

MG 700 TIG

PREMIUM QUALITY HIGH HARDNESS ALLOY FOR MOST HIGH SPEED TOOL STEELS DC STRAIGHT POLARITY (DC-)

GENERAL CHARACTERISTICS:

Specially designed for use on high speed steels. Tungsten, molybdenum, and vanadium are alloyed with other elements to produce a deposit that will maintain a sharp edge on high speed tool steels and withstand elevated temperatures that are normally encountered with these tools.

APPLICATIONS:

Hardfacing and build-up of sliding surfaces, mill cutters, lathe tools, cams, punches, stencils, trimming plates, circle cutting tools, dies, drawing mandrels, planing tools, turning tools, reamers, hot shears, mandrels and molding plates.

TECHNICAL DATA:

Hardness as welded	58-62 RC		
Hardness heat treated	63-65 RC		
Hot Hardness	Approx. 56 at 1100°F (600°C)		
Current	DC- straight polarity		
Sizes: (in)	3/32"	1/8"	
(mm)	2.5	3.25	

PROCEDURE:

Use direct current straight polarity. One hundred percent argon gas is recommended. Adjust the amperage according to the base metal thickness and the amount of deposit required. All foreign materials must be removed from weld area. Approximate preheat of tool steel is 800°-1100°F (425°-600°C). If base metal is known follow the tool steel welding procedure. Temperature should be maintained during entire welding operation. When making deposit on low carbon steel, no preheat is required but a minimum of three layers is necessary to overcome dilution. After welding, reheat to 1000°F (540°C), allow to cool slowly. Final dimension grinding can then be done.