



P 31

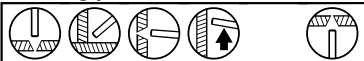
SMAW - (Stick) - MMA
Un-alloyed

Date: 2017-01-23
Revision: 25

Description:

P 31 is a medium-coated rutile electrode suitable for shipbuilding and structural steels as well as general purpose fabrication in mild and medium carbon steels. It has particularly good operability in both downhand and positional welding. The coating of the electrode is of higher basicity than most other rutile types and provides weld deposits of high metallurgical, Grade 3, quality.

Welding positions:



Coating type:

Rutile

Welding current:

DC+/-, AC OCV ≥ 50 V

For root passes: DC -

Metal recovery:

95%

Redrying temperature:

90 °C, 2h

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,10	0,5				
Typical	0,05	0,2	0,8	0,015	0,015		
Max	0,10	0,40	1,0	0,030	0,020	0,1	0,2

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

Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Re:	≥ 380 MPa	450 MPa
Tensile Strength, Rm:	470-550 MPa	530 MPa
Elongation, A5	≥ 22%	24%
Impact energy, CV:	-20 °C • ≥47 J	-20 °C • 50 J

Classification:

EN ISO 2560-A E 38 2 R 12
AWS A5.1 E 6013

Approvals:

CE
LR 3m, 3Ym

Produkt data:

Diam.mm	Length mm	Product code	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	71312500	70-100	18	0,62	88	0,9	45
3,2	450	71313200	90-120	19	0,69	36	1,3	53
4,0	450	71314000	130-180	20	0,71	25	1,7	61