



P 48S

SMAW - (Stick) - MMA
Un-alloyed

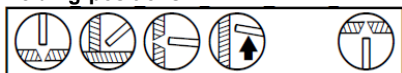
Date:	2022-06-21
Revision:	31

Description:

P 48S is a basic-coated, low hydrogen, general purpose electrode for use on DC only, for which the outstanding all-round operability has been optimised. The smooth, soft arc, easy slag control, all-positional welding, low spatter and excellent slag release provide maximum welder-appeal.

P 48S combines the good running characteristics required for general fabrication work with the exacting operability needs for pipe welding, where the fine spray transfer provides precise weld pool control and ensures an exceptionally regular and smooth root bead.

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	1,00				
Typical	0,05	0,60	1,20	0,015	0,01		
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*	PWHT Typical*
Yield strength, Re:	≥ 420 MPa	530 MPa	490 MPa
Tensile Strength, Rm:	510-640 MPa	600 MPa	580 MPa
Elongation,	A5 ≥ 22%	26%	29%
Impact energy, CV:	-40 °C • 47 J	-40 °C • 120 J	-20 °C • 130 J
	-46 °C • ≥27 J	-46 °C • 100 J	600°C x1h

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.)
1,6	300	30-60	23	0,65	170	0,5	46
2,0	300	40-80	23	0,64	115	0,7	43
2,5	350	80-110	23	0,71	60	1,0	54
3,2	450	110-155	24	0,72	28	1,6	76
3,2	350	110-165	24	0,72	36	1,6	57
4,0	450	140-205	25	0,74	19	2,1	82
5,0	450	200-285	25	0,75	13	2,9	91

Classification:

EN ISO 2560-A E 42 4 B 42 H5
AWS A5.1 E 7018-1H4

Approvals:

CE
TÜV
BV 3Y HH
ABS 3Y
DB Kennblatt Nr 10.042.01
DNV GL 3YH5
MRS 3Y40 H5
LR 3Ym H5

Note

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

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