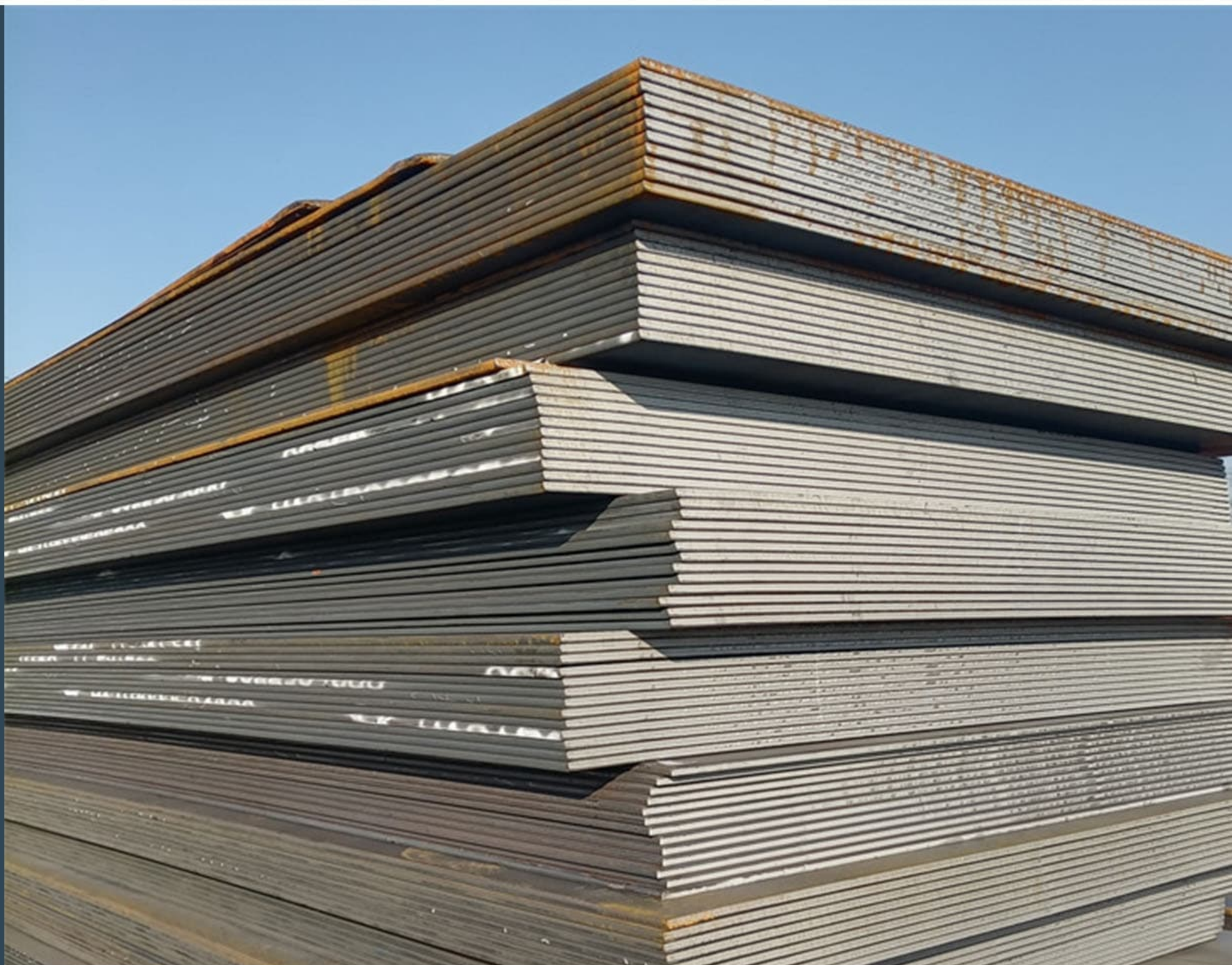


CARBON SHEET & COIL · CARBON PIPE · CARBON ROUND & SQUARE BAR  
CARBON FLAT BAR & ANGLE & CHANNEL & H BEAM & REBAR

# CARBON

## STEEL PRODUCT CATALOGUE



**DINGJIN**  
**STEEL**



# PROFESSIONAL MANUFACTURER



We are proud to work closely with industry and academic partners to continually improve our products and services, as a result, we have patented products designed to save you time and money.

We operate within the scope of ISO 9001: 2015 accredited management system and the raw materials are procured from suppliers in compliance with ASTM, BS EN and DIN standards.

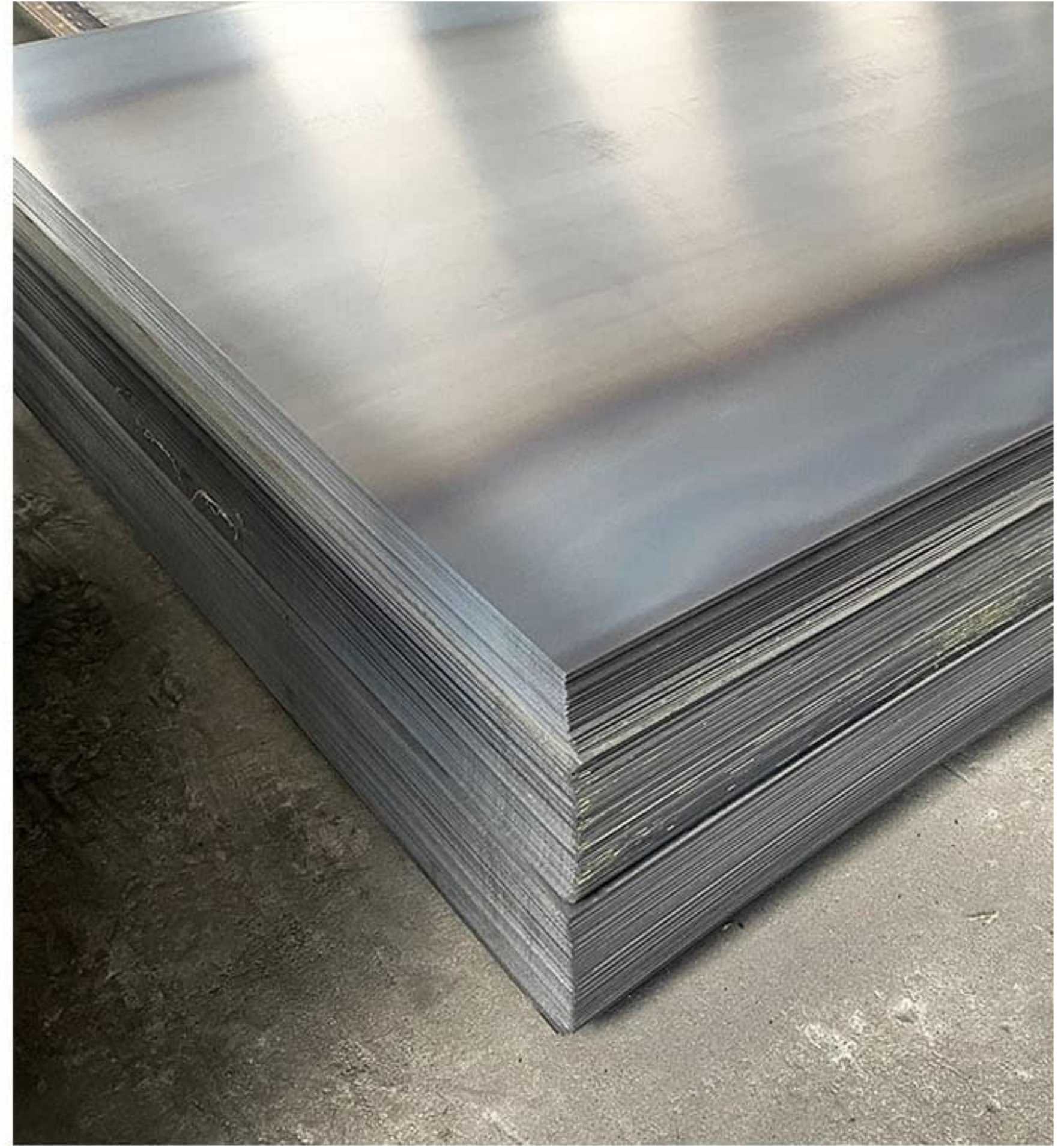
Our products are rigorously inspected to ensure they are within tolerance of our customer's specifications, we work with accredited laboratories for specialised material testing and chemical analysis.

In addition, we use X-ray fluorescence technology to meet our high inspection standards and to ensure that our customers get the best quality products.





# CARBON STEEL PLATE/SHEET



|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | AISI, ASTM, BS, GB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Material   | <p>A32, AH32, A36, AH36, DH36, D32 DH32 Q195 Q215 Q235 Q345</p> <p>SS490 SM400 SM490 SPHC SPHD SPHE SPHF SEA1002 SEA1006</p> <p>SEA1008 SEA1010</p> <p>S25C S35C S45C 65Mn</p> <p>SPHT1 SPHT2 SPH3 SPH4 QstE</p> <p>NM360, NM360L, NM400, NM400L, NM400A, NM450, NM450L, NM450A, NM500A, NM550, NM600, NR360, NR400, MITTA 400F, MITTA 450F, MITTA 500F</p> <p>DILLIDUR400, DILLIDUR500, DILLIDUR400V, DILLIDUR500V, DILLIDUR 450V</p> <p>QUARD400, QUARD450, QUARD500</p> <p>FORA400, FORA500, CREUSABRO4800, CREUSABRO8000</p> <p>RAEX400, RAEX450, RAEX500</p> |
| Technology | Cold Rolled Hot Rolled                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Length     | 1-100mm or customized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Width      | 600-3000mm or customized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Thickness  | 0.1-300mm or customized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Surface    | natural color, iron gray (low carbon plate), brown (special alloy plate, the high carbon plate), partial ochre (weather resistance), with temperature oxidation pattern, than manufacture rough surface                                                                                                                                                                                                                                                                                                                                                           |





# CARBON STEEL COIL & STRIP



|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard    | AISI, ASTM, BS,GB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Material    | A32, AH32,A36,AH36,DH36,D32 DH32 Q195 Q215 Q235 Q345<br>SS490 SM400 SM490 SPHC SPHD SPHE SPHF SEA1002 SEA1006<br>SEA1008 SEA1010<br>S25C S35C S45C 65Mn<br>SPHT1 SPHT2 SPH3 SPH4 QstE<br>NM360,NM360L,NM400,NM400L,NM400A,NM450,NM450L,NM450A,N<br>M500A.NM550,NM600.NR360,NR400,MITTA 400F,MITTA 450F,MITTA<br>500F<br>DILLIDUR400,DILLIDUR500,DILLIDUR400V,DILLIDUR500V,DILLIDUR<br>450V<br>QUARD400,QUARD450,QUARD500<br>FORA400,FORA500,CREUSABRO4800,CREUSABRO8000<br>RAEX400.RAEX450.RAEX500 |
| Technology  | Cold Rolled Hot Rolled                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Width       | 600-3000mm or customized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Thickness   | 0.1-300mm or customized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Surface     | natural color,iron gray (low carbon plate), brown (special alloy plate, the<br>high carbon plate), partial ochre (weather resistance), with temperature<br>oxidation pattern, than manufacture rough surface                                                                                                                                                                                                                                                                                       |
| Coil Weight | 3-5 Tons                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |



# CARBON STEEL PIPE / TUBE



|              |                                                                                                                                                                                                                               |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard     | AISI, ASTM, BS,GB                                                                                                                                                                                                             |
| Material     | A32,AH32,A36,AH36,DH36,D32 DH32<br>10# 20# 45# Q195 Q215 Q235 Q345 Q235b Q355b SS490 SM400<br>SM490 SPHC SPHD SPHE SPHF SEA1002 SEA1006 SEA1008<br>SEA1010<br>S25C S35C S45C 65Mn<br>SPHT1 SPHT2 SPH3 SPH4 QstE or customized |
| Technology   | Cold Rolled Hot Rolled                                                                                                                                                                                                        |
| Length       | 1m - 12m or customized                                                                                                                                                                                                        |
| Out Diameter | 10-600mm or customized.                                                                                                                                                                                                       |
| Thickness    | 1mm-200mm or customized.                                                                                                                                                                                                      |
| Surface      | natural color,iron gray, threaded,or painted                                                                                                                                                                                  |
| Shape        | round, square                                                                                                                                                                                                                 |





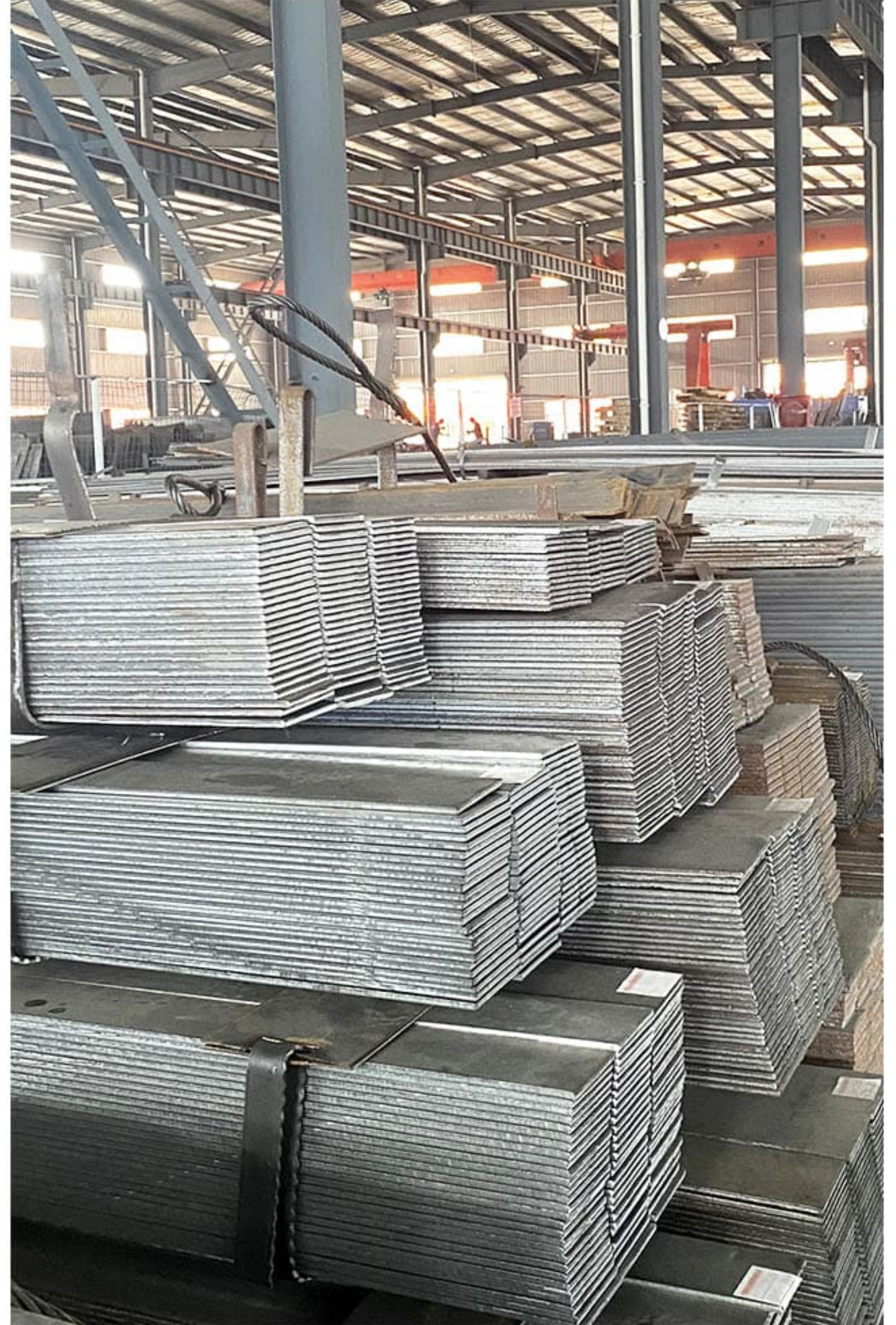
# CARBON STEEL BAR / ROD



|            |                                                                                                                                                                                                                               |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | AISI, ASTM, BS,GB                                                                                                                                                                                                             |
| Material   | A32,AH32,A36,AH36,DH36,D32 DH32<br>10# 20# 45# Q195 Q215 Q235 Q345 Q235b Q355b SS490 SM400<br>SM490 SPHC SPHD SPHE SPHF SEA1002 SEA1006 SEA1008<br>SEA1010<br>S25C S35C S45C 65Mn<br>SPHT1 SPHT2 SPH3 SPH4 QstE or customized |
| Technology | Hot Rolled                                                                                                                                                                                                                    |
| Length     | 3000~12000mm or customized                                                                                                                                                                                                    |
| Diameter   | 10~300mm or customized.                                                                                                                                                                                                       |
| Width      | 3mm-2000mm or customized.                                                                                                                                                                                                     |
| Surface    | natural color,black,mill,polished,brush,galvanized etc                                                                                                                                                                        |
| Shape      | round, square                                                                                                                                                                                                                 |



# CARBON STEEL FLAT BAR



|            |                                                                                                                                                                                                                               |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | AISI, ASTM, BS,GB                                                                                                                                                                                                             |
| Material   | A32,AH32,A36,AH36,DH36,D32 DH32<br>10# 20# 45# Q195 Q215 Q235 Q345 Q235b Q355b SS490 SM400<br>SM490 SPHC SPHD SPHE SPHF SEA1002 SEA1006 SEA1008<br>SEA1010<br>S25C S35C S45C 65Mn<br>SPHT1 SPHT2 SPH3 SPH4 QstE or customized |
| Technology | Hot Rolled                                                                                                                                                                                                                    |
| Length     | 3000~12000mm or customized                                                                                                                                                                                                    |
| Thickness  | 2.0~60mm or customized.                                                                                                                                                                                                       |
| Width      | 3mm-400mm or customized.                                                                                                                                                                                                      |
| Surface    | natural color,black,mill,polished,brush,galvanized etc                                                                                                                                                                        |
| Shape      | flat                                                                                                                                                                                                                          |



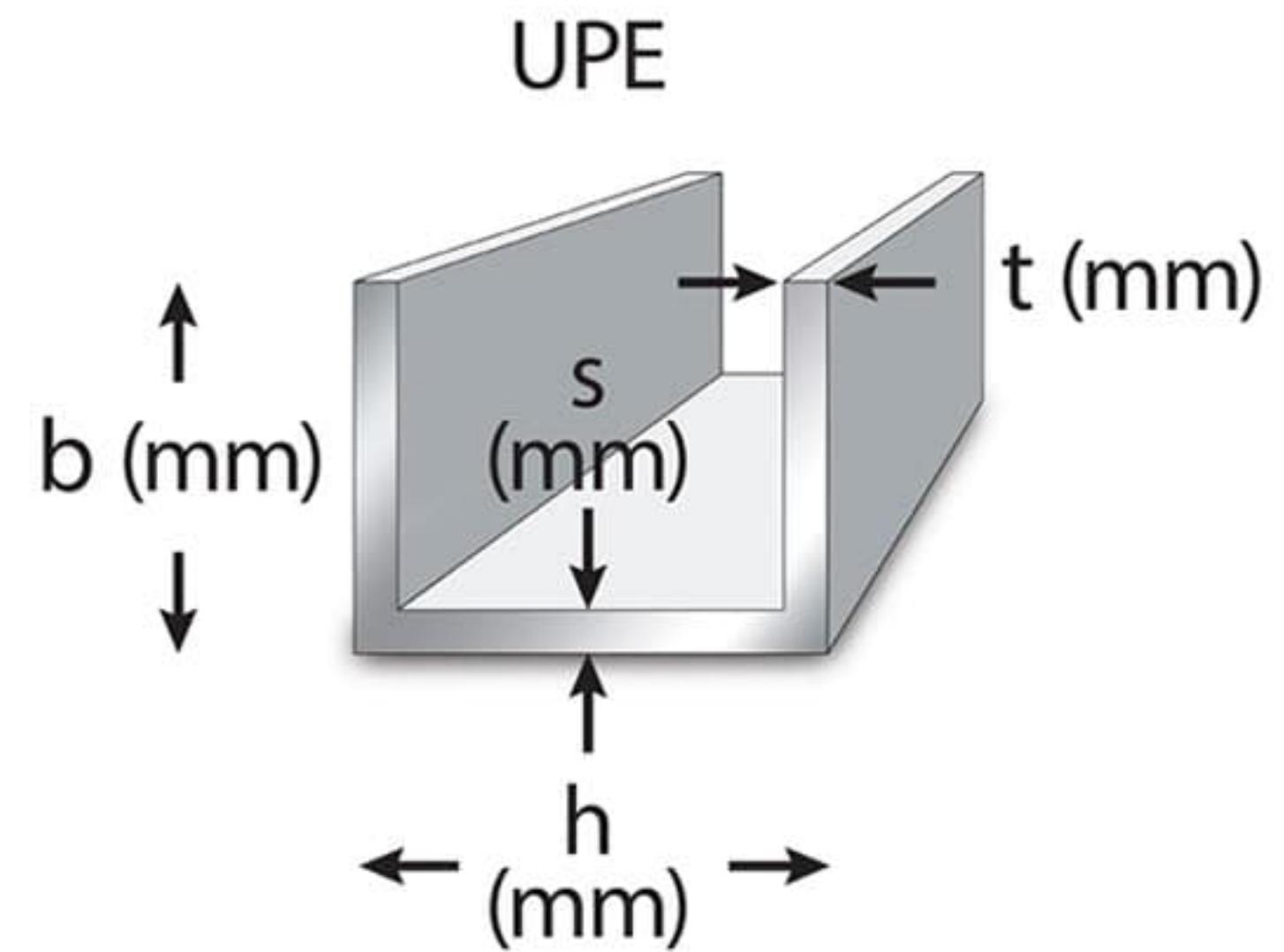
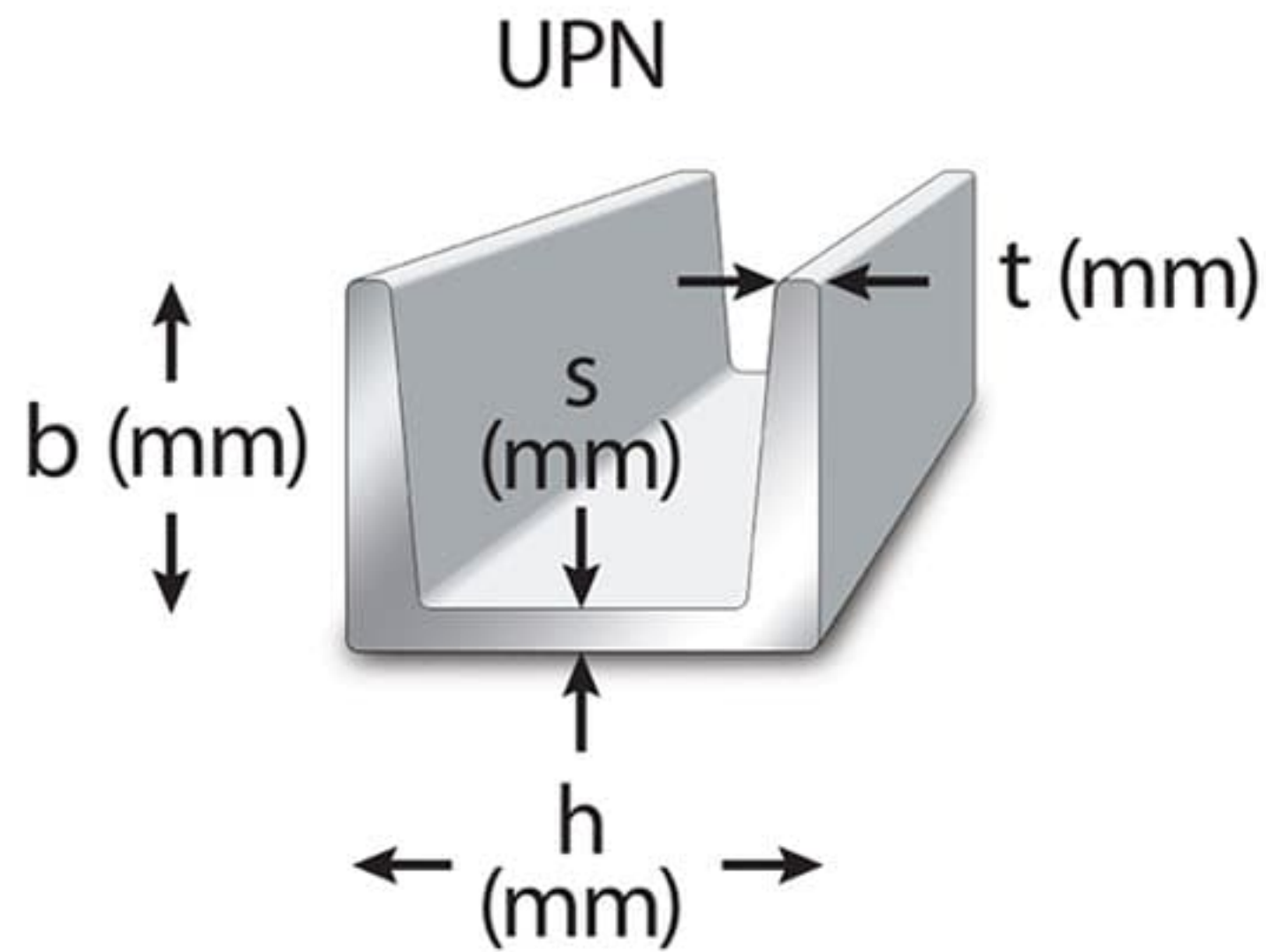
# CARBON STEEL CHANNEL



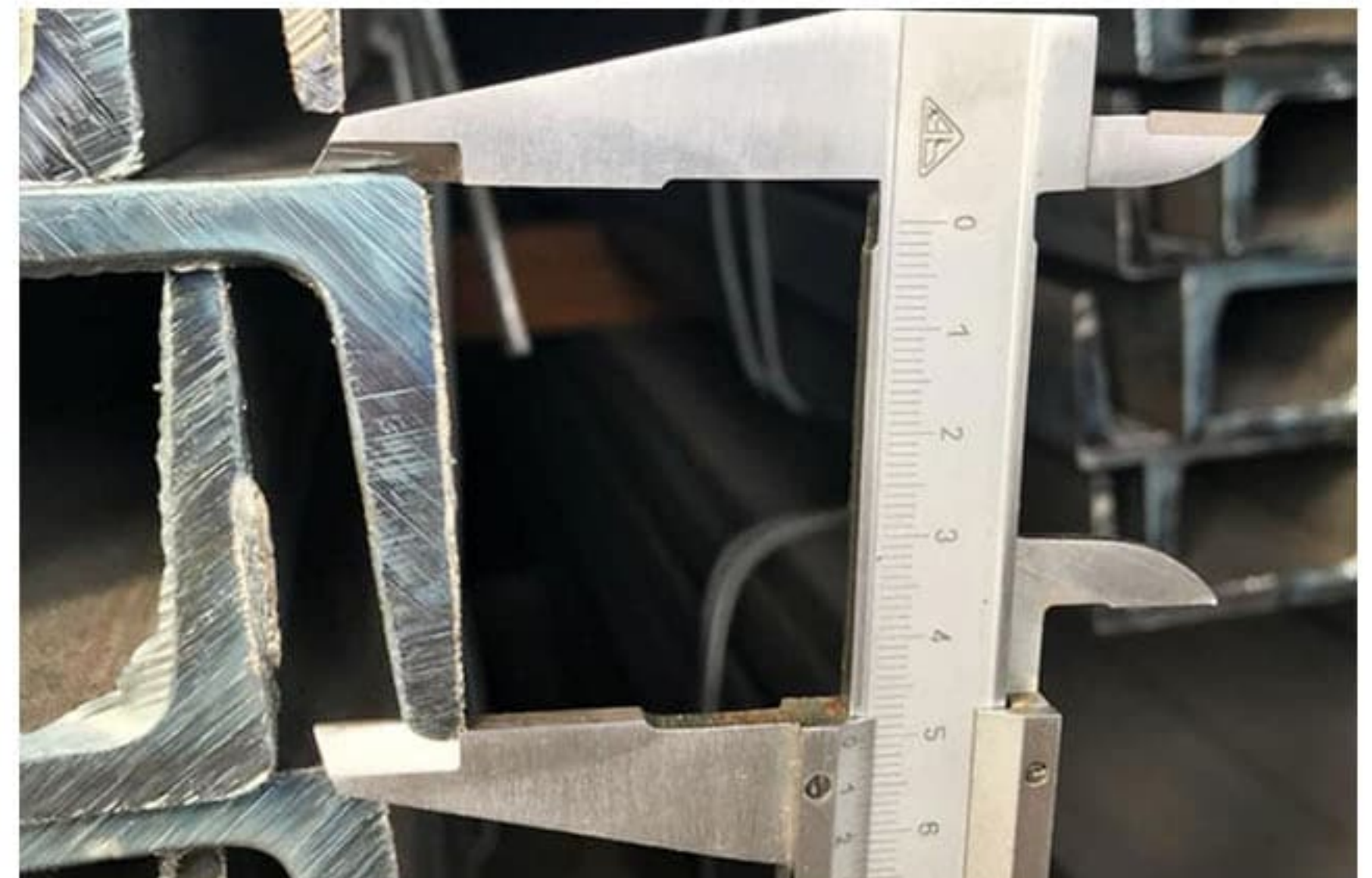
|            |                                                                                                                                                                                                                                    |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | AISI, ASTM, BS, GB                                                                                                                                                                                                                 |
| Material   | A32, AH32, A36, AH36, DH36, D32 DH32<br>10# 20# 45# Q195 Q215 Q235 Q345 Q235b Q355b SS490 SM400<br>SM490 SPHC SPHD SPHE SPHF SEA1002 SEA1006 SEA1008<br>SEA1010<br>S25C S35C S45C 65Mn<br>SPHT1 SPHT2 SPH3 SPH4 QstE or customized |
| Technology | Hot Rolled                                                                                                                                                                                                                         |
| Length     | 3000~12000mm or customized                                                                                                                                                                                                         |
| Size       | 50mm*37mm*4.5mm---400mm*100mm*10mm                                                                                                                                                                                                 |
| Surface    | natural color, black, mill, polished, brush, galvanized etc                                                                                                                                                                        |
| Shape      | U C Channel                                                                                                                                                                                                                        |



# CARBON STEEL CHANNEL

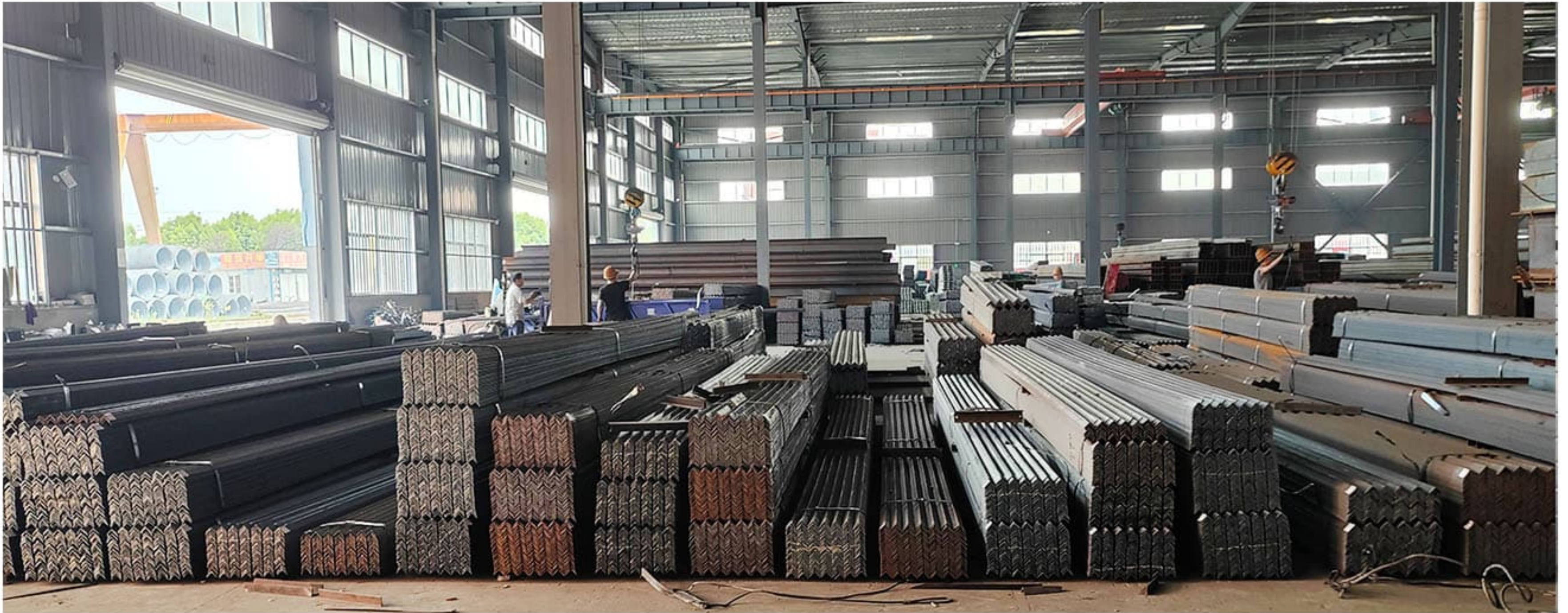


| Size | $h$ (mm) | $b$ (mm) | Thickness(mm) | Density(kg/m) |
|------|----------|----------|---------------|---------------|
| 5#   | 50       | 37       | 4.5           | 5.438         |
| 6.3# | 63       | 40       | 4.8           | 6.634         |
| 8#   | 80       | 43       | 5             | 8.045         |
| 10#  | 100      | 48       | 5.3           | 10.007        |
| 12#  | 120      | 53       | 5.5           | 12.059        |
| 14A# | 140      | 58       | 6             | 14.535        |
| 14B# | 140      | 60       | 8             | 16.733        |
| 16A# | 160      | 63       | 6.5           | 17.24         |
| 16B# | 160      | 65       | 8.5           | 19.752        |
| 18A# | 180      | 68       | 7             | 20.174        |
| 18B# | 180      | 70       | 9             | 23            |
| 20A# | 200      | 73       | 7             | 22.637        |
| 20B# | 200      | 75       | 9             | 25.777        |
| 22A# | 220      | 77       | 7             | 24.999        |
| 25A# | 250      | 78       | 7             | 27.41         |
| 25B# | 250      | 80       | 9             | 31.335        |





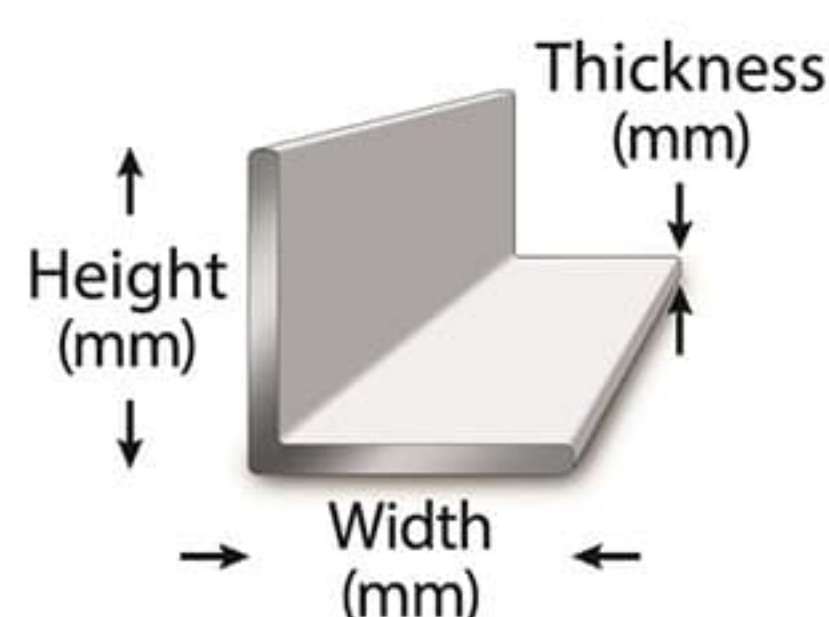
# CARBON STEEL ANGLE BAR



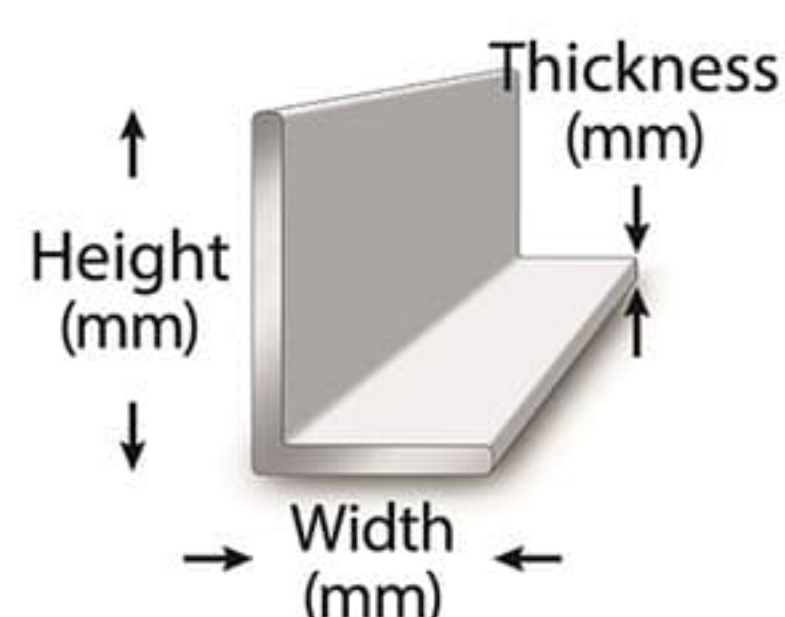
|            |                                                                                                                                                                                                                               |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | AISI, ASTM, BS,GB                                                                                                                                                                                                             |
| Material   | A32,AH32,A36,AH36,DH36,D32 DH32<br>10# 20# 45# Q195 Q215 Q235 Q345 Q235b Q355b SS490 SM400<br>SM490 SPHC SPHD SPHE SPHF SEA1002 SEA1006 SEA1008<br>SEA1010<br>S25C S35C S45C 65Mn<br>SPHT1 SPHT2 SPH3 SPH4 QstE or customized |
| Technology | Hot Rolled                                                                                                                                                                                                                    |
| Length     | 1000~12000mm or customized                                                                                                                                                                                                    |
| Size       | 10*10mm-1000*300mm                                                                                                                                                                                                            |
| Thickness  | 0.5-23mm                                                                                                                                                                                                                      |
| Surface    | natural color,black,mill,polished,brush,galvanized etc                                                                                                                                                                        |
| Shape      | angle (equal & unequal)                                                                                                                                                                                                       |



# CARBON STEEL ANGLE BAR



Equal Angle



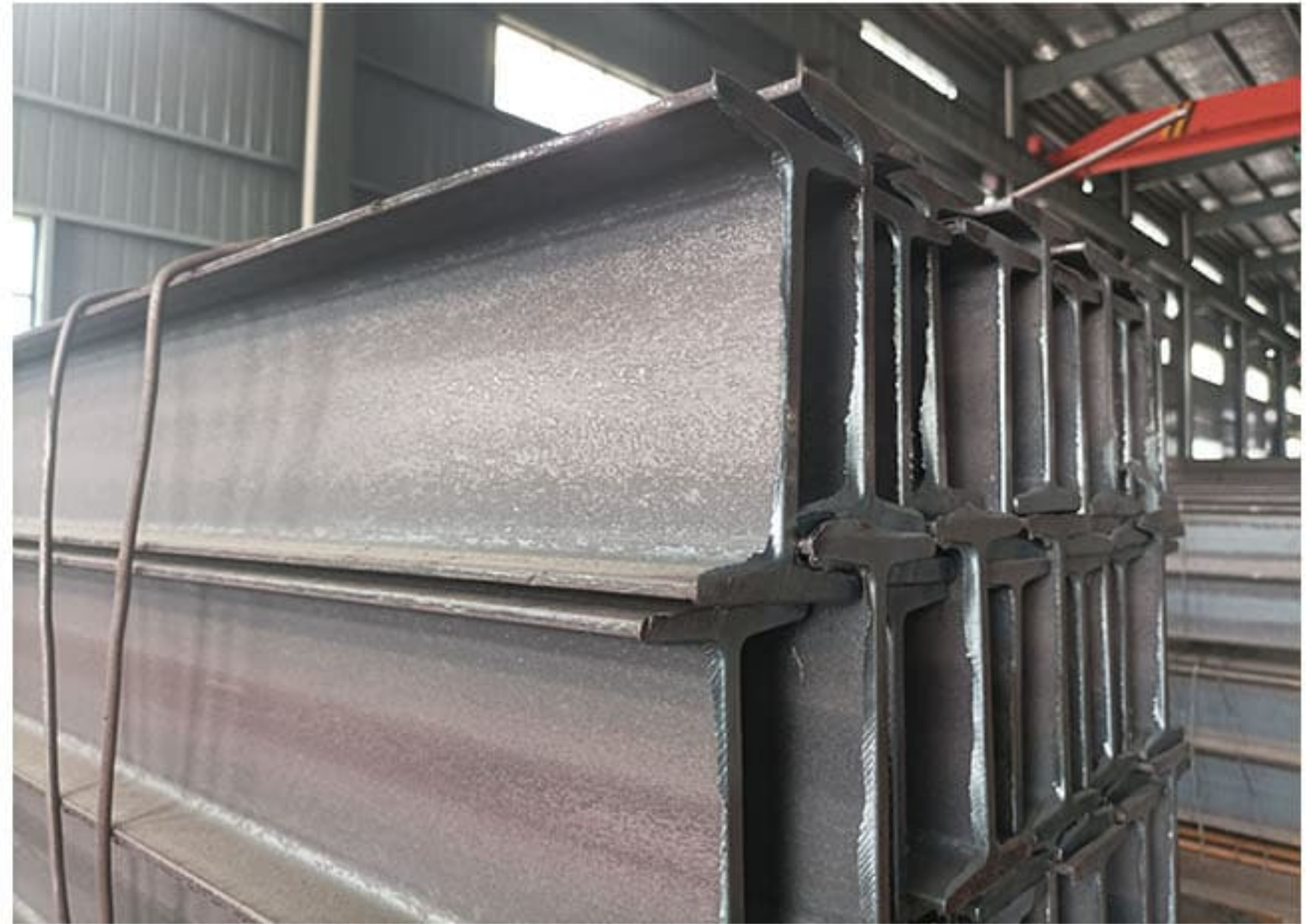
Unequal Angle

| Equal steel angle |        |            |        |
|-------------------|--------|------------|--------|
| Dimension         | Weight | Dimension  | Weight |
| dXbXt             | (Kg/m) | dXbXt      | (Kg/m) |
| (mm)              |        | (mm)       |        |
| 20*20*3           | 0.885  | 80*80*6    | 7.32   |
| 25*25*3           | 1.12   | 80*80*7    | 8.48   |
| 30*30*3           | 1.36   | 80*80*8    | 9.55   |
| 30*30*4           | 1.78   | 90*90*6    | 8.25   |
| 30*30*5           | 2.16   | 90*90*7    | 9.59   |
| 38*38*3           | 1.72   | 90*90*8    | 10.9   |
| 38*38*4           | 2.26   | 90*90*9    | 12.2   |
| 40*40*3           | 1.83   | 90*90*10   | 13.3   |
| 40*40*4           | 2.41   | 100*100*6  | 9.22   |
| 40*40*5           | 2.95   | 100*100*7  | 10.7   |
| 50*50*3           | 2.33   | 100*100*8  | 12.1   |
| 50*50*4           | 3.06   | 100*100*10 | 14.9   |
| 50*50*5           | 3.77   | 120*120*8  | 14.7   |
| 50*50*6           | 4.43   | 120*120*10 | 18.2   |
| 60*60*5           | 4.55   | 120*120*12 | 21.5   |
| 60*60*6           | 5.41   | 130*130*9  | 17.9   |
| 65*65*5           | 5      | 130*130*10 | 19.7   |
| 65*65*6           | 5.91   | 130*130*12 | 23.4   |
| 65*65*8           | 7.66   | 150*150*10 | 22.9   |
| 70*70*5           | 5.37   | 150*150*12 | 27.3   |
| 70*70*6           | 6.38   | 150*150*15 | 33.6   |
| 70*70*7           | 7.35   | 200*200*15 | 45.3   |
| 75*75*5           | 5.76   | 200*200*20 | 59.7   |
| 75*75*6           | 6.85   | 200*200*24 | 71.1   |
| 75*75*7           | 7.94   | 250*250*25 | 93.7   |
| 75*75*8           | 8.92   | 250*250*28 | 104    |
| 75*75*9           | 9.96   | 250*250*35 | 128    |

| Unequal steel angle |        |            |        |
|---------------------|--------|------------|--------|
| Dimension           | Weight | Dimension  | Weight |
| dXbXt               | (Kg/m) | dXbXt      | (Kg/m) |
| (mm)                |        | (mm)       |        |
| 25x16x3             | 0.912  | 100x63x8   | 9.878  |
| 32x20x3             | 1.171  | 100x63x10  | 12.142 |
| 32x20x4             | 1.522  | 100x80x6   | 8.35   |
| 40x25x3             | 1.484  | 100x80x7   | 9.656  |
| 40x25x4             | 1.936  | 100x80x8   | 10.946 |
| 45x28x3             | 1.687  | 100x80x10  | 13.476 |
| 45x28x4             | 2.203  | 110x70x6   | 8.35   |
| 50x32x3             | 1.908  | 110x70x7   | 9.656  |
| 50x32x4             | 2.494  | 110x70x8   | 10.946 |
| 56x36x3             | 2.153  | 110x70x10  | 13.476 |
| 56x36x4             | 2.818  | 125x80x7   | 11.066 |
| 56x36x5             | 3.466  | 125x80x8   | 12.551 |
| 63x40x4             | 3.185  | 125x80x10  | 15.474 |
| 63x40x5             | 3.92   | 125x80x12  | 18.33  |
| 63x40x6             | 4.638  | 140x90x8   | 14.1   |
| 70x45x5             | 4.403  | 140x90x10  | 17.475 |
| 70x45x6             | 5.218  | 140x90x12  | 20.724 |
| 70x45x7             | 6.011  | 140x90x14  | 23.908 |
| 75x50x5             | 4.808  | 160x100x10 | 19.872 |
| 75x50x6             | 5.699  | 160x100x14 | 27.274 |
| 75x50x8             | 7.431  | 160x100x16 | 30.853 |
| 75x50x10            | 9.098  | 180x110x10 | 22.273 |
| 80x50x5             | 5.005  | 180x110x12 | 26.464 |
| 80x50x6             | 5.935  | 180x110x14 | 30.589 |
| 80x50x7             | 6.848  | 180x110x16 | 34.649 |
| 80x50x8             | 7.745  | 200x125x12 | 29.761 |
| 90x56x5             | 5.661  | 200x125x14 | 34.436 |
| 90x56x6             | 6.717  | 200x125x16 | 39.045 |
| 90x56x8             | 8.779  | 200x125x18 | 43.588 |
| 100x63x7            | 8.722  |            |        |



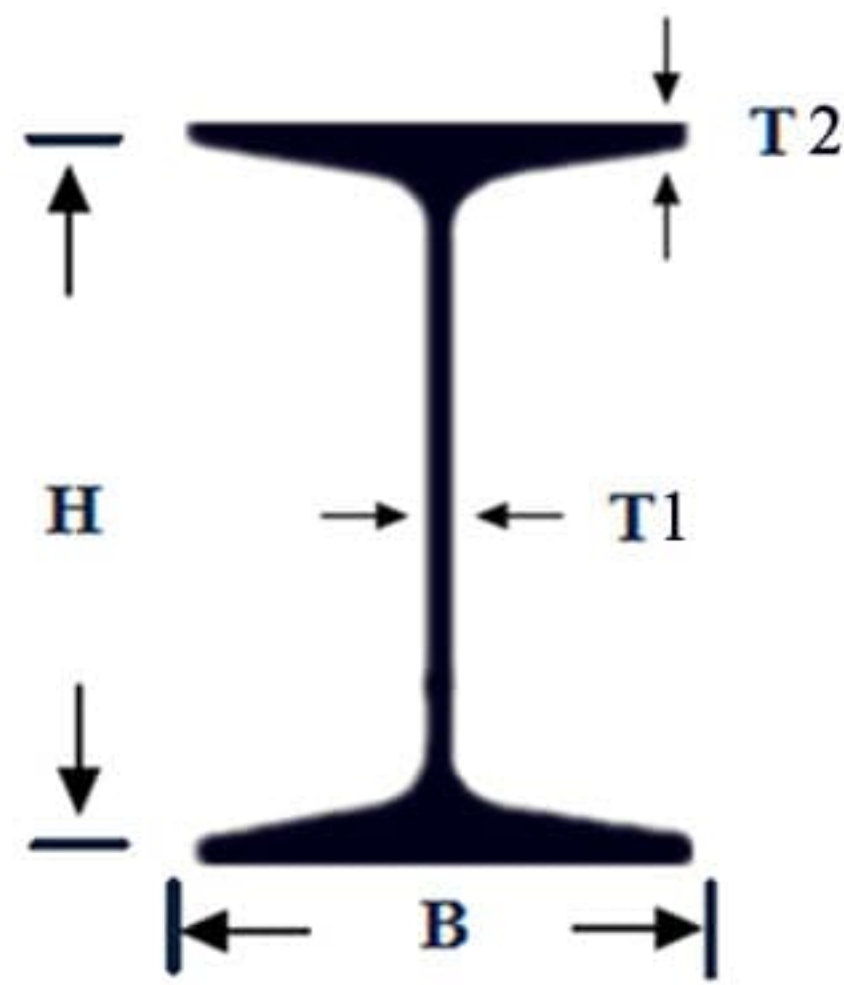
# CARBON STEEL H BEAM



|            |                                                                                                                                                                                                                               |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard   | AISI, ASTM, BS,GB                                                                                                                                                                                                             |
| Material   | A32,AH32,A36,AH36,DH36,D32 DH32<br>10# 20# 45# Q195 Q215 Q235 Q345 Q235b Q355b SS490 SM400<br>SM490 SPHC SPHD SPHE SPHF SEA1002 SEA1006 SEA1008<br>SEA1010<br>S25C S35C S45C 65Mn<br>SPHT1 SPHT2 SPH3 SPH4 QstE or customized |
| Technology | Hot Rolled                                                                                                                                                                                                                    |
| Length     | 1000~12000mm or customized                                                                                                                                                                                                    |
| Size       | 10*10mm-1000*300mm                                                                                                                                                                                                            |
| Thickness  | 0.5-23mm                                                                                                                                                                                                                      |
| Surface    | natural color,black,mill,polished,brush,galvanized etc                                                                                                                                                                        |
| Shape      | H / I                                                                                                                                                                                                                         |



# CARBON STEEL H BEAM



| Nominal Size<br>(mm) | HXB<br>(mm) | T1<br>(mm) | T2<br>(mm) | Unit Weight<br>(kg/m) |
|----------------------|-------------|------------|------------|-----------------------|
| 100*100              | 100*100     | 6          | 8          | 16.9                  |
| 120*120              | 125*125     | 6.5        | 9          | 23.6                  |
| 150*75               | 150*75      | 5          | 7          | 14                    |
| 150*100              | 148*100     | 6          | 9          | 20.7                  |
| 150*150              | 150*150     | 7          | 10         | 31.1                  |
| 175*90               | 175*90      | 5          | 8          | 18                    |
| 200*100              | 198*99      | 4.5        | 7          | 17.8                  |
|                      | 200*100     | 5.5        | 8          | 20.9                  |
| 175*175              | 175*175     | 7.5        | 11         | 40.4                  |
| 194*150              | 194*150     | 6          | 9          | 29.9                  |
| 200*200              | 200*200     | 8          | 12         | 49.9                  |
|                      | 200*204     | 12         | 12         | 56.2                  |
| 250*125              | 248*124     | 5          | 8          | 25.1                  |
|                      | 250*125     | 6          | 9          | 29                    |
| 250*175              | 244*175     | 7          | 11         | 43.6                  |
| 300*150              | 298*149     | 5.5        | 8          | 32                    |
|                      | 300*150     | 6.5        | 9          | 36.7                  |
| 300*200              | 294*200     | 8          | 12         | 55.8                  |
|                      | 298*201     | 9          | 14         | 65.4                  |
| 350*175              | 346*174     | 6          | 9          | 41.2                  |
|                      | 350*175     | 7          | 11         | 49.4                  |
| 400*200              | 396*199     | 7          | 11         | 56.1                  |
|                      | 400*200     | 8          | 13         | 65.4                  |
| 250*250              | 250*250     | 9          | 14         | 71.8                  |
|                      | 250*255     | 14         | 14         | 81.6                  |
| 300*300              | 300*300     | 10         | 15         | 93                    |
|                      | 294*302     | 12         | 12         | 83.4                  |
|                      | 300*305     | 15         | 15         | 105                   |
| 350*350              | 344*348     | 10         | 16         | 113                   |
|                      | 350*350     | 12         | 19         | 135                   |

| Nominal Size<br>(mm) | HXB<br>(mm) | T1<br>(mm) | T2<br>(mm) | Unit Weight<br>(kg/m) |
|----------------------|-------------|------------|------------|-----------------------|
| 400*400              | 388*402     | 15         | 15         | 140                   |
|                      | 394*398     | 11         | 18         | 147                   |
|                      | 400*400     | 13         | 21         | 172                   |
|                      | 400*408     | 21         | 21         | 197                   |
|                      | 414*405     | 18         | 28         | 232                   |
|                      | 428*407     | 20         | 35         | 283                   |
| 350*250              | 340*250     | 9          | 14         | 78.1                  |
| 400*300              | 390*300     | 10         | 16         | 105                   |
| 450*300              | 440*300     | 11         | 18         | 121                   |
| 450*200              | 446*199     | 8          | 12         | 65.1                  |
|                      | 450*200     | 9          | 14         | 74.9                  |
| 500*300              | 482*300     | 11         | 15         | 111                   |
|                      | 488*300     | 11         | 18         | 125                   |
| 500*200              | 496*199     | 9          | 14         | 77.9                  |
|                      | 500*200     | 10         | 16         | 88.2                  |
|                      | 506*201     | 11         | 19         | 102                   |
| 600*200              | 600*200     | 11         | 17         | 103                   |
|                      | 596*199     | 10         | 15         | 92.4                  |
|                      | 606*201     | 12         | 20         | 118                   |
| 600*300              | 582*300     | 12         | 17         | 133                   |
|                      | 588*300     | 12         | 20         | 147                   |
|                      | 594*302     | 14         | 23         | 170                   |
| 700*300              | 692*300     | 13         | 20         | 163                   |
|                      | 700*300     | 13         | 24         | 182                   |
| 800*300              | 800*300     | 14         | 26         | 207                   |
|                      | 808*302     | 16         | 30         | 241                   |
| 900*300              | 890*299     | 15         | 23         | 210                   |
|                      | 900*300     | 16         | 28         | 240                   |
|                      | 912*302     | 18         | 34         | 283                   |



# CARBON STEEL REBAR



|          |                                                                 |
|----------|-----------------------------------------------------------------|
| Grade    | HRB335 HRB400 HRB500 ASTM GR40 GR60                             |
| Diameter | 6MM~40MM or customized                                          |
| Length   | 5m-14m,5.8m,6m,10m-12m,12m or customized                        |
| Payment  | L/C T/T                                                         |
| Packing  | Bundle, or with all kinds of colors PVC or as your requirements |





# CARBON STEEL REBAR

| Diameter (mm) | Theoretical weight (kg/m) |
|---------------|---------------------------|
| 6             | 0.2221                    |
| 8             | 0.3949                    |
| 10            | 0.6170                    |
| 12            | 0.8885                    |
| 14            | 1.2093                    |
| 16            | 1.5795                    |
| 18            | 1.9991                    |
| 20            | 2.4580                    |
| 22            | 2.9863                    |
| 25            | 3.8563                    |
| 28            | 4.8373                    |
| 32            | 6.3181                    |
| 36            | 7.9963                    |
| 40            | 9.8720                    |



| Steel grade | C% <      | Si%<      | Mn%<      | P%<   | S%<   | Cr%>    | Ceq< |
|-------------|-----------|-----------|-----------|-------|-------|---------|------|
| HRB335      | 0.17-0.25 | 0.40-0.80 | 1.00-1.60 | 0.045 | 0.045 | 0.3-0.4 | 0.52 |
| HRB400      | 0.17-0.25 | 0.20-0.80 | 1.20-1.60 | 0.045 | 0.045 | 0.3-0.4 | 0.54 |
| HRB500      | <0.25     | <0.80     | <1.6      | 0.045 | 0.045 | 0.3-0.4 | 0.55 |
| Gn60        | S030      | <0.40     | <1.00     | 0.050 | 0.050 | 0.3-0.4 |      |



# CARBON STEEL SERIES

| Grade | Chemical Composition (%) |      |     |       |       | Mechanical Properties  |                    |                |
|-------|--------------------------|------|-----|-------|-------|------------------------|--------------------|----------------|
|       | C≤                       | Si≤  | Mn≤ | P≤    | S≤    | Tensile Strength (Mpa) | Yield Stress (Mpa) | Elongation (%) |
| Q235B | 0.20                     | 0.28 | 0.7 | 0.025 | 0.025 | 380-450                | 270-300            | 28             |
| Q345B | 0.20                     | 0.50 | 1.6 | 0.034 | 0.025 | 550-600                | 380-450            | 25             |
| Q355B | 0.24                     | 0.55 | 1.6 | 0.035 | 0.025 | 550-630                | 380-450            | 21             |

| Carbon content (wt.%) | Microstructure | Properties        | Examples                                                                        |                                |
|-----------------------|----------------|-------------------|---------------------------------------------------------------------------------|--------------------------------|
| Low-carbon steel      | < 0.25         | Ferrite, pearlite | Low hardness and cost. High ductility, toughness, machinability and weldability | AISI 304, ASTM A815, AISI 316L |
| Medium-carbon steel   | 0.25 – 0.60    | Martensite        | Low hardenability, medium strength, ductility and toughness                     | AISI 409, ASTM A29, SCM435     |
| High-carbon steel     | 0.60 – 1.25    | Pearlite          | High hardness, strength, low ductility                                          | AISI 440C, EN 10088-3          |

