



Product Data Sheet

OK Flux 10.71/OK Autrod 12.20

S 'Submerged arc welding'

Signed by Lars Andersson	Approved by Martin Gehring/Barbro Karlström	Reg no EN002531	Cancelling EN000781	Reg date 2004-11-04	Page 1 (1)
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REASON FOR ISSUE

Chemical Composition All Weld Metal (C) and Wire/Strip (Mn) modified. Approvals updated.

CLASSIFICATIONS Flux

EN 760 SA AB 1 67 AC H5

CLASSIFICATIONS Weld Metal (as welded)

EN 756 S 38 4 AB S2

SFA/AWS A5.17 F7A4-EM12

CLASSIFICATIONS Weld Metal (PWHT)

SFA/AWS A5.17 F6P4-EM12

CLASSIFICATIONS Wire Electrode

EN 756 S2

SFA/AWS A5.17 EM12

APPROVALS

Ü	51.039 - 52.039/1	
ABS	3M, 3YM	SE,HU,PL,ID
BV	3YM	SE,HU,PL,ID
CL	EN 756	SE
DB	51.039.05 - 52.039.02	
DNV	IIIYM	SE,HU,PL,ID
DS	EN 756	SE
GL	3YM	SE,HU,PL,ID
LR	3M, 3YM	SE,HU,PL,ID
RINA	2YT 3M 3YM	HU,PL
RS	3YM	HU
Sepros	UNA 409821 - 347719	
UDT	EN 756	
VdTÜV	02552	

CHEMICAL COMPOSITION

	All Weld Metal (%)				Wire/Strip (%)	
	DC+, 580A, 29V		AC, 580A, 29V		Min	Max
	Max	Nom	Max	Nom		
C		0.05		0.06	0.08	0.12
Si		0.3		0.2		0.10
Mn		1.35		1.2	0.90	1.15
P	0.03		0.03			0.020
S	0.02		0.02			0.020

MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal							
	AWS DC+		AWS DC+		EN AC		EN DC+	EN DC+
	As welded		Stress relieved 620°C 1.0h		As welded		As welded	Stress relieved 580°C 1h
	Min	Max	Min	Max	Min	Max	Typ	Typ
Rp0.2 (MPa)	400		330		380	425	410	390
ReL (MPa)						430	420	395
ReH (MPa)						535	510	500
Rm (MPa)	480	650	415	550	470	600	33	29
A4-A5 (%)	22		22		20		33	29
Z (%)							70	69
Charpy V at 20°C (J)							150	135
Charpy V at 0°C (J)							130	125
Charpy V at -20°C (J)							115	80
Charpy V at -40°C (J)	27		27		47		70	55