

OK AristoRod™ 12.50

Features Specifications
OK AristoRod™ 12.50

GMAW

Type Carbon-manganese

OK AristoRod™ 12.50 is a bare Mn-Si-alloyed G3Si1/ER70S-6 solid wire for the GMAW of non-alloyed steels, as used in general construction, automotive components, pressure vessel fabrication and shipbuilding. OK AristoRod™ 12.50 is treated with ESAB's unique Advanced Surface Characteristics (ASC) technology, taking MAG welding operations to new levels of performance and all-round efficiency, especially in robotic and mechanised welding. Characteristic features include excellent start properties; trouble-free feeding at high wire speeds and lengthy feed distances; a very stable arc at high welding currents; extremely low levels of spatter; low fume emission; reduced contact tip wear and improved protection against corrosion of the wire.

Classifications	Approvals		Typical all weld metal composition, %		Typical mech. properties all weld metal	
<u>SFA/AWS</u> <u>A5.18</u> ER70S-6 <u>EN ISO</u> <u>14341-A</u> G3Si1 <u>CSA W48</u> ER49S-6	ABS	3YSA	C	0,1	<u>Yield stress, MPa</u>	
	BV	SA3YM	Si	0,9	470	
	CWB	CSA	Mn	1,5	<u>Tensile strength, MPa</u>	
		W48	Wire composition		560	
	DB	42.039.29			<u>Elongation, %</u>	
	DNV	III YMS			26	
					<u>Elongation, %</u>	
	GL	3YS			26	
	LR	3S, 3YS			<u>Charpy V</u>	
	VdTÜV	10052			Test temps, °C Impact values, J	
PRS	3YS			+20	130	
CE	EN	13479			-20	90
					-30	70
RS	3YMS					

Diameter, mm	0,8	0,9	1,0	1,2	1,4	1,6
Arc voltage, V	18-24	18-26	18-32	18-35	22-36	28-38
Welding current, A	60-200	70-250	80-300	120-380	150-420	225-550
H. Kg weld metal/hour arc time		-	-	-	-	-
Wire feed, m/min	3,2-10	3,0-12	2,7-15	2,5-15	2,3-12	2,3-15
Deposition rate kg weld metal/hour	0,8-2,5	0,8-3,3	1,0-5,5	1,3-8,0	1,6-8,7	2,1-11,4

OK Autrod 12.51

Features Specifications

OK Autrod 12.51

GMAW

Type Carbon-manganese

OK Autrod 12.51 is a copper-coated, Mn-Si-alloyed G3Si1/ER70S-6 solid wire for the GMAW of non-alloyed steels, as used in general construction, pressure vessel fabrication and shipbuilding. The wire has a carefully controlled wire chemistry and a unique surface technology providing superior weld-metal quality at high wire feed speeds and at high welding currents. The wire can be used with both Ar/CO2 mixed gas and pure CO2 shielding gas.

Welding current

DC(+)

Classifications	Approvals		Typical all weld metal composition, %		Typical mech. properties all weld metal	
<u>SFA/AWS</u> <u>A5.18</u> <u>ER70S-6</u> <u>EN ISO</u> <u>14341-A</u> <u>G3Si1</u>	ABS	3SA, 3YSA	C	0,1	<u>Yield stress, MPa</u>	
			Si	0,9	470	
	BV	SA3YM	Mn	1,5	<u>Tensile strength, MPa</u>	
	CL		Wire composition		560	
	DB	42.039.06			<u>Elongation, %</u>	
					26	
	DNV	III YMS			<u>Elongation, %</u>	
					26	
	DS	EN 440			<u>Charpy V</u>	
	GL	3YS			Test	
	LR	3 3YS			temps, Impact values, J	
	PRS	3YS			°C	
	RINA	SG 52 3			+20	130
	RS	3YMS			-20	90
				-30	70	
	Sepros	UNA 485178				
	SFS	EN 440				
	SS	EN 440				
	VdTÜV					

Diameter, mm	0,6	0,8	0,9	1,0	1,2	1,4	1,6
Arc voltage, V	15-20	18-24	18-26	18-32	18-34	22-36	28-38
Welding current, A	30-100	60-200	70-250	80-300	120-380	150-420	225-550
Wire feed, m/min	5,5-13	3,2-13	3,0-12	2,7-15	2,5-15	2,3-12	2,3-12
Deposition rate kg weld metal/hour	0,7-1,7	0,8-3,0	0,9-3,6	1,0-5,6	1,3-8,0	1,6-8,7	2,1-11,4