



P 62MR

SMAW - (Stick) - MMA
Low-alloyed

Date: 2023-01-16
Revision: 33

Description:

P 62MR is a basic-coated low hydrogen electrode producing a nominal 0.9% Ni weld metal, designed to give excellent fracture toughness at temperatures down to -60 °C. It is an AC/DC electrode with optimised welder-appeal, especially in the vertical up position, producing a finely rippled bead surface and good slag detachability.

Electrode sizes 3,2x350 mm also available with a thin coating, "tc", ideally suited for root pass welding and joints with restricted access. P 62MR conforms to NACE requirements for oil and gas production equipment in sour service and has excellent CTOD values, making it highly suitable for offshore applications.

Welding positions:



Coating type:

Basic

Welding current:

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

Hydrogen content / 100 g weld metal

≤ 4 ml

Metal recovery:

110-120%

Redrying temperature:

350-400 °C, 1-2h

Chemical composition, wt. %

	C	Si	Mn	P	S	Cr	Ni
Min		0,20	1,05				0,8
Typical	0,06	0,3	1,3	0,01	0,005		0,9
Max	0,08	0,50	1,60	0,015	0,015	0,1	1,0

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

Mechanical properties

	Specified	Typical	PWHT Typical
Yield strength, Re:	≥460 MPa	530 Mpa	500 MPa
Tensile Strength, Rm:	540-660 MPa	610 MPa	580 MPa
Elongation, A5	> 22%	25%	23%
Impact energy, CV	-50°C • ≥ 47J -60°C • ≥ 47J	-60 °C • 60 J	-50 °C • 70 J 600°Cx1h

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	0,73	71	0,8	54
3,2 tc	350	80-155	23	0,72	42	1,3	54
3,2	350	80-150	24	0,71	37	1,4	58
3,2	450	80-150	24	0,71	28	1,4	82
4,0	450	140-200	24	0,72	19	1,9	89
5,0	450	200-270	24	0,72	13	2,6	100

Classification: EN

ISO 2560-A ~E 46 5 1Ni B 32 H5
AWS A5.5 E7018-G H4R / (E8018-G H4R)**

Approvals:

CE
BV 3Y HH
ABS 3Y
DNV 5Y46 H5

Note

(PWHT: 620°C, 2h: -20°C 150J, -46°C 70J, -60°C 40J)
CTOD -10°C > 0.25 mm
Part no. 7162-3250: thin coating.

EN: slight deviation in Mn

** Meet also 8018-G H4R in dia. up to 4,0mm

Core wire:

S ≤ 0.015%

P ≤ 0.015%

N ≤ 0.008%

*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and ITW Welding AB expressly disclaims any liability incurred from any reliance thereon. Typical data are those obtained when welded and tested in accordance with the corresponding EN ISO specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by ITW Welding AB.