

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1M	AWS A5.1 / SFA-5.1
E 38 0 RC 1 1	E 4313 A	E4313	E6013

Characteristics and typical fields of application

Rutile-cellulosic coated electrode with good weldability in all positions including vertical-down. Most popular E 6013 type. For small welding machines, very good operating characteristics, flexible coating, good for tack welding. Versatile applications in structural welding, vehicle construction, boiler and tank welding, and in shipbuilding, also suitable for galvanised components.

Base materials

Steels up to a yield strength of 380 MPa (52 Ksi)
 S235JR-S355JR, S235JO-S355JO, P195TR1-P265TR1, P195GH-P265GH, L245NB-L360NB, L245MB-L360MB, ship building steels: A, B, D
 ASTM A 106, Gr. A, B; A 283 Gr. A, C; A 285 Gr. A, B, C; A 501, Gr. B; A 573, Gr. 58, 65; A 633, Gr. A, C; A 711 Gr. 1013; API 5 L Gr. B, X42, X52

Typical analysis


	C	Si	Mn
wt.-%	0.06	0.4	0.45

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R_e	Tensile strength R_m	Elongation A $(L_0=5d_0)$	Impact energy ISO-V KV J		
				20°C	0°C	-10°C
u	460 (≥ 380)	540 (470 – 600)	25 (≥ 20)	75	60 (≥ 47)	47

u untreated, as welded

Operating data

	Polarity	DC – / AC	Dimension mm	Current A
	Electrode identification	FOX OHV 6013 E 38 0 RC		2.0 × 250
			2.5 × 250	60 – 100
			2.5 × 350	60 – 100
			3.2 × 350	90 – 130
			3.2 × 450	90 – 130
			4.0 × 350	110 – 170
			4.0 × 450	110 – 170
			5.0 × 450	170 – 240

Approvals

TÜV (05687), DB (10.014.12), ABS, DNV, LR, CE