

Classifications			
EN ISO 17632-A	EN ISO 17632-B	AWS A5.20	AWS A5.20M
T46 4 B M 3 H5	T496T5 - 0MA H5	E70T-5M-JH4	E490T-5M-JH4
T42 4 B C 3 H5	T496T5 - 0CA H5	E70T-5C-JH4	E490T-5C-JH4

Characteristics and typical fields of application

Seamless basic flux cored wire for single or multipass welding of Carbon, Carbon-Manganese steels and similar steels, including fine grain ones, with Argon-CO₂ shielding gas or pure CO₂. Main features: excellent weldability in flat and horizontal position, smooth and bright bead, low spatter, easy to remove slag and exceptional mechanical properties even at the lowest temperatures (-40°C). This wire is especially suitable for welding components of different material or as buffer layer for hardfacing applications.

Base materials

EN 10207: P235S - P265S - P275SL, **EN 10025-2:** S235JR-J0-J2 - S275JR-J0-J2 - S335JR-J0-J2-K2 - S450J0, **EN 10025-3:** S275N - S355N - S420N - S460N, **EN 10025-4:** S275M - S355M - S420M - S460M, **EN 10028-2:** P235GH - P265GH - P295GH - P355GH - 16Mo3, **EN 10028-3:** P275NH - P355NH - P460NH - P275NL1 - P355N - P355NL1 - P460NL1, **EN 10028-6:** P355QH - P460QH - P355Q - P460Q - P355QL1 - P460QL1, **EN 10025-6:** S460Q - S460QL, **EN 10028-5:** P355M - P420M - P460M - P355ML1 - P420ML1 - P460ML1, **EN 10208-1:** L210GA - L235GA - L245GA - L290GA - (X42) - L360GA - (X52), **EN 10208-2:** L245NB - L245MB - L290NB - L290MB - (X42) - L360NB - L360QB - L360MB - (X52) - L415NB - L415QB - L415MB - (X60) - L450QB - L450MB - (X65).

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

C	Mn	Si	P	S	GAS
0.07	1.60	0.55	< 0.025	< 0.025	M21
0.06	1.30	0.50	< 0.025	< 0.025	C1

Mechanical properties of all-weld metal – typical values (minimum values)

Shielding gas	Heat-treatment	Yield strength	Tensile strength	Elongation	Impact work		
		R _{p0.2}	R _m	A (L ₀ =5d ₀)	in J CVN		
		MPa	MPa	%	RT	-40°C	-60°C
M21	AW	460	560	24	160	110	70
C1	AW	420	540	24	150	90	47

Untreated, as welded – shielding gas Ar + 18% CO₂

Operating data

	Ø (mm)	Spool	Weight (Kg)	Current A	Voltage V
	1.00	B300	16	80 - 250	15 - 25
	1.20	B300	16	100 - 300	16 - 36
	1.40	B300	16	120 - 350	17 - 37
	1.60	B300	16	130 - 400	19 - 38
	2.00	B300	16	300 - 450	28 - 44
	2.40	B300	16	400 - 500	30 - 45

Other spool types on request

Approvals

RINA • TÜV (06218) • LR • ABS • DNV • BV • GL • DB (42.052.04)