SM-80A

AWS A5.28 E110C-G-H4 / AWS A5.36 E110T15-M21A4-G-H4
EN ISO 18276-A T 69 4 ZMn2.5NiCrMo M M21 2 H5
EN ISO 9606-1: FM2

Metal cored wire for welding extra high tensile steels min. 690mpa.

General description:

SM-80A, is a Ni-Cr-Mo alloyed metal cored seamless wire developed for use with Argon/CO_2 mixed (M21) shielding gas.
The wire is designed to be used both in the short-arc range (dip transfer mode) for single side root runs and for automated and manual welding of butt welds and fillet welds in the spray-arc range.

SM-80A consists mainly of metal flux which ensures high productivity.
The seamless wire has a stable welding arc with low spatter and excellent visual bead shape.

A clean, copper coated surface together with exact diameter and roundness which secure stable and even wire feeding. This is of great value when long conduit cables are used and when using any automated welding processes.

Mechanical properties have been designed for Charpy impact values ≥47 joule at -40°C.

Welding positions:

Welding current:

DC+

Type of gas / flow:

M21 Ar+CO_2

20-25 l/min.

Chemical composition of all-weld-metal:

C	Si	Mn	P	S	Cu	Ni	Cr	Mo	
0.03 – 0.08	0.20 – 0.60	1.20 – 1.80	Max. 0.020	Max. 0.010	Max. 0.40	2.20 – 2.80	0.30 – 0.70	0.30 – 0.70	

Diffusible hydrogen content (ml/100g):

≤4 ml/100g.

Mechanical properties of all-weld-metal:

Yield and Tensile Strengths			Charpy Impact Test	
Yield Mpa	Tensile Mpa	Elongation %	Charpy V (J) -40 ºC	
Min. 690	770 - 900	Min. 17	Min. 47	

Guidance - Ampere (DC+):

Wire diameter	1,2 mm		
Ampere / Volt			

Packaging information:

1,2mm x 12,5kg spool D300

Approvals:

DNV-GL, ABS, CE

Reference / date:

SM-80A, English, 06.07.2023.