Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK Autrod 16.95

Signed by	Approved by	Reg no	Cancelling	Reg date	Page
Mats Linde	Mats Öhman/Barbro Karlström	EN002348	EN001130	2004-07-15	1 (2)

REASON FOR ISSUE

Chemical composition modified.

GENERAL

A continous solid corrosion resisting chromium-nickel-manganese wire for welding of austenitic stainless alloys of 18% Cr, 8% Ni, 7% Mn types.

OK Autrod 16.95 has a general corrosion resistance similar to that of the corresponding parent metal. The higher silicon content improves the welding properties, such as wetting. When used for joining dissimilar materials the corrosion resistance is of secondary importance. The alloy is used in a wide range of applications across the industry such as joining of austenitic, manganese, work hardenable steels as well as armourplate and heat resistant steels.

Shielding Gas: M12, M13 (EN439)

Alloy Type: Austenitic (18 % Cr - 8 % Ni - 7 % Mn)

CLASSIFICATIONS Wire Electrode

EN 12072	G 18 8 Mn
Werkstoffnummer	~1.4370

APPROVALS

Ü	43.039/1
DB	43.039.10
UDT	DIN 8556
VdTÜV	05420

CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
	Nom	**Min**	**Max**
C	0.1		0.20
Si	1		1.2
Mn	6.5	5.0	8.0
P	0.010		0.030
S	0.020		0.020
Cr	18.5	17.0	20.0
Ni	8.5	7.0	10.0
Mo	0.1		0.3
Cu	0.1		0.3
N			0.08
Others total			0.50

MECHANICAL PROPERTIES OF WELD METAL

	All Weld Metal	
	As welded	
Properties	**Min**	**Typ**
Rp0.2 (MPa)	350	450
Rm (MPa)	500	640
A4-A5 (%)	25	41
Charpy V at 20°C (J)		130

Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK Autrod 16.95

Signed by	Approved by	Reg no	Cancelling	Reg date	Page
Mats Linde	Mats Öhman/Barbro Karlström	EN002348	EN001130	2004-07-15	2 (2)

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	55	160	12		1.0	4.1	4.0	17.0	15	24
0.9	65	220	12		1.1	5.4	3.5	18.0	15	28
1.0	80	240	15		1.5	6.0	4.0	16.0	15	28
1.2	100	300	18		1.6	7.5	3.0	14.0	15	29
1.6	230	375	22		5.2	8.6	5.5	9.0	23	31

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)