

ES TIG 90S-B9

GTAW
ER90S-B9

ESWECO
The Art of Welding

Description

ES TIG 90S-B9 is a 9CrMoVN-alloyed rod for the GTAW of high-temperature steels and steels for hot hydrogen service, especially in oil refineries. It should preferably be used for 9% Cr steels, such as P 91/T 91 steels.

The alloy is modified in terms of the limits for impurity elements and is extremely "clean". This produces improved strength levels both at room temperature and at higher temperatures.

AWS has changed the classification for this product. The previous classification was A5.9 ER505.

Current

DC (-)

Classifications

SFA/AWS A5.28	ER90S-B9
EN 12070	WCrMo91

Typical all weld metal composition, %

C	Si	Mn	Cr	Ni	Mo
0.1	0.2	0.5	8.9	0.7	1.0

Typical mech. Properties all weld metal

Yield stress, MPa	690
Tensile strength, MPa	785
Elongation, %	20

Charpy V

Test temps, °C	Impact values, J
+20	200
0	180
-20	150
-40	90
-60	70

Welding parameters

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