



Smoothcor 81T1-B8

CLASSIFICATIONS: E81T1-B8M per AWS A5.29, ASME SFA 5.29

DESCRIPTION: Smoothcor 81T1-B8 is an all position, flux cored electrode formulated for single and multiple pass welding of 9 chromium and 1 molybdenum steels.

APPLICATIONS: Smoothcor 81T1-B8 is used to weld 9Cr-1Mo steels such as A335-P9 piping and A213-T9 tubing. Typical applications involve high temperature service in the petrochemical and petroleum industries.

DIAMETERS: .045", .052", 1/16"

SHIELDING GAS: 75-80% Ar/balance CO₂, 40-50 cfh

WELDING POSITIONS: All positions

CHARACTERISTICS:

- Uniform weld beads with good tie-in.
- Smooth and stable arc transfer.
- Greater tolerance for mill scale and rust.
- Increased deposition rates compared to covered and solid electrodes.
- Eliminates lack of fusion defects.

TYPICAL MECHANICAL PROPERTIES	
	SR 2 Hr. @1375°F
	75% Ar/ 25% CO ₂
Ultimate Tensile Strength (psi)	96,300
Yield Strength (psi)	78,000
Percent Elongation	20

TYPICAL DEPOSIT COMPOSITION								
Wt%	C	Mn	P	S	Si	Cr	Mo	
75 Ar/25 CO ₂	.09	.50	.010	.010	.35	9.30	1.05	

Notice: 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.