

SelectWear NiBWC

Hardsurfacing / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- Tungsten carbide particles in a nickel-silicon-boron matrix
- The nickel-silicon-boron matrix provides a high toughness matrix system for the tungsten carbide particles
- Provides excellent abrasion resistance along with good corrosion resistance and moderate impact resistance
- Can be welded at very low heat inputs, preserving the integrity of the tungsten carbide particles
- Hot wear hardness up to 900f

DIAMETERS (in [mm])

1/16 (1.6)

POSITIONS



SHIELDING GAS

75% Ar/25% CO₂

Flow Rate: 40 - 50 CFH

POLARITY

Direct Current Electrode Positive (DCEP)

HARDNESS

Matrix: 40-45 HRC, Tungsten Carbide: >70HRC HRC

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	B	C	Ni	Si	W
75%Ar / 25%CO ₂	1.0	2.4-3	Bal.	2.2	38-45

RECOMMENDED WELDING PARAMETERS **

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
1/16 (1.6 mm)	75% Ar/25% CO ₂	Flat & Horizontal	120 (3.0)	120	18	3/4 - 1 (19 - 25)

* WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

**The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "all-position" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.

PACKAGING (lbs [kgs])

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum

*Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.

STORAGE AND HANDLING

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.