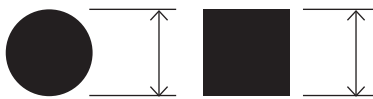


STANDARD TOLERANCES TO BS EN 755

ROUND & SQUARE BARS



| WIDTH/DIAMETER | | TOLERANCE |
|----------------|-------------|-----------|
| OVER | UP TO & INC | MM |
| 8 | 18 | +/- 0.22 |
| 18 | 25 | +/- 0.25 |
| 25 | 40 | +/- 0.30 |
| 40 | 50 | +/- 0.35 |
| 50 | 65 | +/- 0.40 |
| 65 | 80 | +/- 0.45 |
| 80 | 100 | +/- 0.55 |

ROUND TUBES



| DIAMETER (OD or ID) | | TOLERANCE |
|---------------------|-------------|-----------|
| OVER | UP TO & INC | MM |
| 8 | 18 | +/- 0.60 |
| 18 | 30 | +/- 0.70 |
| 30 | 50 | +/- 0.90 |
| 50 | 80 | +/- 1.10 |
| 80 | 120 | +/- 1.40 |
| 120 | 200 | +/- 2.00 |
| 200 | 350 | +/- 3.00 |

TOLERANCES ON WALL THICKNESS

| NOMINAL THICKNESS | | TOLERANCE | |
|-------------------|-------------|-----------|----------|
| OVER | UP TO & INC | OD<150 | OD>150 |
| | | % | |
| - | 3 | +/- 0.70 | +/- 0.90 |
| 3 | 5 | +/- 0.60 | +/- 0.80 |
| 5 | - | +/- 0.50 | +/- 0.70 |

SQUARE & RECTANGULAR HOLLOW SECTIONS



| WIDTH, DEPTH OR WIDTH ACROSS FLATS | | TOLERANCE ON WIDTH, DEPTH OR ACROSS FLATS | | | |
|------------------------------------|-------------|---|----------|----------------|----------|
| OVER | UP TO & INC | CD ≤ 100 | | 100 < CD ≤ 200 | |
| | | Alloy 1 | Alloy 2 | Alloy 1 | Alloy 2 |
| | | MM | MM | MM | MM |
| - | 10 | +/- 0.25 | +/- 0.40 | +/- 0.30 | +/- 0.50 |
| 10 | 25 | +/- 0.30 | +/- 0.50 | +/- 0.40 | +/- 0.70 |
| 25 | 50 | +/- 0.50 | +/- 0.80 | +/- 0.60 | +/- 0.90 |
| 50 | 100 | +/- 0.70 | +/- 1.00 | +/- 0.90 | +/- 1.20 |
| 100 | 150 | - | - | +/- 1.10 | +/- 1.50 |
| 150 | 200 | - | - | +/- 1.30 | +/- 1.90 |

Note: Alloy 1 = 6060, 6063 & 6005 Alloy. Alloy 2 = 6082 Alloy

TOLERANCES ON WALL THICKNESSES

| NOMINAL WALL THICKNESS | | TOLERANCE ON WALL THICKNESS FOR CD | | | |
|------------------------|-------------|------------------------------------|----------|----------------|----------|
| OVER | UP TO & INC | CD ≤ 100 | | 100 < CD ≤ 300 | |
| | | Alloy 1 | Alloy 2 | Alloy 1 | Alloy 2 |
| | | MM | MM | MM | MM |
| 0.5 | 1.5 | +/- 0.20 | +/- 0.30 | +/- 0.30 | +/- 0.40 |
| 1.5 | 3 | +/- 0.25 | +/- 0.35 | +/- 0.40 | +/- 0.50 |
| 3 | 6 | +/- 0.40 | +/- 0.55 | +/- 0.60 | +/- 0.70 |
| 6 | 10 | +/- 0.60 | +/- 0.75 | +/- 0.80 | +/- 1.00 |
| 10 | 15 | +/- 0.80 | +/- 1.00 | +/- 1.00 | +/- 1.30 |
| 15 | 20 | +/- 1.20 | +/- 1.50 | +/- 1.50 | +/- 1.80 |

CONCAVITY/CONVEXITY

SQUARE & RECTANGULAR HOLLOW SECTIONS

| WIDTH w | | MAX ALLOWANCE DEV | |
|---------|-------------|-------------------|---------|
| OVER | UP TO & INC | THK≤5mm | THK>5mm |
| - | 3 | 0.30 | 0.20 |
| 30 | 60 | 0.40 | 0.30 |
| 60 | 100 | 0.60 | 0.40 |
| 100 | 150 | 0.90 | 0.60 |
| 150 | 200 | 1.20 | 0.80 |

RECTANGULAR BARS



| WIDTH w | | TOLERANCE w | | THICKNESS 'T' TOLERANCE | | | | |
|---------|-------------|-------------|----------|-------------------------|----------|----------|----------|----------|
| OVER | UP TO & INC | MM | | 2≤T≤6 | 6<T≤10 | 10<T≤18 | 18<T≤30 | 30<T≤50 |
| 10 | 18 | +/- 0.25 | +/- 0.20 | +/- 0.25 | +/- 0.25 | | | |
| 18 | 30 | +/- 0.30 | +/- 0.20 | +/- 0.25 | +/- 0.30 | +/- 0.30 | | |
| 30 | 50 | +/- 0.40 | +/- 0.25 | +/- 0.25 | +/- 0.30 | +/- 0.35 | +/- 0.40 | +/- 0.40 |
| 50 | 80 | +/- 0.60 | +/- 0.25 | +/- 0.30 | +/- 0.35 | +/- 0.40 | +/- 0.50 | |
| 80 | 120 | +/- 0.80 | +/- 0.30 | +/- 0.35 | +/- 0.40 | +/- 0.45 | +/- 0.60 | |
| 120 | 180 | +/- 1.00 | +/- 0.40 | +/- 0.45 | +/- 0.50 | +/- 0.55 | +/- 0.60 | |
| 180 | 240 | +/- 1.40 | | +/- 0.55 | +/- 0.60 | +/- 0.65 | +/- 0.70 | |

CONCAVITY/CONVEXITY RECTANGULAR BARS

| WIDTH w | | TOLERANCE |
|---------|-------------|-----------|
| OVER | UP TO & INC | +/- MM |
| >10 | 30 | 0.2 |
| 30 | 50 | 0.3 |
| 50 | 80 | 0.4 |
| 80 | 120 | 0.6 |
| 120 | 180 | 0.9 |
| 180 | 240 | 1.2 |
| 240 | 350 | 1.5 |