



P 45S

SMAW - (Stick) - MMA
Un-alloyed

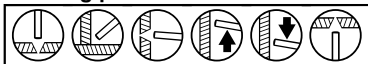
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Revision: 17

Description:

P 45S is a multi-purpose rutile-cellulosic coated electrode suitable for a wide application range in mild steel. The electrode is fully positional, including vertical down and welds with a crisp, steady arc to produce a smooth bead surface with good slag detachability. It is relatively insensitive to rust, dirt and surface coatings. Together with its ability to bridge gaps, the general versatility of P 45S makes it ideal for both shop and site fabrication.

Applications:

Welding positions:



Coating type:

Rutile-cellulosic

Welding current:

DC +/-, AC OCV ≥ 50 V

For root passes: DC -

Metal recovery:

90%

Redrying temperature:

80-90°C, 2h

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,30	0,30				
Typical	0,07	0,4	0,5	0,015	0,015		
Max	0,10	0,70	0,75	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:	≥ 420 N/mm ²	470 N/mm ²
Tensile Strength, Rm:	510-560 N/mm ²	550 N/mm ²
Elongation, A5	$\geq 22\%$	24%
Impact energy, CV:	0°C • ≥ 47 J	0°C • 50 J

Classification:

EN 499-95 E 42 0 RC 11
AWS A5.1-91 E 6013

Approvals:

UDT	E 42 0 RC 11
BV	2Y
LR	2m, 2Ym
Inspecta	
ABS	2
DNV	2
GL	2Y
Force	
CL	
SVK	
MRS	2
MOD (Navy)	MS 25 mm

Note

Core wire.
P < 0.015 %
S < 0.015 %
N < 0.008 %

Product 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.)
2,00	300	71452000	40-80	24	0,7	139	0,4	40
2,50	350	71452500	70-100	25	0,7	78	0,8	48
3,25	350	71453200	90-145	25	0,7	48	1,2	49
3,25	450	71453245	90-135	25	0,7	37	1,2	65
4,00	350	71454000	120-195	25	0,7	33	1,7	58
4,00	450	71454045	120-180	25	0,7	25	1,8	77
5,00	350	71455000	180-270	26	0,75	21	2,3	64