Nickel BARE WIRE DATA SHEET

executive 59

DESCRIPTION

Executive 59 is a nickel-chromium-molybdenum alloy with extra low carbon and silicon contents. It offers excellent corrosion resistance, high mechanical strength and better thermal stability. Because of its low silicon and carbon contents and absence of tungsten, Executive 59 is not prone to grain-boundary precipitation during hot forming and welding. It is best suited for welding in a wide variety of chemical processing facilities in both oxidizing and reducing media. Executive 59 provides exceptional weld ability and very low sensitivity to hot cracking. This alloy is ideally suited for the welding of ASTM B564, B574, B575, B619, B622, and B626 having UNS number N06059 and for ThyssenKrupp VDM Nicrofer® 5923 hMo – alloy 59.

TYPICAL CHEMICAL VALUES

C	Mn	Si	Ni	P	S	Cr	Mo	Al	Fe	Cu	Co	TOE
0.005	0.3	0.005	59.0	0.01	0.003	23.0	16.0	0.2	0.5	0.50	0.3	0.50

WELDING PARAMETERS

PROCESS	SIZE	VOLTS	AMPS	SPEED OF WELDING / GAS FLOW	SHIELDING GAS / FLUX
GMAW	.035	26-32	180-205	30-50 CFH	75% Argon+25% Helium
	.035	18-22	140-180	30-50 CFH	or
	.045	26-32	225-245	30-50 CFH	50% Argon + 50% Helium
	.045	20-26	150-200		
	.062	27-33	225-350		
GTAW	.062	10-16	140-200	TIG	100% Argon
	.093	10-16	150-220	TIG	
	.125	10-16	160-240	TIG	
	.156	10-16	160-265	TIG	

MECHANICAL PROPERTIES

Tensile Strength: 110,000 PSI
Elongation: 45 %

CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to **AWS/SFA 5.14, Class ERNiCrMo-13**, ISO 18274, Class SNi 6059.