## SubCOR™ SL 745



#### EN ISO 26304-A: S 89 4 FB T3Ni2.5Cr1Mo EN ISO 26304-B: S83 A4 FB TUG

#### **FEATURES:**

· Seamless cored wire · Virtually eliminates moisture absorption, produces a low-hydrogen weld deposit for minimized risk of hydrogen-induced cracking · Copper coated wire Offers optimal consistency of electrode feeding and electrical transfer · Cored wire can offer improved deposition Provides potential to increase travel speed for improved productivity and rates compared to solid wires at comparable reduced heat input amperages Cored wire offers broader penetration · Helps to prevent burn-through when welding at high currents on root profiles compared to solid wires compared passes and relatively thin materials at comparable welding parameters Very high-strength deposit (>140 ksi) · Suitable for joining base metals of similar composition and strength **APPLICATIONS:** • 140+ KSI HSLA Steel · Heavy equipment Crane fabrication Offshore fabrication · Casting repair · Single or multi-pass welding WIRE TYPE: Metal-powder, metal-cored submerged-arc wire

#### RECOMMENDED FLUXES: SWX 150

**CURRENT:** Direct Current Electrode Positive (DCEP), Alternating Current (AC).

STANDARD DIAMETERS: 3/32" (2.4 mm),

STORAGE: Product should be stored in a dry, enclosed environment, and in its original intact packaging.

#### RE-DRYING: Not recommended.

#### EN ISO CLASSIFICATIONS:

With Flux	Condition	EN ISO 26304-A	EN ISO 26304-B
SWX 150	As-Welded	S 89 4 FB T3Ni2.5Cr1Mo	S83 A4 FB TUG

**TYPICAL WELD DEPOSIT CHEMICAL COMPOSITION\*:** 

With Flux	% C	% Mn	% Si	% P	% S	% Cu	% Cr	% Ni	% Mo	% Ti + V + Zr
SWX 150	0.10	1.34	0.46	0.013	0.008		0.78	2.49	0.55	0.05

## **TYPICAL MECHANICAL PROPERTIES\*:**

With Flux	Condition	Tensile Strength	Yield Strength	Elongation in 2" (50 mm)
SWX 150	As-Welded	155 ksi (1069 MPa)	129 ksi (889 MPa)	17%
	PWHT*	154 ksi (1062 MPa)	131 ksi (903 MPa)	18%

Note: Stress-Relieved 1 Hr. @ 1150°F (620°C)

\*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brothers LLC expressly disclaims any liability incurred from any reliance thereon. Typical data are those obtained when welded and tested in accordance with the EN ISO 26304 specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by Hobart Brothers LLC.

# SubCOR™ SL 745

**TYPICAL CHARPY V-NOTCH IMPACT VALUES\*:** 

With Flux	Condition	Avg. at -0°F (-20°C)	Avg. at -20°F (-30°C)	Avg. at -40°F (-40°C)	
SWX 150	As-Welded	40 ft-lbs (54 J)	_	28 ft-lbs (38 J)	
SWX 150	PWHT	—	21 ft-lbs (28 J)	21 ft-lbs (28 J)	

Note: Stress-Relieved 1 Hr. @ 1150°F (620°C)

TYPICAL OPERATING PARAMETERS\*:

Diameter	Amne	Volto	Wire Feed Speed		Deposition Rate		CTWD	
Inches (mm)	Amps	VOILS	in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
3/32" (2.4 mm)	300	28	85	(2.2)	7.7	(3.5)	1 1/4	(32)
3/32" (2.4 mm)	390	29	125	(3.2)	11.2	(5.1)	1 1/4	(32)
3/32" (2.4 mm)	490	31	175	(4.4)	15.6	(7.1)	1 1/4	(32)
3/32" (2.4 mm)	600	33	240	(6.1)	21.2	(9.6)	1 1/4	(32)
3/32" (2.4 mm)	650	34	270	(6.9)	23.9	(10.9)	1 1/4	(32)

Maintaining a proper welding procedure - including pre-heat and interpass temperatures - may be critical depending on the type and thickness of steel being welded.

Parameters are provided for informational purposes only. All values are approximate. The optimal voltage may vary (typically ±2 volts) depending on the choice of flux, material thickness, joint design, and other variables specific to the application. Likewise, actual deposition rate may vary depending on choice of flux and contact tip to work distance.

**STANDARD PACKAGING:** For a complete list of diameters and packaging, please contact Hobart Brothers at (800) 424-1543 or (937) 332-5188 for International Customer Service.

Dia	imeter	55-Ib. (27.2 kg) Wire Basket
3/32"	(2.4 mm)	525241025H

## **CONFORMANCES AND APPROVALS:**

With Flux	CE
SWX 150	Х

**TECHNICAL QUESTIONS?** For technical support of Hobart Filler Metals products, contact the Applications Engineering department by phone toll-free at 1-800-532-2618 or by e-mail at <u>Applications.Engineering@hobartbrothers.com</u>

#### CAUTION:

Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standard Z49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36th St., Miami, FL 33166 (can also be downloaded online at www.aws.org); OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Safety Data Sheets on any Hobart Brothers LLC product may be obtained from Hobart Customer Service or at www.hobartbrothers.com.

Because Hobart Brothers LLC is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.



SubCOR is a trademark of Hobart Brothers LLC, Troy, Ohio.

Revision Date: 190909(Replaces 190111)