Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK Autrod 19.40

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
MALI	Tero Tolonen	Michael Spieß	EN006214	EN004292	2013-09-13	1 (2)

REASON FOR ISSUE

Update of classification and chemical composition

GENERAL

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.

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

CLASSIFICATIONS Wire Electrode

SFA/AWS A5.7	ERCuAl-A1
EN ISO 24373	CuAl7

APPROVALS

Not applicable

CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
	Nom	**Min**	**Max**
Si	0.05		0.20
Mn	0.2		0.5
Ni	0.3		
Cu			
Al	8	6.0	8.5
Pb	0.003		0.02
Zn	0.05		0.2
Fe	0.1		0.5
Ni+Co			0.8
Others tot			0.4
		Comments: Cu balance	

MECHANICAL PROPERTIES OF WELD METAL

	All Weld Metal
	As welded
Properties	**Typ**
Rp0.2 (MPa)	175
Rm (MPa)	420
A4-A5 (%)	40

Comments:

Hardness: Typical 100 HB

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ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	H		Feed		U	
Ø	Min	Max	Nom	Nom	Min	Max	Min	Max	Min	Max
0.8	60	165	15				4.0	13.0	13	17.5
1.0	80	210	15				4.0	12.0	12.5	18
1.2	150	320	15				5.0	11.5	16	29
1.6										

W = Gas consumption (l / min)

η = Recovery, g weld metal / 100g wire (%)

H = Deposit rate (kg weld metal / hour arc time)

Feed = Feeding rate (m/min)

U = Arc voltage (V)