



Product Data Sheet

PIPEWELD 9010 PLUS

E 'Manual metal-arc welding'
ESAB S.A. Ind. E Comércio Brazil

Prepared by A-C Thorsson	Qualified by Christos Skodras	Approved by Karin Ivarsson	Reg no EN005863	Cancelling EN005010	Reg date 2012-07-05	Page 1 (2)
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REASON FOR ISSUE

Chemical composition is updated.

GENERAL

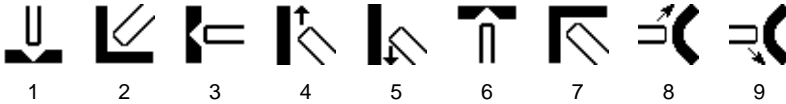
Cellulosic coated electrode designed for low alloy steel. Deep penetration welding in all positions, especially in the vertical downward; recommended for welding pipe-lines of API 5LX: X70- X80

Polarity: DC+

Alloy Type: C-Mn-Ni-Mo

Coating Type: Cellulosic

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.5 E9010-P1
EN ISO 2560-A E 50 2 1NiMo C 21

APPROVALS

FBTS E 9010-P1

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.05	0.15
Si	0.05	0.30
Mn	0.70	1.20
P		0.030
S		0.030
Cr		0.05
Ni	0.65	1.00
Mo	0.35	0.50
V		0.049
Nb		0.049
Cu		0.29



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MECHANICAL PROPERTIES OF WELD METAL

Properties	AWS		ISO	
	Min	Typ	Min	Max
As welded				
Rp0.2 (MPa)	530	620		
ReL (MPa)			500	
Rm (MPa)	620	700	560	720
A4 (%)	17	22		
A5 (%)			18	
Charpy V at -20°C (J)		60	47	
Charpy V at -30°C (J)	27	35		

Comments:

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
\emptyset x Length										
3.2 x 350	65	120	2.7	93	0.63	56	0.82	79	32	1,2,3,4,5,6,7,8,9
4.0 x 350	90	180	4	87	0.63	39	1.17	78	34	1,2,3,4,5,6,7,8,9
5.0 x 350	150	240	6.1	91	0.63	24	1.67	90	32	1,2,3,4,5,6,7,8,9

W = Weight (kg / 100 electrodes)

η = Efficiency (g weld metal x 100 / g core wire)

N = Effective value (kg weld metal / kg electrodes)

B = Changes (number of electrodes / kg weld metal)

H = Deposit rate at 90% of max current (kg weld metal / hour arc time)

T = Fusion time at 90% of max current (s / electrode)

U = Arc voltage (V)