



P 62MR

SMAW - (Stick) - MMA
Low-alloyed

Date: 2020-02-28
Revision: 31

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

≤ 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 | 1,05 | | | | 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: | 530-680 MPa | 610 MPa | 580 MPa |
| Elongation, A5 | ≥ 22% | 25% | 23% |
| Impact energy, CV: | -50 °C • ≥47 J | -60 °C • 60 J | -50 °C • 70 J 600°C x 1h |

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 AWS ~E 46 5 1Ni B 32 H5
A5.5 E7018-G / (E 8018-G)**

Approvals:

CE
BV 3Y HH
LR 3m, 5Y 42m H5
NAKS
MRS 5Y42 H5
ABS 3Y
DNV-GL 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 in dia up to 4,0 mm

Core wire:

S ≤ 0.015%

P ≤ 0.015%

N ≤ 0.008%

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