



# P 48M

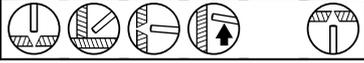
SMAW - (Stick) - MMA  
Un-alloyed

Date: 2002-10-29  
Revision: 7

## Description:

P 48M is a basic coated low hydrogen DC+ electrode designed for welding mild and higher strength steels. It is particularly suitable for heavily restrained sections and also steels with higher impurity levels. The electrode operates with a very smooth and stable arc and shows no tendency to "freeze" when welding vertically, even on low current. Root passes can be welded with DC-. P 48M has very good fracture toughness at temperatures down to -40°C.

## Welding positions:



## Coating type:

Basic

## Welding current:

DC + (-)

## Hydrogen content / 100 g weld metal

< 4 ml

## Metal recovery:

120%

## Redrying temperature:

350-400°C, 2h

## Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,40	1,10				
Typical	0,05	0,5	1,4	0,015	0,010		
Max	0,09	0,75	1,60	0,020	0,020	0,1	0,2

	Mo	Cu	V	Nb
Min				
Typical				
Max	0,1	0,2	0,05	0,05

## Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Re:	420-500 N/mm <sup>2</sup>	480 N/mm <sup>2</sup>
Tensile Strength, Rm:	510-660 N/mm <sup>2</sup>	560 N/mm <sup>2</sup>
Elongation, A5	≥ 24%	28%
Impact energy, CV:	-40 °C • ≥47 J	-40°C • 60 J
	-46 °C • ≥27 J	-46°C • 40 J

## Product data

Diam.mm	Length mm	Product code	Current A	Voltage V	Kg weld metal/kg electrodes	No. of electrodes/kg weld metal	Kg weld metal/hour arc time	Burn-off time/electrode (sec.)
2,00	300	71552000	40-80	23	0,64	112	0,7	
2,50	350	71552500	80-110	23	0,71	60	1	54
3,25	450	71553200	90-165	24	0,69	31	1,3	86
4,00	450	71554000	120-200	25	0,69	21	1,7	91
5,00	450	71555000	200-285	25	0,75	13	2,9	

## Classification:

EN 499-95	E 42 4 B 42 H5
AWS A5.1-91	E 7018-1 H4
DIN 1913-84	E 51 55 B10 120
BS 639-86	E 51 5 5 B (120 2 0 H)
Swedish Standard-79	SS 3211-H10

## Approvals:

GL	3 Y 42 H5
DNV	4 Y 42 H5
SVK	SS 3211-H10
UDT	E 42 4 B 42 H5
RINA	3Y H5

## Note

Core wire: P < 0.015% S < 0.015% N < 0.008%
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