

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.20
T 42 2 P C 1 H10	T493T1-1CA-H10	E71T-1H8

Characteristics and typical fields of application

Union TG 50 C is a rutile flux cored wire with fast solidifying slag for GMAW in all positions with shielding gas C1 acc. to EN ISO 14175. The fast solidifying slag and the soft arc allow excellent properties in position welding with increased welding current. The wire furthermore disposes of a very low spatter affinity, a wide and deep penetration and a fine bead appearance with a good slag detachability. The welding of root passes in all positions with ceramic backing strips is proven.

Base materials

S185, S235J2G3, S275JR, S355J2G3, E295, P235GH, P265GH, P295GH, P355GH (HI, HII, 17 Mn 4, 19 Mn 6), P275N, P355N, P355NL2, P460N, S275N, S275NL, S355N, S355NL, S460N, L210, L240, L290, L360, L290NB, L360MB, L415MB, X42 – X65, GS-38 – GS-52, Shipbuilding steels grade A – E, AH 32 – EH 36, A40 – F40

Typical analysis of all-weld metal (wt.-%)

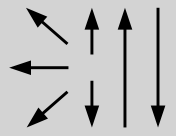
	C	Si	Mn	P	S	Gas
wt-%	0.06	0.5	1.2	≤ 0.025	≤ 0.025	C1

Mechanical properties of all-weld metal

Heat-treatment	Shielding gas	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J	
		MPa	MPa	%	+20 °C	-20 °C
aw	C1	420	520	24	110	47

aw = untreated, as welded

Operating data

	Polarity: DC (+) DC (-)	Shielding gas: (EN ISO 14175) C1 Consumption: 15 – 20 l/min	ø (mm) 1.2	Spool B300	Amps A 130 – 300	Voltage V 23 – 32
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Approvals

TÜV (10870), DB (42.132.39) GL, LR, CE