



Supplier of Welding Alloys

Cobalt Alloy TIG • Wire

Oxford Alloy® Co6

SPECIFICATIONS

AWS 5.21

CLASSIFICATIONS

AWS ERCrCo-A

DESCRIPTION / APPLICATION

Oxford Alloy Co6 is a cobalt base tig rod used for the repair of bearing areas, valves, valve seats, extrusion screws, hot press tools, and pump parts. It has excellent resistance to many forms of mechanical and chemical degradation as well as heat up to 900°C. Machinable with tungsten carbide tools or by grinding. Preheat large components or special steels to 300-600°C and cool down slowly to reduce risk of cracking.

Typical Chemical Composition						
C	Mn	Si	Cr	Ni	Mo	Fe
0.9-1.4	1.0 max	2.0 max	26.0-32.0	3.0 max	1.0 max	3.0 max
W	Co					
3.0-6.0	Bal					

TYPICAL MECHANICAL PROPERTIES

Hardness: 40 ~ 46 HRC

Typical Welding Parameters			
Process	Diameter	Amp	Shield Gas
GTAW	(2.7mm)	70-110	100% Argon
GTAW	1/16 (3.2mm)	90-120	
GTAW	5/32 (4.0mm)	135-160	
GTAW	3/16 (4.8mm)	160-180	



Data contained in this publication are typical of the products and properties described, but are not suitable for specifications. Certified Material Test Certificates (CMTR) and Material Safety Data Sheets (MSDS) are available at www.oxfordalloys.com.

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