



Techniwear 45-O

Metal-Cored, Open-Arc, or Gas Shielded Hardfacing Filler Metal

Features

- Metal-cored, open arc, or gas shielded wire
- Deposits are slag free
- May be used on a variety of steels including austenitic manganese steels
- Complex carbide hardfacing wire with superior resistance to severe abrasion, corrosion, oxidation at high temperatures up to 1300°F
- A unique anti-wear alloy formulated to develop a dense, but very fine network of complex carbides in a reinforced matrix.

Applications

- Blast furnace charging equipment
- Agricultural implements
- Sinter plant parts
- Cement mill parts
- Coke pusher shoes
- Brick making equipment
- Wear plates
- Cereal grinding equipment
- Tong bits
- Conveyor screws
- Slag ladles
- Mixer paddles
- Ash fans
- Solid waste shredder parts

Diameters & Packages

Diameter	25 lb	55 lb
0.045"	✓	
0.062" (1/16")	✓	
0.093" (3/32")		✓
0.109" (7/64")		✓

Technical Specifications

- **Average Hardness:** 62-66 HRC
- **Deposit Thickness:** 1-2 layers
- Deposits cannot be flame-cut
- Deposits will check-crack to relieve stresses
- Use DC Electrode Positive
- Hardness and wear resistance up to 1300°F
- Excellent single pass hardness

Recommended Weld Parameters:

Diameter	Volts	Amps	Stick Out
0.045"	15-26	100-225	¾"-1"
0.062" (1/16")	20-28	160-300	1"-1 ½"
0.093" (3/32")	28-30	230-400	1"-1 ¼"
0.109" (7/64")	28-32	250-400	1 ½"

- **Welding Procedure:** While all sizes will easily operate with or without a gas cover, you may find applications for 0.045 and 0.062 for which you prefer a shielding gas. If a gas cover is used, Argon/CO2 or 100% CO2 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.