BÖHLER Kb 46 T-FD

Flux cored wire, seamless, unalloyed, basic type

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.36	AWS A5.36M
T42 4 B M21 1 H5	T496T5-1M21A-H5	E71T5-M21A4-CS1-H4	E491T5-M21A4-CS1-H4
T42 4 B C1 1 H5	T496T5-1C1A-H5	E71T5-C1A4-CS1-H4	E491T5-C1A4-CS1-H4

Characteristics and typical fields of application

Seamless basic flux cored wire for single- or multilayer welding of Carbon, Carbon-Manganese steels and similar steels, including fine grain steels with Argon-CO_2 shielding gas or pure CO_2.
Main features: excellent weldability in flat and horizontal position, smooth and bright bead, very low spatter losses, easy to remove slag and exceptional mechanical properties even at low temperatures.

Base materials

S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S355N, S275M-S355M, S275NL-S355NL, S275ML-S355ML, P235GH-P355GH, P275NL1-P355NL1, P275NL2-P355NL2, P215NL, P265NL, P355N, P285NH-P355NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L360NB, L245MB-L360MB, GE200-GE240
Ship building steels: A, B, D, E, A 32-E 36
ASTM 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, LF2; 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; A 633 Gr. A, C, D; A 662 Gr. A, B, C; A 707 Gr. L1, L3; A 711 Gr. 1013; A 841 Gr. A, B, C; API 5 L Gr. B, X42, X52, X56

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

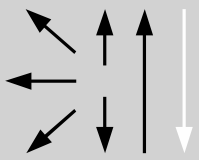
	Gas	C	Si	Mn
wt-%	M21	0.07	0.40	1.40
wt-%	C1	0.06	0.30	1.30

Mechanical properties of all-weld metal

Condition	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	-40°C	-60°C
u	**450** (≥420)	**550** (500–640)	**28** (≥20)	**140** (≥47)	**100**
u1	**430** (≥420)	**530** (500–640)	**30** (≥20)	**90** (≥47)	**80**

u untreated, as welded – shielding gas M21
u1 untreated, as welded – shielding gas C1

Operating data



Polarity:	Shielding gases:	ø (mm)
DC (-)	(EN ISO 14175) M21 – M35; C1	1.0 1.2 1.4 1.6

Welding with standard GMAW power source possible

Approvals

TÜV, CE