



Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK Autrod 16.95

Signed by Mats Linde	Approved by Per-Åke Pettersson/Christos Skodras	Reg no EN004122	Cancelling EN003892	Reg date 2007-09-19	Page 1 (2)
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REASON FOR ISSUE

EN ISO 14343 added and EN 12072 deleted,

GENERAL

A continuous 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. The product is a modified variant of ER307, basically with a higher Mn content to make the weld metal less sensitive to hot cracking. 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 ISO 14343 G 18 8 Mn
Werkstoffnummer ~1.4370

APPROVALS

CE EN 13479
DB 43.039.10
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 tot			0.50	

MECHANICAL PROPERTIES OF WELD METAL

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



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ECONOMICS & CURRENT DATA

Dimension (mm) Ø	Current (A)		W Nom	η Nom	H		Feed		U	
	Min	Max			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)