Oxford Alloy® 410-16

AWS E410-16 • Stainless Steel

Key Features

- Designed to weld stainless steels of similar chemical composition as well as to overlay carbon steels to impart corrosion, erosion and abrasion resistance.
- This material, being an air-hardening type, calls for a pre-heat and inter-pass temperature of not less than 400°F (200°C) during welding.

Conformances

AWS ASME SFA 5.4
E410-16
UNS W41010

Chemical Composition - As required per AWS 5.4						
C	**Cr**	**Mn**	**Si**	**P**	**S**	**Ni**
0.12 max	11.0-13.5	1.0 max	0.90 max	0.04 max	0.03 max	0.7 max
Mo	**Cu**					
0.75 max	0.75 max					

Mechanical Properties - As required by AWS 5.4			
	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	520 (75) min	Not specified	30 min
Typical Results - As welded	540 (78)	320 (46)	38

Typical Welding Parameters					
Diameter		**Process**	**Volt**	**Amps (flat)**	**Amps (V/OH)**
in	**(mm)**				
3/32	(2.4)	SMAW	24-28	70-85	65-75
1/8	(3.2)	SMAW	26-30	85-110	80-90
5/32	(4.0)	SMAW	28-32	110-140	100-120
3/16	(4.8)	SMAW	28-32	120-160	110-130

Diameters & Packaging					
Oxford Alloys USA			**Oxford Alloys Asia Pacific**		
Diameter (in)	**Length (in)**	**Packaging (lbs)**	**Diameter (mm)**	**Length (mm)**	**Packaging (kgs)**
3/32"	12	10 lb tube | 30 lb carton	2.6	300	4 kg tube | 12 kg carton
1/8"	14	10 lb tube | 30 lb carton	3.2	350	5 kg tube | 15 kg carton
5/32"	14	10 lb tube | 30 lb carton	4.0	350	5 kg tube | 15 kg carton
3/16"	14	10 lb tube | 30 lb carton	5.0	350	5 kg tube | 15 kg carton

Actual test results may vary. Refer test result disclaimer on page 160.