

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1	AWS A5.1M
E 42 2 RB 1 2	E 4303 AU	E6013	E4313

Characteristics and typical fields of application

Outstanding vertical-up welding characteristics; easy handling in out-of-position; even in small gaps or overhead position good, pore-free welding is possible. Particularly suitable for radiographically sound welding of circumferential welds on conduit pipes. Suitable for pipeline, boiler, tank, ship construction and general structural engineering.

Base materials

S235JRG2 - S355J2, St45; fine grained structural steels up to P355N; shipbuilding steels corresp. to app.-grade 3, boiler steels P235GH, P265GH, P295GH; ASTM A36 u. A53 Gr. alle; A106 Gr. A, B, C; A135 Gr. A, B; A283 Gr. A, B, C, D; A366; A285 Gr. A, B, C; A500 Gr. A, B, C; A570 Gr. 30, 33, 36, 40, 45; A607 Gr. 45; A668 Gr. A, B; A907 Gr. 30, 33, 36, 40; A935 Gr. 45; A936 Gr. 50; API 5 L Gr. B, X42-X52

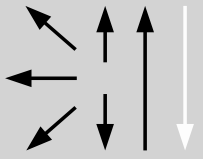
Typical analysis of all-weld metal (wt.-%)

	C	Si	Mn
wt-%	0.09	0.20	0.65

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
aw	420	510	22	75

Operating data

	Polarity: DC (-) / AC	ø (mm)	L mm	Amps A
		2.5	250	60 – 90
		2.5	350	60 – 90
		3.2	350	90 – 130
		4.0	350	140 – 190
		5.0	450	160 – 230

Approvals

TÜV (01596), DB (10.132.22), GL, LR, DNV, CE