

Classifications

EN ISO 18276-A	EN ISO 18276-B	AWS A5.29 / SFA-5.29
T 89 4 Mn2Ni1CrMo B M21 3 H5	T 83 4 T5-0M21A-N4C2M2-UH5	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

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

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy 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+	Dimension mm
	Shielding gas (EN ISO 14175)	M21	1.2
			1.6

Welding with conventional or pulsed power sources using DC+

Approvals

CE