diamondspark Ni1 RC-SR

Flux cored wire, seamless, high strength, rutile type

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.36/SFA-5.36	AWS A5.36M/SFA-5.36M
T50 6 1Ni P M21 1 H5	T556T1-1MA21P-N2 H5	E81T1-M21AP8-Ni1-H4	E551T1-M21AP6-Ni1-H4

Characteristics and typical fields of application

Seamless rutile, Nickel alloyed, flux cored wire for single- or multilayer welding of carbon, carbon manganese steels and high strength steels with Ar-CO_2 shielding gas.
Main features: excellent impact values at very low temperature (-60°C) in as welded conditions and after post weld heat treatments, excellent weldability in all positions, very low spatter losses make it especially suitable for more special applications. CTOD tested at -25°C (-13°F)

Base materials

S355JR, S355J0, S355J2, S450J0, S355N-S460N, S355NL-S460NL, S355M-S460M, S355ML-S460ML, S460Q, S500Q, S460QL, S500QL, S460QL1, S500QL1, P355GH, P355NH, P420NH, P460NH, P355N-P460N, P355NH-P460NH, P355NL1-P460NL1, P355NL2-P460NL2, L245NB-L415NB, L245MB-L485MB, L360QB-L485QB, aldur 500Q, aldur 500QL, aldur 500QL1

ASTM A 350 Gr. LF2; A 516 Gr. 65, 70; A 572 Gr. 42, 50, 60, 65; A 573 Gr. 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, L3; A 841 Gr. A, B, C; API 5 L X42, X52, X60, X65, X70, X52Q, X60Q, X65Q, X70Q

Typical analysis of all-weld metal

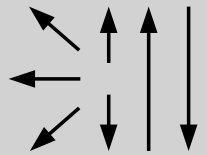
	Gas	C	Si	Mn	Ni
wt-%	M21	0.07	0.4	1.3	0.85

Mechanical properties of all-weld metal

Condition	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	-40°C	-60°C
u	**520** (≥500)	**600** (560–690)	**25** (≥20)	**120**	**100** (≥47)
s	**500** (≥470)	**580** (550–680)	**29** (≥20)	**120**	**90** (≥47)
s1	**490** (≥470)	**570** (550–680)	**30** (≥20)	**110**	**60** (≥47)

u untreated, as welded – shielding gas M21
s stress relieved 620°C / 2h – shielding gas M21
s1 stress relieved 620°C / 6h – shielding gas M21

Operating data



Polarity:	Shielding gas:	ø (mm)
DC (+)	(EN ISO 14175) M21	1.0 1.2 1.4 1.6

Welding with standard GMAW power source possible

Approvals

TÜV, ABS, DNV-GL; LR, CE