

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.5 / SFA-5.5	AWS A5.5M
E 46 4 Z1NiCrCu B 4 2 H5	E4918-NCC1 A H5 (mod.)	E8018-W2 H4R	E5518-W2 H4R

Characteristics and typical fields of application

NiCuCr alloyed basic coated electrode for welding weather resistant constructional steels. Excellent mechanical properties and high crack resistance even when subjected to restraint.

Metal recovery approximately 115%. Easily welding in all positions except vertical-down. Very low hydrogen contents (acc. AWS condition HD < 4 ml/100 g weld metal) with a moisture resistant coating.

Base materials

Weather resistant constructional steels

S235JRG2Cu, S235J2G4Cu, S235J0Cu, S235JRW, S355J0Cu, S355J2G3Cu, S355J0W, 235J2W-S355J2W, S355K2W

ASTM A 588 Gr. A, B, C, K; A 618 Gr. II; A 709 Gr. 50 WF3

Typical analysis

	C	Si	Mn	Cr	Ni	Cu
wt.-%	0.05	0.4	0.7	0.6	0.6	0.45


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	-40°C
u	520 (≥ 460)	570 (≥ 530 – 680)	27 (≥ 20)	200	130 (≥ 47)
s	500	550	27	190	

u untreated, as-welded

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

Operating data

	Polarity	DC +	Dimension mm		Current A	
	Electrode identification	FOX NiCuCr 8018-W2 E 46 4 Z B	2.5 × 350	80 – 110		
			3.2 × 350	130 – 150		
	Redrying	if necessary: 300 – 350 °C, min. 2 h	4.0 × 450	150 – 190		
5.0 × 450			200 – 240			

Approvals

CE