

## **OK Autrod 19.40**

A continuous solid copper wire for welding of aluminium bronzes of the same type and over lay welding of un- and low alloyed steels. OK Autrod 19.40 is alloyed with aluminium and is recognised for high strength, good wear resistance and very good corrosion resistance against sea water. The alloy is also commonly used in the automotive industry for Mig brazing of galvanised steel in car body production.

Specifications	
Classifications	SFA/AWS A5.7 : ERCuAl-A1
	EN ISO 24373 : S Cu 6100 (CuAl7)

Alloy Type	Alloyed copper ( Cu + 8 % Al)	
Shielding Gas	I1, I2, I3, M13 (EN439)	

Typical Tensile Properties				
Condition	Yield Strength	Tensile Strength	Elongation	
As Welded	175 MPa ( 25 ksi )	420 MPa ( 61 ksi )	40 %	

Typical Wire Composition %					
Mn	Si	Al	Pb	Zn	Fe
0.3	0.1	7	0.01	0.1	0.4

Typical Weld Metal Analysis %					
Mn	Si	Al	Pb	Zn	Fe
0.2	0.05	8	0.003	0.05	0.1

Recommended Welding Parameters				
Current	Wire Diameter	Voltage	Wire Feed Speed	
60-165 A	0.8 mm ( 0.030 in. )	13-17.5 V	4.0-13.0 mm/min ( 157-512 in./min )	
80-210 A	1.0 mm ( 0.040 in. )	12.5-18 V	4.0-12.0 mm/min ( 157-472 in./min )	
150-320 A	1.2 mm ( 0.047 in. )	16-29 V	5.0-11.5 mm/min ( 197-453 in./min )	
	1.6 mm ( 1/16 in. )			