

Formulas

Constants

π	3.14
-------	------

Formulas

Descriptions	Full	Abbreviated
Cube	length $\times$ width $\times$ height $\times$ unit weight	$L \times w \times H \times U.W.$
Cylinder	$\pi \times \frac{\text{diameter}^2}{4} \times \text{length} \times \text{unit weight}$	$\pi \times \frac{D^2}{4} \times L \times U.W.$
Hollow ball	$\pi \times \text{diameter} \times \text{diameter} \times \text{thickness} \times \text{unit weight}$	$\pi \times D \times D \times T \times U.W.$
Load	$\frac{y}{z} \times \text{weight}$	$\frac{y}{z} \times W$
Pipe	$\pi \times \text{diameter} \times \text{length} \times \text{thickness} \times \text{unit weight}$	$\pi \times D \times L \times T \times U.W.$
Pipe	$\pi \times \text{mean diameter} \times \text{length} \times \text{thickness} \times \text{unit weight}$	$\pi \times M.D. \times L \times T \times U.W.$
Plate steel	length $\times$ width $\times$ thickness $\times$ unit weight	$L \times w \times T \times U.W.$
Solid cylinder	$\pi \times \text{radius}^2 \times \text{length}$	$\pi r^2 \times L$
Stress	$\frac{\text{width}}{\text{number of slings}} \times \frac{\text{length}}{\text{height}}$	$\frac{w}{\# \text{ slings}} \times \frac{L}{H}$

Formulas (continued)

Tandem lift	weight $\times$ diameter = weight $\times$ diameter	$W \times D = W \times D$
Tension	$\frac{\text{number of lines} \times \text{safe load}}{2 \times \text{height}}$	$\frac{\# \text{ lines} \times \text{S.L.}}{2 \times H}$
Wedge	width $\times \frac{\text{length}}{2} \times \text{height} \times \text{unit weight}$	$w \times \frac{L}{2} \times H \times \text{U.W.}$