

BÖHLER AWS E71T1-M/C

RUTILE FLUX CORED WIRE FOR GENERAL STEEL CONSTRUCTION

All positional welding with one parameter setting

With the extremely efficient rutile flux cored wire by Böhler Welding, fabricators have the perfect welding consumable for highest productivity in welding. It features user friendly welding characteristics in all positions, with one diameter and same parameter settings.

The BÖHLER AWS E71T1-M/C is characterized by highest productivity and provides significant savings in time and economical aspects when used for positional welding. This filler material allows fabricators to enter a new era in productive, high quality welding.

Product features	Product benefits	User benefits
» Designed chemistry	<ul style="list-style-type: none"> » Excellent mechanical properties » Easy slag removal » Low spatter loss » Smooth, finely rippled bead surface » All positional welding » Can be use under mixed gas (Ar + 15-25%CO₂) or with 100% CO₂ with fast freezing slag system » Can be used for steel grades up to yield strength of 460 MPa (67 ksi) 	<ul style="list-style-type: none"> » Less post weld cleaning » Flexibility to use different shielding gases » Easy Handling » Wide parameter box
» Productivity	<ul style="list-style-type: none"> » The product performs to the highest productivity 	<ul style="list-style-type: none"> » Significant savings in time and economical aspects » User friendly welding characteristics in all positions with one wire diameter and same parameter setting.



Typical applications

- » General steel construction
- » Shipbuilding

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Classifications		Operating data		
EN ISO 17632-A	AWS A5.36	Welding positions	Polarity	Shielding gas
T 46 2 P C1 H5 T 46 2 P M21 1 H10	E71T1-C1A2-CS1-H8 E71T1-M21A2-CS1-H8		DC+	M21 C1

Typical chemical composition, all weld metal, wt. %

Shielding gas	C	Si	Mn
M21	0.04	0.50	1.40
C1	0.04	0.45	1.30

Mechanical properties, all weld metal (single values typical)

Shielding gas	Condition	Yield strength $R_{p0.2\%}$ MPa	Tensile strength R_m MPa	Elongation A ($L_0 = 5d_0$) %	CVN Impact toughness ISO-V KV J	
					+20 °C	-20 °C
M21	As welded	530 (≥ 460)	600 (530 – 680)	28 (≥ 20)	130	100 (≥ 47)
C1	As welded	480 (≥ 460)	540 (530 – 680)	30 (≥ 20)	110	90 (≥ 47)

Steels to be welded

EN	ASTM
Steels up to a yield strength of 460 MPa (67 ksi) 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, shipbuilding steels: A, B, D, E, A 32-E 36	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

Approvals

TÜV, DB, DNV-GL, ABS, LR, CE

Overview diameters and packaging

Wire basket BS300	Wire basket BS300		Black plastic spool S300	Black plastic spool S300	
	Weight:	16 kg		Weight:	15 kg
	Precision layer wound			Precision layer wound	
	Dimensions			Dimensions	
ø external	300 mm		ø external	300 mm	
ø Pinhole	52 mm		ø Pinhole	52 mm	
Width	100 mm		Width	110 mm	
Diameter	SAP code		Diameter	SAP code	
1.2 mm	39319		1.2 mm	39322	