

# ESH 180R

High Efficiency Coated Electrode - Non Alloyed Steels

### Standards

AWS/ASME SFA - 5.1	E7024
EN ISO 2560 - A	E 38 A RR 73
TS EN ISO 2560 - A	E 38 A RR 73

### Approvals & Certificates

TSE	CE	TUV
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### Materials

EN	DIN
S185 - S275J2	St 33- St 44.3
P235GH, P265GH	H I, H II
P295GH	17Mn4
S255N - P315N	StE 255- StE 315
GE 200, GE 240	GS 38, GS 45
	AH 32, EH 36
	A, B, D

### Properties and Applications

Heavy coated, rutile type high-efficiency electrode having a weld metal recovery of approx. 180 %. It is suited to produce long fillet welds and economically filling-up large weld sections especially in shipbuilding. Suitable to use in pre-painted plates. Relatively low current intensities and short burn-off times. Easy arc striking and restriking.



### Typical Chemical Values of Weld Metal

Type of Analysis	C	Si	Mn
Weld Deposit	0.07	0.55	0.80

### 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	480	550	25	20°C → 50

### Application Information

#### Welding Positions



PA

PB

#### Polarity:



#### Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)
4.00x450	160-220
3.25x450	100-170
2.50x350	70-110
5.00x450	220-300

**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
11121HREM2	2.50x350	150 pcs	5.0	3	15.4	Cardboard Box
11121PSEM2	3.25x450	95 pcs	6.5	3	19.9	Cardboard Box
11121SSEM2	4.00x450	60 pcs	6.5	3	19.9	Cardboard Box
11121VSEM2	5.00x450	38 pcs	6.5	3	19.9	Cardboard Box

**Storage & Re-Drying Information**

Generally not required. If required, redry for 1 hour at 110°C.