

Classifications

EN ISO 3580-A	EN ISO 3580-B	EN ISO 2560-A	EN ISO 2560-B
E Mo B 4 2 H5	E 4918-1M3 H5	E 46 5 Mo B 4 2	E 4918-1M3 A U
AWS A5.5		AWS A5.5M	
E7018-A1		E4918-A1	

Characteristics and typical fields of application

Very good welding characteristics in out of position work; easy slag removal; cold toughness at temperatures as low as -40 °C (-40 °F). High temperature resistant up to 500 °C (932 °F) and creep resistant up to 550 °C (1022 °F).

Particularly suitable for circumferential welds in conduit pipes as well as boiler, pressure vessel, header and nuclear reactor fabrication.

Base materials

Boiler steels P235GH, P265GH, P295GH, 16 Mo 3, 20 MnMo 45, 16 Mo 5, 15 NiCuMoNb 5, 17 MnMoV 64;

fine grained structural steels S355N - S460N, P355NH - P460NH, P355NL1 - P460NL1;

pipe steels L360NB - L415NB, L360MB - L485MB, X 52 - X 70;

ASTM A 355 Gr. P1; A161-94 Gr. T1; A217 Gr. WC1; A182M Gr. F1; A204M Gr. A, B, C; A250M Gr. T1

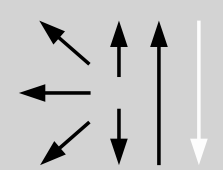
Typical analysis of all-weld metal (wt.-%)

	C	Si	Mn	Mo
wt-%	0.08	0.35	0.85	0.45

Mechanical properties of all-weld metal

Heat-treatment	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	-40 °C
aw	480	560	20	120	47
sr	470	550	21	120	47

Operating data

	Polarity:	Redrying:	ø (mm)	L mm	Amps A
	DC (+)	250 – 350 °C / 2 h (482 – 662 °F).	2.5	350	80 – 110
			3.2	350	100 – 140
			4.0	350	130 – 180
			4.0	450	130 – 180
			5.0	450	190 – 230

Approvals

TÜV (00902), DB (10.132.31), ABS, DNV, LR, CE