

Select 810-B6

Description:

Select 810-B6 is a low alloy steel electrode intended for single and multiple pass, all position welding of certain chromium-molybdenum steels where a weld deposit of 5 percent chromium and 1/2 percent molybdenum is required.

Classification:

- E81T1-B6M per AWS A5.29, ASME SFA 5.29

Characteristics:

- Smooth, stable arc transfer with low spatter emission.
- Fast freezing slag facilitates easy removal.
- Increased deposition rates over covered and stick electrodes.
- Greater tolerance of mill scale and rust.

Applications:

Select 810-B6 is specially formulated for welding tube, pipe and plate subjected to high temperature service, such as A213-T5 and A335-P5.

Typical Mechanical Properties

	SR 2 Hr. At 1375° F
Ultimate Tensile Strength (psi)	89,000
Yield Strength (psi)	71,200
Percent Elongation	19.9
CVN (ft • lb f) @ 70° F	60

Typical Deposit Composition

<u>Wt%</u>	<u>C</u>	<u>Cr</u>	<u>Mo</u>	<u>Mn</u>	<u>Si</u>	<u>P</u>	<u>S</u>
	.08	4.85	.56	.47	.27	.006	.010

Recommended Welding Parameters:

<u>Diam.</u>	<u>Position</u>	<u>Optimum</u>			<u>Range</u>	
		<u>Amperage</u>	<u>WFS</u>	<u>Voltage</u>	<u>Amperage</u>	<u>Voltage</u>
.045"	Flat	250	450	28	130-300	21-32
	Overhead	190	305	26	150-280	21-30
	Vertical Up	190	305	25	130-260	21-29
.052"	Flat	275	400	28	140-330	19-32
	Overhead	200	245	26	150-290	21-28
	Vertical Up	200	245	25	140-270	21-27
1/16"	Flat	330	330	29	150-400	22-34
	Overhead	225	180	26	150-310	22-28
	Vertical Up	225	180	25	150-280	22-27

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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.