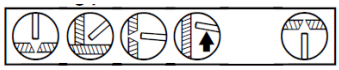
P 48P

SMAW - (Stick) - MMA
Un-alloyed

Date: 2022-06-21
Revision: 16

Description:
P 48P is a basic-coated, low hydrogen, carbon manganese electrode specially designed for pipewelding. The all-positional AC/DC electrode is exceptionally easy to use. P 48P has an extremely stable arc which enables it to be manipulated in the most difficult welding positions without any risk of arc extinction due to freezing. Root beads are even and slightly convex, providing a smooth blend-in with the base material. Operating characteristics are not sensitive to variations in the root gap or edge misalignment. Fill and capping passes fuse flush with the joint edges, minimising the risk of edge defects when using either the stringer bead or weaving technique. The flat-to slightly convex bead profile results in the need for only a bare minimum of grinding and therefore considerable reduction in the associated problems of dust and noise pollution. P 48P combines the special operability needs of the pipe welder with the general requirement for improved productivity.

Welding positions:



Coating type:
Basic

Welding current:
DC+/-, AC OCV> 70 V

Hydrogen content / 100 g weld metal
≤ 5 ml

Metal recovery:
105%

Redrying temperature:
350°C, 2h

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,25	0,90				
Typical	0,06	0,60	1,20	0,015	0,010		
Max	0,08	0,75	1,60	0,020	0,015	0,1	0,2

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

Mechanical properties

	Specified	Typical
Yield strength, Re:	≥460 MPa	530 MPa
Tensile Strength, Rm:	530-660 MPa	620 MPa
Elongation, A5	≥ 22 %	25 %
Impact energy, CV:	-20 °C • ≥47 J	-20 °C • 80 J
	-30 °C • ≥28 J	-30 °C • 70 J

Classification:

EN ISO 2560-A	E 46 2 B 12 H5
AWS A5.1	E 7018

Approvals:

CE	
ABS	3, 3Y
LR	3Ym H5
TÜV	
DNV	3Y H5
BV	3 Y HH

Note

Core wire:
S ≤ 0.015%
P ≤ 0.015%
N ≤ 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.)
2,0	300	45-65	20	0,61	155	0,6	52
2,5	350	60-85	22	0,62	80	0,6	65
3,2	450	70-130	23	0,75	30	1,1	88
3,2	350	70-130	23	0,75	42	1	66
4,0	450	120-190	24	0,73	23	1,7	84