

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1 / SFA-5.1	AWS A5.1M
E 46 4 B 3 2 H5	E 4916 A	E7016	E4916

Characteristics and typical fields of application

Good welding characteristics; clean weld metal with good toughness characteristics.
 Preferred for rail joints and crossing frogs in railway and tramway trackage; suitable for rail grades with a tensile strength up to 1080 MPa; for mechanical engineering and tank construction.

Base materials

E295, E335, E360, C 45, C 60, GS-45, GS-52, GS-60,
 P295GH, P355GH
 Fine grained structural steels up to S355N;
 Railway steels with up to 1080 MPa tensile strength

Typical analysis

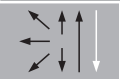
	C	Si	Mn
wt.-%	0.07	0.40	1.35

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	%	-40 °C
u	470 (≥ 420)	575 (≥ 530)	26 (≥ 19)	160 ($\Rightarrow 47$)

u untreated, as welded

Operating data

	Polarity	DC+ / AC	Dimension mm	Current A
	Electrode identification	FOX K 55 / E 46 4 B / E7016	3.2 × 450	100 - 140
	Redrying	300 – 350°C/2h	4.0 × 450	140 - 190
			5.0 × 450	170 - 240
			6.0 × 450	220 - 300

Approvals

TÜV (01807), DB (81.014.02), CE