Techalloy 330

Description

Techalloy 330 is used to weld cast and wrought material of similar chemical composition. The weld metal provides excellent heat and scale resistance up to 1800°F . However, high sulfur environments may adversely affect elevated temperature performance. This being a fully austenitic alloy, low heat input is necessary.

Specifications & Approvals

AWS A5.9 ER330 UNS N08331 ISO 14343:2009 (18 69 H)[e] CWB

Typical Chemical Composition

C	Mn	Si	Cr	Mo	Ni	Nb	N	S	P	Cu	FN (WRC)
.23	1.95	.42	15.95		35.20			.005	.014		0 FN

Typical Mechanical Properties

Tensile Strength	84,000 PSI	580 MPA
Yield Strength	56,500 PSI	390 MPA
Elongation	29%	

Welding Parameters

	Shielding	Gas Flow	Diameter	Voltage	Amperage
Mig Welding	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO2	30 to 50 CFH	.035" (0.9mm) .045" (1.14mm) .062" (1.6mm))	26 to 29 28 TO 32 29 TO 33	160/210 180/250 200/280
Tig Welding	100% Argon				
Sub Arc Welding	Suitable flux may be used		3/32" (2.5mm) 1/8" (3.14mm) 5/32" (4.0mm)	28 to 33 29 TO 32 30 TO 33	275/350 350/450 400/550

Standard Packages:

Mig Wire– 33# wire basket	Tig Wire– 10# tube/30# Master Carton	SAW– 60# Coil