

Classifications

EN ISO 18276-A

AWS A5.29

T89 4 Mn2Ni1CrMo B M 3 H5

E120T5-GM-H4

Characteristics and typical fields of application

Seamless basic flux cored wire for welding of very high strength Nickel-Chromium-Molybdenum alloyed steels with Ar-CO₂ shielding gas.

Features include: excellent weldability in flat and horizontal positions, smooth and bright bead, less spatter, easy to remove slag and very high mechanical properties at low temperatures.

Base materials

S690Q-S890Q, S690QL-S890QL, S960Q, S960QL, N-A-XTRA M 700, PAS 700, alform 700 M, alform 900 x-treme, alform 960 x-treme

ASTM A 709 Gr. 100 Type B, E, F, H, Q, HPS 100W

Typical analysis of all-weld metal (wt.-%)

	Gas	C	Si	Mn	Ni	Cr	Mo
wt-%	M21	0.06	0.40	1.40	2.20	0.40	0.40

Mechanical properties of all-weld metal

Condition	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J
	MPa	MPa	%	-40°C
u	960 (≥890)	1010 (940–1180)	19 (≥15)	75 (≥47)

u untreated, as welded – shielding gas M21

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) M21	ø (mm) 1.2
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Welding with standard GMAW-facilities possible

Approvals

CE