

Classifications

EN ISO 18276-A	EN ISO 18276-B	AWS A5.29 / SFA-5.29
T 69 6 Mn2NiCrMo B M21 3 H5	T 76 6 T5-0M21A-N4C1M2-H5	E110T5-K4M-JH4

Characteristics and typical fields of application

Seamless basic flux-cored wire for welding of 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, low spatter losses easy to remove slag, exceptional mechanical properties at low temperatures (-60°C) with low content of diffusible hydrogen (<3ml/100g).

Base materials

S620Q, S620QL, S690Q, S690QL, S620QL1-S690QL1, alform plate 620 M, 700 M, aldur 620 Q, 620 QL, 620 QL1, aldur 700 Q, 700 QL, 700 QL1

ASTM A 514 Gr. F, H, Q ; A 709 Gr. 100 Type B, E, F, H, Q ; A 709 Gr. 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	%	-60°C
u	740 (≥ 690)	800 (770–900)	20 (≥ 17)	80 (≥ 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

TÜV (07416), ABS, DNV, LR, CE