AN ISO 9001:2015 COMPANY
CERTIFICATE NO.: C755336

ERNiCrMo-10 DATA SHEET

Pinnacle Alloys ERNiCrMo-10 (622)
AWS CLASS ERNiCrMo-10
CODE AND SPECIFICATION DATA:
AWS A5.14 ASME SFA 5.14; UNS N06022

DESCRIPTION:
Pinnacle Alloys ERNiCrMo-10 has a nominal composition (wt.-%) of 56 Ni, 22 Cr, 13 Mo, 4 Fe, and 3 W. Filler metal of this classification is used for welding nickel-chromium-molybdenum alloy (ASTM B 574, B 575, B 619, B 622, and B 628 having UNS Number N06022) to itself, to steel, to other nickel-based alloys, and for cladding steel with nickel-chromium-molybdenum weld metal using the GTAW, GMAW, and PAW processes. This wire offers good pitting and crevice corrosion resistance. Pinnacle Alloys ERNiCrMo-10 is designed to handle a broad range of industrial welding applications, such as petroleum, chemical, and power generation plants, as well as offshore and marine facilities.

DIAMETERS: .035", .045", 1/16", 3/32", 1/8", 5/32"

WELDING POSITIONS: GTAW & GMAW: All positions

TYPICAL DEPOSIT COMPOSITION:

	AWS Spec	Weld Metal Analysis (%)
Carbon (C)	0.015	0.007
Chromium (Cr)	20.0-22.5	22.20
Cobalt (Co)	2.50	0.027
Copper (Cu)	0.50	0.01
Iron (Fe)	2.0-6.0	4.03
Manganese (Mn)	0.50	0.19
Molybdenum (Mo)	12.5-14.5	13.9
Nickel (Ni)	Balance	55.74
Phosphorus (P)	0.02	0.005
Silicon (Si)	0.08	0.049
Sulfur (S)	0.01	0.001
Tungsten (W)	2.5-3.5	3.21
Vanadium (V)	0.35	0.036

NOTE: Single values are maximums.

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TYPICAL MECHANICAL PROPERTIES:

	AWS Spec (min)	As Welded
Ultimate Tensile Strength	Not required	105,000 psi (720 MPa)
Percent Elongation in 2”	Not required	40%

TYPICAL WELDING PARAMETERS:

	Diameter	Amperage	Volts	Shielding Gas
GTAW	1/16”	90-130		100% Ar
	3/32”	120-175		
	1/8”	150-220		
GMAW	.035”	150-190	26-29	75% Ar/ 25% He
	.045”	180-220	28-32	
	1/16”	200-250	29-33	
SAW	3/32”	275-350	28-30	Suitable Flux
	1/8”	350-450	29-32	
	5/32”	400-550	30-33	

NOTE: Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

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 the use in the field. The manufacturer disclaims any warranty of merchantability of fitness for any particular purpose with respect to its products.

CAUTION: Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standards A49.1, “Safety in Welding and Cutting,” published by the American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33126: OSHA Safety and Health Standards 29 CRF 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.

Pinnacle Alloys SDS sheets may be obtained on the website below.