

SelectWear 423-S

Hardsurfacing / Flux Shielded / Submerged Arc

PRODUCT DATA SHEET

FEATURES

- Deposits a martensitic stainless steel alloy containing nickel and molybdenum designed for surfacing with the submerged arc process
- The deposit has improved resistance to thermal fatigue and corrosion compared to a 420 alloy
- A neutral flux should be used
- Multiple layers can be deposited with proper welding procedure
- Machinable with carbide tools
- Will not cross crack
- Applications include: Caster Rolls

DIAMETERS [in (mm)]

1/8 (3.2)

POSITIONS



FLUX

Neutral flux recommended

POLARITY

Direct Current Electrode Positive (DCEP)

HARDNESS

42 - 46 HRC

TYPICAL WELD DEPOSIT CHEMISTRY [WT%]

Flux	C	Cr	Fe	Mn	Mo	Nb	Ni	Si	V
Neutral Flux	0.12	12.5	Balance	1.9	1.0	0.2	2.2	0.7	0.2

Chemistry results from a 3 layer pad welded with neutral flux

RECOMMENDED WELDING PARAMETERS **

Diameter in (mm)	Flux	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
1/8 (3.2 mm)	N/A	Flat & Horizontal	120 (3.0)	500	32	1 - 1 1/2 (25 - 38)

* 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.



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.

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

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.

600 Enterprise Drive, P.O. Box 259, Fort Loramie, Ohio 45845-0259 • 800-341-5215 • www.Select-Arc.com