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Formula for Notching Mild Steel Based on 25 Tons Per Square Inch

Total Sheet Length x Material Thickness x 25 = Tonnage

Multiplier Chart

Material Description	Tons Per Sq. In.	Shear Strength Per Sq. In.	Multiplier
Aluminum - Soft Sheet	7-1/2	15,000	0.30
Aluminum - Half Hard	9-1/2	19,000	0.38
Aluminum - Hard	12	25,000	0.50
Brass - soft sheet	15	30,000	0.60
Copper - rolled	14	28,000	0.57
Steel - mild	25	50,000	1.00
Steel - ASTM-A36	30	60,000	1.20
Steel - 50 carbon	36	70,000	1.40
Steel - cold drawn	30	60,000	1.20
Steel - stainless (18-8)	35	70,000	1.40

THE MULTIPLIES SHOWN OPPOSITE MAY BE USED TO CONVERT THE ABOVE CHART
AND FORMULA TO FIND TONNAGE REQUIRED TO NOTCH OTHER MATERIAL
FOR EXAMPLE: IT REQUIRES 1.5 TONS TO NOTCH 1" OF 16-GAUGE MILD STEEL -
STAINLESS STEEL (18-8), WOULD REQUIRE 1.5 X 1.4 (MULTIPLIER) OR 2.1 TONS