



# Techalloy 622

## Description

Techalloy 622 is an alloy with chromium, molybdenum, and tungsten as the principal alloying elements. It is used to weld alloys of similar composition as well as dissimilar joints between nickel-chromium-molybdenum alloys and stainless or carbon or low alloy steels. It can also be used for cladding overlay as well as thermal spray applications. Techalloy 622 offers excellent corrosion resistance in oxidizing as well as reducing media in a wide variety of chemical process environments. It offers an outstanding resistance to stress corrosion cracking, pitting and crevice corrosion.

## Specifications & Approvals:

AWS A5.14 ERNiCrMo-10

UNS N06022

CWB

## Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	Nb	W	S	P	Al	Ti	Cu
.008	.20	.04	3.1	21.5	13.5	BAL		3.5	.002	.005			

## Typical Mechanical Properties

Tensile Strength	115,000 PSI	790 MPA
Yield Strength	82,000 PSI	570 MPA
Elongation	38%	

## 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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