Select Ni2S

Description:

Select Ni2S is a metal cored, low alloy steel electrode for submerged arc welding. It contains 2-3% nickel to produce good low temperature toughness. This electrode is intended for single and multiple pass welding of carbon and low alloy steels in the flat and horizontal fillet positions. It should be used for submerged arc welding, with neutral fluxes only.

Classification:

- ECNi2 per AWS A5.23, SFA 5.23

Characteristics:

Select Ni2S is designed to deposit a ductile deposit with good low temperature toughness. This wire allows for better control of bead penetration than solid wire. The penetration pattern of a metal cored electrode is broader and slightly shallower, reducing the tendency for burn through on root passes or poorly fit up joints. The cored wire design also results in higher deposition rates than solid wire when run at the same current level.

Applications:

Select Ni2S is ideal for those applications involving the welding of carbon and certain low alloy steels, in applications where low temperature toughness is required.
Typical applications include offshore oil equipment, shipbuilding and other cold weather, structural applications.

Typical Weld Metal Properties (with OP121TT Flux):

Ultimate Tensile Strength (psi)	82,700
Yield Strength (psi)	71,300
Percent Elongation	30
CVN (ft•lb *ƒ*) @ -60° F.	61

Typical Deposit Chemistry

Wt%	C	Mn	P	S	Si	Ni
	.05	1.10	.010	.010	.35	2.37

Recommended Welding Parameters:

	Amps	Volts	Wire Feed Speed (ipm)	ESO (in)
5/64”	250	26-27	90	¾”-1¼”
	350	29-30	160	
	500	32-33	290	
3/32”	275	28-29	80	1”-1¼”
	450	32-33	155	
	600	37-38	245	
1/8”	300	28-29	45	1”-1¼”
	550	32-33	105	
	750	37-38	180	
5/32”	425	31-32	45	1¼” -1½”
	700	37-38	105	
	900	31-42	180	

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