



## TECHNIWEAR 50<sup>®</sup>

### Data Sheet

#### Description:

A chromium carbide hardfacing alloy that produces a controlled microstructure of specially sized carbides in a very tough matrix. For applications involving high impact combined with abrasion. Weld metal is tougher than conventional chromium carbide alloys with fewer stress relieving check-cracks.

#### Specifications

**Wire Type:** Metal-cored, open-arc or gas-shielded  
Deposits are slag-free

**Alloy Content:** Carbon, Chromium, Manganese, Silicon

#### Weld Deposit Properties:

Hardness: 45 - 50 Rc  
Deposit Thickness: 3-5 layers  
Deposits cannot be flame cut

#### Welding Parameters – DC Reverse or Straight Polarity

Diameter	.045" (1.2mm)	1/16" (1.6mm)	7/64" (2.8mm)
Current <i>amps</i>	100-250	160-300	250-450
Voltage (DCRP) <i>volts</i>	15-26	20-25	24-30
Stickout <i>inch (mm)</i>	3/4"-1"(18-25mm)	1"-1 "(25-35mm)	1 "(40mm)
Gas Flow <i>cfh (l/hr)</i>	NA	NA	NA

While all sizes of Techniwear 50 will easily operate with or without a gas cover, you may find applications for .045 and 1/16 for which you prefer a shielding gas. If a gas cover is used, Argon/CO<sub>2</sub> or 100% CO<sub>2</sub> is recommended. This will cause amperages to go up by about 10% and the stick-out should be shortened.

When welding out of position, use the lower range of amperages and voltages. In addition, a gas cover may be useful, especially when using a constant current power source and voltage sensing feeder.

#### Packaging

Diameter	.045"(1.2mm)	1/16"(1.6mm)
25 Lb. Spools	Standard	Standard