

AUSTIN WEIGHT CALCULATOR

USEFUL TABLES

- (1) In the centre of the scale under the slide are details of Decimal Equivalents of Fractions.
- (2) On the reverse side of the scale will be found a useful set of weights per foot of a variety of steel sections.
- (3) On the reverse side of the slide will be found weights per square foot of plate and weights per foot of flats. We have given a range of weights per foot of flats to enable a weight of most other sizes of flats to be calculated by easy addition or multiplication.

CALCULATIONS

- (a) With one movement of the slide the total weight in tons of any number of pieces can be given, providing the length and poundage per foot is known.

EXAMPLE 1—

Required: Total weight of 15 pieces 24 ft. long at 28 lbs. per foot.

Instructions: Move the slide so that the 28 lbs. coincides with 24 ft. Read down the number of bars to 15, and to the left you will read the weight— $4\frac{1}{2}$ tons.

EXAMPLE 2—

Required: Total weight of 40 bars 10 ft. long at 2.8 lbs. per foot.

Instructions: Move the slide so that the 2.8 lbs. coincides with 10 ft. Read down the number of bars to 40 and read the weight to the left—10 cwts.

- (b) To calculate the weight of a footage of steel, say 600 ft. at 14 lbs. per foot, proceed as above, moving the slide so that the 14 lbs. coincides with 100 ft., and read the weight to the left of 6 bars, namely, $3\frac{3}{4}$ tons.
- (c) To calculate the weight of plates or sheets, first obtain the total square feet per plate or sheet and the weight per square foot.

EXAMPLE 3—

Required: Total weight of 80 sheets 6 ft. \times 3 ft. \times 7 lbs. per sq. ft.

Instructions: Move the slide so that the 7 lbs. coincides with 18 ft. Read down the number off to 80 and read the weight at the left, namely, $4\frac{1}{2}$ tons.

To calculate the number of bars in a certain tonnage, providing the length and weight per foot are known, proceed as follows:—

EXAMPLE 4—

Required: The number of bars 24 ft. long weighing 14 lbs. per ft. in 6 tons.

Instructions: Place the 14 lbs. per foot in coincidence with 24 ft., read down the left hand scale to 6 tons, and to the right can be read the number of bars, namely, 40 bars.

We have designed the calculator to function with one hand for easy use, say, during telephone conversations, and feel sure with a little practice you will find this CALCULATOR invaluable.

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