | | · · · · · · · · · · · · · · · · · · · | | 120 × 6 | (9,31. 51,2. 0,7) |
| 52,0 | 110× 12 140 × 8 100 × 14 | (13,20, 52,3, 0,8) (11,20, 52,6, 0,8) (14,00, 52,7, 0,9) | 70 × 70 × 9 | (11,90. 52,6. 0,8) | 80 × 65 × 8 | (11,00. 52,9. 0,8) | | |
| 54,0 | 102 x 14 120 x 11 | (14,28, 54,6, 0,9) (13,20, 55,6, 0,8) | 65 x 65 x 11 75 x 75 x 8 80 x 80 x 7 | (13,20, 54,2, 1,0) (11,50, 54,6, 0,8) (10,80, 55,0, 0,8) | | | | |

| W cm ³ | . Fla | Flat bars Equal angles | | Unequal | angles | Bull | flats | | |
|----------------------|----------------------------------|--|-------------|-----------------------|--|---|---|---------------------------------------|--------------------|
| 56,0 | 100 x 15 110 x 13 92 x 17 | (15,00. 57,2. 1,0) (14,30. 57,3. 0,9) (15,64. 57,7. 1,1) | | | | | | 120 × 7 | (10,50. 56,4. 0,8) |
| 58,0 | 130 × 10 90 × 18 150 × 8 | (13,00, 58,1, 0,8) (16,20, 59,8, 1,2) (12,00, 59,9, 0,8) | | | | 90 x 60 x 8 | (11,40. 58,3. 0,8) | | |
| 60,0 | 120 × 12 100 × 16 | (14,40, 61,3, 0,9) (16,00, 61,8, 1,1) | | | | 100 x 50 x 8 90 x 75 x 7 | (11,50. 60,5. 0,8) (11,10. 60,6. 0,8) | 120 × 8 | (11,70. 61,8. 0,8) |
| 62,0 | 110 × 14 122 × 12 | (15,40, 62,4, 1,0) (14,64, 63,2, 0,9) | | x 80 x 8 70 x 11 | (12,30. 62,2. 0,9) (14,30. 62,9. 1,0) | 100 × 65 × 7 | (11,20. 63,6. 0,8) | | |
| 64,0 | 130 x 11 | (14,30. 64,5. 0,9) | | | | 80 x 65 x 10 | (13,60. 64,9. 0,9) | | |
| 66,0 | 140 × 10 120 × 13 110 × 15 | (14,00. 66,7. 0,9) (15,60. 67,0. 1,0) (16,50. 67,6. 1,0) | 75 : | 75 x 10 | (14,10. 66,6. 1,0) | | | us. the | |
| 68,0 | 102 × 17 | (17,34. 68,8. 1,2) | 90 | × 90 × 7 | (12,20. 69,9. 0,9) | | | | |
| 70,0 | 130 × 12 | (15,60. 71,0. 1,0) | | | | 100 x 75 x 7 | (11,90. 70,1. 0,9) | | |
| 72,0 | 110 × 16 | (17,60. 72,9. 1,1) | | | | 100 × 50 × 10 | (14,10. 73,8. 0,9) | | |
| 74,0 | 122 × 14 150 × 10 | (17,08. 75,1. 1,0) (15,00. 75,9. 1,0) | 80 : | 80 x 10 | (15,10. 75,8. 1,1) | | | <u> </u> | |
| 76,0 | 130 x 13 | (16,90. 77,6. 1,0) | | | | | | | |
| 78,0 | 120 x 15 | (18,00. 78,9. 1,1) | | : 75 x 12 x 90 x 8 | (16,70, 78,4, 1,2) (13,90, 79,0, 1,0) | 100 x 65 x 9 | (14,20, 79,9, 1,0) | 140 x 7 | (12,60. 78,6. 1,0) |
| 80,0 | 100 × 20 140 × 12 | (20,00. 81,3. 1,4) (16,80. 81,4. 1,0) | | | | | | | |
| 84,0 | 150 × 11 130 × 14 120 × 16 | (16,50, 84,1, 1,1) (18,20, 84,3, 1,1) (19,20, 85,0, 1,2) | | | | | | 140 x 8 | (13,80. 84,8. 1,1) |
| 86,0 | | | 9 | x 90 x 9 | (15,50. 87,9. 1,1) | | | | |
| 88,0 | | | 80 | < 80 × 12 | (17,90. 89,6. 1,3) | 100 x 75 x 9 | (15,10. 88,2. 1,1) | | |
| 90,0 | 130 x 15 | (19,50. 91,1. 1,2) | | | | | | | |
| 92,0 | 150 x 12 122 x 17 | (18,00. 92,4. 1,1) (20,74. 93,9. 1,3) | <u>.</u> . | | | | | 140 × 9 | (15,20. 92,0. 1,1) |
| 94,0 | 110 x 20 | (22,00. 95,4. 1,5) | | | | 100 x 65 x 11 | (17,10. 95,7. 1,2) | · | |
| 98,0 | 130 x 16 | (20,80. 98,1. 1,3) | 100 | x 100 x 8 | (15,50. 98,0. 1,2) | | | | |
| 100,0 | 150 x 13 | (19,50. 100,9. 1,2) | 80 | × 80 × 14 | (20,60. 102,9. 1,5) | | | | |
| 103,0 | 140 x 15 | (21,00, 104,2, 1,3) | 90 | x 90 x 11 | (18,70. 105,4. 1,3) | 130 x 65 x 8 100 x 75 x 11 120 x 80 x 8 | (15,10, 103,2, 1,2) (18,20, 105,7, 1,3) (15,50, 105,7, 1,2) | | |
| 106,0 | | | | | | | | 160 × 7 | (14,60, 106,2, 1,3 |
| 109,0 | 150 x 14 120 x 20 | (21,00, 109,4, 1,3) (24,00, 110,7, 1,5) | | | | | | | |
| 112,0 | 140 × 16 | (22,40. 112,0. 1,4) | | | | 130 x 75 x 8 | (15,90. 112,6. 1,3) | · · · · · · · · · · · · · · · · · · · | |
| 115,0 | | | | | | | | 160 × 8 | (16,20. 115,1. 1,4 |
| 118,0 | 150 x 15 | (22,50. 118,1. 1,4) | 100 | 100 x 10 | (19,20. 120,5. 1,4) | | | | |
| 121,0 | | | 90 | x 90 x 13 | (21,80. 122,1. 1,5) | | · | | |

| W cm ³ | Fla | at bars | Equal a | ingles | Unequa | l angles | Bul | b flats |
|----------------------|----------------------------------|---|----------------------------------|--|---------------------------------|--|------------------------|--|
| 124,0 | | | | | 130 × 65 × 10 | (18,60. 126,2. 1,4) | 160 × 9 | (17,80. 124,2. 1,4) |
| 127,0 | 150 x 16 130 x 20 122 x 22 | (24,00. 127,0. 1,5) (26,00. 127,1. 1,6) (26,84. 127,8. 1,8) | | | 120 × 80 × 10 | (19,10. 129,3. 1,4) | | |
| 136,0 | | | | | 130 × 75 × 10 | (19,60. 137,8. 1,5) | | |
| 139,0 | | | 00 x 100 x 12 | (22,70. 141,6. 1,6) | | | | |
| 142,0 | 140 × 20 | (28,00. 144,8. 1,7) | | | | | | |
| 145,0 | | | 110 x 110 x 10 90 x 90 x 16 | (21,20. 146,1. 1,6) (26,40. 147,0. 1,9) | 130 x 65 x 12 | (22,10. 148,7. 1,5) | | |
| 150,0 | | | | | 150 x 75 x 9 120 x 80 x 12 | (19,50. 152,3. 1,6) (22,70. 152,7. 1,6) | 180 x 8 | (18,90. 154,2. 1,8) |
| 155,0 | | | | | 130 x 90 x 10 | (21,20. 156,8. 1,6) | | |
| 160,0 | 150 × 20 | (30,00. 163,6. 1,8) | 100 x 100 x 14 | (26,20. 162,5. 1,8) | 130 x 75 x 12 | (23,30, 162,8, 1,7) | 180 x 9 | (20,70. 164,7. 1,8) |
| 165,0 | 130 x 25 | (32,50. 166,5. 2,1) | | | | | | |
| 170,0 | | | 110 × 110 × 12 | (25,10. 171,9. 1,8) | | | | |
| 175,0 | | | | | 120 × 80 × 14 | (26,20. 175,3. 1,8) | 180 × 10 | (22,50. 177,1. 1,9) |
| 180,0 | | | 100 × 100 × 16 | (29,60. 182,6. 2,1) | 150 x 75 x 11 130 x 90 x 12 | (23,60, 183,0, 1,8) (25,10, 184,3, 1,8) | | |
| 185,0 | 140 × 25 | (35,00. 188,8. 2,2) | 120 × 120 × 11 | (25,40. 189,9. 1,9) | 150 x 90 x 10 | (23,20. 189,9. 1,9) | 180 × 11 | (24,30. 189,3. 1,9) |
| 190,0 | | | | | 160 x 80 x 10 | (23,20. 192,7. 1,9) | | |
| 195,0 | | | 110 x 110 x 14 | (29,00. 198,3. 2,0) | | | | |
| 200,0 | | | | | 150 x 100 x 10 | (24,20. 203,9. 2,0) | | |
| 205,0 | | | 120 × 120 × 12 | (27,50. 205,1. 2,0) | | | | |
| 210,0 | 150 x 25 | (37,50. 212,6. 2,3) | | | | | 200 × 9 | (23,60. 212,5. 2,4) |
| 220,0 | | | 120 × 120 × 13 100 × 100 × 20 | (29,70, 220,7, 2,2) (36,20, 222,5, 2,5) | 150 × 90 × 12 | (27,50. 223,7. 2,1) | | |
| 225,0 | | | | | 160 × 80 × 12 | (27,50. 227,1. 2,1) | 200 x 10 | (25,60. 225,6. 2,4) |
| 240,0 | | | 130 × 130 × 12 | (30,00. 242,1. 2,3) | 150 x 100 x 12 180 x 90 x 10 | (28,70, 240,3, 2,2) (26,20, 244,3, 2,4) | 200 x 11 200 x 11,5 | (27,60, 240,7, 2,4) (28,60, 246,5, 2,4) |
| 250,0 | | | 120 × 120 × 15 | (33,90. 251,2. 2,4) | | | 200 x 12 | (29,60. 255,4. 2,5 |
| 258,0 | 150 × 30 | (45,00, 265,3, 2,9) | 44. | | 160 x 80 x 14 | (31,80. 260,8. 2,3) | | |
| 274,0 | | | 130 x 130 x 14 | (34,70. 278,4. 2,6) | 150 x 100 x 14 | (33,20. 276,5. 2,5) | | |
| 282,0 | | | | | 180 × 90 × 12 | (31,20 × 289,1. 2,6) | 220 x 10 | (29,00. 288,7. 3,0 |
| 298,0 | | | 140 × 140 × 13 | (35,00. 303,1. 2,7) | 200 × 100 × 10 | (29,20. 301,8. 2,9) | 220 x 11 | (31,20. 304,3. 3,0 |
| 306,0 | | | 130 x 130 x 16 | (39,30. 313,6. 2,8) | | | 220 x 11,5 | (32,30. 311,8. 3,0 |
| 314,0 | | | | | | | 220 x 12 | (33,40. 318,5. 3,0 |
| 322,0 | | | 150 × 150 × 12 | (34,80. 323,9. 2,9) | | | | |
| 330,0 | | | | | 180 x 90 x 14 | (36,10, 332,3, 2,8) | | |
| 338,0 | | | 140 × 140 × 15 | (40,00. 344,6. 3,0) | | | | |
| 346,0 | | | | | | | 240 x 10 | (32,40. 351,3. 3,7 |

| W cm ³ | Flat bars | | Equal a | ingles | Unequa | l angles | Bulb flats | | |
|-------------------|-----------|-------|----------------------|--|---------------------------------|--|------------|----------------------|--|
| 354,0 | | | | , | 200 × 100 × 12 | (34,80. 356,9. 3,1) | | | |
| 370,0 | | 150 × | 50 x 14 | (40,30, 372,3, 3,2) | | | 240 × 11 | (34,90. 375,7. 3,7) | |
| 386,0 | | | | | 250 x 90 x 10 | (33,20. 388,7. 3,9) | | | |
| 394,0 | | 150 x | 50 x 15 | (43,00. 396,2. 3,3) | | | 240 × 12 | (37,30. 394,0. 3,7) | |
| 410,0 | | 150 × | 150 x 16 | (45,70. 419,9. 3,5) | 200 × 100 × 14 | (40,30. 410,7. 3,4) | | | |
| 450,0 | | 160 × | 160 x 15 | (46,10. 452,8. 3,7) | | | 260 x 11 | (38,70, 455,7, 4,5) | |
| 460,0 | | 150 × | 150 x 18 | (51,00. 487,1. 3,8) | 250 x 90 x 12 200 x 100 x 16 | (39,60. 460,7. 4,1) (45,70. 463,9. 3,6) | | 2027 | |
| 470,0 | | | | | | | 260 x 12 | (41,30. 477,7. 4,5) | |
| 490,0 | | | | | | | 260 x 13 | (43,90. 499,2. 4,5) | |
| 500,0 | | | 160 x 17 150 x 20 | (51,80, 506,6, 4,0) (56,30, 513,3, 4,1) | | | | | |
| 530,0 | | | | | 250 × 90 × 14 | (45,90. 530,9. 4,4) | 280 x 11 | (42,60. 543,7. 5,5) | |
| 545,0 | | 160 x | 160 x 19 | (57,50. 559,3. 4,3) | 4.1 | | | | |
| 560,0 | | | | | | | 280 x 12 | (45,50, 571,7, 5,4) | |
| 590,0 | | | | | 250 x 90 x 16 | (52,10, 599,3, 4,6) | 280 x 13 | (48,30, 597,3, 5,4) | |
| 605,0 | | 180 x | 180 x 16 | (55,40. 609,1. 4,6) | | | | | |
| 635,0 | | | | | | | 300 x 11 | (46,70. 647,5. 6,6) | |
| 665,0 | | 180 × | 180 x 18 | (61,90. 677,8. 5,0) | | | 300 x 12 | (49,70. 679,8. 6,5) | |
| 710,0 | | | | | | | 300 x 13 | (52,80. 711,2. 6,5) | |
| 740,0 | | | 180 × 20 200 × 16 | (68,40, 744,7, 5,3) (61,80, 752,6, 5,5) | | | 300 x 14 | (55,80. 740,7. 6,4) | |
| 780,0 | | | | | | | 320 × 12 | (54,20. 793,6. 7,7) | |
| 800,0 | | 180 x | 180 × 22 | (74,70. 809,6. 5,7) | | | | | |
| 820,0 | | 200 x | 200 x 18 | (69,10.837,7.5,9) | | | 320 × 13 | (57,40. 829,4. 7,6) | |
| 860,0 | | | | | | | 320 × 14 | (60,70. 864,8. 7,6) | |
| 880,0 | | | | | | | 320 × 15 | (63,90, 897,7, 7,5) | |
| 900,0 | | | | | | | 340 x 12 | (58,80. 916,7. 9,0) | |
| 920,0 | | 200 2 | 200 x 20 | (76,40. 921,6. 6,3) | | | | | |
| 940,0 | | | | | | | 340 × 13 | (62,20. 958,6. 8,9) | |
| 980,0 | | | | | | | 340 x 14 | (65,50. 997,4. 8,8 | |
| 1030,0 | | | | | | | 340 x 15 | (68,90. 1035,7. 8,7 | |
| 1060,0 | | 200 | 200 x 24 | (90,60. 1083,2. 7,1) | | | | | |
| 1150,0 | | | | | | | 370 x 13 | (69,60. 1179,7. 11,1 | |
| 1210,0 | | | | | | | 370 x 14 | (73,30. 1219,9. 10,9 | |
| 1240,0 | | 200 | 200 x 28 | (105,0. 1244,6. 7,9) | | | 370 x 15 | (77,00. 1267,5. 10 8 | |
| 1300,0 | | | | | | | 370 x 16 | (80,70. 1312,9. 0,7 | |
| 1450,0 | | | - | | | | 400 x 14 | (81,40. 1488,6. 13,5 | |

| W cm ³ | Flat bars | Equal angles | Unequal angles | Buib flats | | |
|----------------------|-----------|--------------|----------------|------------|-----------------------|--|
| 1500,0 | | | | 400 x 15 | (85,40. 1535,8. 3,2) | |
| 1550,0 | | | | 400 x 16 | (89,40, 1591,4, 13,1 | |
| 1600,0 | | | | 400 x 17 | (93,40. 1633,6. 12,9 | |
| 1800,0 | | | | 430 x 15 | (94,10. 1833,2. 16,1 | |
| 1950,0 | | | | 430 x 17 | (103,00. 1954,5. 15,6 | |
| 2050,0 | | | | 430 x 19 | (111,00. 2069,9. 15,2 | |
| 2150,0 | | | | 430 × 21 | (120,00. 2188,6. 15,1 | |

Table 6-A-III
SECTION MODULUS WITH ATTACHED PLATING OF 610 MM
OF STANDARD UNE SECTIONS

| | | | OFSIA | INDARD UNI | E SECTION | 3 | |
|----------------------|---------------------|--|----------------------------|--|---------------------------------------|--|------------|
| W cm ³ | - Fla | at bars | Equal a | ngles | Unequa | l angles | Bulb flats |
| 12,5 | 55 x 10 | (5,50. 12,6. 0,5) | 45 × 45 × 5 50 × 50 × 4 | (4,30. 12,5. 0,3) (3,89. 12,6. 0,3) | | | |
| 13,5 | | | | | 60 × 30 × 5 | (4,29. 13,9. 0,3) | |
| 14,5 | 60 × 10 | (6,00. 14,5. 0,5) | 45 × 45 × 6 | (5,09. 14,8. 0,4) | · · · · · · · · · · · · · · · · · · · | | |
| 15,5 | | | 50 × 50 × 5 | (4,80. 15,5. 0,3) | | | |
| 16,0 | | | | | 60 × 30 × 6 | (5,08. 16,3. 0,4) | |
| 16,5 | 65 × 10 | (6,50. 16,7. 0,5) | 45 × 45 × 7 | (5,86. 16,9. 0,5) | 60 × 40 × 5 | (4,76. 16,6. 0,3) | |
| 18,0 | 60 x 12 | (7,20. 18,4. 0,6) | 50 × 50 × 6 60 × 60 × 4 | (5,69. 18,2. 0,5) (4,71. 18,3. 0,4) | | | |
| 18,5 | 70 × 10 | (7,00. 18,9. 0,5) | | | | | |
| 19,5 | | | | | 60 x 40 x 6 60 x 50 x 5 | (5,67. 19,6. 0,4) (5,54. 19,5. 0,4) | |
| 20,0 | 65 × 12 | (7,80. 20,9. 0,6) | 50 × 50 × 7 | (6,56. 20,9. 0,5) | | | |
| 21,0 | 75 x 10 | (7,50. 21,4. 0,5) | | | | | |
| 22,0 | | | 55 x 55 x 6 60 x 60 x 5 | (6,31, 22,2, 0,4) (5,82, 22,5, 0,5) | 60 × 40 × 7 60 × 50 × 6 | (6,55. 22,6. 0,5) (6,58. 23,0. 0,5) | |
| 23,0 | 70 × 12 80 × 10 | (8,40. 23,6. 0,6) (8,00. 23,9. 0,5) | 50 × 50 × 8 | (7,41. 23,7. 0,6) | | | |
| 24,0 | | | | | 80 × 40 × 5 | (5,80. 24,9. 0,5) | |
| 26,0 | 75 x 12 | (9,00. 26,6. 0,7) | 60 × 60 × 6 | (6,91. 26,5. 0,5) | 65 × 50 × 7 | (7,60. 26,4. 0,6) | |
| 28,0 | 70 × 14 | (9,80. 28,8. 0,8) | 55 × 55 × 8 | (8,23. 28,9. 0,6) | | | |
| 29,0 | 90 x 10 80 x 12 | (9,00. 29,6. 0,6) (9,60. 29,7. 0,7) | | | 80 x 40 x 6 60 x 50 x 8 | (6,89. 29,4. 0,5) (8,60. 29,9. 0,6) | |
| 30,0 | | | 70 × 70 × 5 | (6,84. 30,8. 0,5) | | | |
| 32,0 | 75 x 14 | (10,50. 32,2. 0,8) | | | | | |
| 33,0 | | | | | 80 × 40 × 7 | (7,96. 33,7. 0,6) | |
| 34,0 | ••• | | 60 × 60 × 8 | (9,03. 34,4. 0,6) | | | |
| 35,0 | 100 x 10 80 x 14 | (10,00. 35,8. 0,6) (11,20. 35,9. 0,8) | 65 × 65 × 7 | (8,70. 35,9. 0,6) | | | |
| 36,0 | 90 x 12 | (10,80. 36,5. 0,7) | 70 × 70 × 6 | (8,13. 36,4. 0,6) | | | |
| 38,0 | | | | | 80 x 40 x 8 80 x 50 x 6 | (9,01. 38,1. 0,7) (8,11. 38,5. 0,6) | |
| 41,0 | | | 70 × 70 × 7 | (9,40. 41,9. 0,7) | | | |
| 42,0 | 80 x 16 110 x 10 | (12,80. 42,4. 1,0) (11,00. 42,7. 0,7) | 60 x 60 x 10 | (11,10. 42,1. 0,9) | | | |
| 43,0 | 90 x 14 | (12,60. 43,8. 0,9) | | | | | |
| 44,0 | 100 x 12 | (12,00. 44,0. 0,8) | | | 80 x 50 x 7 | (9,38. 44,3. 0,7) | |
| 45,0 | | | 65 × 65 × 9 | (10,98. 45,1. 0,8) | 80 x 50 x 8 | (9,97. 45,1. 0,7) | |
| 46,0 | | | | | 100 x 50 x 6 | (8,73. 46,5. 0,7) | |

| W cm ³ | W Flat bars | | Equal an | igles | Unequal | angles | Bulb flats |
|----------------------|----------------------------------|--|----------------------------|---|-------------------------------|--|------------|
| 47,0 | | | 70 x 70 x 8 80 x 80 x 6 | (10,60. 47,1. 0,8) (9,35. 47,8. 0,7) | | | |
| 49,0 | | | 70 × 70 × 9 | (11,10. 49,8. 0,8) | | | |
| 50,0 | 120 x 10 90 x 16 | (12,00. 50, 1. 0,7) (14,40. 51,6. 1,0) | | | 90 × 60 × 7 | (10,20. 51,8. 0,7) | |
| 52,0 | 112 × 12 100 × 14 | (13,20, 52,3, 0,8) (14,00, 52,7, 0,9) | | · | 100 × 50 × 7 | (10,10. 53,5. 0,8) | |
| 54,0 | | | 75 × 75 × 8 | (11,50. 54,6. 0,8) | 80 x 50 x 10 | (12,20. 55,4. 0,8) | A-10/11 |
| 58,0 | 130 x 10 90 x 18 | (13,00. 58,1. 0,8) (16,20. 59,8. 1,2) | | | | | |
| 60,0 | 120 ×12 100 × 16 | (14,40, 61,3, 0,9) (16,00, 61,8, 1,1) | 90 x 90 x 6 | (10,60. 60,9. 0,9) | 100 x 50 x 8 | (11,40. 60,1. 0,8) | |
| 62,0 | 110 × 14 | (15,40. 62,4. 1,0) | 80 x 80 x 8 | (12,30. 62,2. 0,9) | 100 x 65 x 7 | (11,20, 63,7, 0,9) | |
| 64,0 | | | | | 90 x 60 x 9 | (12,90. 65,3. 0,9) | |
| 66,0 | 140 x 10 | (14,00. 66,7. 1,9) | 75 x 75 x 10 | (14,10. 66,6. 1,0) | | | |
| 70,0 | 130 x 12 100 x 18 | (15,60. 71,0. 1,0) (18,00. 71,3. 1,2) | | | 100 x 65 x 8 | (12,70. 72,0. 1,0) | |
| 72,0 | 110 × 16 120 × 14 | (17,60. 72,9. 1,1) (16,80. 72,9. 1,0) | | | 100 x 70 x 8 100 x 50 x 10 | (12,80. 72,3. 0,9) (14,10. 73,9. 1,0) | |
| 74,0 | 150 × 10 | (15,00. 75,9. 1,0) | 80 x 80 x 10 | (15,10. 75,8. 1,1) | | | |
| 78,0 | | | 90 x 90 x 8 | (13,90, 79,0, 1,1) | 100 x 75 x 8 | (13,50. 79,3. 1,0) | |
| 80,0 | 100 x 20 140 x 12 | (20,00. 81,3. 1,4) (16,80. 81,4. 1,0) | 100 x 100 x 6,5 | (12,70. 81,0. 1,1) | | | |
| 82,0 | 110 × 18 | (19,80, 83,9, 1,3) | | | | | · |
| 84,0 | 130 x 14 120 x 16 160 x 10 | (18,20, 84,3, 1,1) (19,20, 85,0, 1,2) (16,00, 85,7, 1,7) | | 1. | | | |
| 86,0 | | | 90 x 90 x 9 | (15,50. 87,9. 1,1) | 100 x 65 x 10 | (15,60. 87,6. 1,1) | |
| 88,0 | | | 80 x 80 x 12 | (17,90. 89,7. 1,3) | | | |
| 92,0 | 150 x 12 | (18,00. 92,4. 1,1) | | | 100 x 70 x 10 | (16,20. 92,2. 1,1) | |
| 94,0 | 110 × 20 | (22,00. 95,4. 1,5) | | | | | |
| 96,0 | 140 x 14 120 x 18 | (19,60, 96,5, 1,2) (21,60, 97,6, 1,4) | 90 x 90 x 10 | (17,10. 96,7. 1,3) | 100 × 75 × 10 | (16,60. 96,8. 1,2) | |
| 98,0 | 130 x 16 | (20,80. 98,1. 1,3) | 100 × 100 × 8 | (15,50. 98,0. 1,2) | | | |
| 103,0 | 160 × 12 | (19,20. 104,2. 1,2) | 90 x 90 x 11 | (18,70. 105,4. 1,3) | 130 × 65 × 8 120 × 80 × 8 | (15,10, 103,2, 1,2) (15,50, 105,8, 1,3) | |
| 106,0 | 180 × 10 110 × 22 | (18,00, 106,9, 1,3) (24,20, 107,4, 1,7) | | | | | · |
| 109,0 | 150 × 14 120 × 20 | (21,00, 109,4, 1,3) (24,00, 110,7, 1,5) | | | | | |
| 112,0 | 140 × 16 130 × 18 | (22,40, 112,0, 1,4) (23,40, 112,3, 1,4) | 90 x 90 x 12 | (20,30. 114,0. 1,5) | 100 x 75 x 12 | (19,70. 114,1. 1,4) | |
| 118,0 | | | 100 x 100 x 10 | (19,20. 120,5. 1,4) | | | |
| 121,0 | 160 × 14 | (22,40. 123,2. 1,4) | | | | | |

| W cm³ | _ Fla | at bars | | qual a | angles | Unequa | al angles | Bulb flats |
|----------|--|--|---------------------------------------|--------|--|--------------------------------|--|------------|
| 124,0 | 120 × 22 | (26,40. 124,3. 1,7) | | | | 130 × 65 × 10 | (18,60. 126,1. 1,4) | |
| 127,0 | 150 x 16 130 x 20 140 x 18 180 x 12 | (24,00. 127,0. 1,5) (26,00. 127,1. 1,6) (25,20. 128,1. 1,5) (21,60. 129,7. 1,5) | | | | 120 × 80 × 10 | (19,10. 129,3. 1,4) | |
| 130,0 | 200 × 10 | (20,00. 130,2. 1,6) | | | | | | |
| 139,0 | | · | 100 x 100 120 x 13 | | (22,70, 141,6, 1,6) (18,70, 141,5, 1,6) | | | |
| 142,0 | 130 x 22 160 x 16 140 x 20 | (28,60. 142,5. 1,8) (25,60. 142,8. 1,6) (28,00. 144,8. 1,7) | | | | | | |
| 145,0 | 150 x 18 | (27,00. 145,0. 1,6) | | | | 130 × 65 × 12 | (22,10. 148,7. 1,6) | |
| 150,0 | 180 x 14 | (25,20. 153,1. 1,6) | | | | 120 × 80 × 12 150× 75 × 9 | (22,70. 152,7. 1,6) (19,60. 153,2. 1,7) | |
| 155,0 | 200 x 12 | (24,00. 157,9. 1,7) | | | | | | |
| 160,0 | 140 x 22 160 x 18 150 x 20 | (30,80, 162,0, 1,9) (28,80, 162,9, 1,8) (30,00, 163,6, 1,8) | | | | <u> </u> | | |
| 165,0 | 130 × 25 | (32,50. 166,5. 2,1) | | | | 150 x 75 x 10 | (21,70. 165,9. 1,7) | |
| 170,0 | | | 100 x 100 120 x 120 | | (27,90. 172,7. 2,0) (23,20. 174,4. 1,8) | | | |
| 175,0 | 180 × 16 | (28,80. 177,1. 1,8) | , | | | | | |
| 180,0 | 150 x 22 160 x 20 | (33,00. 182,7. 2,0) (32,00. 183,5. 1,9) | | | - | | | |
| 185,0 | 200 x 14 140 x 25 | (28,00. 186,1. 1,9) (35,00. 188,8. 2,2) | 120 x 120 | x 11 | (25,40. 189,9. 1,9) | 150 x 90 x 10 | (23,20. 189,7. 1,9) | |
| 195,0 | | | | | | 150 x 75 x 12 | (25,80. 197,4. 1,9) | |
| 200,0 | 180 x 18 160 x 22 | (32,40. 201,7. 2,0) (35,20. 204,8. 2,1) | | | | | . · | |
| 205,0 | | | 120 × 12 | × 12 | (27,50. 205,1. 2,1) | 150 x 90 x 11 | (25,30, 207,9, 2,0) | |
| 210,0 | 150 × 25 | (37,50. 212,6. 2,3) | | | | | | |
| 215,0 | 200 x 16 | (32,00. 215,0. 2,1) | | | | | | |
| 220,0 | | | 120 x 12 | x 13 | (29,70. 220,7. 2,2) | 150 × 90 × 12 | (27,50. 223,8. 2,1) | |
| 225,0 | 180 × 20 | (36,00. 226,8. 2,2) | | | · | | | |
| 235,0 | 160 x 25 | (40,00. 237,7. 2,5) | | | | | | |
| 240,0 | 200 × 18 | (36,00. 244,4. 2,3) | | | | 150 x 90 x 13 150 x 75 x 15 | (29,60, 241,1, 2,2) (31,60, 242,6, 2,3) | |
| 250,0 | 180 x 22 | (39,60. 252,5. 2,4) | 120 x 12 | × 15 | (33,90. 251,1. 2,5) | | | |
| 258,0 | 150 × 30 | (45,00. 265,3. 2,9) | · · · · · · · · · · · · · · · · · · · | | | | | |
| 266,0 | | | | | | 150 x 90 x 15 | (33,90. 273,4. 2,5) | |
| 274,0 | 200 × 20 | (40,00. 274,5. 2,5) | 150 x 15 | x 10 | (29,30. 274,5. 2,6) | | | |
| 290,0 | 180 x 25 160 x 30 | (45,00. 292,4. 2,7) (48,00. 295,8. 3,0) | | | | | | |
| 298,0 | 200 x 22 | (44,00. 305,2. 2,7) | 140 × 14 | × 13 | (35,00. 303,1. 2,7) | 200 x 100 x 10 | (29,20, 301,9, 2,9) | |

| W cm ³ | Flo | at bars | Equal a | ngles | Unequa | i angles | Bulb flats |
|----------------------|----------------------|--|----------------|----------------------|----------------|---------------------|------------|
| 314,0 | 160 × 22 | (51,20, 320,2, 3,2) | | | | | |
| 322,0 | | | 150 x 150 x 12 | (34,80. 323,9. 2,9) | | | |
| 338,0 | | | 140 x 140 x 15 | (40,00. 344,6. 3,0) | | | |
| 346,0 | 200 × 25 | (50,00. 352,5. 3,0) | | | | | |
| 354,0 | | | | | 200 x 100 x 12 | (34,80. 357,0. 3,2) | |
| 362,0 | 180 × 30 | (54,00. 362,0. 3,3) | | | | | |
| 378,0 | | | 150 x 150 x 16 | (40,30. 381,2. 2,9) | | | |
| 386,0 | 180 × 32 | (57,60. 391,0. 3,5) | | | 200 x 150 x 10 | (34,20. 393,8. 3,7) | |
| 394,0 | | | 150 x 150 x 15 | (43,00. 396,3. 3,4) | | | |
| 430,0 | 200 x 30 180 x 35 | (60,00. 434,8. 3,6) (63,00. 435,9. 3,9) | | | 200 × 100 × 15 | (43,00. 437,7. 3,5) | |
| 460,0 | 200 x 32 | (64,00. 468,9. 3,9) | 150 x 150 x 18 | (51,00. 464,2. 3,8) | 200 x 150 x 12 | (40,80. 466,3. 4,0) | |
| 515,0 | 200 × 35 | (70,00. 521,5. 4,2) | | | | | |
| 560,0 | | | 180 x 180 x 15 | (52,10. 574,6. 4,5) | 200 x 150 x 15 | (50,50, 572,4, 4,4) | |
| 605,0 | 200 × 40 | (80,00. 612,9. 4,9) | | | | | |
| 665,0 | | | 180 x 180 x 18 | (61,90. 677,8. 5,0) | 200 x 150 x 18 | (60,00. 675,9. 4,9) | |
| 740,0 | | | 180 x 180 x 20 | (68,30. 743,9. 5,4) | | | |
| 760,0 | | | 200 x 200 x 16 | (61,80. 766,1. 5,4) | | | |
| 820,0 | | | 200 × 200 × 18 | (69,10. 837,7. 6,0) | | | |
| 920,0 | | | 200 × 200 × 20 | (76,30. 920,8. 6,3) | | | |
| 1060,0 | | | 200 × 200 × 24 | (90,60. 1083,3. 7,1) | | | |

Table 6-A-IV

| W cm ³ | FI | at bars | Equal | angles | Unequal a | ngles | Bulb flats |
|----------------------|---------------------|--|----------------------------|--|---------------|--------------------|------------|
| 12,0 | 75 × 6 | (4,50. 12,0. 0,3) | <u> </u> | | | | |
| 12,5 | 65 x 8 | (5,20. 12,8. 0,4) | 50 × 50 × 4 | (3,89. 12,5. 0,3) | | | |
| 14,5 | 65 x 9 | (5,85. 14,7. 0,4) | 50 × 50 × 5 | (4,80. 15,4. 0,3) | | | |
| 16,5 | 75 × 8 90 × 6 | (6,00.× 16,5. 0,4) (5,40. 16,8. 0,3) | - | | 1 11.00_00 | | |
| 18,0 | | | 50 × 50 × 6 60 × 60 × 4 | (5,64, 18,1, 0,4) (4,69, 18,2, 0,3) | | | |
| 18,5 | 75 x 9 | (6,75. 18,9. 0,4) | | | | | |
| 20,0 | 100 × 6 65 × 12 | (6,00. 20,5. 0,4) (7,80. 20,9. 0,6) | | | | | |
| 22,0 | | | 60 × 60 × 5 | (5,80. 22,3. 0,4) | | | |
| 23,0 | 90 x 8 | (7,20. 23,0. 0,4) | | | | | |
| 26,0 | 90 × 9 75 × 12 | (8,10. 26,2. 0,5) (9,00. 26,6. 0,7) | 65 < 65 × 5 | (6,37. 26,6. 0,5) | | | |
| 28,0 | 100 x 8 | (8,00. 28,0. 0,5) | | | | | |
| 31,0 | 100 × 9 | (9,00. 31,8. 0,6) | 65 < 65 × 6 | (7,52. 31,3. 0,5) | | | |
| 36,0 | 90 x 12 | (10,80. 36,5. 0,7) | 70 < 70 × 6 | (8,12. 36,2. 0,6) | | | |
| 40,0 | | | 65 < 65 × 8 | (9,76. 40,3. 0,7) | | | |
| 41,0 | | | 75 < 75 × 6 | (8,72. 41,7. 0,6) | | | |
| 42,0 | 125 × 8 | (10,00. 42,5. 0,6) | | | | | - |
| 44,0 | 100 x 12 | (12,00. 44,0. 0,8) | | | | | · |
| 47,0 | | | 80 < 80 × 6 | (9,32. 47,5. 0,7) | | | |
| 48,0 | 125 x 9 | (11,25. 48,2. 0,7) | | | | | |
| 50,0 | 90 x 16 | (14,40. 51,6. 1,0) | | | | | |
| 60,0 | 100 x 16 | (16,00. 61,8. 1,1) | 75 < 75 × 9 90 < 90 × 6 | (12,69. 60,1. 0,9) (10,55. 60,5. 0,8) | | | |
| 66,0 | 125 x 12 150 x 9 | (15,00, 66,0, 0,9) (13,50, 67,8, 0,9) | | | | | |
| 68,0 | 1 | | 90 < 90 × 7 | (12,22. 69,8. 0,9) | | | |
| 70,0 | | | | | 100 x 75 x 7 | (11,87. 70,0. 0,9) | |
| 76,0 | 100 x 19 | (19,00. 76,3. 1,3) | 75 × 75 × 12 | (16,56. 77,8. 1,2) | 90 x 75 x 9 | (14,04. 76,0. 1,0) | |
| 86,0 | | | 100 x 100 x 7 | (13,62. 86,3. 1,1) | | | |
| 90,0 | 125 x 16 | (20,00. 91,4. 1,2) | <u> </u> | | | | |
| 92,0 | 150 x 12 | (18,00. 92,4. 1,1) | | | | | |
| 94,0 | 180 × 9 | (16,20. 95,6. 1,2) | 90 x 90 x 10 | (17,00. 95,9. 1,2) | 125 x 75 x 7 | (13,62. 94,2. 1,1) | |
| 96,0 | | | | | 100 x 75 x 10 | (16,50. 96,2. 1,2) | |
| 109,0 | 125 x 19 | (23,75. 111,7. 1,5) | | | | | |
| 118,0 | | | 100 x 100 x 10 | (19,00. 119,0. 1,4) | | | |

| w ₃ | W Flat bars | | Equal | angles | Unequal a | ingles | Bi | ılb flats |
|-----------------|--|--|----------------|---------------------|---------------------------------------|---------------------|-----------|---------------------|
| cm ³ | | | 90 × 90 × 13 | (21,71, 121,8, 1,5) | · · · · · · · · · · · · · · · · · · · | | | |
| 127,0 | 150 x 16 180 x 12 | (24,00. 127,0. 1,5) (21,60. 129,7. 1,5) | | (21) 11 (21) (10) | 125 × 75 × 10 | (19,00. 129,8. 1,4) | | · |
| 133,0 | 125 × 22 | (27,50. 133,2. 1,8) | | | | | | |
| 139,0 | | | 120 × 120 × 8 | (18,76. 141,8. 1,5) | | | | |
| 145,0 | | | | | 125 × 90 × 10 | (20,50. 147,3. 1,5) | | |
| 150,0 | 150 x 19 | (28,50. 154,2. 1,7) | 100 x 100 x 13 | (24,31. 151,2. 1,7) | | | | |
| 155,0 | 125 × 25 200 × 12 | (31,25. 155,9. 2,1) (24,00. 157,9. 1,7) | | | | | | |
| 160,0 | | | | | 125 x 75 x 13 | (24,31. 164,9. 1,7) | 180 × 9,5 | (21,06. 163,3. 1,8) |
| 170,0 | | | | | 150 × 90 × 9 | (20,94. 171,7. 1,8) | | |
| 175,0 | 180 x 16 | (28,80. 177,1. 1,8) | | | | | | |
| 180,0 | 150 x 22 | (33,00. 182,7. 2,0) | | | 150 × 100 × 9 | (21,84. 184,3. 1,9) | | |
| 185,0 | | | 130 × 130 × 9 | (22,74. 185,1. 1,9) | 125 x 90 x 13 | (26,26. 186,8. 1,9) | | |
| 205,0 | 230 x 12 | (27,60. 205,1. 2,2) | | | | | | |
| 210,0 | 150 x 25 180 x 19 | (37,50. 212,6. 2,3) (34,20. 214,2. 2,1) | | | | | | |
| 215,0 | 200 x 16 | (32,00. 215,0. 2,1) | | | | | | |
| 220,0 | | | | | 150 × 90 × 12 | (27,36, 222,7, 2,1) | | |
| 235,0 | | | | | 150 × 100 × 12 | (28,56, 239,2, 2,2) | 200 x 10 | (25,23. 220,3. 2,3) |
| 240,0 | 150 x 28 | (42,00. 243,7. 2,6) | 130 x 130 x 12 | (29,76, 240,2, 2,3) | | | | |
| 250,0 | 180 x 22 | (39,60. 252,5. 2,4) | | | | | | |
| 258,0 | 200 x 19 | (38,00. 259,4. 2,4) | | | | | | |
| 274,0 | 230 x 16 | (36,80. 278,3. 2,6) | | | | | | |
| 290,0 | 180 x 25 | (45,00. 292,4. 2,7) | 130 x 130 x 15 | (36,75. 294,1. 2,7) | 150 x 100 x 15 | (35,25. 292,5. 2,6) | | |
| 298,0 | 200 x 22 | (44,00. 305,2. 2,7) | | | | | 230 x 11 | (31,98. 318,2. 3,2) |
| 322,0 | 250 x 16 | (40,00. 324,7. 3,0) | 150 × 150 × 12 | (34,77. 322,8. 2,9) | 200 × 90 × 9 × 14 | (29,66, 324,8, 3,3) | | |
| 330,0 | 180 x 28 230 x 19 | (50,40, 333,6, 3,1) (43,70, 335,0, 2,9) | | | * | , | | |
| 346,0 | 200 x 25 | (50,00. 352,5. 3,0) | | | · · · · · · · · · · · · · · · · · · · | | | |
| 386,0 | 250 x 19 180 x 32 230 x 22 | (47,50, 390,4, 3,3) (57,60, 391,0, 3,5) (50,60, 393,1, 3,3) | | | | | | |
| 394,0 | 280 × 16 200 × 28 | (44,80, 400,7, 3,7) (56,00, 401,3, 3,4) | 150 × 150 × 15 | (42,74, 394,2, 3,3) | | | 250 x 12 | (38,13, 413,6, 3,9) |
| 430,0 | | | 175 x 175 x 12 | (40,52. 438,0. 3,7) | | | | |
| 450,0 | 180 x 36 230 x 25 300 x 16 250 x 22 | (64,80, 451,2, 4,0) (57,50, 452,9, 3,6) (48,00, 455,4, 4,1) (55,00, 457,6, 3,7) | | | | : | | |

| W cm ³ | _ F | at bars | E | luai | angles | Unequal | angles | Bulb flats |
|----------------------|----------------------|---|-------------|------|------------------------|---------------------|-----------------------|--|
| 460,0 | 200 × 32 | (64,00. 468,9. 3,9) | | | | 250 x 90 x10 x 15 | (37,47. 475,4. 4,7) | |
| 480,0 | 280 × 19 | (53,20. 480,9. 4,0) | 150 x 150 x | 19 | (53,38. 487,5. 3,9) | | | |
| 500,0 | 230 × 28 | (64,60, 514,3, 4,0) | | | | | | |
| 515,0 | 250 × 25 | (62,50. 526,5. 4,0) | | | | 250 x 90 x 12 x 16 | (42,95. 527,6. 4,7) | سيوردون والمساورة وا |
| 530,0 | 200 × 36 | (72,00. 539,4. 4,4) | 175 x 175 x | 15 | (50,21. 539,1. 4,2) | | | |
| 545,0 | 300 x 19 | (57,00. 546,1. 4,5) | | | | | | |
| 560,0 | 280 × 22 | (61,60. 562,9. 4,4) | | | | | | |
| 590,0 | 250 × 28 230 × 32 | (70,00. 597,1. 4,4) (73,60. 598,8. 4,5) | | | | | | |
| 635,0 | 300 x 22 280 x 25 | (66,00. 638,6. 4,9) (70,00. 646,6. 4,8) | | | | 300 x 90 x 11 x 16 | (46,22. 661,6. 6,2) | |
| 680,0 | 230 x 36 250 x 32 | (82,80. 686,4. 5,0) (80,00. 693,9. 4,9) | | | | | | |
| 695,0 | | | 200 x 200 x | 15 | (57,75. 705,2. 5,3) | | | |
| 725,0 | 280 × 28 300 × 25 | (78,40, 732,1, 5,1) (75,00, 733,0, 5,3) | | | | 300 x 90 x 13 x 17 | (52,67. 732,8. 6,3) | · . |
| 780,0 | 250 × 36 | (90,00. 794,0. 5,5) | | | | | | |
| 820,0 | 300 × 28 | (84,00. 829,3. 5,7) | | | | | | |
| 840,0 | 280 × 32 | (89,60. 849,1. 5,7) | | | | | | |
| 900,0 | | | 200 x 200 x | 20 | (76,00. 917,3. 6,3) | 350 x 100 x 12 x 17 | (57,74. 933,7. 8,7) | |
| 960,0 | 300 × 32 280 × 36 | (96,00, 960,6, 6,2) (100,80, 969,4, 6,2) | | | | | | |
| 1090,0 | 300 × 26 | (108,00. 1095,5. 6,8) | 200 × 200 × | 25 | (93,75. 1119,4. 7,2) | 400 x 100 x 13 x 18 | (68,59. 1208,0. 11,0) | |
| 1750,0 | | H.117 | 250 × 250 x | 25 | (119,40, 1770,6, 10,4) | | | |
| 2350,0 | | • | 250 × 250 × | 35 | (162,60. 2374,8. 12,7) | | | |

Table 6-A-V
SECTION MODULUS WITH ATTACHED PLATING OF 610 MM
OF STANDARD BS SECTIONS

| W cm ³ | W Flat bars | | Equal ar | gles | Unequal a | angles | Bult | flats |
|----------------------|---------------------------------------|-----------|----------------------------|---|---|--|----------|----------------------|
| 12,0 | | | | | 2 × 1 1/2 × 3/16 | (3,99. 12,1. 0,3) | | |
| 13,0 | · · · · · · · · · · · · · · · · · · · | 1 1/2 × 1 | 1/2 × 5/16 | (5,40. 13,3. 0,5) | | | | |
| 14,5 | | | 1 3/4 × 1/4 × 2 × 3/16 | (5,12. 14,6. 0,4) (4,56. 14,9. 0,3) | | | | |
| 15,5 | | | | | 2 x 1 1/2 x 1/4 | (5,12. 15,5. 0,4) | | |
| 16,0 | | | | | 2 1/2 × 1 1/2 × 3/16 | (4,56. 16,3. 0,3) | | |
| 18,0 | | 1 3/4 × 1 | 3/4 × 5/16 | (6,45. 18,4. 0,5) | | | | |
| 18,5 | | 2 1/4 × 2 | 1/4 × 3/16 | (5,11. 18,8. 0,4) | | | | |
| 19,0 | | | | | 2 × 1 1/2 × 5/16 | (6,45. 19,4. 0,5) | | |
| 19,5 | | | 2 x 2 x 1/4 | (6,08. 19,7. 0,4) | 2 1/2 × 2 × 3/16 | (5,11. 19,7. 0,4) | | |
| 21,0 | | | | | 2 1/2 × 1 1/2 × 1/4 | (6,08. 21,5. 0,4) | | |
| 23,0 | | | × 2 × 5/16 | (7,39. 23,9. 0,5) | | | · . | |
| 24,0 | | 2 1/4 × | 2 1/4 × 1/4 | (6,82. 24,9. 0,5) | | | | |
| 25,0 | | | | | 3 × 2 × 3/16 | (5,88. 25,8. 0,4) | | |
| 26,0 | | | | | 2 1/2 × 1 1/2 × 5/16 2 1/2 × 2 × 1/4 | (7,39. 26,1. 0,5) (6,82. 26,1. 0,5) | | |
| 28,0 | | | 2 × 2 × 3/8 | (8,72. 28,2. 0,7) | | | | |
| 30,0 | | | 1/4 × 5/16 2 1/2 × 1/4 | (8,35. 30,3. 0,6) (7,59. 30,6. 0,5) | | | 3 | |
| 31,0 | | | | | 2 1/2 × 2 × 5/16 | (8,35. 31,8. 0,6) | | |
| 33,0 | | | | | 3 x 2 x 1/4 | (7,59. 33,2. 0,5) | | |
| 35,0 | | 2 1/4 × | 2 1/4 × 3/8 | (9,86. 35,7. 0,7) | | | | |
| 37,0 | | | | | 2 1/2 × 2 × 3/8 | (9,86. 37,4. 0,7) | | |
| 38,0 | | 2 1/2 x 3 | 1/2 × 5/16 | (9,48. 38,1. 0,7) | 3 × 2 1/2 × 1/4 | (8,36. 38,8. 0,6) | | |
| 41,0 | | | | | 3 × 2 × 5/16 | (9,48. 41,1. 0,6) | 4 × 0,25 | (8,58. 41,2. 0,6) |
| 44,0 | | | 3 × 3 × 1/4 2 1/2 × 3/8 | (9,12, 44,2, 0,6) (11,18, 44,8, 0,8) | | | | |
| 46,0 | | | | | | | 4 × 0,30 | (9,87. 46,1. 0,7) |
| 47,0 | | | | | 3 1/2 × 2 1/2 × 1/4 | (9,12. 47,3. 0,7) | | |
| 48,0 | | | | | 3 × 2 1/2 × 5/16 3 × 2 × 3/8 | (10,43, 48,0, 0,7) (11,18, 48,3, 0,8) | | |
| 50,0 | | 2 1/2 x i | 1/2 × 7/16 | (12,89. 51,5. 0,9) | | | | |
| 54,0 | | 1 | × 3 × 5/16 | (11,37. 54,9. 0,8) | 3 1/2 × 3 × 1/4 3 × 2 × 7/16 | (10,05. 54,7. 0,7) (12,89. 55,5. 0,9) | 4 × 0,38 | - (11,94, 54,7, 0,8) |
| 56,0 | | 2 1/2 x | 2 1/2 × 1/2 | (14,41. 57,7. 1,1) | 3 × 2 1/2 × 3/8 4 × 2 1/2 × 1/4 | (12,33. 56,5. 0,9) (10,05. 57,4. 0,8) | | |
| 58,0 | | | | | 3 1/2 × 2 1/2 × 5/16 | (11,37. 58,6. 0,8) | | |
| 60,0 | | 3 1/2 x | 3 1/2 × 1/4 | (10,81. 61,1. 0,8) | | | | |

| cm ³ | Flat bars | Equal a | gles | Unequal | angles | Bulb | flats |
|-----------------|-------------|--------------------------------------|--|---|---|------------|---------------------|
| 64,0 | | 3 × 3 × 3/8 | (13,47. 64,5. 0,9) | 3 × 2 1/2 × 7/16 | (14,23. 65,1. 1,0) | | |
| 66,0 | | | | 3 1/2 × 3 × 5/16 | (12,35. 66,7. 0,9) | | |
| 68,0 | | | | 3 1/2 × 2 1/2 × 3/8 | (13,47. 69,1. 0,9) | | |
| 70,0 | | | * | 4 × 2 1/2 × 5/16 | (12,35. 70,1. 0,9) | | |
| 74,0 | | 3 × 3 × 7/16 3 1/2 × 3 1/2 × 5/16 | (15,55. 74,2. 1,1) (13,47. 75,6. 1,0) | | | 5 × 0,28 | (12,26. 74,4. 1,0) |
| 78,0 | | | | 3 1/2 × 2 1/2 × 7/16 3 1/2 × 3 × 3/8 | (15,55. 79,4. 1,1) (14,79. 79,5. 1,0) | | |
| 80,0 | | | | 4 × 3 × 5/16 | (13,48. 80,2. 1,0) | | |
| 82,0 | | 3 x 3 x 1/2 | (17,64. 83,9. 1,2) | 4 × 2 1/2 × 3/8 | (14,79. 83,3. 1,0) | 5 × 0,33 | (13,87. 82,7. 1,0) |
| 88,0 | | 3 1/2 × 3 1/2 × 3/8 | (15,92. 88,9. 1,1) | 4 × 3 1/2 × 5/16 | (14,41. 89,4. 1,1) | | |
| 90,0 | | | " | 3 1/2 × 3 × 7/16 | (17,07. 91,5. 1,2) | | |
| 92,0 | | 3 x 3 x 9/16 | (19,74. 93,8. 1,4) | | | | |
| 94,0 | | | | 4 × 3 × 3/8 4 × 2 1/2 × 7/16 | (15,92. 94,3. 1,1) (17,07. 95,9. 1,2) | | |
| 96,0 | | | | | | 6 × 0,28 | (14,07. 97,6. 1,2) |
| 98,0 | | 4 × 4 × 5/16 | (15,37. 98,5. 1,2) | | | | |
| 100,0 | | 3 1/2 × 3 1/2 × 7/16 | (18,40. 102,3. 1,3) | | | | |
| 103,0 | | | | 3 1/2 × 3 × 1/2 | (19,36. 103,1. 1,3) | 5 × 0,48 | (18,71. 105,9. 1,2) |
| 106,0 | | | | 4 × 3 1/2 × 3/8 5 × 3 × 5/16 4 × 3 × 7/16 | (17,27. 106,3. 1,2) (15,37. 107,5. 1,2) (18,40. 108,5. 1,3) | 6 × 0,33 | (16,01. 108,2. 1,3) |
| 112,0 | | | | 3 1/2 × 3 × 9/16 | (21,44. 114,0. 1,5) | . , ··· ·· | |
| 115,0 | | 3 1/2 × 3 1/2 × 1/2 4 × 4 × 3/8 | (20,87. 115,7. 1,4) (18,39. 117,1. 1,3) | | - | | |
| 118,0 | | | | 5 x 3 1/2 x 5/16 | (16,48. 120,1. 1,3) | | |
| 121,0 | | | | 4 × 3 1/2 × 7/16 4 × 3 × 1/2 | (19,90. 122,0. 1,4) (20,87. 122,6. 1,4) | | - |
| 127,0 | | 3 1/2 × 3 1/2 × 9/16 | (23,32. 128,8. 1,6) | 5 × 3 × 3/8 | (18,39. 127,8. 1,4) | | |
| 133,0 | | 4 × 4 × 7/16 | (21,27. 134,7. 1,5) | | | | |
| 136,0 | | | | 4 × 3 × 9/16 4 × 3 1/2 × 1/2 6 × 3 × 5/16 | (23,32, 136,6, 1,6) (22,57, 137,8, 1,6) (17,44, 138,7, 1,5) | | |
| 139,0 | | 3 1/2 x 3 1/2 x 5/8 | (25,61. 141,0. 1,8) | 5 × 3 1/2 × 3/8 | (19,56, 141,8, 1,5) | 6 × 0,48 | (21,81. 140,8. 1,5) |
| 145,0 | | | | 5 x 3 x 7/16 | (21,27. 147,0. 1,5) | | <u> </u> |
| 150,0 | | 4 × 4 × 1/2 | (24,09. 152,0. 1,7) | 4 × 3 1/2 × 9/16 6 × 3 1/2 × 5/16 | (25,06. 152,4. 1,7) (18,40. 152,7. 1,7) | | |
| 155,0 | | | | | | 7 × 0,33 | (19,33. 155,0. 1,8) |
| 160,0 | | | | 5 × 3 1/2 × 7/16 | (22,79. 164,3. 1,7) | | |
| 165,0 | | 4 × 4 × 9/16 | (26,96. 169,5. 1,9) | 6 × 3 × 3/8 5 × 3 × 1/2 4 × 3 1/2 × 5/8 | (20,87. 165,0. 1,7) (24,09. 165,9. 1,7) (27,71. 168,0. 1,9) | 7 × 0,38 | (21,59. 169,2. 1,8) |

| W cm ³ | Flat bars | Equal a | ngles | Unequal | angles | Bulb | flats |
|----------------------|-----------|-----------------------------|--|--|--|-----------|---------------------|
| 180,0 | | 5 × 5 × 3/8 | (23,31. 184,9. 1,9) | 6 × 3 1/2 × 3/8 | (21,99. 181,5. 1,8) | | |
| 185,0 | | 4 × 4 × 5/8 | (29,78. 186,6. 2,1) | 5 × 3 × 9/16 5 × 3 1/2 × 1/2 6 × 3 × 7/16 | (26,96, 185,0, 1,8) (25,81, 185,4, 1,8) (24,10, 189,5, 1,8) | | |
| 195,0 | | | | 6 x 4 x 3/8 | (23,31. 199,1. 2,0) | | |
| 200,0 | | 4 × 4 × 11/16 | (32,45. 202,7. 2,3) | | | | |
| 205,0 | | | | 5 x 3 1/2 x 9/16 | (28,84. 206,0. 2,0) | | |
| 210,0 | | 5 × 5 × 7/16 | (26,93. 212,6. 2,1) | 6 × 3 1/2 × 7/16 6 × 3 × 1/2 | (25,63. 210,1. 2,0) (27,33. 214,1. 2,0) | 7 x 0,53 | (28,36. 212,9. 2,0) |
| 215,0 | | 4 × 4 × 3/4 | (35, 12. 218,9. 2,5) | | | | |
| 220,0 | | | | | | 8 × 0,35 | (23,89. 220,3. 2,4) |
| 225,0 | | | | 7 × 3 1/2 × 3/8 5 × 3 1/2 × 5/8 6 × 4 × 7/16 | (24,48. 225,2. 2,2) (31,67. 225,9. 2,2) (26,93. 229,2. 2,2) | | |
| 235,0 | | | | 6 × 3 1/2 × 1/2 6 × 3 × 9/16 | (29,00. 236,9. 2,2) (30,56. 238,2. 2,2) | 8 × 0,40 | (26,47. 238,8. 2,5) |
| 240,0 | | 5 x 5 x 1/2 | (30,56. 240,2. 2,3) | | | | |
| 258,0 | | | | 6 x 4 x 1/2 7 x 3 1/2 x 7/16 6 x 3 x 5/8 6 x 3 1/2 x 9/16 | (30,56, 259,0, 2,3) (28,48, 260,6, 2,4) (33,78, 262,6, 2,3) (32,43, 264,0, 2,4) | | |
| 266,0 | | 6 × 6 × 3/8 5 × 5 × 9/16 | (28,06. 266,5. 2,6) (34,14. 267,2. 2,5) | | | | |
| 282,0 | | | | 6 × 4 × 9/16 6 × 3 1/2 × 5/8 | (34,14, 287,9, 2,5) (35,66, 289,3, 2,5) | | |
| 290,0 | | 5 × 5 × 5/8 | (37,78. 294,7. 2,7) | 7 × 3 1/2 × 1/2 | (32,24. 293,6. 2,6) | 8 × 0,55 | (34,21, 294,4, 2,7 |
| 298,0 | | | | | | 9 × 0,38 | (29,38. 304,0. 3,2 |
| 306,0 | | 6 × 6 × 7/16 | (32,61. 307,9. 2,8) | | | | |
| 314,0 | | ∜ × 5 × 11/16 | (41,37. 321,6. 2,9) | 6 × 4 × 5/8 | (37,78. 317,6. 2,7) | · | |
| 322,0 | | | | 7 x 3 1/2 x 9/16 | (36,02. 326,4. 2,8) | 9 × 0,43 | (32,28. 326,5. 3,3 |
| 346,0 | | 5 × 5 × 3/4 6 × 6 × 1/2 | (44,80. 347,0. 3,1) (37,03. 348,2. 3,0) | 6 x 4 x 11/16 | (41,37. 346,6. 2,9) | | |
| 354,0 | | | | 7 × 3 1/2 × 5/8 | (39,87. 360,3. 3,0) | | |
| 370,0 | | | | 6 × 4 × 3/4 | (44,80. 374,2. 3,1) | | |
| 378,0 | | | | 8 × 4 × 1/2 | (37,03. 383,9. 3,3) | | |
| 386,0 | | 6 × 6 × 9/16 | (41,55. 388,5. 3,3) | · | | | |
| 394,0 | | | | | | 9 × 0,58 | (40,99. 396,2. 3,4) |
| 400,0 | | | | | | 10 × 0,40 | (34,89. 402,6. 4,2) |
| 420,0 | <u>,</u> | 6 × 6 × 5/8 | (45,95. 428,0. 3,5) | 8 × 4 × 9/16 | (41,55. 428,8. 3,5) | | |
| 430,0 | | | | , | | 10 × 0,45 | (38,12. 430,1. 4,2) |
| 450,0 | | | | 9 × 4 × 1/2 | (40,20. 452,4. 3,9) | | |
| 460,0 | | ∮ × 6 × 11/16 | (50,09. 465,5. 3,7) | | | | |

| W cm³ | Flat bars | Equal a | ngles | Unequal | angles | Bulb | flats |
|----------|-------------|----------------|---|--|---|------------------------|--|
| 470,0 | | | | 8 × 4 × 5/8 | (45,95. 472,8. 3,7) | | |
| 500,0 | | 6 x 6 x 3, 4 | (54,45. 503,5. 4,0) | 8 × 6 × 1/2 9 × 4 × 9/16 8 × 4 × 11/16 | (43,44, 502,6, 4,1) (45,13, 505,8, 4,1) (50,09, 513,1, 3,9) | 10 × 0,60 | (47,80. 514,6. 4,3) |
| 515,0 | | | | | | 11 x 0,43 | (41,46, 524,0, 5,3) |
| 530,0 | | 6 × 6 × 13/' 6 | (58,63. 541,2. 4,2) | | | | |
| 545,0 | | | | 8 × 4 × 3/4 9 × 4 × 5/8 | (54,45, 556,2, 4,1) (49,93, 557,4, 4,3) | 11 × 0,48 | (45,01. 557,4. 5,2) |
| 560,0 | | | | 8 × 6 × 9/16 | (48,78. 561,8. 4,4) | | |
| 575,0 | | 6 × 6 × 7′8 | (62,83. 578,1. 4,5) | | | | |
| 605,0 | | | | 9 x 4 x 11/16 8 x 6 x 5/8 | (54,61, 607,1, 4,5) (53,91, 618,8, 4,6) | | |
| 650,0 | | | | 9 × 4 × 3/4 | (59,17. 655,8. 4,7) | 11 × 0,63 12 × 0,45 | (55,65. 658,5. 5,3) (47,86. 660,5. 6,6) |
| 665,0 | | | | 8 x 6 x 11/16 | (58,99. 674,9. 4,9) | | |
| 695,0 | | | | 9 x 4 x 13/16 | (63,97. 706,4. 4,9) | 12 × 0,50 | (51,73. 699,6. 6,5) |
| 725,0 | | | | 8 × 6 × 3/4 | (64,10. 731,0. 5,1) | | |
| 740,0 | 4// 4// 5// | | | 9 × 4 × 7/8 | (68,49. 754,4. 5,1) | | |
| 760,0 | | 8 x 8 x 1 /8 | (62,02. 765,2. 5,6) | | | | |
| 780,0 | | | | 8 × 6 × 13/16 | (69,07. 785,3. 5,4) | 12 3/4 × 0,47 | (53,35. 787,2. 7,6) |
| 800,0 | | | | | | 12 × 0,65 | (63,34. 819,1. 6,4) |
| 820,0 | | 8×8×11/6 | (67,89. 834,8. 5,9) | 8 × 6 × 7/8 | (74,00. 838,8. 5,6) | 12 3/4 × 0,52 | (57,48. 831,2. 7,5) |
| 900,0 | | 8 x 8 x 1/4 | (73,82. 904,6. 6,2) | | | 13 1/2 × 0,49 | (59,18. 915,3. 8,8) |
| 940,0 | | | | | | 12 3/4 × 0,67 | (69,81. 959,9. 7,5) |
| 960,0 | | 8 x 8 x 13/16 | (79,69. 973,3. 6,6) | | | 13 1/2 × 0,54 | (63,54. 964,6. 8,6) |
| 1030,0 | | 8 × 8 × 1/8 | (85,42. 1039,7. 6,9) | | | | |
| 1090,0 | | 8 × 8 × 15/16 | (91,09. 1105,2. 7,2) | | | 13 1/2 × 0,69 | (76,60. 1112,7. 8,5) |
| 1150,0 | | 8×8 1 | (96,81. 1171,0. 7,5) | | | | |
| 1210,0 | | | | | | 15 × 0,53 | (71,77. 1230,0. 11,2) |
| 1270,0 | | | | | | 15 x 0,58 | (76,61. 1288,5. 11,1) |
| 1450,0 | | | | | | 15 x 0,73 | (91,13, 1469,4, 10,8) |
| 1700,0 | | | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | 17 x 0,58 | (89,91. 1735,3. 15,3) |
| 1800,0 | | | | | | 17 x 0,63 | (95,40. 1811,6. 15,0) |
| 2000,0 | | | | | | 17 × 0,78 | (111,85. 2039,6. 14,5) |