



# Techalloy 385

## Description

Techalloy 385 is used for welding materials of similar chemical composition which are used for fabrication of equipment and vessels for the handling of sulfuric acid and other media containing chloride. This filler metal may also find applications for joining Type 317L material where improved corrosion resistance in specific media is needed. In order to reduce the propensity for fissuring and hot cracking, the low melting constituents such as carbon, silicon and phosphorus are controlled to lower levels in this alloy.

## Specifications & Approvals

AWS A5.9 ER385

UNS N08904

ISO 14343:2009 (20 25 5 Cu L)

CWB

## Typical Chemical Composition

C	Mn	Si	Cr	Mo	Ni	Nb	N	S	P	Cu	FN (WRC)
.019	2.05	.35	20.50	4.6	25.10			.015	.014	1.6	0

## Typical Mechanical Properties

Tensile Strength	86,500 PSI	600 MPA
Yield Strength	59,500 PSI	410 MPA
Elongation	36%	

## 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)	26 to 29	160/210
			.045" (1.14mm)	28 TO 32	180/250
			.062" (1.6mm)	29 TO 33	200/280
Tig Welding	100% Argon				
Sub Arc Welding	Suitable flux may be used		3/32" (2.5mm)	28 to 33	275/350
			1/8" (3.14mm)	29 TO 32	350/450
			5/32" (4.0mm)	30 TO 33	400/550

## Standard Packages:

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