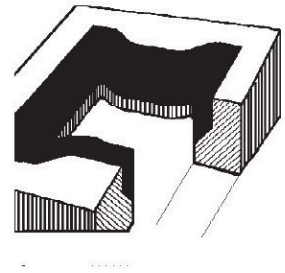


Tungsten free hot work tool steel electrode



- ❑ Deposits maintain a very sharp edge.
- ❑ Alloying elements include molybdenum and vanadium.
- ❑ Weld metal maintains many of the properties of H13 tool steel.

INTERNATIONAL SPECIFICATIONS	NONE
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APPLICATIONS:

For repair and reclamation of tools and dies subject to heat checking.

MICROSTRUCTURE:

In the as-welded condition, the microstructure consists of partially tempered martensite with carbides and some retained austenite.

ALL WELD METAL ANALYSIS (Typical Weight %):

S	C	Mo	S	Mn	V	Cr	P	Fe
1.16	.35	1.76	.03	.4	1.2	5.26	.03	bal

FLUX COLOR: Grey

TYPICAL MECHANICAL PROPERTIES:

Undiluted Weld Metal

Maximum Value Up to:

Hardness (as welded)

Rockwell C 54-58

RECOMMENDED CURRENT: DC Reverse (+), Straight (-) or AC

RECOMMENDED AMPERAGE SETTINGS:

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Minimum Amperage	45	80	110
Maximum Amperage	60-90	80-120	125-175

WELDING POSITIONS: Flat, Horizontal, Vertical up

DEPOSITION RATES:

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Setting	Recovery Rate
3/32 (2.5)	14" (350)	.45oz (12g)	36 (78)	30 (66)	70	120%
1/8 (3.25)	14" (350)	.93oz (25g)	17 (38)	20 (44)	100	120%
5/32 (4.0)	14" (350)	1.2oz (34g)	13 (29)	17 (37)	130	120%

WELDING TECHNIQUES:

When welding on tool steel, preheat the part to 1100°F (600°C) and maintain this temperature during welding. Allow parts to cool slowly.