

Classifications

EN ISO 2560-A	EN ISO 2560-B:	AWS A5.1	AWS A5.1M
E 38 2 RB 12	E4303 A U	E6013 (mod.)	E4313 (mod.)

Characteristics and typical fields of application

Rutile-basic electrode especially suited for out-of-position welding except vertical-down.

Preferably used for pipeline, boiler and tank welding. Especially suited for X-ray quality root pass and out-of-position welds. Exceeds the FOX SPE electrode in mechanical strength thanks to the elevated Mn-content of the weld deposit.

Base materials

Steels up to a yield strength of 380 MPa (52 ksi)

S235JR-S355JR, S235JO-S355JO, S275N-S355N, S275M-S355M, P235GH-P355GH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L360NB, L245MB-L360MB, ship building steels: A, B, D, (A 32, A 36, D 32, D 36 - only GL, A 32-E 36 only BV)

ASTM A 106 Gr. A, B; A 283 Gr. A, C; A 285 Gr. A, B, C; A 414 Gr. A, B, D, G; A 501 Gr. B; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. A, C, D; A 662 Gr. A, B, C; A 711, Gr. 1013; API 5 L Gr. B, X42, X52

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

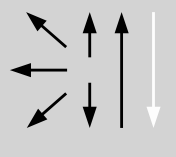
	C	Si	Mn
wt.-%	0.08	0.3	0.6

Mechanical properties of all-weld metal

Condition	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	-20 °C
u	430 (≥ 380)	510 (470 – 600)	26 (≥ 20)	90	≥ 47

u untreated, as welded

Operating data

	Polarity:	Redrying:	Electrode identification:	ø (mm)	L mm	Amps A
	DC (–)	not necessary	FOX SPEM	2.5	250/350	70 – 90
	AC		E 38 2 RB	3.2	350	110 – 140
				4.0	350	140 – 190
				5.0	450	200 – 250

Approvals

TÜV (0732.), DB (10.014.06), DNV (2), LR (X), GL (2Y), ABS (2), BV (3Y), CE