



# P 65MR

SMAW - (Stick) - MMA  
Low-alloyed

Date: 2020-02-28  
Revision: 20

### Description:

P 65MR is a basic-coated low hydrogen electrode producing a nominal 0.9% Ni weld metal with molybdenum addition, designed for welding steels with a minimum yield strength of 460 MPa and similar materials, used in offshore fabrication etc.

P 65MR gives a minimum yield strength of 500 MPa, minimum tensile strength of 560 MPa and has excellent fracture toughness down to -60 °C. It is an AC/DC, all-positional electrode producing a finely rippled bead surface and good slag detachability.

### Welding positions:



### Coating type:

Basic

### Welding current:

DC+/-, AC OCV ≥ 70 V, For root passes: DC -

### Hydrogen content / 100 g weld metal

≤ 5 ml

### Metal recovery:

110-120%

### Redrying temperature:

375-400 °C, 2h

### Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,20	1,40				0,7
Typical	0,06	0,4	1,6	0,01	0,005		0,8
Max	0,08	0,50	1,70	0,015	0,015	0,1	1,0

	Mo	Cu	V	Nb
Min				
Typical	0,15			
Max	0,2	0,2	0,05	0,05

### Mechanical properties

	<u>Specified</u>	<u>Typical</u>	<u>PWHT Typical</u>
Yield strength, Re:	≥500 MPa	610 MPa	580 MPa
Tensile Strength, Rm:	560-720 MPa	650 MPa	640 MPa
Elongation, A5	≥ 19%	22%	22%
Impact energy, CV:	-60 °C • ≥47 J	-60 °C • 60 J	-40 °C • 50 J 600°C x 2h

### 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.)
2,5	350	71652500	60-110	22	0,71	71	0,8	56
3,2	350	71653235	80-150	24	0,68	37	1,4	57
3,2	450	71653200	80-150	24	0,68	31	1,5	79
4,0	450	71654000	140-200	24	0,72	20	1,9	85

### Classification:

EN ISO 2560-A E 50 6 Mn 1 Ni B 32 H5  
AWS A5.5 E8018-G

### Approvals:

CE  
DNV-GL 5Y 46 H5  
LR 5Y 46 H5

### Note

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

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