

STOODY® 160FC / 160FC-O

Gas Metal Arc and Open Arc Welding Wires

Stoody 160FC / 160FC-O deposits consist of tungsten carbide particles in a nickel silicon boron matrix. Due to higher tungsten carbide content, Stoody 160FC / 160FC-O are ideal composite hardfacing overlays with a microstructure that delivers some toughness and resistance to corrosion and most of all, extreme abrasion and fine particle erosion resistance. They also provides improved weldability through enhanced wetting, tie in, and arc stability.

TYPICAL MECHANICAL PROPERTIES

Abrasion Resistance	Excellent
Matrix Hardness, HRC	38 - 45
Tungsten Carbide Hardness, HV	1800 - 2400
Deposit Layers	2 Maximum
Surface Cross Check	Depends on application
Machinability	Grinding only

TYPICAL APPLICATIONS

- Dredge rotary cutter heads
- Oil sands crushers and screens
- Drill bits, stabilizers, and kick rings
- Hardbanding (Open-Hole)
- Tunnel bore machine face cutters
- Brick plant extruders and pug knives
- Anode paste mixer flights and teeth
- Foundry sand mixer blades
- Dewatering press, centrifuges, and pump screws

STANDARD SIZES & PACKAGING

Diameter	Packaging	Part #
1/16" (1.6 mm)	33 lb (15 kg) Wire Basket	12022500
5/64" (2.0 mm)	50 lb (22.67 kg) Poly Pak	12031600
3/32" (2.4 mm)	50 lb (22.67 kg) Poly Pak	12027100
7/64" (2.8 mm)	50 lb (22.67 kg) Poly Pak	12033700

OPERATIONAL CHARACTERISTICS/WELDING PARAMETERS (DCEP)

1/16" (1.6 mm) and 5/64" (2.0 mm)

Current DCEP, amp	130 – 200
Voltage (volts)	16 – 18
Shielding Gas	75% Ar / 25% CO ₂
Wire Extension, in (mm)	1/2" - 5/8" (12 - 16)
WFS, in/min (m/min)	110 - 170 (2.8 - 4.3)
Position	Flat/Horizontal/Vertical Up

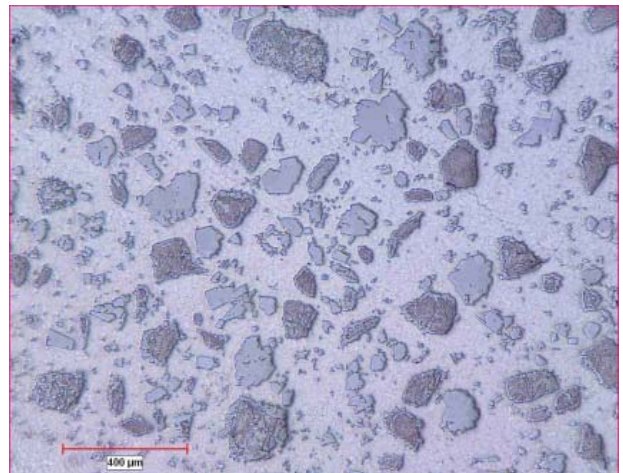
3/32" (2.4 mm)

Current DCEP, amp	250 – 325
Voltage (volts)	18 – 20
Shielding Gas	75% Ar / 25% CO ₂
Wire Extension, in (mm)	5/8" - 1" (16 - 25)
WFS, in/min (m/min)	80 - 140 (2.0 - 3.6)
Position	Flat

7/64" (2.8 mm)

Current DCEP, amp	275 – 355
Voltage (volts)	18 – 20
Shielding Gas	None
Wire Extension, in (mm)	3/4" - 1" (19 - 25)
WFS, in/min (m/min)	70 - 110 (1.8 - 2.8)
Position	Flat

* Microstructures are parameter sensitive. Use lowest possible heat input.



Microstructure 50X - Tungsten Carbides in a Nickel-Silicon-Boron Matrix
Stoody 160FC 1/16" (1.6 mm)

PDS-WC-W-008
Revision 3
June 25, 2015

NOTICE - Failure to follow manufacturer's directions for use may result in equipment or material failure and void any applicable warranty. The data provided or referenced herein is provided for informational purposes only, without guarantee or warranty and represents "typical" results when Stoody products are used in accordance with internal Stoody procedures. Other tests and procedures may produce differing results. Stoody expressly disclaims any liability resulting from reliance on this data.

PROTECT YOURSELF AND OTHERS - Users should read and follow all recommended guidance on health and safety from their employer, the supplier, the manufacturer, and government authorities. These, at a minimum including the Warning Labels on the products and the Safety Data Sheets ("SDS"). The SDS and additional safety information may be found on materials or links at: Stoody.com.