

## Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1M	AWS A5.1 / SFA-5.1
E 42 5 B 1 2 H5	E4916-1 A U H5	E4916-1H4 R	E7016-1H4R

## Characteristics and typical fields of application

Basic coated electrode for high-quality joint welds. Especially suited for root pass welding. Excellent weldability in all positions except vertical-down. Smooth and slag-free welds. Crack resistant deposits of high toughness at sub-zero temperatures. Very low hydrogen contents in the weld deposit (acc. AWS condition HD < 4 ml/100 g weld metal). Especially suited for welding on AC. For root pass welding, DC negative polarity is recommended.

## Base materials

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

S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S420N, S275M-S420M, P235GH-P355GH, P355N, P215NL, P275NL1-P355NL1, P265NL, P285NH-P420NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L245MB-L415MB, GE200-GE240, GE300, Ship building steels: A, B, D, E, A 32-E 36

ASTM A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 350 Gr. LF1; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 513 Gr. 1018; 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 678 Gr. A, B; A 711 Gr. 1013; API 5 L Gr. B, X42, X52, X56, X60

## Typical analysis

	C	Si	Mn
wt.-%	0.07	0.5	1.1

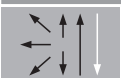
## Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_e$	Tensile strength $R_m$	Elongation A ( $L_0=5d_0$ )	Impact energy ISO-V KV J		
	MPa	MPa	%	20°C	-20°C	-50°C
u	480 (≥ 420)	570 (≥ 500 – 640)	28 (≥ 20)	200	150	80 (≥ 47)
s	430	540	28	200	160	

u untreated, as welded

s stress relieved 580 °C/2h / furnace down to 300 °C / air

## Operating data

	Polarity	DC+ / AC / DC- for root pass only	Dimension mm	Current A
	Electrode identification	FOX EV 50-W 7016-1 E 42 5 B	2.5 × 350	55 – 85
	Redrying	if necessary 300 – 350°C, min. 2h	3.2 × 350	80 – 140
			3.2 × 450	80 – 140
			4.0 × 350	110 – 180
			4.0 × 450	110 – 180
5.0 × 450	180 – 230			

## Approvals

TÜV (04180), DNV