BÖHLER EMK 8-Ultra

Solid Wire, mild steel

Classifications

EN ISO 14341-A	CSA W48-23	AWS A5.18 / SFA-5.18
G 46 4 M21 4Si1	B-G 55A 4 C1 S6	ER70S-6
G 46 4 C1 4Si1		

Characteristics and typical fields of application

Solid wire of type G 4Si1 / ER70S-6 for joining of mild steel with excellent welding performance. With optimized chemistry and strictly controlled raw material, combined with advanced production technologies, BÖHLER EMK 8-Ultra guarantees excellent wire feeding characteristics and arc stability for trouble free welding and less post weld cleaning.
Innovative drum solutions make it the best choice for fully automated welding processes.

Base materials

Steels up to a yield strength < 460 MPa (67 ksi)
S235JR-S355JR, S235J0-S355J0, S450J0, 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,
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; 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, X70

Typical analysis

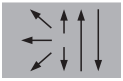
	C	Si	Mn
wt.-%	0.1	1.0	1.7

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J
	MPa	MPa	%	-50°C
u1	490 (≥ 460)	610 (≥ 530 – 680)	26 (≥ 20)	115 (≥ 75)
u2	480 (≥ 460)	580 (≥ 530 – 680)	28 (≥ 20)	115 (≥ 75)

u1 untreated, as welded – shielding gas M21
u2 untreated, as welded – shielding gas C1

Operating data



Polarity	DC+	Dimension mm
Shielding gas (EN ISO 14175)	C1 M1 M2 M3	0.8 1.0 1.2 1.6

Approvals

TÜV (20298), DB (42.132.99), CWB, DNV, RINA, CE