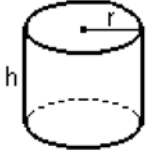# Tank Calculations   Weight, Volume, Scrap Cost

Item TF-8202

ENTER   Diameter $d := 16 \cdot ft$ **Scrap Dollars**   **Weights**

Height $h := 30 \cdot ft$

$s304 := .47$ per lb $wcs4 := 10.21$ lb/sf

$t := .227 \cdot in$ $s316 := .65$ per lb $wss4 := 11.162$ lb/sf

$type := \text{"cs"}$ $cs := \dfrac{246}{2240}$ per long ton

CHOICES
cs
ss304   **Prices effective 6/24/2013**
ss316

Steel $type = \text{"cs"}$ **Plate Thickness** $t = 0.227 \; in$

Surface area & Scrap Cost   Calculates tank shell + flat top and flat bottom - all same thickness. Does not include coils, manheads, pipe fittings.

$Volume = 45121 \; gal$

Area $SA = 1910 \; ft^2$

Weight: For $type = \text{"cs"}$ and

$t = 0.227 \; in$ $weight = 17708 \; lb$

Weight + 15% for fittings, etc: $weightplus = 20364 \; lb$

Scrap Price: $ScrapPrice = 2236$ dollars

Coils - 2 inch pancake $L := 85 \cdot ft$ $Sch40 := 3.625 \cdot \dfrac{lb}{ft}$ $Sch80 := 5.022 \cdot \dfrac{lb}{ft}$
Approx 85 linear feet

IF Sch 40 $L40 := Sch40 \cdot L$ $L40 = 308 \; lb$

IF Sch 80 $L80 := Sch80 \cdot L$ $L80 = 427 \; lb$

$MIN := weightplus + L40$ $MIN = 20672 \; lb$

$MAX := weightplus + L80$ $MAX = 20791 \; lb$

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