

TENALLOY Z PLUS

CLASSIFICATIONS

AWS A/SFA 5.1 E7018-1
IS 814 E B5629H₃JX

IDENTIFICATION: Name Printed

CHARACTERISTICS

A low-hydrogen, iron-powder electrode. Weld metal exhibits excellent toughness upto minus 45°C. It gives excellent arc stability, arc smoothness and very easy slag removal. It has exceptional all-positional operating characteristics giving X-ray quality welds even for pipe welding in 5G & 6G,6GR positions.

TYPICAL APPLICATIONS

Welding of storage tanks, pipes, pressure vessels, boilers, bridges and heavy structures subject to dynamic loading and mechanical restraint. Suitable for joining steels like ASTM SA-414/SA-414M Gr. C&D (P. No. 1) Gr.55, Gr. 60 steels of SA-516/516M (P. No. 1), IS:2002, IS:2062 etc.

APPROVALS

ABS	4Y400H5	SONCAP-	
BV	4Y40H5	IBR	E7018-1
DNV	4Y40H5	Toyo	E7018-1
IRS	4HHH, 4Y40HHH	LRA	DXVUO, BF, 4Y40M, H5
GL	4Y40H5	MND	

CURRENT CONDITIONS: AC (90V), DC (+)

5.0	4.0	3.2	2.5
180-280	140-180	90-140	60-90

WELDING POSITIONS

F, H, V-up, OH

REDRYING CONDITIONS

300°C for 1 hour (Optionally also available in vacuum-packed condition.)

WELD METAL CHEMISTRY, wt%

C - 0.04 - 0.09	S - 0.030 max	Diffusible H ₂
Mn - 0.80 - 1.60	P - 0.030 max	Content, <5 ml/100gm
Si - 0.20 - 0.45		of weld metal

PACKING DATA

Dia., mm	5.0	4.0	3.2	2.5
Length, mm	450	450	450	350
Pcs per carton, Nos	51	75	113	239
Cartons / box	4	4	4	4
Pcs per box, Nos	204	300	452	956
Approx. Wt. of 1000 pcs,kg	96	66	44	21

MECHANICAL PROPERTIES - ALL-WELD

Condition	UTS MPa	YS MPa	% Elong. (L=4Xd)	CVN Impacts, J -45°C	Hardness, BHN
As-welded	520 - 640	450 - 540	24 min.	40 - 60	200 max.

SPECIAL TESTS

TEST TYPE	REMARKS
HIC & Sulphide SCC (NACE)	Passed



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