



Techalloy 825

Description

Techalloy 825 is used for TIG, MIG and SAW welding of nickel-chromium-molybdenum-copper alloys. This can also be used to overlay cladding where similar chemical composition is required.

Specifications & Approvals:

AWS A5.14 ERNiFeCr-1

UNS N08065

CWB

Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	W	S	P	Al	Ti	Cu
.01	.45	.25	27.5	22.5	3.1	42.6			.001	.015	.10	1.0	2.5

Typical Mechanical Properties

Tensile Strength	88,500 PSI	610 MPA
Yield Strength	61,000 PSI	420 MPA
Elongation	34%	

Welding Parameters

Process	Diameter	Voltage	Amperage	Gas
TIG	.035" (0.9mm)	12-15	60-90	100% Argon
	.045" (1.2mm)	13-16	80-110	100% Argon
	1/16" (1.6mm)	14-18	90-130	100% Argon
	3/32" (2.4mm)	15-20	120-175	100% Argon
	1/8" (3.2mm)	15-20	150-220	100% Argon
MIG	.035" (0.9mm)	26-29	150-190	75% Argon + 25% Helium
	.045" (1.2mm)	28-32	180-220	75% Argon + 25% Helium
	1/16" (1.6mm)	29-33	200-250	75% Argon + 25% Helium
SAW	3/32" (2.4mm)	28-30	275-350	Suitable Flux may be used
	1/8" (3.2mm)	29-32	350-450	Suitable Flux may be used
	5/32" (4.0mm)	30-33	400-550	Suitable Flux may be used

Standard Packages:

MIG Wire– 33# wire basket	TIG Wire– 10# tube/30# Master Carton	SAW– 60# Coil
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