



# Product Data Sheet

G 'Gas-shielded metal-arc welding'

# OK Autrod 4043

Prepared by Benjamin Mousa	Qualified by Christos Skodras	Approved by Jerry Mirgain	Reg no EN005670	Cancelling EN005065	Reg date 2012-01-25	Page 1 (2)
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## REASON FOR ISSUE

TÜV Approval added

## GENERAL

OK Autrod 4043 is one of the most widely used welding and brazing alloys and can be classed as a general purpose filler alloy. The silicon additions result in improved fluidity (wetting action) to make the alloy a preferred choice by welders. The alloy is not sensitive to weld cracking and produces bright and almost smut free welds. Not recommended for anodizing. Non-Heat treatable.

**Shielding Gas:** I1, I3 (EN ISO 14175)

**Alloy Type:** AISi

## CLASSIFICATIONS Wire Electrode

SFA/AWS A5.10	ER4043
EN ISO 18273	S AI 4043 (AISi5)
EN ISO 18273	S AI 4043A (AISi5(A))

## APPROVALS

CE	EN 13479	
CWB	AWS A5.10 (Item no ending with A)	Item no ending with A
DB	61.039.05	
VdTÜV	12187	

## CHEMICAL COMPOSITION

### Wire/Strip (%)

	Min	Max
Si	4.5	5.5
Mn		0.05
Cu		0.10
Al		
Ti		0.15
Zn		0.10
Fe		0.6
Be		0.0003
Mg		0.05
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)	165
A4-A5 (%)	18



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### ECONOMICS & CURRENT DATA

Dimension (mm) Ø	Current (A)		W Nom	η Nom	H Min Max		Feed Min Max		Min	U 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
2.0	280	400	30						26	31
2.4	280	400	30						26	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)

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### 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.

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