



P 65MR

SMAW - (Stick) - MMA
Low-alloyed

Date: 2022-06-21
Revision: 21

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:

350°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	$\geq 19\%$	22%	22%
Impact energy, CV:	-60 °C • ≥ 47 J	-60 °C • 60 J	-40 °C • 50 J 600°C x 2h

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:
 $S \leq 0.015\%$
 $P \leq 0.015$
 $N \leq 0.008\%$

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

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