Product Data Sheet

E 'Manual metal-arc welding'

Xpert 7018-1

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
J-P Ernoult	P-O Oskarsson	J-P Ernoult	EN009135	None	2020-03-23	1 (2)

REASON FOR ISSUE

New Product

GENERAL

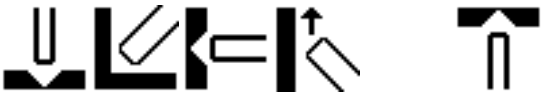
Xpert 7018-1 is a basic DC+ electrode for welding of mild and low alloy steels. Excellent for general purpose welding. It provides very low Hydrogen and good impact toughness at -46°C.

Polarity: DC+(-)

Coating Type: Basic covering

Diff Hydrogen: < 4 ml/100g

WELDING POSITIONS



1 2 3 4 6

CLASSIFICATIONS Electrode

SFA/AWS A5.1	E7018 H4
SFA/AWS A5.1	E7018-1 H4
EN ISO 2560-A	E 42 4 B 42 H5

APPROVALS

CE	EN 13479

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.02	0.10
Si	0.30	0.70
Mn	0.90	1.40
P		0.030
S		0.020

MECHANICAL PROPERTIES OF WELD METAL

	ISO		AWS
	As welded		As welded
Properties	**Min**	**Max**	**Min**
Rp0.2 (MPa)			400
ReL (MPa)	420		
Rm (MPa)	500	640	490
A4 (%)			22
A5 (%)	20		
Charpy V at -40°C (J)	47		
Charpy V at -50°C (J)			27

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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	105	2.2	114	0.59	78	0.91	51.4	22	1,2,3,4,6
3.2 x 350	80	160	3.5	112	0.59	48	1.3	59.8	23	1,2,3,4,6
3.2 x 450	80	140	3.5	112	0.59	48	1.3	59.8	23	1,2,3,4,6
4.0 x 350	110	200	6.0	113	0,64	26	1,67	82	24,5	1,2,3,4,6
4.0 x 450	100	210	6.6	111	0.64	23	1.82	84.2	24.5	1,2,3,4,6
5.0 x 400	160	260	9,2	112	0.65	17	2,4	90	24,5	1,2,3,4

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)