

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.20
T 46 4 B M 3 H5 T 42 4 B C 3 H5	T556T5-3MA-H5 T496T5-3CA-H5	E70T-5MJH4 E70T-5CJH4

Characteristics and typical fields of application

Union BA 70 is a high-basic flux cored wire with very good properties in means of cracking, elongation and toughness. According to covered electrode E7018 it provides high mechanical properties, notch free weld seams and good slag detachability. It is mostly used with mixed gas M21, M33 and C1 acc. to EN ISO 14175.

Good root weldability without wall thickness limitation, approved for temperatures down to -40°C (-40°F).

Root weldability is proven on ceramic backing strips.

Base materials

S185 – S355K2G3, E295 – E335, P235GH – P355GH,
P275N – P420NL2, S275N – S420NL,
X42 – X60 (API-5LX), GS-38 – GS-60,
Shipbuilding steels grade A – E, AH32 – EH36, A40 – F40

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

	C	Si	Mn	P	S
wt-%	0.06	0.45	1.4	≤ 0.020	≤ 0.020

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	-40 °C
aw	M21	460	530	20	120	100	47

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) M21 und C1 Consumption: 15 – 20 l/min	ø (mm) 1.2	Spool B300	Amps A 120 – 350	Voltage V 18 – 32
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Approvals

TÜV (11078), DB (42.132.31), ABS, DNV, LR, CE