

## Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1 / SFA-5.1	AWS A5.1M
E 42 0 RR 1 2	E 4313 A	E6013	E4313

## Characteristics and typical fields of application

Rutile covered electrode. Minimum spatter formation, self releasing slag; finely rippled, smooth welds with notch-free weld metal / parent metal interface. Unproblematical welding of general-purpose structural steels; also suitable for vertical down welding in diam. up to 2.0 mm. Outstanding striking and restriking ability.

For use on small transformers (42 V, open circuit).

## Base materials

Steels up to a yield strength of 420 MPa (60ksi)

S235JRG2 - S355J2; St 35; St 45; St 35.8; St 45.8;

boiler steels P235GH, P265GH, P295GH; shipbuilding steels; fine grained structural steels up to P355N- and M-grades.

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-X56

## Typical analysis

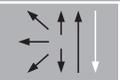
	C	Si	Mn
wt.-%	0.08	0.35	0.55

## 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
u	420	510	22	60

u untreated, as welded

## Operating data

	Polarity	DC - / AC	Dimension mm	Current A
	Electrode identification	Phoenix Grün T / E 42 0 RR / E 6013		2.0 × 250
			2.5 × 350	60 - 100
			3.2 × 350	85 - 140
			3.2 × 450	85 - 140
			4.0 × 350	130 - 200
			4.0 × 450	130 - 200
			5.0 × 450	230 - 300
			6.0 × 450	280 - 370

## Approvals

TÜV (00350), DB (10.014.52), ABS, BV, LR, DNV, CE