Oxford® ALLOYS, Inc.
Supplier of Welding Alloys

Nickel Alloy Welding Parameters

Typical Welding Parameters for Nickel Alloy SMAW (Electrodes)				
Diameter of Rod		Voltage (V)	Amperage (A)	
Inches	Millimeters		Flat	Vertical & Overhead
3/32	2.4	24-28	70-85	65-75
1/8	3.2	26-30	85-110	80-90
5/32	4.0	28-32	110-140	100-120
3/16	4.8	28-32	120-160	110-130

Typical Welding Parameters of Nickel Alloy Bare Wire					
Process	Diameter of Wire		Voltage (V)	Amperage (A)	Shielding Gas
	Inches	Millimeters			
GTAW (TIG)	.035	0.9	12 - 15	60 - 90	100% Argon
	.045	1.14	13 - 16	80 - 110	
	1/16	1.6	14 -18	90 - 130	
	3/32	2.4	15 - 20	120 - 175	
	1/8	3.2	15 - 20	150 - 220	
GMAW (MIG)	.035	0.9	26 - 29	150 - 190	75 % Argon/ 25% Helium Or 100% Argon
	.045	1.14	28 - 32	180 - 220	
	1/16	1.6	29 - 33	200 - 250	
SAW (Sub-Arc)	3/32	2.4	28 - 30	275 - 350	Suitable Flux
	1/8	3.2	29 - 32	350 - 450	
	5/32	4.0	30 - 33	400 - 550	

Typical Welding Parameters for Nickel Alloy FCAW						
Diameter of Wire		Voltage (V)	Amperage (A)	Wire Feed Speed (ipm)	Wire Extension in (mm)	Shielding Gas
Inches	Millimeters					
.045	1.14	25-26	150-200	290-400	1/2 (12)	75% Ar -25% Co_2 or 100% Co_2
1/16	1.6	26-27	200-250	190-275	1/2 (12)	