

Classifications

EN ISO 18276-A	EN ISO 18276-B	AWS A5.29 / SFA-5.29
T 69 4 Z P C1 1 H5	T 76 4 T1-1C1A-G-H5	E111T1-GC-JH4

Characteristics and typical fields of application

Seamless rutile, Nickel-Molybdenum alloyed, flux cored wire for single- or multilayer welding of high strength steels to be used with pure CO₂ shielding gas. The low diffusible hydrogen content of the pure weld metal (2-3ml/100g) and the outstanding mechanical properties at low temperatures, makes this wire perfect suitable for applications using high- and ultrahigh strength steel grades. This core wire with its easy to remove and fast freezing slag shows excellent weldability in all positions, excellent bead appearance and low spatter losses.

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

	C	Si	Mn	Ni	Mo
wt.-%	0.05	0.30	1.85	2.2	0.15

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	750 (=>690)	790 (770-900)	18 (=>17)	70 (=>47)

u - untreated, as welded – shielding gas C1

Operating data

	Polarity	DC +	Dimension mm
	Shielding gas (EN ISO 14175)	C1	1.20

Preheating is always recommended in accordance with base material thickness and interpass temperature 150°C maximum.

Approvals

CE