

TENALLOY 80

CLASSIFICATIONS

AWS A/SFA 5.5 E11018-M

IDENTIFICATION: Name Printed

CHARACTERISTICS

A micro-alloyed, low-hydrogen, iron-powder electrode for welding of high tensile steels, heavy sections. It gives excellent arc stability, arc smoothness and very easy slag removal. Weld metal is of X-ray quality.

TYPICAL APPLICATIONS

Welding of high tensile steels e.g. USS T-1 etc. used for fabrication of penstocks, earth moving equipments and heavy structures subject to dynamic loading and mechanical restraint. For welding of steels C, D grades of SA-225/225M (P. No. 10A); B, C, D grades of SA-53 3/533M (P. No. 3); B, C grades of SA-543/543M (P. No. 11A) etc.

APPROVALS

ABS E 11018-M

CURRENT CONDITIONS: AC (70V), DC (+)

6.3	5.0	4.0	3.2	2.5
250-310	190-250	140-180	100-140	60- 90

WELDING POSITIONS

F, H, V-up, OH

REDRYING CONDITIONS

300°C for 2 Hrs (Optionally also available in vacuum-packed condition.)

WELD METAL CHEMISTRY, (%)

C - 0.05 - 0.09	S - 0.030 max.	Diffusible H ₂
Mn - 1.30 - 1.80	P - 0.030 max.	Content <5 ml/100gm
Mo - 0.30 - 0.50	Cr - 0.20-0.40	of weld metal
Si - 0.30 - 0.60	Ni - 1.25-2.40	

PACKING DATA

Dia., mm	6.3	5.0	4.0	3.2	2.5
Length, mm	450	450	450	450	350
Pcs per carton, Nos	30	51	78	114	215
Cartons / box	4	4	4	4	4
Pcs per box, Nos	120	204	312	456	860
Approx. Wt. of 1000 pcs,kg	167	96	63	44	23

MECHANICAL PROPERTIES- ALL-WELD

Condition	UTS MPa	YS MPa	% Elong. (L =4Xd)	CVN Impacts, J -50°C
As-welded	770-870	680-760	20-24	40(avg)



WELDERS TO THE NATION SINCE 1951
ADOR WELDING LIMITED

(Formerly Known as Advani-Oerlikon Ltd.)

www.adorwelding.com

