

# SelectAlloy 307T0-3

Stainless Steel / Self Shielded / Flux Cored

PRODUCT DATA SHEET

## FEATURES

- The relatively high Mn content of ~4 wt% helps reduce the chance of weld metal cracking in dissimilar metal welding.
- Designed for welding in either the flat or horizontal position where gas-shielding is not possible.
- Arc transfer is globular, with low spatter, and resulting bead is flat and well washed with a fine ripple surface.
- Applications for this alloy includes joining difficult to weld steels, hardenable steels, and dissimilar steels, such as welding armor plating and austenitic manganese steel forgings or castings.

## CONFORMANCES

AWS A5.22	E307T0-3
ASME SFA 5.22	E307T0-3

## DIAMETERS (in [mm])

0.045 (1.2), 1/16 (1.6), 7/64 (2.8)

## POSITIONS



## SHIELDING GAS

N/A

## POLARITY

Direct Current Electrode Positive (DCEP)

## TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	C	Cr	Cu	Mn	Mo	N	Ni	P	S	Si	WRC-1992 Ferrite
N/A	0.06	20.5	0.09	3.90	0.94	0.11	9.75	0.02	0.01	0.65	10

Bismuth is not intentionally added and levels are not known to be greater than 0.002 (WT%)

## TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp
N/A	95 (655)	69 (476)	37	As-Welded	-



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.

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## RECOMMENDED WELDING PARAMETERS \*\*

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.045 (1.2 mm)	N/A	Flat & Horizontal	250 (6.4)	120	25	1/2 (13)
		Flat & Horizontal	430 (10.9)	175	28	5/8 (16)
		Flat & Horizontal	575 (14.6)	205	32	1 (25)
1/16 (1.6 mm)	N/A	Flat & Horizontal	215 (5.5)	165	26	5/8 (16)
		Flat & Horizontal	255 (6.5)	200	28	3/4 (19)
		Flat & Horizontal	350 (8.9)	250	32	1 (25)
7/64 (2.8 mm)	N/A	Flat & Horizontal	90 (2.3)	250	26	1 (25)
		Flat & Horizontal	115 (2.9)	320	28	1 (25)
		Flat & Horizontal	130 (3.3)	345	32	1 1/4 (32)

\* 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.



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