

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.29 / SFA-5.29
T 46 6 1Ni P C1 1 H5	T 55 6 T1-1C1A-N2-UH5	E81T1-Ni1C-JH4

Characteristics and typical fields of application

Seamless rutile, nickel alloyed, flux-cored wire for singleor multilayer welding of carbon, carbon-manganese steels and high strength steels with pure CO₂ shielding gas. Main features: excellent weldability in all positions, excellent bead appearance, very low spatter losses and fast freezing and easy to remove slag.

The exceptional mechanical properties of this wire even at low temperatures make it especially suitable for offshore applications.

Base materials

S355JR, S355J0, S355J2, S450J0, S355N-S460N, S355NL-S460NL, S355M-S460M, S355ML-S460ML, S460Q, S460QL, P355GH, P355NH, P420NH, P460NH, P355N-P460N, P355NH-P460NH, L245NB-L415NB, L245MB-L485MB, L360QB-L485QB, ASTM A 350 Gr. LF1; A 516 Gr. 65, 70; A 572 Gr. 42, 50, 60, 65; A 573 Gr. 65, 70; A 588 Gr. B, C, K; A 633 Gr. A, C, D, E; A 662 Gr. B, C; A 678 Gr. B; A 707 Gr. L2; A 841 Gr. A, B, C; API 5 L X42, X52, X60, X65, X70, X52Q, X60Q, X65Q, X70Q

Typical analysis

	Gas	C	Si	Mn	Ni
wt.-%	C1	0.07	0.35	1.1	0.85

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	%	-20°C	-60°C
u	550 (≥ 470)	600 (550-680)	24 (≥ 20)	110	85 (≥ 47)

u untreated, as welded – shielding gas C1

Operating data

	Polarity	DC+	Dimension mm
	Shielding gas (EN ISO 14175)	C1	1.2
			1.4
			1.6

Welding with standard GMAW-facilities possible

Approvals

TÜV (12887), ABS, DNV, LR, CE