

附录 I 型钢理论要素表

表 I.1.1 ~ 表 I.1.4 球扁钢理论要素表

表 I.2.1 ~ 表 I.2.4 不等边角钢理论要素表


球扁钢理

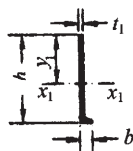


| 球扁钢号 | 单 型 材 要 素 | | | | | |
|------|------------------------|--------------------|--------------------------|--|---|---|
| | 型 材 高 度 h (mm) | 球 宽 b (mm) | 型 材 厚 度 t_1 (mm) | 型 材 剖 面 积 A_1 (cm ²) | 型材自身惯性矩 I_{x1} (cm ⁴) | 型材自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 5 | 50 | 16 | 4.0 | 2.870 | 6.96 | 3.13 |
| 6 | 60 | 19 | 5.0 | 4.270 | 15.00 | 3.74 |
| 7 | 70 | 21 | 5.0 | 5.060 | 24.10 | 4.40 |
| 8 | 80 | 22 | 5.0 | 5.840 | 36.23 | 5.07 |
| 9 | 90 | 24 | 5.5 | 7.030 | 55.60 | 5.65 |
| 10 | 100 | 26 | 6.0 | 8.630 | 85.22 | 6.29 |
| 12 | 120 | 30 | 6.5 | 11.150 | 158.00 | 7.55 |
| 14a | 140 | 33 | 7.0 | 14.050 | 274.00 | 8.82 |
| 14b | 140 | 35 | 9.0 | 16.850 | 321.00 | 8.55 |
| 16a | 160 | 36 | 8.0 | 17.960 | 468.00 | 9.95 |
| 16b | 160 | 38 | 10.0 | 21.160 | 527.00 | 9.75 |
| 18a | 180 | 40 | 9.0 | 22.200 | 724.00 | 11.15 |
| 18b | 180 | 42 | 11.0 | 25.800 | 837.00 | 10.81 |
| 20a | 200 | 44 | 10.0 | 27.360 | 1078.00 | 12.40 |
| 20b | 200 | 46 | 12.0 | 31.360 | 1265.00 | 12.06 |
| 22a | 220 | 48 | 11.0 | 32.820 | 1611.00 | 13.50 |
| 22b | 220 | 50 | 13.0 | 37.220 | 1795.00 | 13.20 |
| 24a | 240 | 52 | 12.0 | 38.750 | 2232.00 | 14.70 |
| 24b | 220 | 50 | 14.0 | 43.550 | 2542.00 | 13.20 |
| 27a | 270 | 55 | 12.0 | 43.820 | 3265.00 | 16.60 |
| 27b | 270 | 57 | 14.0 | 49.220 | 3515.00 | 16.30 |

论要素表


表 I.1.1

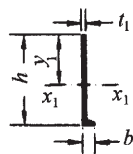
| <div style="text-align: center;">  </div> | | | | |
|--|--|---|--|--------------------------------|
| 连带板的型材要素 带板宽度 $l = 500\text{mm}$ | | | | |
| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
| 17.87/27.87 | 32.990/36.892 | 7.136/7.526 | 1.359/1.151 | 3/5 |
| 19.27/29.27 | 65.409/73.583 | 12.369/12.982 | 1.842/1.586 | 3/5 |
| 20.06/35.06 | 102.543/102.644 | 17.084/18.219 | 2.261/1.855 | 3/6 |
| 20.84/35.84 | 150.880/178.096 | 22.563/23.986 | 2.691/2.229 | 3/6 |
| 27.03/47.03 | 233.879/276.586 | 30.459/32.556 | 2.942/2.425 | 4/8 |
| 28.63/48.63 | 339.414/405.054 | 41.127/43.967 | 3.443/2.886 | 4/8 |
| 31.15/51.15 | 588.249/711.225 | 62.408/66.675 | 4.346/3.729 | 4/8 |
| 34.05/54.0 | 945.699/1160.032 | 90.255/96.643 | 5.270/4.633 | 4/8 |
| 36.85/56.85 | 1021.445/1272.809 | 100.152/108.349 | 5.265/4.732 | 4/8 |
| 37.96/57.96 | 1443.127/1797.890 | 126.615/136.278 | 6.166/5.570 | 4/8 |
| 41.16/61.16 | 1545.193/1954.873 | 139.398/151.678 | 6.127/5.654 | 4/8 |
| 42.20/62.20 | 2079.650/2630.658 | 170.057/184.250 | 7.020/6.503 | 4/8 |
| 45.80/65.80 | 2202.978/2810.035 | 183.614/200.651 | 6.935/6.535 | 4/8 |
| 47.36/77.36 | 2912.588/4024.887 | 225.416/252.540 | 7.842/7.213 | 4/10 |
| 51.36/81.36 | 3100.799/4309.452 | 243.886/275.210 | 7.770/7.278 | 4/10 |
| 52.82/82.82 | 3943.711/5498.721 | 288.127/324.369 | 8.641/8.148 | 4/10 |
| 57.22/87.22 | 4131.241/5803.880 | 306.388/348.504 | 8.497/8.157 | 4/10 |
| 58.75/88.75 | 5160.909/7279.998 | 359.086/407.538 | 9.373/9.057 | 4/10 |
| 57.22/87.22 | 4131.241/5803.880 | 306.388/348.504 | 8.497/8.157 | 4/10 |
| 63.82/93.82 | 7141.091/10097.885 | 455.868/517.490 | 10.578/10.375 | 4/10 |
| 69.22/99.22 | 7387.022/10519.697 | 477.586/548.872 | 10.330/10.297 | 4/10 |



| 球扁钢号 | 单 型 材 要 素 | | | | | |
|------|------------------------|--------------------|--------------------------|--|---|---|
| | 型 材 高 度 h (mm) | 球 宽 b (mm) | 型 材 厚 度 t_1 (mm) | 型 材 剖 面 积 A_1 (cm ²) | 型材自身惯性矩 I_{x1} (cm ⁴) | 型材自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 5 | 50 | 16 | 4.0 | 2.870 | 6.96 | 3.13 |
| 6 | 60 | 19 | 5.0 | 4.270 | 15.00 | 3.74 |
| 7 | 70 | 21 | 5.0 | 5.060 | 24.10 | 4.40 |
| 8 | 80 | 22 | 5.0 | 5.840 | 36.23 | 5.07 |
| 9 | 90 | 24 | 5.5 | 7.030 | 55.60 | 5.65 |
| 10 | 100 | 26 | 6.0 | 8.630 | 85.22 | 6.29 |
| 12 | 120 | 30 | 6.5 | 11.150 | 158.00 | 7.55 |
| 14a | 140 | 33 | 7.0 | 14.050 | 274.00 | 8.82 |
| 14b | 140 | 35 | 9.0 | 16.850 | 321.00 | 8.55 |
| 16a | 160 | 36 | 8.0 | 17.960 | 468.00 | 9.95 |
| 16b | 160 | 38 | 10.0 | 21.160 | 527.00 | 9.75 |
| 18a | 180 | 40 | 9.0 | 22.200 | 724.00 | 11.15 |
| 18b | 180 | 42 | 11.0 | 25.800 | 837.00 | 10.81 |
| 20a | 200 | 44 | 10.0 | 27.360 | 1078.00 | 12.40 |
| 20b | 200 | 46 | 12.0 | 31.360 | 1265.00 | 12.06 |
| 22a | 220 | 48 | 11.0 | 32.820 | 1611.00 | 13.50 |
| 22b | 220 | 50 | 13.0 | 37.220 | 1795.00 | 13.20 |
| 24a | 240 | 52 | 12.0 | 38.750 | 2232.00 | 14.70 |
| 24b | 240 | 54 | 14.0 | 43.550 | 2542.00 | 14.35 |
| 27a | 270 | 55 | 12.0 | 43.820 | 3265.00 | 16.60 |
| 27b | 270 | 57 | 14.0 | 49.220 | 3515.00 | 16.30 |


表 I.1.2

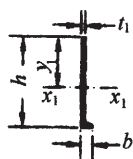
|  | | | | |
|---|--|---|--|--------------------------------|
| 连带板的型材要素 带板宽度 $l = 550\text{mm}$ | | | | |
| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
| 24.87/46.87 | 35.406/42.880 | 7.352/8.272 | 1.193/0.956 | 4/8 |
| 26.27/48.27 | 70.805/84.059 | 12.736/13.931 | 1.642/1.320 | 4/8 |
| 27.06/49.06 | 111.442/131.005 | 17.578/18.973 | 2.029/1.634 | 4/8 |
| 27.84/49.84 | 164.694/192.840 | 23.214/24.854 | 2.432/1.967 | 4/8 |
| 29.03/62.03 | 238.217/295.941 | 30.606/33.618 | 2.865/2.184 | 4/10 |
| 30.63/63.63 | 346.595/433.718 | 41.402/45.278 | 3.364/2.611 | 4/10 |
| 33.15/66.15 | 602.738/763.341 | 62.829/68.503 | 4.264/3.397 | 4/10 |
| 36.05/69.05 | 971.894/1250.675 | 90.962/99.232 | 5.192/4.256 | 4/10 |
| 38.85/71.85 | 1051.840/1381.994 | 101.090/111.653 | 5.203/4.386 | 4/10 |
| 50.96/83.96 | 1690.898/2047.306 | 133.272/142.737 | 5.760/4.983 | 6/12 |
| 54.16/87.16 | 1830.206/2251.338 | 147.913/159.813 | 5.813/5.082 | 6/12 |
| 55.20/88.20 | 2464.948/3025.448 | 179.987/193.412 | 6.682/5.857 | 6/12 |
| 58.80/91.80 | 2625.236/3259.782 | 195.545/211.767 | 6.682/5.959 | 6/12 |
| 60.36/93.36 | 3491.606/4354.701 | 240.083/259.359 | 7.606/6.830 | 6/12 |
| 64.36/97.36 | 3722.457/4680.192 | 260.722/283.267 | 7.605/6.933 | 6/12 |
| 65.82/98.82 | 4745.657/5976.806 | 307.782/333.581 | 8.491/7.777 | 6/12 |
| 70.22/103.22 | 4983.834/6335.178 | 329.089/359.466 | 8.425/7.834 | 6/12 |
| 71.75/104.75 | 6243.007/7955.292 | 385.396/420.024 | 9.328/8.715 | 6/12 |
| 76.55/109.55 | 6572.314/8414.030 | 411.658/450.989 | 9.266/8.764 | 6/12 |
| 76.82/109.82 | 8642.314/11063.894 | 489.377/533.536 | 10.607/10.037 | 6/12 |
| 82.22/115.22 | 8959.691/11575.426 | 516.034/567.963 | 10.439/10.023 | 6/12 |



| 球扁钢号 | 单 型 材 要 素 | | | | | |
|------|------------------------|--------------------|--------------------------|--|---|---|
| | 型 材 高 度 h (mm) | 球 宽 b (mm) | 型 材 厚 度 t_1 (mm) | 型 材 剖 面 积 A_1 (cm ²) | 型材自身惯性矩 I_{x1} (cm ⁴) | 型材自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 5 | 50 | 16 | 4.0 | 2.870 | 6.96 | 3.13 |
| 6 | 60 | 19 | 5.0 | 4.270 | 15.00 | 3.74 |
| 7 | 70 | 21 | 5.0 | 5.060 | 24.10 | 4.40 |
| 8 | 80 | 22 | 5.0 | 5.840 | 36.23 | 5.07 |
| 9 | 90 | 24 | 5.5 | 7.030 | 55.60 | 5.65 |
| 10 | 100 | 26 | 6.0 | 8.630 | 85.22 | 6.29 |
| 12 | 120 | 30 | 6.5 | 11.150 | 158.00 | 7.55 |
| 14a | 140 | 33 | 7.0 | 14.050 | 274.00 | 8.82 |
| 14b | 140 | 35 | 9.0 | 16.850 | 321.00 | 8.55 |
| 16a | 160 | 36 | 8.0 | 17.960 | 468.00 | 9.95 |
| 16b | 160 | 38 | 10.0 | 21.160 | 527.00 | 9.75 |
| 18a | 180 | 40 | 9.0 | 22.200 | 724.00 | 11.15 |
| 18b | 180 | 42 | 11.0 | 25.800 | 837.00 | 10.81 |
| 20a | 200 | 44 | 10.0 | 27.360 | 1078.00 | 12.40 |
| 20b | 200 | 46 | 12.0 | 31.360 | 1265.00 | 12.06 |
| 22a | 220 | 48 | 11.0 | 32.820 | 1600.00 | 13.50 |
| 22b | 220 | 50 | 13.0 | 37.220 | 1795.00 | 13.20 |
| 24a | 240 | 52 | 12.0 | 38.750 | 2232.00 | 14.70 |
| 24b | 240 | 54 | 14.0 | 43.550 | 2542.00 | 14.35 |
| 27a | 270 | 55 | 12.0 | 43.820 | 3265.00 | 16.60 |
| 27b | 270 | 57 | 14.0 | 49.220 | 3515.00 | 16.30 |


表 I.1.3

| <div style="text-align: center;">  </div> | | | | |
|--|--|---|--|--------------------------------|
| 连带板的型材要素 带板宽度 $l = 600\text{mm}$ | | | | |
| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
| 32.87/50.87 | 37510/43.265 | 7.570/8.319 | 1.068/0.922 | 5/8 |
| 34.27/52.27 | 75.134/84.767 | 13.060/13.984 | 1.481/1.273 | 5/8 |
| 35.06/53.06 | 118.334/132.125 | 17.988/19.032 | 1.837/1.578 | 5/8 |
| 35.84/65.84 | 175.208/206.344 | 23.731/25.774 | 2.211/1.770 | 5/10 |
| 37.03/67.03 | 254.481/298.606 | 31.302/33.722 | 2.622/2.111 | 5/10 |
| 38.63/68.63 | 372.502/438.066 | 42.383/45.413 | 3.105/2.526 | 5/10 |
| 47.15/83.15 | 683.688/807.939 | 65.465/70.212 | 3.808/3.117 | 6/12 |
| 50.05/86.05 | 1115.632/1325.821 | 95.030/101.503 | 4.721/3.925 | 5/12 |
| 52.85/88.85 | 1221.047/1472.827 | 106.378/114.468 | 4.807/4.071 | 6/12 |
| 53.96/89.96 | 1727.961/2076.545 | 134.071/143.272 | 5.659/4.804 | 6/12 |
| 57.16/93.16 | 1874.120/2287.500 | 148.981/160.536 | 5.726/4.955 | 6/12 |
| 58.20/106.20 | 2525.374/3203.444 | 181.258/197.465 | 6.587/5.492 | 6/14 |
| 61.80/109.80 | 2693.157/3465.573 | 197.130/216.660 | 6.601/5.618 | 6/14 |
| 63.36/111.36 | 3586.406/4633.395 | 242.065/265.064 | 7.524/6.450 | 6/14 |
| 67.36/115.36 | 3826.513/4996.652 | 263.068/289.976 | 7.537/6.581 | 6/14 |
| 68.82/116.82 | 4881.604/6383.300 | 310.558/341.160 | 8.422/7.392 | 6/14 |
| 73.22/121.22 | 5131.240/6791.950 | 332.387/368.485 | 8.371/7.485 | 6/14 |
| 86.75/134.75 | 7123.305/8884.985 | 403.471/436.766 | 9.062/8.120 | 8/16 |
| 91.55/139.55 | 7512.257/9438.780 | 432.149/470.244 | 9.085/8.224 | 8/16 |
| 91.82/139.82 | 9887.807/12394.524 | 512.668/554.645 | 10.377/9.415 | 8/16 |
| 97.22/145.22 | 10294.914/13049.819 | 543.404/593.060 | 10.290/9.480 | 8/16 |

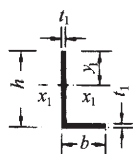


| 球扁钢号 | 单 型 材 要 素 | | | | | |
|------|---------------------|-----------------|-----------------------|---------------------------------------|--|---------------------------------------|
| | 型 材 高 度 h (mm) | 球 宽 b (mm) | 型 材 厚 度 t_1 (mm) | 型 材 剖 面 积 A_1 (cm ²) | 型材自身惯性矩 I_{x1} (cm ⁴) | 型材自身中和轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 5 | 50 | 16 | 4.0 | 2.870 | 6.96 | 3.13 |
| 6 | 60 | 19 | 5.0 | 4.270 | 15.00 | 3.74 |
| 7 | 70 | 21 | 5.0 | 5.060 | 24.10 | 4.40 |
| 8 | 80 | 22 | 5.0 | 5.840 | 36.23 | 5.07 |
| 9 | 90 | 24 | 5.5 | 7.030 | 55.60 | 5.65 |
| 10 | 100 | 26 | 6.0 | 8.630 | 85.22 | 6.29 |
| 12 | 120 | 30 | 6.5 | 11.150 | 158.00 | 7.55 |
| 14a | 140 | 33 | 7.0 | 14.050 | 274.00 | 8.82 |
| 14b | 140 | 35 | 9.0 | 16.850 | 321.00 | 8.55 |
| 16a | 160 | 36 | 8.0 | 17.960 | 468.00 | 9.95 |
| 16b | 160 | 38 | 10.0 | 21.160 | 527.00 | 9.75 |
| 18a | 180 | 40 | 9.0 | 22.200 | 724.00 | 11.15 |
| 18b | 180 | 42 | 11.0 | 25.800 | 837.00 | 10.81 |
| 20a | 200 | 44 | 10.0 | 27.360 | 1078.00 | 12.40 |
| 20b | 200 | 46 | 12.0 | 31.360 | 1265.00 | 12.06 |
| 22a | 220 | 48 | 11.0 | 32.820 | 1611.00 | 13.50 |
| 22b | 220 | 50 | 13.0 | 37.220 | 1765.00 | 13.20 |
| 24a | 240 | 52 | 12.0 | 38.750 | 2232.00 | 14.70 |
| 24b | 240 | 54 | 14.0 | 43.550 | 2542.00 | 14.35 |
| 27a | 270 | 55 | 12.0 | 43.820 | 3265.00 | 16.60 |
| 27b | 270 | 57 | 14.0 | 49.220 | 3515.00 | 16.30 |

表 I.1.4

|  | | | | |
|---|--|---|--|--------------------------------|
| 连带板的型材要素 带板宽度 $l = 650\text{mm}$ | | | | |
| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
| 41.87/80.87 | 39.581/54.833 | 7.815/10.029 | 0.972/0.823 | 6/12 |
| 43.27/82.27 | 78.986/100.614 | 13.384/15.783 | 1.351/1.106 | 6/12 |
| 44.06/83.06 | 124.209/152.254 | 18.373/20.870 | 1.679/1.354 | 6/12 |
| 44.84/83.84 | 183.874/220.262 | 24.192/26.845 | 2.025/1.621 | 6/12 |
| 46.03/85.03 | 267.639/316.866 | 31.895/34.885 | 2.411/1.930 | 6/12 |
| 47.63/99.63 | 393.268/458.221 | 43.188/48.068 | 2.873/2.207 | 6/14 |
| 50.15/102.15 | 693.498/848.924 | 65.705/71.946 | 3.719/2.883 | 6/14 |
| 53.05/105.05 | 1134.273/1391.914 | 95.440/103.667 | 4.624/3.640 | 6/14 |
| 55.85/107.85 | 1243.739/1552.342 | 106.943/117.115 | 4.719/3.794 | 6/14 |
| 56.96/108.96 | 1761.129/2184.159 | 134.766/146.151 | 5.560/4.477 | 6/14 |
| 60.16/112.16 | 1913.664/2416.649 | 149.913/164.080 | 5.640/4.642 | 6/14 |
| 74.20/126.20 | 2802.243/3358.726 | 187.512/201.147 | 6.145/5.159 | 8/16 |
| 77.80/129.80 | 3006.752/3645.582 | 204.784/221.047 | 6.217/5.300 | 8/16 |
| 79.36/131.36 | 4018.002/4874.467 | 251.328/270.044 | 7.115/6.092 | 8/16 |
| 83.36/135.36 | 4304.864/5271.936 | 273.976/295.834 | 7.186/6.241 | 8/16 |
| 84.82/136.82 | 5501.299/6734.646 | 323.196/347.689 | 8.053/7.016 | 8/16 |
| 89.22/141.22 | 5810.091/7189.602 | 347.359/376.219 | 8.070/7.135 | 8/16 |
| 90.75/142.75 | 7297.475/9036.726 | 406.492/438.836 | 8.967/7.956 | 8/16 |
| 95.55/147.55 | 7701.153/9609.617 | 435.654/472.718 | 8.978/8.070 | 8/16 |
| 95.82/147.82 | 10140.315/12621.256 | 516.687/557.429 | 10.287/9.240 | 8/16 |
| 101.22/153.22 | 10569.761/13306.223 | 548.243/596.509 | 10.219/9.319 | 8/16 |

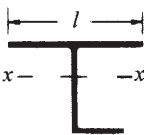
不等边角钢

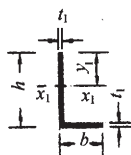


| 角 钢 号 | 单 型 材 要 素 | | | | | |
|-------------|---------------------|---------------------|-----------------------|--|---|---|
| | 角边高度 h (mm) | 角边宽度 b (mm) | 角边厚度 t_1 (mm) | 角 钢 剖 面 积 A_1 (cm ²) | 角钢自身惯性矩 I_{x1} (cm ⁴) | 角钢自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 2.5/1.6 | 25 | 16 | 3.0 | 1.162 | 0.70 | 1.64 |
| | | | 4.0 | 1.499 | 0.88 | 1.60 |
| 3.2/2 | 32 | 20 | 3.0 | 1.492 | 1.53 | 2.12 |
| | | | 4.0 | 1.939 | 1.93 | 2.08 |
| 4/2.5 | 40 | 25 | 3.0 | 1.890 | 3.08 | 2.68 |
| | | | 4.0 | 2.467 | 3.93 | 2.63 |
| 4.5/2.8 | 45 | 28 | 3.0 | 2.149 | 4.45 | 3.03 |
| | | | 4.0 | 2.806 | 5.69 | 2.99 |
| 5/3.2 | 50 | 32 | 3.0 | 2.431 | 6.24 | 3.40 |
| | | | 4.0 | 3.177 | 8.02 | 3.35 |
| 5.6/3.6 | 56 | 36 | 3.0 | 2.743 | 8.88 | 3.82 |
| | | | 4.0 | 3.590 | 11.45 | 3.78 |
| | | | 5.0 | 4.415 | 13.86 | 3.73 |
| 6.3/4 | 63 | 40 | 4.0 | 4.058 | 16.49 | 4.26 |
| | | | 5.0 | 4.993 | 20.02 | 4.22 |
| | | | 6.0 | 5.908 | 23.36 | 4.18 |
| | | | 7.0 | 6.802 | 26.53 | 4.15 |
| 7/4.5 | 70 | 45 | 4.0 | 4.547 | 23.17 | 4.76 |
| | | | 5.0 | 5.609 | 27.95 | 4.72 |
| | | | 6.0 | 6.647 | 32.54 | 4.68 |
| | | | 7.0 | 7.657 | 37.22 | 4.64 |
| 7.5/5 | 75 | 50 | 5.0 | 6.125 | 34.86 | 5.10 |
| | | | 6.0 | 7.260 | 41.12 | 5.06 |
| | | | 8.0 | 9.467 | 52.39 | 4.98 |
| | | | 10.0 | 11.590 | 62.71 | 4.90 |
| 8/5 | 80 | 50 | 5.0 | 6.375 | 41.96 | 5.40 |
| | | | 6.0 | 7.560 | 49.49 | 5.35 |
| | | | 7.0 | 8.724 | 56.16 | 5.31 |
| | | | 8.0 | 9.867 | 62.83 | 5.27 |

理论要素表

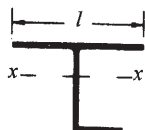
表 I.2.1

|  | | | | |
|---|--|---|--|--------------------------------|
| 连带板的型材要素 (带板宽度 $l = 500\text{mm}$) | | | | |
| 总剖面面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
| 16.16/31.16 | 4.268/5.810 | 1.693/2.130 | 0.514/0.432 | 3/6 |
| 16.50/31.50 | 5.166/6.934 | 2.074/2.559 | 0.560/0.469 | 3/6 |
| 16.49/31.49 | 8.635/10.754 | 2.746/3.177 | 0.724/0.584 | 3/6 |
| 16.94/31.94 | 10.581/13.146 | 3.417/3.918 | 0.790/0.642 | 3/6 |
| 16.89/31.89 | 16.636/19.769 | 4.340/4.794 | 0.992/0.787 | 3/6 |
| 17.47/32.47 | 20.416/24.400 | 5.434/5.984 | 1.081/0.867 | 3/6 |
| 17.15/32.15 | 23.571/27.587 | 5.544/6.027 | 1.172/0.926 | 3/6 |
| 17.81/32.81 | 29.109/34.365 | 7.005/7.605 | 1.279/1.023 | 3/6 |
| 17.43/32.43 | 32.716/37.926 | 7.028/7.551 | 1.370/1.081 | 3/6 |
| 18.18/33.18 | 40.249/47.193 | 8.869/9.533 | 1.488/1.193 | 3/6 |
| 17.74/32.74 | 45.541/52.440 | 8.867/9.440 | 1.602/1.266 | 3/6 |
| 17.59/33.59 | 56.302/65.724 | 11.281/12.029 | 1.740/1.399 | 3/6 |
| 19.41/34.42 | 65.323/77.265 | 13.420/14.353 | 1.834/1.498 | 3/6 |
| 19.06/34.06 | 78.718/91.717 | 14.284/15.143 | 2.032/1.641 | 3/6 |
| 19.99/34.99 | 91.671/108.374 | 17.107/18.199 | 2.141/1.760 | 3/6 |
| 20.91/35.91 | 102.941/123.326 | 19.696/21.035 | 2.219/1.853 | 3/6 |
| 21.80/36.80 | 113.174/137.231 | 22.154/23.753 | 2.276/1.931 | 3/6 |
| 19.55/34.55 | 107.402/125.167 | 17.877/18.867 | 2.344/1.903 | 3/6 |
| 20.61/35.61 | 124.885/147.934 | 21.441/22.727 | 2.462/2.038 | 3/6 |
| 21.65/35.65 | 140.104/168.388 | 24.723/26.324 | 2.544/2.144 | 3/6 |
| 22.66/37.66 | 153.643/186.983 | 27.777/29.701 | 2.604/2.228 | 3/6 |
| 26.12/46.12 | 166.841/197.671 | 25.837/27.571 | 2.527/2.070 | 4/8 |
| 27.26/47.26 | 188.758/226.438 | 29.966/32.068 | 2.631/2.189 | 4/8 |
| 29.47/49.47 | 225.068/276.099 | 37.289/40.187 | 2.764/2.363 | 4/8 |
| 31.59/51.59 | 253.832/317.267 | 43.547/47.287 | 2.835/2.480 | 4/8 |
| 26.37/46.37 | 193.825/229.068 | 28.310/30.130 | 2.711/2.222 | 4/8 |
| 27.56/47.56 | 218.746/261.844 | 32.758/34.978 | 2.817/2.346 | 4/8 |
| 28.72/48.72 | 240.845/291.803 | 36.903/39.552 | 2.896/2.447 | 4/8 |
| 29.87/49.87 | 260.793/319.411 | 40.794/43.887 | 2.955/2.531 | 4/8 |



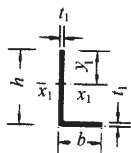
| 角 钢 号 | 单 型 材 要 素 | | | | | |
|-------------|---------------------|---------------------|-----------------------|--|---|---|
| | 角边高度 h (mm) | 角边宽度 b (mm) | 角边厚度 t_1 (mm) | 角 钢 剖 面 积 A_1 (cm ²) | 角钢自身惯性矩 I_{x1} (cm ⁴) | 角钢自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 9/5.6 | 90 | 56 | 5.0 | 7.212 | 60.45 | 6.09 |
| | | | 6.0 | 8.557 | 71.03 | 6.05 |
| | | | 7.0 | 9.880 | 81.01 | 6.00 |
| | | | 8.0 | 11.183 | 91.03 | 5.96 |
| 10/6.3 | 100 | 63 | 6.0 | 9.617 | 99.06 | 6.76 |
| | | | 7.0 | 11.111 | 113.45 | 6.72 |
| | | | 8.0 | 12.584 | 127.37 | 6.68 |
| | | | 10.0 | 15.467 | 153.81 | 6.60 |
| 10/8 | 100 | 80 | 6.0 | 10.637 | 107.04 | 7.05 |
| | | | 7.0 | 12.301 | 122.73 | 7.00 |
| | | | 8.0 | 13.944 | 137.92 | 6.96 |
| | | | 10.0 | 17.167 | 166.87 | 6.88 |
| 11/7 | 110 | 70 | 6.0 | 10.637 | 133.37 | 7.47 |
| | | | 7.0 | 12.301 | 153.00 | 7.43 |
| | | | 8.0 | 13.944 | 172.04 | 7.38 |
| | | | 10.0 | 17.167 | 208.39 | 7.30 |
| 12.5/8 | 125 | 80 | 7.0 | 14.096 | 227.96 | 8.49 |
| | | | 8.0 | 15.989 | 256.77 | 8.44 |
| | | | 10.0 | 19.712 | 312.04 | 8.36 |
| | | | 12.0 | 23.351 | 364.41 | 8.28 |
| 14/9 | 140 | 90 | 8.0 | 18.038 | 365.64 | 9.50 |
| | | | 10.0 | 22.261 | 445.50 | 9.42 |
| | | | 12.0 | 26.400 | 521.59 | 9.34 |
| | | | 14.0 | 30.456 | 594.10 | 9.26 |
| 16/10 | 160 | 100 | 10.0 | 25.315 | 668.69 | 10.76 |
| | | | 12.0 | 30.054 | 784.91 | 10.68 |
| | | | 14.0 | 34.709 | 896.30 | 10.60 |
| | | | 16.0 | 39.281 | 1003.04 | 10.52 |
| 18/11 | 180 | 110 | 10.0 | 28.373 | 956.25 | 12.11 |
| | | | 12.0 | 33.712 | 1124.72 | 12.02 |
| | | | 14.0 | 38.967 | 1286.91 | 11.94 |
| | | | 16.0 | 44.139 | 1443.06 | 11.86 |
| 20/12.5 | 200 | 125 | 12.0 | 37.912 | 1570.90 | 13.46 |
| | | | 14.0 | 43.867 | 1800.97 | 13.38 |
| | | | 16.0 | 49.739 | 2023.35 | 13.30 |
| | | | 18.0 | 55.526 | 2238.30 | 13.22 |

续上表



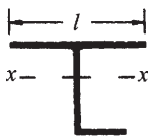
连带板的型材要素
(带板宽度 $l = 500\text{mm}$)

| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
|-----------------------------------|--|---|--|--------------------------------|
| 27.21/47.21 | 270.430/319.950 | 35.900/38.050 | 3.152/2.603 | 4/8 |
| 28.56/48.56 | 305.395/366.421 | 41.680/44.343 | 3.270/2.747 | 4/8 |
| 29.88/49.88 | 335.485/407.670 | 46.921/50.130 | 3.351/2.859 | 4/8 |
| 31.18/51.18 | 363.461/446.677 | 51.991/55.762 | 3.414/2.954 | 4/8 |
| 29.62/49.62 | 413.918/498.655 | 52.131/55.331 | 3.738/3.170 | 4/8 |
| 31.11/51.11 | 455.760/556.401 | 58.971/62.855 | 3.827/3.299 | 4/8 |
| 32.58/52.58 | 493.249/609.338 | 65.392/69.993 | 3.891/3.404 | 4/8 |
| 35.47/55.47 | 557.378/702.490 | 77.044/83.154 | 3.964/3.559 | 4/8 |
| 30.64/50.64 | 472.295/575.536 | 61.474/65.143 | 3.926/3.371 | 4/8 |
| 32.30/52.30 | 517.538/640.037 | 69.433/73.911 | 4.004/3.498 | 4/8 |
| 33.94/53.94 | 559.379/700.146 | 77.063/82.394 | 4.059/3.603 | 4/8 |
| 37.17/57.17 | 630.193/805.611 | 90.939/98.080 | 4.118/3.754 | 4/8 |
| 30.64/60.64 | 542.138/694.681 | 63.504/68.767 | 4.207/3.385 | 4/10 |
| 32.30/62.30 | 596.675/777.961 | 71.936/76.313 | 4.296/3.534 | 4/10 |
| 33.94/63.94 | 644.362/853.240 | 79.687/87.229 | 4.357/3.653 | 4/10 |
| 37.17/67.17 | 728.281/990.052 | 94.144/104.146 | 4.427/3.839 | 4/10 |
| 34.10/64.10 | 852.645/1120.645 | 93.621/101.683 | 5.001/4.182 | 4/10 |
| 35.99/65.99 | 920.335/1229.203 | 102.858/113.459 | 5.057/4.316 | 4/10 |
| 39.71/69.71 | 1039.729/1426.047 | 123.030/135.882 | 5.117/4.523 | 4/10 |
| 43.35/73.35 | 1139.367/1595.616 | 140.105/156.357 | 5.127/4.664 | 4/10 |
| 38.04/68.04 | 1258.275/1695.389 | 131.068/143.085 | 5.751/4.992 | 4/10 |
| 42.26/72.26 | 1420.723/1965.439 | 155.565/171.744 | 5.798/5.215 | 4/10 |
| 46.40/76.40 | 1557.506/2198.660 | 177.553/198.081 | 5.794/5.365 | 4/10 |
| 50.46/80.46 | 1674.736/2401.216 | 197.264/222.223 | 5.761/5.463 | 4/10 |
| 45.31/75.31 | 2011.063/2803.659 | 199.565/220.495 | 6.662/6.101 | 4/10 |
| 50.05/80.05 | 2206.691/3135.319 | 228.263/254.846 | 6.640/6.258 | 4/10 |
| 54.71/84.71 | 2376.564/3424.694 | 254.228/286.541 | 6.591/6.356 | 4/10 |
| 59.28/89.28 | 2526.260/3678.716 | 277.713/315.728 | 6.528/6.419 | 4/10 |
| 48.37/78.37 | 2734.175/3838.736 | 249.023/275.477 | 7.518/6.999 | 4/10 |
| 53.71/83.71 | 2999.487/4285.166 | 284.846/318.410 | 7.473/7.155 | 4/10 |
| 58.97/88.97 | 3235.026/4680.133 | 317.859/358.594 | 7.407/7.253 | 4/10 |
| 64.14/94.14 | 3445.146/5028.685 | 347.974/395.811 | 7.329/7.309 | 4/10 |
| 57.91/87.91 | 4014.257/5777.196 | 356.585/398.984 | 8.326/8.107 | 4/10 |
| 63.87/93.87 | 4334.562/6306.810 | 398.669/450.054 | 8.238/8.197 | 4/10 |
| 69.74/99.74 | 4623.291/6776.058 | 437.332/497.579 | 8.142/8.242 | 4/10 |
| 75.53/105.53 | 4886.670/7194.860 | 472.885/541.750 | 8.044/8.257 | 4/10 |



| 角 钢 号 | 单 型 材 要 素 | | | | | |
|-------------|---------------------|---------------------|-----------------------|--|---|---|
| | 角边高度 h (mm) | 角边宽度 b (mm) | 角边厚度 t_1 (mm) | 角 钢 剖 面 积 A_1 (cm ²) | 角钢自身惯性矩 I_{x1} (cm ⁴) | 角钢自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 2.5/1.6 | 25 | 16 | 3.0 | 1.162 | 0.70 | 1.64 |
| | | | 4.0 | 1.499 | 0.88 | 1.60 |
| 3.2/2 | 32 | 20 | 3.0 | 1.492 | 1.53 | 2.12 |
| | | | 4.0 | 1.939 | 1.93 | 2.08 |
| 4/2.5 | 40 | 25 | 3.0 | 1.890 | 3.08 | 2.68 |
| | | | 4.0 | 2.467 | 3.93 | 2.63 |
| 4.5/2.8 | 45 | 28 | 3.0 | 2.149 | 4.45 | 3.03 |
| | | | 4.0 | 2.806 | 5.69 | 2.99 |
| 5/3.2 | 50 | 32 | 3.0 | 2.431 | 6.24 | 3.40 |
| | | | 4.0 | 3.177 | 8.02 | 3.35 |
| 5.6/3.6 | 56 | 36 | 3.0 | 2.743 | 8.88 | 3.82 |
| | | | 4.0 | 3.590 | 11.45 | 3.78 |
| | | | 5.0 | 4.415 | 13.86 | 3.73 |
| 6.3/4 | 63 | 40 | 4.0 | 4.058 | 16.49 | 4.26 |
| | | | 5.0 | 4.993 | 20.02 | 4.22 |
| | | | 6.0 | 5.908 | 23.36 | 4.18 |
| | | | 7.0 | 6.802 | 26.53 | 4.15 |
| 7/4.5 | 70 | 45 | 4.0 | 4.547 | 23.17 | 4.76 |
| | | | 5.0 | 5.609 | 27.95 | 4.72 |
| | | | 6.0 | 6.647 | 32.54 | 4.68 |
| | | | 7.0 | 7.657 | 37.22 | 4.64 |
| 7.5/5 | 75 | 50 | 5.0 | 6.125 | 34.86 | 5.10 |
| | | | 6.0 | 7.260 | 41.12 | 5.06 |
| | | | 8.0 | 9.467 | 52.39 | 4.98 |
| | | | 10.0 | 11.590 | 62.71 | 4.90 |
| 8/5 | 80 | 50 | 5.0 | 6.375 | 41.96 | 5.40 |
| | | | 6.0 | 7.560 | 49.49 | 5.35 |
| | | | 7.0 | 8.724 | 56.16 | 5.31 |
| | | | 8.0 | 9.867 | 62.83 | 5.27 |

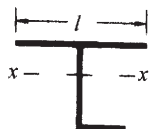
表 I.2.2

|  | | | | |
|---|--|---|--|--------------------------------|
| 连带板的型材要素 (带板宽度 $l = 550\text{mm}$) | | | | |
| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
| 23.16/45.16 | 4.730/7.758 | 1.817/2.724 | 0.452/0.414 | 4/8 |
| 23.50/45.50 | 5.720/9.025 | 2.123/3.184 | 0.493/0.445 | 4/8 |
| 23.49/45.49 | 9.344/13.041 | 2.873/3.708 | 0.631/0.535 | 4/8 |
| 23.94/45.94 | 11.847/15.699 | 3.572/4.491 | 0.693/0.585 | 4/8 |
| 23.89/45.89 | 17.810/22.618 | 4.484/5.293 | 0.863/0.702 | 4/8 |
| 24.47/46.47 | 21.989/27.723 | 5.617/6.540 | 0.948/0.772 | 4/8 |
| 24.15/46.15 | 25.168/30.902 | 2.873/3.708 | 1.021/0.818 | 4/8 |
| 24.81/46.81 | 31.307/38.350 | 7.215/8.165 | 1.123/0.905 | 4/8 |
| 24.43/46.43 | 34.904/41.852 | 7.209/8.047 | 1.195/0.949 | 4/8 |
| 25.18/47.18 | 43.299/52.035 | 9.112/10.109 | 1.311/1.050 | 4/8 |
| 24.74/57.74 | 48.587/62.223 | 9.074/10.556 | 1.401/1.038 | 4/10 |
| 25.59/58.59 | 60.633/77.767 | 11.567/13.321 | 1.539/1.152 | 4/10 |
| 26.41/59.41 | 70.945/91.570 | 13.794/15.827 | 1.639/1.241 | 4/10 |
| 26.06/59.06 | 84.933/106.700 | 14.630/16.484 | 1.805/1.344 | 4/10 |
| 26.99/59.99 | 99.815/126.582 | 17.566/19.756 | 1.923/1.453 | 4/10 |
| 27.91/60.91 | 113.001/144.791 | 20.277/22.816 | 2.012/1.542 | 4/10 |
| 28.80/61.80 | 125.137/162.002 | 22.866/25.763 | 2.084/1.619 | 4/10 |
| 26.55/59.55 | 116.167/143.951 | 18.293/20.280 | 2.092/1.555 | 4/10 |
| 27.61/60.61 | 136.433/171.226 | 22.004/24.402 | 2.223/1.681 | 4/10 |
| 28.65/61.65 | 154.398/196.247 | 25.446/28.272 | 2.322/1.784 | 4/10 |
| 29.66/62.66 | 170.573/219.377 | 28.666/31.924 | 2.398/1.871 | 4/10 |
| 28.13/61.12 | 169.736/212.276 | 25.931/28.536 | 2.457/1.864 | 4/10 |
| 29.26/62.26 | 192.471/243.965 | 30.093/33.185 | 2.565/1.980 | 4/10 |
| 31.47/64.47 | 230.282/299.522 | 37.496/41.628 | 2.705/2.155 | 4/10 |
| 33.59/66.59 | 260.444/346.435 | 43.844/49.069 | 2.785/2.281 | 4/10 |
| 28.38/61.38 | 197.257/245.407 | 28.416/31.115 | 2.637/2.000 | 4/10 |
| 29.56/62.56 | 223.094/281.530 | 32.902/36.126 | 2.747/2.121 | 4/10 |
| 30.72/63.72 | 246.108/314.915 | 37.090/40.874 | 2.830/2.223 | 4/10 |
| 31.87/64.87 | 266.941/345.946 | 41.028/45.138 | 2.894/2.309 | 4/10 |



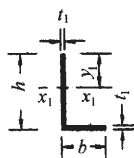
| 角 钢 号 | 单 型 材 要 素 | | | | | |
|-------------|---------------------|---------------------|-----------------------|--|---|---|
| | 角边高度 h (mm) | 角边宽度 b (mm) | 角边厚度 t_1 (mm) | 角 钢 剖 面 积 A_1 (cm ²) | 角钢自身惯性矩 I_{x1} (cm ⁴) | 角钢自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 9/5.6 | 90 | 56 | 5.0 | 7.212 | 60.45 | 6.09 |
| | | | 6.0 | 8.557 | 71.03 | 6.05 |
| | | | 7.0 | 9.880 | 81.01 | 6.00 |
| | | | 8.0 | 11.183 | 91.03 | 5.96 |
| 10/6.3 | 100 | 63 | 6.0 | 9.617 | 99.06 | 6.76 |
| | | | 7.0 | 11.111 | 113.45 | 6.72 |
| | | | 8.0 | 12.584 | 127.37 | 6.68 |
| | | | 10.0 | 15.467 | 153.81 | 6.60 |
| 10/8 | 100 | 80 | 6.0 | 10.637 | 107.04 | 7.05 |
| | | | 7.0 | 12.301 | 122.73 | 7.00 |
| | | | 8.0 | 13.944 | 137.92 | 6.96 |
| | | | 10.0 | 17.167 | 166.87 | 6.88 |
| 11/7 | 110 | 70 | 6.0 | 10.637 | 133.37 | 7.47 |
| | | | 7.0 | 12.301 | 153.00 | 7.43 |
| | | | 8.0 | 13.944 | 172.04 | 7.38 |
| | | | 10.0 | 17.167 | 208.39 | 7.30 |
| 12.5/8 | 125 | 80 | 7.0 | 14.096 | 227.98 | 8.49 |
| | | | 8.0 | 15.989 | 256.77 | 8.44 |
| | | | 10.0 | 19.712 | 312.04 | 8.36 |
| | | | 12.0 | 23.351 | 364.41 | 8.28 |
| 14/9 | 140 | 90 | 8.0 | 18.038 | 365.64 | 9.50 |
| | | | 10.0 | 22.261 | 445.50 | 9.42 |
| | | | 12.0 | 26.400 | 521.59 | 9.34 |
| | | | 14.0 | 30.456 | 594.10 | 9.26 |
| 16/10 | 160 | 100 | 10.0 | 25.315 | 668.69 | 10.76 |
| | | | 12.0 | 30.054 | 784.91 | 10.68 |
| | | | 14.0 | 34.709 | 896.30 | 10.60 |
| | | | 16.0 | 39.281 | 1003.04 | 10.52 |
| 18/11 | 180 | 110 | 10.0 | 28.373 | 956.25 | 12.11 |
| | | | 12.0 | 33.712 | 1124.72 | 12.02 |
| | | | 14.0 | 38.967 | 1286.91 | 11.94 |
| | | | 16.0 | 44.139 | 1443.06 | 11.86 |
| 20/12.5 | 200 | 125 | 12.0 | 37.912 | 1570.90 | 13.46 |
| | | | 14.0 | 43.867 | 1800.97 | 13.38 |
| | | | 16.0 | 49.739 | 2023.35 | 13.30 |
| | | | 18.0 | 55.526 | 2238.30 | 13.22 |

续上表



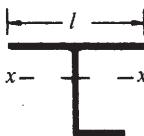
连带板的型材要素
(带板宽度 $l = 550\text{mm}$)

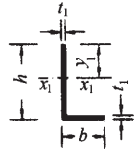
| 总剖面积 A (cm^2) | 对 $x-x$ 轴的 惯性矩 I_x (cm^4) | 对 $x-x$ 轴的最小 剖面模数 W_x (cm^3) | 对 $x-x$ 轴的 惯性半径 r (cm) | 带 板 厚 度 t (mm) |
|-------------------------------|--|---|---|-----------------------------------|
| 29.21/62.21 | 275.634/341.928 | 36.044/39.140 | 3.072/2.344 | 4/10 |
| 30.56/63.56 | 311.978/393.303 | 41.877/45.637 | 3.195/2.488 | 4/10 |
| 31.88/64.88 | 343.930/439.457 | 47.178/51.639 | 3.282/2.603 | 4/10 |
| 33.18/66.18 | 372.660/483.442 | 52.310/57.495 | 3.351/2.703 | 4/10 |
| 31.62/64.62 | 423.514/535.092 | 52.396/56.807 | 3.660/2.878 | 4/10 |
| 33.11/66.11 | 467.265/599.888 | 59.314/64.579 | 3.757/3.012 | 4/10 |
| 34.58/67.58 | 506.579/659.896 | 65.819/72.017 | 3.827/3.125 | 4/10 |
| 37.47/70.47 | 574.053/766.948 | 77.650/85.773 | 3.914/3.299 | 4/10 |
| 32.64/65.64 | 484.217/619.697 | 61.785/66.803 | 3.852/3.073 | 4/10 |
| 34.30/67.30 | 532.011/692.776 | 69.838/75.886 | 3.938/3.208 | 4/10 |
| 35.94/68.94 | 575.745/761.561 | 77.569/84.701 | 4.002/3.324 | 4/10 |
| 39.17/72.17 | 650.515/884.029 | 91.663/101.096 | 4.075/3.500 | 4/10 |
| 32.64/65.64 | 555.479/704.127 | 63.847/68.975 | 4.126/3.275 | 4/10 |
| 34.30/67.30 | 612.603/789.745 | 72.380/78.577 | 4.226/3.426 | 4/10 |
| 35.94/68.94 | 662.701/867.350 | 80.236/87.556 | 4.294/3.547 | 4/10 |
| 39.17/72.17 | 751.083/1008.963 | 94.921/104.615 | 4.379/3.739 | 4/10 |
| 47.10/80.10 | 992.109/1195.407 | 97.561/103.967 | 4.590/3.864 | 6/12 |
| 48.99/81.99 | 1080.494/1316.522 | 108.620/116.125 | 4.696/4.007 | 6/12 |
| 52.71/85.71 | 1238.518/1538.526 | 129.531/139.367 | 4.847/4.237 | 6/12 |
| 56.35/89.35 | 1372.082/1732.446 | 148.420/160.720 | 4.934/4.403 | 6/12 |
| 51.04/84.04 | 1486.740/1818.665 | 137.198/146.288 | 5.397/4.652 | 6/12 |
| 55.26/88.26 | 1702.440/2124.723 | 163.941/175.993 | 5.550/4.906 | 6/12 |
| 59.40/92.40 | 1885.547/2392.664 | 188.262/203.458 | 5.634/5.089 | 6/12 |
| 63.46/96.46 | 2042.628/2628.029 | 210.328/228.789 | 5.674/5.220 | 6/12 |
| 58.31/91.32 | 2422.034/3037.830 | 210.634/225.849 | 6.445/5.768 | 6/12 |
| 33.05/96.05 | 2682.205/3420.368 | 242.372/261.683 | 6.522/5.967 | 6/12 |
| 67.71/100.71 | 2907.135/3757.562 | 271.379/294.943 | 6.553/6.108 | 6/12 |
| 72.28/105.28 | 3103.583/4055.951 | 297.852/327.752 | 6.553/6.207 | 6/12 |
| 61.37/94.37 | 3306.794/4169.646 | 263.221/282.138 | 7.340/6.647 | 6/12 |
| 66.71/99.17 | 3656.849/4686.495 | 302.863/326.967 | 7.404/6.856 | 6/12 |
| 71.97/104.97 | 3964.851/5147.690 | 339.672/369.149 | 7.422/7.003 | 6/12 |
| 77.14/110.14 | 4236.141/5557.381 | 373.490/408.434 | 7.411/7.103 | 6/12 |
| 70.91/103.91 | 4912.361/6339.024 | 379.525/409.756 | 8.323/7.810 | 6/12 |
| 76.87/109.87 | 5326.351/6959.148 | 426.347/463.382 | 8.324/7.959 | 6/12 |
| 82.74/115.74 | 5693.600/7511.400 | 469.603/513.549 | 8.295/8.056 | 6/12 |
| 88.53/121.53 | 6022.782/8005.752 | 509.547/560.409 | 8.248/8.116 | 6/12 |



| 角 钢 号 | 单 型 材 要 素 | | | | | |
|-------------|---------------------|---------------------|-----------------------|--|---|---|
| | 角边高度 h (mm) | 角边宽度 b (mm) | 角边厚度 t_1 (mm) | 角 钢 剖 面 积 A_1 (cm ²) | 角钢自身惯性矩 I_{x1} (cm ⁴) | 角钢自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 2.5/1.6 | 25 | 16 | 3.0 | 1.162 | 0.70 | 1.64 |
| | | | 4.0 | 1.499 | 0.88 | 1.60 |
| 3.2/2 | 32 | 20 | 3.0 | 1.492 | 1.53 | 2.12 |
| | | | 4.0 | 1.939 | 1.93 | 2.08 |
| 4/2.5 | 40 | 25 | 3.0 | 1.890 | 3.08 | 2.68 |
| | | | 4.0 | 2.467 | 3.93 | 2.63 |
| 4.5/2.8 | 45 | 28 | 3.0 | 2.149 | 4.45 | 3.03 |
| | | | 4.0 | 2.806 | 5.69 | 2.99 |
| 5/3.2 | 50 | 32 | 3.0 | 2.431 | 6.24 | 3.40 |
| | | | 4.0 | 3.177 | 8.02 | 3.35 |
| 5.6/3.6 | 56 | 36 | 3.0 | 2.743 | 8.88 | 3.82 |
| | | | 4.0 | 3.590 | 11.45 | 3.78 |
| | | | 5.0 | 4.415 | 13.86 | 3.73 |
| 6.3/4 | 63 | 40 | 4.0 | 4.058 | 16.49 | 4.26 |
| | | | 5.0 | 4.993 | 20.02 | 4.22 |
| | | | 6.0 | 5.908 | 23.36 | 4.18 |
| | | | 7.0 | 6.802 | 26.53 | 4.15 |
| 7/4.5 | 70 | 45 | 4.0 | 4.547 | 23.17 | 4.76 |
| | | | 5.0 | 5.609 | 27.95 | 4.72 |
| | | | 6.0 | 6.647 | 32.54 | 4.68 |
| | | | 7.0 | 7.657 | 37.22 | 4.64 |
| 7.5/5 | 75 | 50 | 5.0 | 6.125 | 34.86 | 5.10 |
| | | | 6.0 | 7.260 | 41.12 | 5.06 |
| | | | 8.0 | 9.467 | 52.39 | 4.98 |
| | | | 10.0 | 11.590 | 62.71 | 4.90 |
| 8/5 | 80 | 50 | 5.0 | 6.375 | 41.96 | 5.40 |
| | | | 6.0 | 7.560 | 49.49 | 5.35 |
| | | | 7.0 | 8.724 | 56.16 | 5.31 |
| | | | 8.0 | 9.867 | 62.83 | 5.27 |

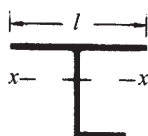
表 I.2.3

|  | | | | |
|---|--|---|--|--------------------------------|
| 连带板的型材要素 (带板宽度 $l = 600\text{mm}$) | | | | |
| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
| 31.16/49.16 | 5.321/7.981 | 1.986/2.799 | 0.413/0.403 | 5/8 |
| 31.50/49.50 | 6.391/9.254 | 2.401/3.259 | 0.450/0.432 | 5/8 |
| 31.49/49.49 | 10.138/13.279 | 3.038/3.768 | 0.567/0.518 | 5/8 |
| 31.94/49.94 | 12.443/15.953 | 3.761/4.533 | 0.624/0.565 | 5/8 |
| 31.89/49.89 | 18.969/22.890 | 4.653/5.344 | 0.771/0.677 | 5/8 |
| 32.47/50.47 | 23.462/28.032 | 5.820/6.593 | 0.850/0.745 | 5/8 |
| 32.15/50.15 | 26.649/31.209 | 5.882/6.566 | 0.910/0.789 | 5/8 |
| 32.81/50.81 | 33.252/38.716 | 7.434/8.215 | 1.007/0.873 | 5/8 |
| 32.43/50.43 | 36.824/42.211 | 7.400/8.091 | 1.066/0.915 | 5/8 |
| 33.18/51.18 | 45.876/52.483 | 9.352/10.157 | 1.176/1.013 | 5/8 |
| 32.74/50.74 | 51.136/57.648 | 9.282/9.988 | 1.250/1.066 | 5/8 |
| 33.59/51.59 | 64.148/72.371 | 11.837/12.676 | 1.382/1.184 | 5/8 |
| 34.42/52.42 | 75.449/85.383 | 14.130/15.106 | 1.481/1.276 | 5/8 |
| 34.06/64.06 | 89.820/107.610 | 14.939/16.559 | 1.624/1.296 | 5/10 |
| 34.99/64.99 | 106.175/127.710 | 17.959/19.839 | 1.742/1.402 | 5/10 |
| 35.91/65.91 | 120.852/146.160 | 20.761/22.907 | 1.835/1.489 | 5/10 |
| 36.80/66.80 | 134.502/163.630 | 23.446/25.864 | 1.912/1.565 | 5/10 |
| 34.55/64.55 | 122.904/145.112 | 18.648/20.354 | 1.886/1.499 | 5/10 |
| 35.61/64.61 | 145.299/172.720 | 22.467/24.486 | 2.020/1.623 | 5/10 |
| 36.65/66.65 | 165.417/198.107 | 26.026/28.368 | 2.125/1.724 | 5/10 |
| 37.66/67.66 | 183.710/221.620 | 29.367/32.034 | 2.209/1.810 | 5/10 |
| 36.13/66.13 | 181.073/214.148 | 26.461/28.625 | 2.239/1.800 | 5/10 |
| 37.26/67.26 | 206.563/246.328 | 30.760/33.288 | 2.355/1.914 | 5/10 |
| 39.47/69.47 | 249.850/302.944 | 38.465/41.767 | 2.516/2.088 | 5/10 |
| 41.59/71.59 | 285.068/350.960 | 45.143/49.252 | 2.618/2.214 | 5/10 |
| 42.38/78.38 | 219.004/261.433 | 29.426/32.228 | 2.273/1.826 | 6/12 |
| 43.56/79.56 | 250.020/300.341 | 34.158/37.381 | 2.396/1.943 | 6/12 |
| 44.72/80.72 | 278.246/336.582 | 38.615/42.277 | 2.494/2.042 | 6/12 |
| 45.87/81.87 | 304.179/370.479 | 42.831/46.941 | 2.575/2.127 | 6/12 |



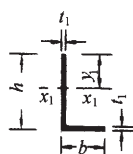
| 角 钢 号 | 单 型 材 要 素 | | | | | |
|-------------|---------------------|---------------------|-----------------------|--|---|---|
| | 角边高度 h (mm) | 角边宽度 b (mm) | 角边厚度 t_1 (mm) | 角 钢 剖 面 积 A_1 (cm ²) | 角钢自身惯性矩 I_{x1} (cm ⁴) | 角钢自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 9/5.6 | 90 | 56 | 5.0 | 7.212 | 60.45 | 6.09 |
| | | | 6.0 | 8.557 | 71.03 | 6.05 |
| | | | 7.0 | 9.880 | 81.01 | 6.00 |
| | | | 8.0 | 11.183 | 91.03 | 5.96 |
| 10/6.3 | 100 | 63 | 6.0 | 9.617 | 99.06 | 6.76 |
| | | | 7.0 | 11.111 | 113.45 | 6.72 |
| | | | 8.0 | 12.584 | 127.37 | 6.68 |
| | | | 10.0 | 15.467 | 153.81 | 6.60 |
| 10/8 | 100 | 80 | 6.0 | 10.637 | 107.04 | 7.05 |
| | | | 7.0 | 12.301 | 122.73 | 7.00 |
| | | | 8.0 | 13.944 | 137.92 | 6.96 |
| | | | 10.0 | 17.167 | 166.87 | 6.88 |
| 11/7 | 110 | 70 | 6.0 | 10.637 | 133.37 | 7.47 |
| | | | 7.0 | 12.301 | 153.00 | 7.43 |
| | | | 8.0 | 13.944 | 172.04 | 7.38 |
| | | | 10.0 | 17.167 | 208.39 | 7.30 |
| 12.5/8 | 125 | 80 | 7.0 | 14.096 | 227.98 | 8.49 |
| | | | 8.0 | 15.989 | 256.77 | 8.44 |
| | | | 10.0 | 19.712 | 312.04 | 8.36 |
| | | | 12.0 | 23.351 | 364.41 | 8.28 |
| 14/9 | 140 | 90 | 8.0 | 18.038 | 365.64 | 9.50 |
| | | | 10.0 | 22.261 | 445.50 | 9.42 |
| | | | 12.0 | 26.400 | 521.59 | 9.34 |
| | | | 14.0 | 30.456 | 594.10 | 9.26 |
| 16/10 | 160 | 100 | 10.0 | 25.315 | 668.69 | 10.76 |
| | | | 12.0 | 30.054 | 784.91 | 10.68 |
| | | | 14.0 | 34.709 | 896.30 | 10.60 |
| | | | 16.0 | 39.281 | 1003.04 | 10.52 |
| 18/11 | 180 | 110 | 10.0 | 28.373 | 956.25 | 12.11 |
| | | | 12.0 | 33.712 | 1124.72 | 12.02 |
| | | | 14.0 | 38.967 | 1286.91 | 11.94 |
| | | | 16.0 | 44.139 | 1443.06 | 11.86 |
| 20/12.5 | 200 | 125 | 12.0 | 37.912 | 1570.90 | 13.46 |
| | | | 14.0 | 43.867 | 1800.97 | 13.38 |
| | | | 16.0 | 49.739 | 2023.35 | 13.30 |
| | | | 18.0 | 55.526 | 2238.30 | 13.32 |

续上表



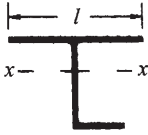
连带板的型材要素
(带板宽度 $l = 600\text{mm}$)

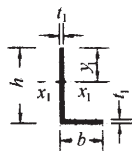
| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
|-----------------------------------|--|---|--|--------------------------------|
| 43.21/79.21 | 306.863/362.483 | 37.270/40.317 | 2.665/2.139 | 6/12 |
| 44.56/80.56 | 350.886/417.886 | 43.424/46.987 | 2.806/2.278 | 6/12 |
| 45.88/81.88 | 389.783/468.092 | 49.070/53.170 | 2.915/2.391 | 6/12 |
| 47.18/83.18 | 426.477/516.217 | 54.563/59.212 | 3.006/2.491 | 6/12 |
| 57.62/93.62 | 512.350/593.002 | 55.611/59.696 | 2.982/2.517 | 8/14 |
| 59.11/95.11 | 573.399/667.438 | 63.277/67.876 | 3.115/2.649 | 8/14 |
| 60.58/96.58 | 629.698/737.171 | 70.520/75.697 | 3.224/2.763 | 8/14 |
| 63.47/99.47 | 729.556/863.599 | 83.914/90.289 | 3.390/2.947 | 8/14 |
| 58.64/94.64 | 592.883/687.836 | 65.522/69.981 | 3.180/2.696 | 8/14 |
| 60.30/96.30 | 661.482/772.616 | 74.404/79.516 | 3.312/2.832 | 8/14 |
| 61.94/97.94 | 725.789/853.332 | 83.012/88.801 | 3.423/2.952 | 8/14 |
| 65.17/101.17 | 839.578/999.570 | 98.981/106.182 | 3.589/3.143 | 8/14 |
| 58.64/94.64 | 675.240/777.295 | 67.111/72.094 | 3.393/2.866 | 8/14 |
| 60.30/96.30 | 755.877/875.922 | 77.109/82.157 | 3.540/3.016 | 8/14 |
| 61.94/97.94 | 828.616/966.509 | 85.879/91.615 | 3.657/3.141 | 8/14 |
| 65.17/101.17 | 960.653/1134.362 | 102.507/109.680 | 3.839/3.349 | 8/14 |
| 62.10/98.10 | 1091.688/1261.124 | 100.321/106.160 | 4.193/3.586 | 8/14 |
| 63.99/99.99 | 1196.594/1392.614 | 111.924/118.637 | 4.324/3.732 | 8/14 |
| 67.71/103.71 | 1386.896/1636.261 | 134.002/142.556 | 4.526/3.972 | 8/14 |
| 71.35/107.35 | 1550.519/1851.556 | 154.138/164.632 | 4.662/4.153 | 8/14 |
| 78.04/114.04 | 1757.503/1997.079 | 144.193/151.629 | 4.746/4.185 | 10/16 |
| 82.26/118.26 | 2048.311/2353.433 | 173.358/182.774 | 4.990/4.461 | 10/16 |
| 86.40/122.40 | 2301.726/2671.041 | 200.266/211.770 | 5.161/4.671 | 10/16 |
| 90.46/126.46 | 2523.46/2954.498 | 225.030/338.706 | 5.282/4.834 | 10/16 |
| 85.31/121.32 | 2930.945/3366.182 | 222.735/233.962 | 5.861/5.826 | 10/16 |
| 90.05/126.05 | 3292.756/3821.871 | 257.874/271.769 | 6.047/5.506 | 10/16 |
| 94.71/130.71 | 3610.544/4229.750 | 290.422/307.109 | 6.174/5.689 | 10/16 |
| 99.28/135.28 | 3890.948/4595.507 | 320.509/340.079 | 6.260/5.828 | 10/16 |
| 88.37/124.37 | 4024.392/4626.814 | 278.477/291.823 | 6.748/6.099 | 10/16 |
| 93.71/129.71 | 4513.088/5245.840 | 322.454/339.139 | 6.940/6.359 | 10/16 |
| 98.97/134.97 | 4947.846/5806.012 | 363.761/383.951 | 7.071/6.559 | 10/16 |
| 104.14/140.14 | 5333.116/6309.749 | 402.158/425.974 | 7.156/6.710 | 10/16 |
| 97.91/133.91 | 6103.446/7118.100 | 404.346/424.636 | 7.895/7.291 | 10/16 |
| 100.87/139.87 | 6687.889/7375.505 | 456.877/461.603 | 8.024/7.504 | 10/16 |
| 109.74/145.74 | 7207.345/8557.575 | 505.950/535.255 | 8.104/7.663 | 10/16 |
| 115.53/151.53 | 7671.754/9173.530 | 551.700/585.703 | 8.149/7.781 | 10/16 |



| 角 钢 号 | 单 型 材 要 素 | | | | | |
|-------------|---------------------|---------------------|-----------------------|--|---|---|
| | 角边高度 h (mm) | 角边宽度 b (mm) | 角边厚度 t_1 (mm) | 角 钢 剖 面 积 A_1 (cm ²) | 角钢自身惯性矩 I_{x1} (cm ⁴) | 角钢自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 2.5/1.6 | 25 | 16 | 3.0 | 1.162 | 0.70 | 1.64 |
| | | | 4.0 | 1.499 | 0.88 | 1.60 |
| 3.2/2 | 32 | 20 | 3.0 | 1.492 | 1.53 | 2.12 |
| | | | 4.0 | 1.939 | 1.93 | 2.08 |
| 4/2.5 | 40 | 25 | 3.0 | 1.890 | 3.08 | 2.68 |
| | | | 4.0 | 2.467 | 3.93 | 2.63 |
| 4.5/2.8 | 45 | 28 | 3.0 | 2.149 | 4.45 | 3.03 |
| | | | 4.0 | 2.806 | 5.69 | 2.99 |
| 5/3.2 | 50 | 32 | 3.0 | 2.431 | 6.24 | 3.40 |
| | | | 4.0 | 3.177 | 8.02 | 3.35 |
| 5.6/3.6 | 56 | 36 | 3.0 | 2.743 | 8.88 | 3.82 |
| | | | 4.0 | 3.590 | 11.45 | 3.78 |
| | | | 5.0 | 4.415 | 13.86 | 3.73 |
| 6.3/4 | 63 | 40 | 4.0 | 4.058 | 16.49 | 4.26 |
| | | | 5.0 | 4.993 | 20.02 | 4.22 |
| | | | 6.0 | 5.908 | 23.36 | 4.18 |
| | | | 7.0 | 6.802 | 26.53 | 4.15 |
| 7/4.5 | 70 | 45 | 4.0 | 4.547 | 23.17 | 4.76 |
| | | | 5.0 | 5.609 | 27.95 | 4.72 |
| | | | 6.0 | 6.647 | 32.54 | 4.68 |
| | | | 7.0 | 7.657 | 37.22 | 4.64 |
| 7.5/5 | 75 | 50 | 5.0 | 6.125 | 34.86 | 5.10 |
| | | | 6.0 | 7.260 | 41.12 | 5.06 |
| | | | 8.0 | 9.467 | 52.39 | 4.98 |
| | | | 10.0 | 11.590 | 62.71 | 4.90 |
| 8/5 | 80 | 50 | 5.0 | 6.375 | 41.96 | 5.40 |
| | | | 6.0 | 7.560 | 49.49 | 5.35 |
| | | | 7.0 | 8.724 | 56.16 | 5.31 |
| | | | 8.0 | 9.867 | 62.83 | 5.27 |

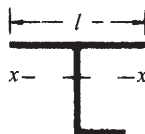
表 I.2.4

|  | | | | |
|---|--|---|--|--------------------------------|
| 连带板的型材要素 (带板宽度 $l = 650\text{mm}$) | | | | |
| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
| 40.16/66.16 | 6.117/11.345 | 2.229/3.830 | 0.390/0.414 | 6/10 |
| 40.50/66.50 | 7.261/12.758 | 2.660/4.321 | 0.423/0.438 | 6/10 |
| 40.49/66.49 | 11.116/16.959 | 3.259/4.657 | 0.524/0.505 | 6/10 |
| 40.94/66.94 | 13.563/19.880 | 4.004/5.484 | 0.576/0.545 | 6/10 |
| 40.89/66.89 | 20.258/27.069 | 4.867/6.138 | 0.704/0.636 | 6/10 |
| 41.47/67.47 | 25.019/32.632 | 6.064/7.441 | 0.777/0.695 | 6/10 |
| 41.15/67.15 | 28.206/35.788 | 6.097/7.323 | 0.828/0.730 | 6/10 |
| 41.81/67.81 | 35.194/43.870 | 7.686/9.035 | 0.918/0.804 | 6/10 |
| 41.43/67.43 | 38.738/47.299 | 7.621/8.825 | 0.967/0.838 | 6/10 |
| 42.18/68.18 | 48.327/58.333 | 9.617/10.964 | 1.070/0.925 | 6/10 |
| 41.74/67.74 | 53.551/63.415 | 9.513/10.703 | 1.133/0.968 | 6/10 |
| 42.59/68.59 | 67.343/79.188 | 12.121/13.476 | 1.257/1.074 | 6/10 |
| 34.41/69.42 | 79.442/93.249 | 14.470/15.992 | 1.353/1.159 | 6/10 |
| 43.06/82.06 | 94.088/116.958 | 15.249/17.562 | 1.478/1.194 | 6/12 |
| 43.99/82.99 | 111.621/138.401 | 18.333/20.938 | 1.593/1.291 | 6/12 |
| 44.91/83.91 | 127.506/158.204 | 21.214/24.104 | 1.685/1.373 | 6/12 |
| 45.80/84.80 | 142.393/177.050 | 23.975/27.159 | 1.763/1.445 | 6/12 |
| 43.55/82.55 | 128.604/155.968 | 18.991/21.352 | 1.718/1.375 | 6/12 |
| 44.61/83.61 | 152.696/185.408 | 22.897/25.598 | 1.850/1.489 | 6/12 |
| 45.65/84.65 | 174.553/212.656 | 26.549/29.596 | 1.956/1.585 | 6/12 |
| 46.66/85.66 | 194.583/238.029 | 29.985/33.377 | 2.042/1.667 | 6/12 |
| 45.12/84.13 | 190.392/228.732 | 26.941/29.764 | 2.054/1.649 | 6/12 |
| 46.26/85.26 | 218.133/263.254 | 31.346/34.557 | 2.171/1.757 | 6/12 |
| 48.47/87.47 | 265.933/324.614 | 39.289/43.305 | 2.342/1.926 | 6/12 |
| 50.59/89.59 | 305.476/377.312 | 46.223/51.068 | 2.457/2.052 | 6/12 |
| 58.37/97.38 | 235.768/278.507 | 30.357/33.552 | 2.010/1.691 | 8/14 |
| 59.56/98.56 | 270.489/319.843 | 35.265/38.835 | 2.131/1.801 | 8/14 |
| 60.72/99.72 | 302.507/358.569 | 39.910/43.866 | 2.232/1.896 | 8/14 |
| 61.87/100.87 | 332.255/394.961 | 44.322/48.664 | 2.317/1.979 | 8/14 |



| 角 钢 号 | 单 型 材 要 素 | | | | | |
|-------------|---------------------|---------------------|-----------------------|--|---|---|
| | 角边高度 h (mm) | 角边宽度 b (mm) | 角边厚度 t_1 (mm) | 角 钢 剖 面 积 A_1 (cm ²) | 角钢自身惯性矩 I_{x1} (cm ⁴) | 角钢自身中和 轴 $x_1 - x_1$ 轴位置 y_1 (cm) |
| 9/5.6 | 90 | 56 | 5.0 | 7.212 | 60.45 | 6.09 |
| | | | 6.0 | 8.557 | 71.03 | 6.05 |
| | | | 7.0 | 9.880 | 81.01 | 6.00 |
| | | | 8.0 | 11.183 | 91.03 | 5.96 |
| 10/6.3 | 100 | 63 | 6.0 | 9.617 | 99.06 | 6.76 |
| | | | 7.0 | 11.111 | 113.45 | 6.72 |
| | | | 8.0 | 12.584 | 127.37 | 6.68 |
| | | | 10.0 | 15.467 | 153.81 | 6.60 |
| 10/8 | 100 | 80 | 6.0 | 10.637 | 107.04 | 7.05 |
| | | | 7.0 | 12.301 | 122.73 | 7.00 |
| | | | 8.0 | 13.944 | 137.92 | 6.96 |
| | | | 10.0 | 17.167 | 166.87 | 6.88 |
| 11/7 | 110 | 70 | 6.0 | 10.637 | 133.37 | 7.47 |
| | | | 7.0 | 12.301 | 153.00 | 7.43 |
| | | | 8.0 | 13.944 | 172.04 | 7.38 |
| | | | 10.0 | 17.167 | 208.39 | 7.30 |
| 12.5/8 | 125 | 80 | 7.0 | 14.096 | 227.96 | 8.49 |
| | | | 8.0 | 15.989 | 256.77 | 8.44 |
| | | | 10.0 | 19.712 | 312.04 | 8.36 |
| | | | 12.0 | 23.351 | 364.41 | 8.28 |
| 14/9 | 140 | 90 | 8.0 | 18.038 | 365.64 | 9.50 |
| | | | 10.0 | 22.261 | 445.50 | 9.42 |
| | | | 12.0 | 26.400 | 521.59 | 9.34 |
| | | | 14.0 | 30.456 | 594.10 | 9.26 |
| 16/10 | 160 | 100 | 10.0 | 25.315 | 668.69 | 10.76 |
| | | | 12.0 | 30.054 | 784.91 | 10.68 |
| | | | 14.0 | 34.709 | 896.30 | 10.60 |
| | | | 16.0 | 39.281 | 1003.04 | 10.52 |
| 18/11 | 180 | 110 | 10.0 | 28.373 | 956.25 | 12.11 |
| | | | 12.0 | 33.712 | 1124.72 | 12.02 |
| | | | 14.0 | 38.967 | 1286.91 | 11.94 |
| | | | 16.0 | 44.139 | 1443.06 | 11.86 |
| 20/12.5 | 200 | 125 | 12.0 | 37.912 | 1570.90 | 13.46 |
| | | | 14.0 | 43.867 | 1800.97 | 13.38 |
| | | | 16.0 | 49.739 | 2023.35 | 13.30 |
| | | | 18.0 | 55.526 | 2238.30 | 13.22 |

续上表



连带板的型材要素
(带板宽度 $l = 650\text{mm}$)

| 总剖面积 $A \text{ (cm}^2\text{)}$ | 对 $x-x$ 轴的 惯性矩 $I_x \text{ (cm}^4\text{)}$ | 对 $x-x$ 轴的最小 剖面模数 $W_x \text{ (cm}^3\text{)}$ | 对 $x-x$ 轴的 惯性半径 $r \text{ (cm)}$ | 带 板 厚 度 $t \text{ (mm)}$ |
|-----------------------------------|--|---|--|--------------------------------|
| 59.21/98.21 | 329.994/383.399 | 38.329/41.668 | 2.361/1.976 | 8/14 |
| 60.56/99.56 | 379.492/442.261 | 44.706/48.494 | 2.053/2.108 | 8/14 |
| 61.88/100.88 | 423.855/495.950 | 50.590/54.839 | 2.617/2.217 | 8/14 |
| 63.18/102.18 | 466.088/547.636 | 56.330/61.04 | 2.716/2.315 | 8/14 |
| 61.62/100.62 | 517.905/597.970 | 55.794/59.875 | 2.899/2.438 | 8/14 |
| 63.11/102.11 | 580.323/673.481 | 63.448/68.079 | 3.032/2.568 | 8/14 |
| 64.58/103.58 | 638.026/744.349 | 70.731/75.927 | 3.143/2.681 | 8/14 |
| 67.47/106.47 | 740.720/873.169 | 84.218/90.582 | 3.313/2.864 | 8/14 |
| 62.64/101.64 | 599.935/893.925 | 65.675/70.172 | 3.095/2.613 | 8/14 |
| 64.30/103.30 | 670.244/780.072 | 74.601/79.737 | 3.229/2.748 | 8/14 |
| 65.94/104.94 | 736.316/862.245 | 83.259/89.055 | 3.342/2.866 | 8/14 |
| 69.17/108.17 | 853.652/1011.545 | 99.341/106.512 | 3.513/3.058 | 8/14 |
| 62.64/101.64 | 683.085/783.934 | 67.877/72.286 | 3.302/2.777 | 8/14 |
| 64.30/103.30 | 765.661/884.103 | 77.323/82.381 | 3.451/2.925 | 8/14 |
| 65.94/104.94 | 840.354/976.297 | 86.147/91.875 | 3.570/3.050 | 8/14 |
| 69.17/108.17 | 976.373/1147.570 | 102.896/110.022 | 3.757/3.257 | 8/14 |
| 79.10/118.10 | 1169.608/1321.502 | 102.617/108.399 | 3.845/3.345 | 10/16 |
| 80.99/119.99 | 1287.800/1462.154 | 114.623/121.152 | 3.988/3.491 | 10/16 |
| 84.71/123.71 | 1504.773/1724.638 | 137.569/145.656 | 4.215/3.734 | 10/16 |
| 88.35/127.35 | 1694.157/1958.798 | 158.637/168.353 | 4.379/3.922 | 10/16 |
| 83.04/122.04 | 1783.025/2018.628 | 144.635/152.033 | 4.634/4.067 | 10/16 |
| 87.26/126.26 | 2082.695/2382.871 | 174.003/183.324 | 4.885/4.344 | 10/16 |
| 91.40/130.40 | 2344.870/2708.665 | 201.142/212.492 | 5.065/4.558 | 10/16 |
| 95.46/134.46 | 2575.042/3000.373 | 226.159/239.622 | 5.194/4.724 | 10/16 |
| 90.32/129.32 | 2984.086/3411.560 | 223.630/234.681 | 5.748/5.136 | 10/16 |
| 95.05/134.05 | 3359.118/3879.934 | 259.089/272.730 | 5.945/5.380 | 10/16 |
| 99.71/138.71 | 3689.552/4300.540 | 291.986/308.340 | 6.083/5.568 | 10/16 |
| 104.28/143.28 | 3981.860/4678.819 | 322.446/341.605 | 6.179/5.714 | 10/16 |
| 93.37/132.37 | 4102.374/4693.718 | 279.677/292.756 | 6.628/5.955 | 10/16 |
| 98.71/137.71 | 4609.795/5331.200 | 324.081/340.398 | 6.834/6.222 | 10/16 |
| 103.97/142.97 | 5062.450/5909.897 | 365.851/385.572 | 6.978/6.429 | 10/16 |
| 109.14/148.14 | 5464.468/6431.785 | 404.738/427.991 | 7.076/6.589 | 10/16 |
| 102.91/141.91 | 6242.855/7242.846 | 406.509/426.290 | 7.789/7.144 | 10/16 |
| 108.87/147.87 | 6852.232/8026.881 | 459.660/483.743 | 7.934/7.368 | 10/16 |
| 114.74/153.74 | 7394.851/8734.897 | 509.368/537.921 | 8.028/7.538 | 10/16 |
| 120.53/159.53 | 7880.576/9375.804 | 555.783/588.930 | 8.086/7.066 | 10/16 |