

AX-NiMoCr90

Standards

EN ISO 16834-A:	G 89 4 M21 Mn4Ni2CrMo
EN ISO 16834-B:	G 83A 4 M21 N4M4T
AWS A5.28:	ER120S-G

Properties

Solid wire made of alloyed steel for GMAW welding of high-strength, quenched and tempered fine-grained structural steels. Weld metal for operating temperatures from -40 to 450°C.

The mechanical property values depend on the shielding gas used; an optimum weld metal is achieved under mixed gas M21 with corresponding welding parameters. Weldable in short or spray arc.

Important base materials / Important applications

S690Q-S890Q, S690QL-S890QL, S960Q, S960QL.
ASTM A 709 Gr. 100 Type B, E, F, H, Q, HPS 100W.

Typical composition of welding rod / solid wire in %

C	Si	Mn	Ni	Cr	Mo
0,1	0,7	1,8	2,0	0,4	0,5

Mechanical properties of all-weld metal (typical values)

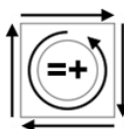
Yield strength $R_{p0,2}$	[MPa]	900
Tensile strength R_m	[MPa]	960
Elongation A ($L_0 = 5d_0$)	[%]	17
Impact work KV	[J]	60 at -40°C

Shielding gas: M21, PWHT: untreated

Operating data

GMAW:

Shielding gas: M21 (e.g. Ar+18%CO₂)
acc. to ISO 14175 M20, M24, M26



Preheating temperature depends on the base material. Ensure controlled heat input. The interpass temperature should not exceed 180°C.

Approvals

(Please ask for current scope)

Packaging and available sizes

Spools	Ø mm	0,8	1,0	1,2	1,6		
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Other dimensions on request.