diamondspark Ni1.5 RC (C1)

Flux cored wire, seamless, high strength, rutile type

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.29 / SFA-5.29
T 50 6 1.5Ni P C1 1 H5	T 55 6 T1-1C1A-N3-H5	E81T1-K2C-JH4

Characteristics and typical fields of application

High performance seamless rutile flux cored wire, for the welding of medium alloyed steel and for low temperature applications with pure CO2 shielding gas. Main features: excellent weldability in all positions, fast freezing and easy removable slag, no spatter at low parameters, good mechanical properties also after long post weld heat treatment. The good mechanical properties of this wire even at the low temperature (–60ºC) as well as the low content of diffusible hydrogen make it especially suitable for offshore applications.

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,
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
JIS SM520B, SM520C, SM570, SBHS500

Typical analysis

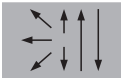
	Gas	C	Si	Mn	Ni
wt.-%	C1	0.04	0.3	1.2	1.5

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	-40°C	-60°C
u	580 (≥ 500)	605 (570 – 690)	25 (≥ 18)	-	100	90 (≥47)
s	520	580	27	120	100	80
s1	500	570	29	110	90	70

u - untreated, as welded – shielding gas 100 % CO2
s - stress relieved 635°C / 3h – shielding gas 100 % CO2
s 1 stress relieved 635°C / 15h – shielding gas 100 % CO2

Operating data



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

Welding with standard GMAW-facilities possible

Approvals

ABS, BV, DNV, LR, RS

All information provided is based upon careful investigation and intensive research.
However, we do not assume any liability for correctness and information is subject to change without notice.