



# Techalloy 4130

## Description



Techalloy 4130 is a high strength, low alloy welding wire for joining steels of similar chemical composition, as well as for overlays where moderate hardness is required. This wire can be used for TIG, MIG, and submerged arc welding applications. A preheat and inter-pass temperature of not less than 400°F required during welding. Note; Mechanical properties of welds listed below are governed by the heat treatment undergone by the weld metal. Mechanical properties are for weld metal oil quenched from 1550°F and tempered at 1050°F.

## Specifications & Approvals

AWS N/A

UNS N/A

CWB

ASME QSC-395

## Typical Chemical Composition

C	Mn	Si	Fe	Cr	Mo	Ni	v
.31	.52	.28	BAL	.93	.20		

## Typical Mechanical Properties

Tensile Strength	145,000 PSI	1,000 MPA
Yield Strength	130,000 PSI	900 MPA
Elongation	11%	

## Welding Parameters

Process	Diameter	Voltage	Amperage	Gas
TIG	.035"	10-12	50-70	100% Argon
	.045"	10-12	70-100	100% Argon
	1/16"	12-15	100-125	100% Argon
	3/32"	15-20	125-175	100% Argon
	1/8"	15-20	175-250	100% Argon
MIG–Spray Transfer	.035"	28-32	165-200	98% Argon + 2% Oxygen 75% Argon + 25% CO <sup>2</sup> 100% CO <sup>2</sup>
	.045"	30-34	180-220	
	1/16"	30-34	230-260	
MIG–Short Circuiting Transfer	.035"	22-25	100-140	100% CO <sup>2</sup> *
	.045"	23-26	120-150	75% Argon + 25%CO <sup>2</sup>

## Standard Packages:

MIG– 33# Spool	TIG– 10# Can/30# Master Carton
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