

EM 170

Basic Coated Electrode - Fine Grained-High Strength Steels

Standards	
AWS/ASME SFA - 5.5	E9018-G H4
EN ISO 2560 - A	E 50 6 Mn1Ni B 42 H5
TS EN ISO 2560 - A	E 50 6 Mn1Ni B 42 H5

Properties and Applications

Heavy coated basic type electrode with high efficiency, for welding low alloy high strength steels, fine grained structural steels and high strength steel pipes. Provides high crack resistance under difficult conditions such as dynamic loads, impact, pressure, vibration and service temperatures between -60°C and 450°C. Weld deposit is of a extremely high metallurgical purity and very low hydrogen content. Especially 2,50 mm and 3,25 mm diameter electrodes feature stable and concentrated arc, rendering it well-suited fore positional welding. Suitable for welding and repair jobs up to X70 oil and gas pipes. Weld are of X-ray quality.

Approvals & Certificates		
TSE	CE	TUV
GOST		

Materials	
Width	DIN
S420NL - S460NL	TSIE 420 - TSIE 460
S420N - S460N	StE 420 - StE 460
P420NH - P460NH	WSIE 420 - WSIE 460

Typical Chemical Values of Weld Metal				
Type of Analysis	C	Si	Mn	Ni
Weld Deposit	0.05	0.40	1.70	1.00

Typical Mechanical Values of Weld Metal				
Test Condition	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	570	650	25	-60°C → 60

Application Information

Welding Positions: PA, PB, PC, PD, PE, PF

Polarity:

Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)
2.50x350	60-90
3.25x350	90-140
3.25x450	90-140
4.00x350	140-185
4.00x450	130-180
5.00x350	180-240
5.00x450	180-240

Packaging Information						
Product Code	Diameter x Length (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
12006HREM2	2.50x350	200 pcs	4.57	3	13.90	Cardboard Box
12006NKEM2	3.25x350	70 pcs	2.54	6	15.50	VAC Box
12006NREM2	3.25x350	127 pcs	4.57	3	13.90	Cardboard Box
12006SSEM2	4.00x450	94 pcs	6.58	3	19.90	Cardboard Box
12006VSEM2	5.00x450	64 pcs	6.58	3	19.90	Cardboard Box

Storage & Re-Drying Information

It can be dried maximum 5 times.
It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.
It has to be dried at 350°C for 2 hours.