



## ERNiFeCr-2

### Shanti Metal Supply Corporation ERNiFeCr-2

AWS CLASS ERNiFeCr-2

#### CODE & SPECIFICATION DATA:

AWS A5.14 ASME SFA 5.14

TYPICAL DEPOSIT COMPOSITION (Wt %)	
Element	Composition (%)
Aluminum (Al)	0.4
Carbon (C)	0.05
Chromium (Cr)	17.8
Copper (Cu)	0.002
Iron (Fe)	20.2
Manganese (Mn)	0.03
Molybdenum (Mo)	2.95
Nickel (Ni)	51.8
Phosphorous (P)	0.005
Silicon (Si)	0.12
Sulfur (S)	0.001
Titanium (Ti)	1.11
Niobium (Nb) + Tantalum (Ta)	5.33

#### Description

Shanti Metal Supply Corporation ERNiFeCr-2 is used for TIG welding alloys 718, 706, and X-750. It welds high-strength aircraft and cryogenic rocket components. MIG welding may cause micro fissuring. This alloy can be age-hardened for increased strength.

TYPICAL MECHANICAL PROPERTIES	
Property	Value
Ultimate Tensile Strength	125,000 psi (860 MPa)
Yield Strength	91,000 psi (630 MPa)
Percent Elongation	27%





TYPICAL WELDING PARAMETERS				
Process	Diameter	Amperage (A)	Voltage (V)	Shielding Gas
GTAW	1/16"	80-110	-	100% Argon
	3/32"	90-130	-	100% Argon
	1/8"	120-175	-	100% Argon
	5/32"	150-220	-	100% Argon
GMAW	.035"	150-190	26-29	75% Argon / 25% Helium
	.045"	180-220	28-32	75% Argon / 25% Helium
	1/16"	200-250	29-33	75% Argon / 25% Helium
SAW	3/32"	275-350	28-30	Suitable Flux
	1/8"	350-450	29-32	Suitable Flux

### **Notice**

The reported results are based on controlled lab tests per AWS standards. Actual results may vary due to factors like electrode size, plate chemistry, environment, weld design, fabrication, and welding procedures. These results are not guaranteed for field use. The manufacturer disclaims any warranty of merchantability or fitness for a specific purpose regarding its products.

