diamondspark 52 RC

Flux-cored wire, seamless, mild steel, rutile

Classifications

AWS A5.20 / SFA-5.20	EN ISO 17632-A	EN ISO 17632-B
E71T1M/T-9M/T-12M JDH4	T 46 4 P M21 1 H5	T 49 5 T1-1M21A-H5
E71T1C/T-9C/T-12C DH4	T 46 2 P C1 1 H5	T 49 3 T1-1C1A-H5

Characteristics and typical fields of application

Seamless rutile flux cored wire for single- or multilayer welding of Carbon, Carbon-Manganese steels and similar types of steels including fine grain steels with Argon-CO2 shielding gas or pure CO2. Main features: excellent weldability in all positions with high performance welding speed, very low spatter losses, good bead appearance, fast freezing and easy to remove slag. This wire is especially suitable for ship building, structural steel work or wherever good bead appearance is required. D1.8 Seismic Supplement approved. This product can be used in sour gas applications. (HIC tested acc. to NACE TM-0284). Test values for SSC are available upon request. Typical hydrogen value 2.5 – 3.5ml/100g weld metal.

Base materials

S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P275NL1-P460NL1, P215NL, P265NL, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE240
ship building steels: AH32, AH36, AH40; DH32, DH36, DH40; EH32, EH36, EH40; FH32. FH36, FH40
ASTM A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 350 Gr. LF1; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 513 Gr. 1018; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. C, E; A 662 Gr. B; A 711 Gr. 1013; A 841 Gr. A; API 5 L Gr. B, X42, X52, X56, X60, X65

Typical analysis

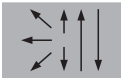
	Gas	C	Si	Mn
wt.-%	M21	0.06	0.40	1.45
wt.-%	C1	0.04	0.35	1.25

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			
	ksi	ksi	%	-4°F	-40°F	-50°F	-58°F
u	73 (≥ 67)	86 (77–90)	26 (≥ 22)	74 (≥ 35)	52 (≥ 35)	37 (≥ 20)	33 (≥ 20)
u1	68 (≥ 67)	81 (77–90)	28 (≥ 22)	59 (≥ 35)	35 (≥ 20)		
s1	74 (≥ 67)	86 (77–90)	26 (≥ 22)		59 (≥ 35)	30(≥ 20)	

u untreated, as welded – shielding gas M21
u1 untreated, as welded – shielding gas C1
s1 stress relieved 620°C/1 hour - shielding gas M21

Operating data



Dimension inch
0.045"
0.052"
1/16

Welding with standard GMAW-facilities possible

Approvals

ABS, CWB, D1.8 seismic supplement

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.