

# ESB 42

Basic Coated Electrode - Non Alloyed Steels

Standards	
AWS/ASME SFA - 5.1	E7016 H8
EN ISO 2560 - A	E 42 4 B 12 H10
TS EN ISO 2560 - A	E 42 4 B 12 H10
ГОСТ Р ИСО 2560 - А	E 42 4 B 12 H10

Approvals & Certificates		
CE	HAKC	TSE

Materials	
EN	DIN
S185 - S355J0	St 33- St 52.3
E295	St 50.2
P235GH, P265GH	H I, H II
P295GH	17Mn4
P235TR2 - P355T2	St37.4 - St 52.4
P235G1TH, P255G1TH	StE 35.8 - StE 45.8
L210 - L360NB	StE 210.7 - StE 360.7
S255N - S355N	StE 255- StE 355
GE 200, GE 240, GE 260	GS 38, GS 45, GS 52
	AH 32, EH 36
	A, B, D, E

## Properties and Applications

Multi-purpose electrode for assembly work, workshop and maintenance welding. Particularly used for repair welding of earthmoving equipment booms and approved for rail joint welding. Suitable for root passes as well as positional welding. Smooth and clean welds, merging into base metal without undercuts. Good gap bridging properties. Welds are of X-ray quality.



## Typical Chemical Values of Weld Metal

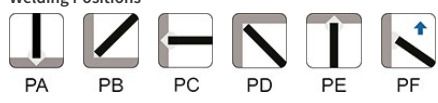
Type of Analysis	C	Si	Mn
Weld Deposit	0.06	0.35	0.85

## Typical Mechanical Values of Weld Metal

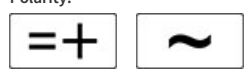
Test Condition	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation A5 (%)	Charpy V-Notch Properties (J)	
As welded	490	580	29	-20°C → 105	-40°C → 65

### Application Information

**Welding Positions**



PA PB PC PD PE PF

**Polarity:** 

**Welding Parameters & Efficiency**

Diameter x Length (mm)	Current (A)
3.25x350	90-140
4.00x350	140-190
2.50x350	60-90
4.00x450	140-190

### Packaging Information

Product Code	Diameter X Length (mm)	Pieces per Box (~)	Weight Of The Box (kg)	Boxes Per Package	Weight Of The Package	Packaging Type
11201HREM2	2.50x350	271 pcs	5.0	3	15.4	Cardboard Box
11201NREM2	3.25x350	167 pcs	5.0	3	15.4	Cardboard Box
11201QREM2	4.00x350	98 pcs	5.0	3	15.4	Cardboard Box
11201SSEM2	4.00x450	99 pcs	6.5	3	19.9	Cardboard Box

### Storage & Re-Drying Information

It can be dried maximum 5 times.  
It has to be dried at 350°C for 2 hours.