



# Techalloy 409Nb

## Description

Techalloy 409Nb is a ferritic stainless steel welding wire used to weld Type 409 and 409Ti base materials. The addition of niobium improves corrosion resistance and promotes a ferritic micro-structure. For the best results, welding must be done in a low heat input procedure and not recommended for multi-pass applications.

## Specifications & Approvals

AWS A5.9 ER409Nb

UNS S40940

## Typical Chemical Composition

C	Mn	Si	Cr	Mo	Ni	Nb	N	S	P	Cu	FN (WRC)
.04	.62	.48	11.50		.35	.50		.016	.018		

## Typical Mechanical Properties

Tensile Strength	67,000 PSI	460 MPA
Yield Strength	50,500 PSI	350 MPA
Elongation	26%	

## 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)	26 to 29 28 TO 32	160/210 180/250
Tig Welding	100% Argon				
SubArc Welding - (not recommended)					

## Standard Packages:

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