



# P 48M

SMAW - (Stick) - MMA  
Un-alloyed

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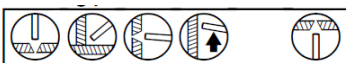
## Description:

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

	Specified	Typical
Yield strength, Re:	≥ 420 MPa	480 MPa
Tensile Strength, Rm:	520-640 MPa	560 MPa
Elongation, A5	≥ 22%	28%
Impact energy, CV:	-50 °C • ≥47 J	-40 °C • 80 J
	-46 °C • ≥27 J	-46 °C • 70 J
		-50 °C • 60 J

## Product data:

Diam.mm	Length mm	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	40-80	23	0,64	112	0,7	43
2,5	350	70-110	23	0,69	62	0,9	58
3,2	450	80-145	24	0,71	30	1,3	85
4,0	450	120-210	25	0,73	20	1,8	90
5,0	450	200-285	25	0,75	13	2,7	93

## Classification:

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

## Approvals:

CE	
DNV-GL	4Y40 H5
LR	4Y M 42 H5
RINA	3Y H5
MRS	4Y40 H5

## Note

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

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