

# BS 4360 : 1990

## Weldable structural steels

### Tolerances for flats

#### Length tolerances for flats

The length tolerances on ordered length for flats shall be -0, +300 mm.

#### Width tolerances for flats

The width tolerances on ordered width for flats shall be as given in table 1.

#### Thickness tolerances for flats

The thickness tolerances on ordered thickness length for flats shall be as given in table 2.

### Tolerances for round and square bars

#### Size tolerances for rounds and square bars

The size (diameter in the case of round bars and width across flats in the case of square bars) tolerances on ordered size shall be given in table 3.

Diameter or width across flats shall be measured at a distance of not less than 150 mm from the end of the bars when delivery is made in lengths and at any point when delivery is made with restricted length tolerances.

The out-of-section tolerances shall be given in table 3.

Out-of-section shall be measured as the difference between the maximum and minimum diameters on the same cross section, for round bars, and the difference of the distance between parallel faces on the same cross section, for square bars.

#### Length tolerances for round and square bars

The length tolerance on ordered length for round and square bars shall be -0, +600 mm.

**Table 1. Width tolerances for flats**

Ordered width mm	Tolerances mm
Up to and including 35	±0.5
Over 35 up to and including 75	±0.8
Over 75 up to and including 100	±1.0
Over 100 up to and including 125	±1.3
Over 125 up to and including 150	±1.5

**Table 2. Thickness tolerances for flats**

Ordered thickness mm	Tolerances mm
Up to and including 10	±0.4
Over 10 up to and including 20	±0.5
Over 20 up to and including 40	±0.6
Over 40 up to and including 60	±0.8
Over 60	±1.0

**Table 3. Size tolerances for round and square bars**

Ordered size mm	tolerances on diameter or width mm	tolerances on out-of-section mm
Up to and including 15	±0.2	0.3
Over 15 up to and including 25	±0.3	0.5
Over 25 up to and including 35	±0.4	0.6
Over 35 up to and including 50	±0.5	0.8
Over 50 up to and including 65	±0.6	0.9
Over 65 up to and including 80	±0.7	1.1
Over 80 up to and including 100	±0.9	1.4
Over 100 up to and including 120	±1.1	1.7
Over 120 up to and including 160	±2.0	3.0
Over 160 up to and including 200	±2.5	3.8
Over 200	±3.0	4.5

