

SelectAlloy 2216HT-C

Nickel Alloy / Gas Shielded / Metal Cored

PRODUCT DATA SHEET

FEATURES

- Designed to weld high strength grades of nodular cast iron components and for the welding of dissimilar joints between silicon-molybdenum alloyed cast irons and 400 series stainless steel.
- Nominally ~12 wt% manganese (Mn) addition in a nickel-iron system improves the flow of the molten metal and increased the crack resistance of the weld metal.
- Additions of ~7 wt% chromium (Cr) and ~0.7 wt% columbium (Cb), also known as niobium (Nb), promote a more stable microstructure with enhanced resistance of HAZ cracking to increase service life durability.
- Applications for this alloy type include cast iron intake manifolds to dissimilar steels found in automotive exhaust systems or general repair welding of cast iron parts.
- No AWS class, Modified ERNiFeMn-CI chemistry per AWS A5.15, ASME SFA 5.15

DIAMETERS (in [mm])

0.045 (1.2), 1/16 (1.6)

POSITIONS



SHIELDING GAS

Ar + 0.5-25% CO₂, Ar + 0.5-3% O₂

Flow Rate: 40 - 50 CFH

POLARITY

Direct Current Electrode Positive (DCEP)

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	C	Cr	Fe	Mn	Nb	Ni	P	S	Si
Argon	0.03	7.40	Balance	12.6	0.75	40.80	0.002	0.002	0.28

RECOMMENDED WELDING PARAMETERS **

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.045 (1.2 mm)	98% Ar/2% O ₂	Flat & Horizontal	325 (8.3)	220	22	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	375 (9.5)	235	23	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	420 (10.7)	250	24	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	500 (12.7)	270	26	5/8 - 3/4 (16 - 19)
1/16 (1.6 mm)	98% Ar/2% O ₂	Flat & Horizontal	225 (5.7)	265	21	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	300 (7.6)	305	23	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	330 (8.4)	335	23	3/4 - 1 (19 - 25)
		Flat & Horizontal	375 (9.5)	350	26	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.



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.

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.



Revision: 1/17/2025

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