

METHODS TO ESTIMATE APPROXIMATE WEIGHT OF TOOL STEEL BARS

ROUNDS

Multiply diameter of bar by 4. Square the result and divide by 6.

For example:

Size 3" round

$$3 \times 4 = 12$$

$$12 \times 12 = 144$$

$$144 \div 6 = 24 \text{ lbs. per foot}$$

SQUARES

Square the section and add a zero. This will give the weight per yard. Divide by 3 to get the weight per foot. For example:

Size 4" square

$$4 \times 4 = 16$$

$$\text{Add a zero} = 160 \text{ lbs. per yard}$$

$$160 \div 3 = 53.33 \text{ lbs. per foot}$$

FLATS

Multiply the width by the thickness. Add a zero and divide by 3.

For example:

Size 4" X 1"

$$4 \times 1 = 4$$

$$\text{Add a zero} = 40$$

$$40 \div 3 = 13.33 \text{ lbs. per foot}$$

NOTE: For Molybdenum High Speed grades, multiply tool steel weights by 1.03. For Tungsten High Speed grades, multiply steel weights by 1.11

TOOL STEEL WEIGHT FORMULAS

SHAPE	POUNDS PER FOOT	FEET PER POUND
Round	$2.667 \times d^2$	$.3749 \div d^2$
Flat	$3.396 \times wt$	$.2945 \div wt$
Square	$3.396 \times d^2$	$.2945 \div d^2$
Hexagonal	$2.942 \times d^2$	$.3398 \div d^2$
Half Round	$1.334 \times d^2$	$.7498 \div d^2$
Half Oval	$2.647 \times wt$	$.3778 \div wt$