



# P 48M

SMAW - (Stick) - MMA

Un-alloyed

Date: 2008-12-19  
Revision: 12

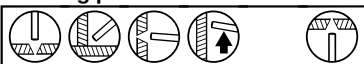
### Description:

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", even on low current.

Root passes can be welded with DC-.

P 48M has very good fracture toughness at temperatures down to -50 °C.

### Welding positions:



### Coating type:

Basic

### Welding current:

DC + (-)

### Hydrogen content / 100 g weld metal

≤ 4 ml

### Metal recovery:

120%

### Redrying temperature:

350 °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 MPa	480 MPa
Tensile Strength, Rm:	510-660 MPa	560 MPa
Elongation, A5	≥ 24%	28%
Impact energy, CV:	-40 °C • ≥47 J	-40 °C • 80 J
	-46 °C • ≥27 J	-46 °C • 70 J
		-50 °C • 60 J

### Produkt 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.)
2,0	300	71552000	40-80	23	0,64	112	0,7	43
2,5	350	71552500	70-110	23	0,69	62	0,9	58
3,2	450	71553200	80-145	24	0,71	30	1,3	85
4,0	450	71554000	120-210	25	0,73	20	1,8	90
5,0	450	71555000	200-285	25	0,75	13	2,7	93

### Classification:

EN 499	E 42 5 B 42 H5
EN ISO 2560-A	E 42 5 B 42 H5
AWS A5.1	E 7018-1 H4R*

### Approvals:

GL	3Y40 H5
DNV	4Y40 H5
LR	4Y40 H5
CE	
RINA	3Y H5
MRS	4Y40 H5

### Note

Core wire:

S ≤ 0.015%

P ≤ 0.015%

N ≤ 0.008%

\* AWS Suffix R only guaranteed for hermetically sealed or newly redried consumables