

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1 / SFA-5.1	AWS A5.1M
E 42 0 RC 1 1	E 4313 A	E6013	E4313

Characteristics and typical fields of application

Rutile cellulose coated electrode. General purpose; useable in all positions; excellent gap-bridging and arc-striking ability; for tack-welding and bad fit-ups. Very intensive arc, well suited for welding rusty and primed plates (roughly 40 µm). Good vertical down characteristics. Useable on small transformers (42 V, open circuit).

Base materials

Steels up to a yield strength of 420 MPa (60ksi)
S235JRG2 - S355J2; GS-38; GS-45; St35; St45; St35.8; boiler steels P235GH, P265GH, P295GH; shipbuilding steels corresp. to app.-grade 2; fine grained structural steels up to P355N; weldable ribbed reinforcing steel bars. ASTM A36 and A53 Gr. all; 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

	C	Si	Mn
wt.-%	0.09	0.35	0.50

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

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J	
	MPa	MPa	%	20°C	0 °C
u	440 (≥ 420)	540 (≥ 500 – 640)	22 (≥ 20)	80	55 (≥ 47)

Operating data

	Polarity	DC - / AC	Dimension mm	Current A
	Electrode identification	Phoenix Blau / E 42 0 RC / E 6013		
			2.0 × 250	50 – 60
			2.5 × 250	60 – 90
			2.5 × 350	60 – 90
			3.2 × 350	90 – 140
			4.0 × 350	150 – 190
			4.0 × 450	150 – 190
			5.0 × 450	190 – 240

Approvals

TÜV (00425), DB (10.014.86), DNV, CE