

Classifications

EN ISO 3580-A	EN ISO 3580-B	EN ISO 2560-A	EN ISO 2560-B
E Mo B 4 2 H5	E 4915-G	E 50 4 Mo B 4 2	E 4915-GA
AWS A5.5	AWS A5.5M		
E7015-G (E7015-A1 mod.)	E4915-G (E4915-A1 mod.)		

Characteristics and typical fields of application

Basic covered electrode for welding high strength and creep resistant joints.

High temperature resistant up to 500 °C (932 °F) and creep resistant up to 550 °C (1022 °F); high strength and cracking resistance; very low H₂-content ≤ 5 ml/100 g.

For welding creep resistant joints in boilers, tanks and pipeline constructions, especially suited for boiler steel 16Mo3.

Base materials

High strength and creep resistant steels

16Mo3, 15NiCuMoNb5-6-4, 17MnMoV6-4, 13MnNiMo5-4, 20MnMoNi4-5S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2-P265TR2, P235GH-P355GH, L245NB-L415NB, L245MB-L485MB, GE200-GE300;

ASTM A 29 Gr. 1013, 1016; A 106 Gr. C; A, B; A 182 Gr. F1; A 234 Gr. WP1; A 283 Gr. B, C, D; A 335 Gr. P1; A 501 Gr. B; A 533 Gr. B, C; A 510 Gr. 1013; A 512 Gr. 1021, 1026; A 513 Gr. 1021, 1026; A 516 Gr. 70; A 633 Gr. C; A 678 Gr. B; A 709 Gr. 36, 50; A 711 Gr. 1013; API 5 L B, X42, X52, X60, X65;

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

	C	Si	Mn	Mo
wt-%	0.08	0.30	1.20	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	500	570	20	120	47
sr	480	550	22	120	47

Operating data

Polarity: DC (+)	Redrying: 300 – 350 °C / 2 h (572 – 662 °F).	Ø mm	L mm	Amps A
↔↑↑↓↓		2.5	350	70 – 100
		3.2	350	110 – 140
		4.0	350	130 – 190
		5.0	450	160 – 230
		6.0	450	220 – 310

Approvals

TÜV (01829), DB (10.132.14 und 20.132.15), ABS, DNV, GL, CE