

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.18	AWS A5.18M
T46 6 M M 1 H5	T556T15-1MA-H5	E70C-6MH4	E48C-6MH4
T42 5 M C 1 H5	T495T15-1CA-H5	E70C-6CH4	E48C-6CH4

Characteristics and typical fields of application

Seamless metalcored wire for single or multipass welding of Carbon, Carbon-Manganese and similar types of steels, including fine grain ones, with Argon-CO₂ or pure CO₂ shielding gas. Features include: high yield, good weldability, excellent bead appearance, no spatter or slag and exceptional mechanical properties at low temperatures (-60°C). This wire is especially suitable for automated - robotized applications and for rootpass welding for piping and butt-joint's. CTOD tested at -10°C.

Base materials

EN 10207: P253S - P265S - P275SL ÷ EN 10025-2: S235JR-J0-J2 - S275JR-J0-J2 - S355JR-J0-J2-K2 - S450J0 ÷ EN 10025-3: S275N - S275NL - S355N - S355NL - S420N - S420NL - S460N - S460NL ÷ EN 10025-4: S275M - S275ML - S355M - S355ML - S420M - S420ML - S460M - S460ML ÷ EN 10028-2: P235GH - P265GH - P295GH - P355GH ÷ EN 10028-3: P275NH - P355NH - P460NH - P275NL1 - P355N - P355NL1 - P460NL1 ÷ EN 10028-6: P355QH - P460QH - P355Q - P460Q - P355QL1 - P460QH1 ÷ EN 10025-6: S460Q - S460QL ÷ EN 10028-5: P355M - P420M - P460M - P355ML1 - P420ML1 - P460ML1 ÷ EN 10028-6: P355Q - P460Q - P500Q - P355QL1 - P460QL1 - P500QL1 - P355QL2 - P460QL2 - P500QL2 ÷ 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) - L485QB - L485MB - (X70)

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

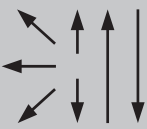
C	Mn	Si	P	S	GAS
0.06	1.60	0.80	< 0.025	< 0.025	M21
0.05	1.50	0.60	< 0.025	< 0.025	C1

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

Shielding Gas	Heat-treatment	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work in J CVN				
					20°C	0°C	-40°C	-50°C	-60°C
M21	AW	460	560	28	140	130	90	-	60
C1	AW	420	540	26	100	90	80	60	-
M21	S=620° Cx2h	420	510	24	-	-	90	-	-

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

Operating data

	Ø (mm)	Spool	Weight (Kg)	Current A	Voltage V
	1.00	B300	16	90 - 280	16 - 30
	1.20	B300	16	120 - 350	17 - 32
	1.40	B300	16	150 - 400	18 - 33
	1.60	B300	16	200 - 450	20 - 34

Other spool types on request

Approvals

RINA • TÜV (06226) • LR • ABS • DNV • BV • GL • DB (42.052.02) • CWB