

# ES TIG 80S-B6

GTAW  
ER80S-B6

**ESWECO**  
*The Art of Welding*

## Description

ES TIG 80S-B6 is a 5Cr-0.5Mo-alloyed (ER80S-B6), copper-coated rod for the GTAW of creep-resistant steels of similar composition. The rod is also suitable for welding high strength steels with a minimum yield strength of up to 730 MPa.

ES TIG 80S-B6 is suitable for applications in the chemical or petro-chemical industry and in the ammonia synthesis process. It can also be used for heat exchangers, boilers, piping, and pressure vessels for temperature service up to 1110°F (600°C).

AWS has changed the classification for this product. The previous classification was A5.9 ER502.

## Current

DC (-)

## Classifications

SFA/AWS A5.28	ER80S-B6
DIN 8575	W.nr. 1.7373
EN 12070	WCrMo5

## Typical all weld metal composition, %

C	Si	Mn	Cr	Ni	Mo	Cu
0.07	0.4	0.6	5.8	<0.3	0.6	<0.4

## Typical mech. Properties all weld metal

Yield stress, MPa	730
Tensile strength, MPa	900
Elongation, %	22

## Charpy V

Test temps, °C	Impact values, J
+20	100
-20	80
-29	50

## Welding parameters

Diameter, mm	Length, mm	Weight of rods/box, kg
1.6	1000	5.0
2.0	1000	5.0
2.4	1000	5.0
3.2	1000	5.0