

MMA Electrodes C-Mn and low-alloy steels

TENAX 56S is a basic coated low hydrogen electrode with a very thin coating to improve joint access making the electrode suitable for root pass welding. The principal applications are related to all positional welding of materials to BS 4360-50D or equivalent. The electrode is ideally suited for pipe welding using the vertical-up technique. The main related industries are offshore, petrochemical and power engineering. Efficiency 100%.

Classification	
AWS	A5.1: E 7016-1 H4
EN	499: E 42 5 B 12 H5
EN ISO	2560-A: E 42 5 B 12 H5

Approvals	Grades
ABS	
BV	
DB	
DNV	
GL	
LRS	
RINA	
TÜV	

see Appendix, Classification Society Approvals, for details pag. 521

Analysis of all-weld metal (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	V	N	Cu
0.08	1.20	0.50	≤ 0.020	≤ 0.015	-	-	-	-	-	-	-

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO - V (J) -50°C	Hardness
PWHT 620°C x 1h	≥ 390	500-620	≥ 22	≥ 110	-
As Welded	≥ 420	500-640	≥ 22	≥ 110	-

Materials

S(P)235-S(P)420, GP240-GP280

Storage and redrying

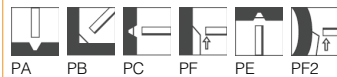
Keep dry and avoid condensation.

HD ≤ 5: Re-dry at 400-420 °C for 1 hour, 5 times max

HD ≤ 10: Re-dry at 350-370 °C for 1 hour, 5 times max

Current condition and welding position

DC+; DC-; AC



Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,5	300	60-90	16,7	10,0
2,5	350	60-90	19,6	11,8
3,2	350	80-130	31,2	18,7
3,2	450	80-120	39,8	23,8
4,0	350	125-170	46,1	27,6
4,0	450	125-170	58,4	35,0
5,0	450	170-240	89,1	53,4