



Product Data Sheet

PIPEWELD 6010 PLUS

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

Signed by P-O Oskarsson	Approved by Tony Dray/Christos Skodras	Reg no EN005346	Cancelling EN004995	Reg date 2011-02-01	Page 1 (2)
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REASON FOR ISSUE

Chemical data and mechanicals updated

GENERAL

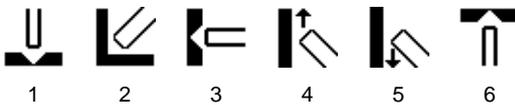
Cellulosic-coated electrode designed for welding of pipes and pipelines in all positions using conventional and stovepipe techniques . Deep penetration in all positons especially vertical down. Suitable for welding pipe steels API 5L up to X56, root pass up to X80 .

Polarity: DC+

Alloy Type: Carbon - Manganese

Coating Type: Cellulosic

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.1	E6010
EN ISO 2560-A	E 38 2 C 21

APPROVALS

FBTS	E 6010
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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		0.05
Nb		0.05
Cu		0.30

MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO		AWS	
	As welded Min	Max	As welded Min	Typ
Rp0.2 (MPa)			330	430
ReL (MPa)	380			
Rm (MPa)	470	600	415	525
A4 (%)			22	27
A5 (%)	20			
Charpy V at -20°C (J)	47			
Charpy V at -30°C (J)			27	50



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ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
2.5 x 350	60	80	1.8	78	0.79	100	0.72	50	27	1,2,3,4,5,6
3.2 x 350	75	130	3.1	68	0.57	66	1.04	52	29	1,2,3,4,5,6
4.0 x 350	100	190	3.9	61	0.64	50	1.36	53	30	1,2,3,4,5,6
5.0 x 350	160	240	5.9	48	0.54	40	1.64	55	33	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)