

Classifications

EN ISO 18276-A	EN ISO 18276-B	AWS A5.28 / SFA-5.28
T 62 4 Z M M21 1 H5	T 69 4 T15-1M21AP-G-UH5	E100C-GH4

Characteristics and typical fields of application

Seamless, Nickel-Molybdenum alloyed, metal-cored wire for single- or multilayer welding of high strength steels with pure Argon or Ar-CO₂ shielding gas. This wire is especially suitable for pipe welding of special base material like ASTM A519 Gr. 4130; it meets the requirements of NACE requirements.

Features include: high yield, good weldability, excellent bead appearance, low spatter losses and exceptional mechanical properties at low temperatures.

Base materials

30CrMo4
ASTM A519 Gr. 4130

Typical analysis

	Gas	C	Si	Mn	Ni	Mo
wt.-%	M21	0.10	0.50	1.80	0.90	0.55

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

Condition	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J	
	MPa	MPa	%	-29°C	-40°C
u	780 (≥ 620)	820 (700-830)	20 (≥ 17)		70 (≥ 47)
s	670 (≥ 620)	750 (700-830)	22 (≥ 17)		60 (≥ 47)
s1	720 (≥ 620)	800 (700-830)	20 (≥ 17)	55 (≥ 35)	

u untreated, as welded – shielding gas M21

s stress relieved 650°C x 4h - shielding gas M21

s1 stress relieved 650°C x 4h - shielding gas I1

Operating data

	Polarity	DC+	Dimension mm
	Shielding gas (EN ISO 14175)	M21, I1	1.2
			1.6

Welding with conventional or pulsed power sources using DC+

Approvals

ABS, DNV