

FORMULAS

$$\text{Angle iron} = W \times H \times T \times L \times U.W.$$

$$\text{Cone} = 3.14 \times \frac{D \times D}{4} \times \frac{H}{3} \times U.W.$$

$$\text{Cube} = L \times W \times H \times U.W.$$

$$\text{Cylinder} = 3.14 \times \frac{D}{2} \times \frac{D}{2} \times L \times U.W.$$

$$\text{Hollow ball} = 3.14 \times D \times D \times T \times U.W.$$

$$\text{Pipe} = 3.14 \times D \times L \times T \times U.W.$$

$$\text{Plate steel} = W \times L \times T \times U.W.$$

$$\text{Pyramid} = W \times L \times \frac{H}{3} \times U.W.$$

$$\text{Round plate} = 3.14 \times \frac{D}{2} \times \frac{D}{2} \times T \times U.W.$$

FORMULAS (continued)

$$\text{Solid balls} = 3.14 \frac{D \times D \times D}{6} \times \text{U.W.}$$

$$\text{Stress} = \frac{W}{N} \times \frac{L}{H}$$

$$\text{Vertical capacity} = \text{SWL (sling vertical)} \times \frac{H}{L} \times N$$

$$\text{Wedge} = W \times \frac{L}{2} \times H \times \text{U.W.}$$

Unit Weights (U.W.)

Unit weight per cubic meter (cubic foot) of steel = 7 850 kg (490 lb.)

Unit weight per square meter (square foot) of 1 cm (1 in.) of steel = 78.5 kg (40.8 lb.)

Unit weight of concrete per cubic meter (cubic foot) = 2 400 kg (150 lb.)