

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1	AWS A5.1M
E 42 3 B 1 2 H10	E 4916 AU	E7016	E4916

Characteristics and typical fields of application

Double covered basic electrode. Outstanding welding characteristics on AC and DC in all positions except the vertical down; stable arc, good radiographic soundness. Useable in handicraft and industry for field and workshop applications.

Base materials

S235JRG2 - S355J2, boiler steels P235GH, P265GH, P295GH, P355GH;
 Fine grained structural steels up to S355N;
 Pipe steels St 35, St 35.8, L210 - L360NB, GS-52,
 L290MB - L360MB; ASTM A27 and A36 Gr. all, A214, A242
 Gr. 1-5, A266 Gr. 1, 2, 4, A283 Gr. A, B, C, D, A285 Gr. A, B, C, A299 Gr. A, B, A328, A366,
 A515 Gr. 60, 65, 70, A516 Gr. 55, A570 Gr. 30, 33, 36, 40, 45, A572 Gr. 42, 50, A606 Gr. all,
 A607 Gr. 45, A656 Gr. 50, 60, A668 Gr. A, B, A907 Gr. 30, 33, 36, 40, A841, A851 Gr. 1, 2,
 A935 Gr. 45, A936 Gr. 50; API 5 L Gr. B, X42-X56

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

	C	Si	Mn
wt-%	0.06	0.65	1.05

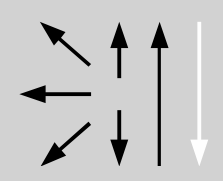
Mechanical properties of all-weld metal

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	-30 °C
aw	420	550	22	80	50
sr	400	520	25	80	50

aw: as welded

sr: stress relieved 580 °C/2h / oven down to 300 °C / air

Operating data

	Polarity: DC (+) / AC	Redrying: 250 – 300 °C / 2 h (482 – 572 °F).	ø (mm)	L mm	Amps A
			2.5	350	60 – 90
			3.2	350	95 – 150
			3.2	450	95 – 150
			4.0	450	140 – 190
5.0	450	190 – 250			

Approvals

TÜV (10572), DB (10.132.42), ABS, DNV, GL, LR, CE