



# HILCO BROWN

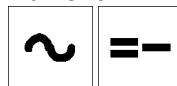
Stick electrodes – unalloyed steel

AWS A5.1: E 6013

EN ISO 2560-A: E 42 0 RC 11

**Coating type:**  
Rutile

**Current:**



**Welding positions:**



Brown is our “fast freezing” rutile coated electrode for all welding positions, especially vertical-down position. This electrode is characterised by easy handling, a good penetrating arc and the ability to bridge wide root openings under conditions of poor fit: on rusty, scaled, primer painted and/or contaminated plate material. Brown is selected for bridging gaps, assembly, repair and workshop welding. Typical applications include repair welding in shipbuilding. Brown is an all-current type (AC/DC).

### Base materials to be welded:

- Ships plate A-D, A(H)32-D(H)36, S315G1S-S355G3S
- Structural steel S185-S355J2, St.33-St.52, C(K)10-C(K)35
- Boiler steel P235GH-P295GH, HI, HII, 17Mn4
- Fine grain steel P275N-P355N, S275N-S355M, StE285-StE 355, StE285-StE355TM
- Pipe steel P235T1-P355N, L210-L360NB, St37.0-St52, St45.8, X42-X52, StE210.7-StE360.7TM
- Cast steel GP240R, GS45

### Applications:

- Shipbuilding & Offshore
- General fabrication & construction
- Power Generation
- Repair & Maintenance

### Chemical composition, wt. % weld metal – typical:

C	Mn	Si	S	P
0,10	0,5	0,4	0,010	0,016

### Mechanical properties, weld metal – typical:

Condition	0,2% Yield strength MPa	Tensile strength MPa	Elongation Lo=5d - %	Impact Values ISO-V J
As welded	≥ 420	≥ 510	≥ 22	0°C ≥ 47 20°C ≥ 50

### Packaging and welding data:

Dia. mm.	Length mm.	Weight (kgs) 1000 pcs.	Current A
2,5	350	18,8	60-100
3,2	350	31,3	90-140
4,0	350	47,0	150-190