



Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK Autrod 4047

Prepared by Mats Linde	Qualified by Tero Tolonen	Approved by Michael Spieß	Reg no EN006177	Cancelling EN005069	Reg date 2013-08-29	Page 1 (2)
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REASON FOR ISSUE

Mechanical data update.

GENERAL

OK Autrod 4047 was originally developed as a brazing alloy to take advantage of its low melting point and narrow freezing range. In addition, it has higher silicon content than OK Autrod 4043, which provides an increased fluidity and reduced shrinkage. The alloy produces bright and almost smut free welds. Hot cracking is significantly reduced when using OK Autrod 4047 as a filler alloy. The alloy may be used in applications of sustained elevated temperatures. Non-Heat treatable.

Shielding Gas: I1, I3 (EN ISO 14175)

Alloy Type: AISi

CLASSIFICATIONS Wire Electrode

APPROVALS

SFA/AWS A5.10 ER4047
EN ISO 18273 S AI 4047 (AISi12)

CWB AWS A5.10

CHEMICAL COMPOSITION

Wire/Strip (%)

	Min	Max
Si	11.0	13.0
Mn		0.15
Cu		0.30
Al		
Zn		0.20
Fe		0.6
Be		0.0003
Mg		0.10
Other each		0.05
Others tot		0.15

MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Properties	As welded Typ
Rp0.2 (MPa)	55
Rm (MPa)	124
A4-A5 (%)	12

Comments:

THIS INFORMATION IS BASED ON DATA DEVELOPED UNDER LABORATORY CONDITIONS AND IS DESIGNED AS A GUIDELINE ONLY. INDIVIDUAL CONDITIONS, WELDING EQUIPMENT AND ENVIRONMENT CAN AFFECT RESULTS.



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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	60	170	15						13	24
0.9	60	170	15						13	24
1.0	90	210	16						15	26
1.2	140	260	19						20	29
1.6	190	350	25						25	30

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)

OTHER DATA

Clean material is essential for a good weld quality. Remove oxide, dirt, oil, humidity etc. before welding. If brushing use a stainless steel wire brush.

Preheating: is not required for welds in sections up to 20 mm but risk of porosity can be reduced by preheating sections over 10 mm. Preheating temperature is usually 150-200 °C.

The wire is not recommended when a good matching of colour is required between the welded joint and the base material after anodic treatment.
