Product Data Sheet PIPEWELD 6010 PLUS

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

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
P-O Oskarsson	Tero Borg	J-P Ernoult	EN007027	EN006957	2016-02-08	1 (2)

REASON FOR ISSUE

Typical mechanical values added.

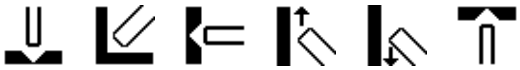
GENERAL

Cellulosic-coated electrode designed for welding of pipes and pipelines in all positions using conventional and stovepipe techniques . Deep penetration in all positons especially vertical down. Suitable for welding pipe steels API 5L up to X56, root pass up to X80 .

Polarity: DC+

Alloy Type: Carbon - Manganese
Coating Type: Cellulosic

WELDING POSITIONS



1 2 3 4 5 6

CLASSIFICATIONS Electrode

SFA/AWS A5.1	E6010

APPROVALS

FBTS	E 6010

CLASSIFICATIONS weld metal

EN ISO 2560-A	E 38 2 C 21

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.03	0.13
Si	0.05	0.25
Mn	0.25	0.7
P		0.02
S		0.02
Cr		0.07
Ni		0.05
Mo		0.05
V		0.049
Nb		0.049
Cu		0.29

MECHANICAL PROPERTIES OF WELD METAL

	AWS		ISO	
	As welded		As welded	
Properties	**Min**	**Typ**	**Min**	**Max**
Rp0.2 (MPa)	330	480		
ReL (MPa)			380	
Rm (MPa)	430	590	470	600
A4 (%)	22	22		
A5 (%)			20	
Charpy V at -20°C (J)		50	47	
Charpy V at -30°C (J)	27	40		

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ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	N	B	H	T	U	Welding
Ø x Length	Min	Max								Positions
2.5 x 350	60	80	1.6	77.9	0.79	100	0.7	54	34	1,2,3,4,5,6
3.2 x 350	75	130	2.7	68.6	0.69	67	1.0	57	25	1,2,3,4,5,6
4.0 x 350	100	190	4.0	61.2	0.63	50	1.2	58	30	1,2,3,4,5,6
5.0 x 350	160	240	6.2	67.6	0.71	29	1.9	65	28	1,2,3,4,5,6

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)