

# Inweld 80S-B8

AWS A5.28 ER80S-B8

## Chemical Composition of Inweld 80S-B8

Fe	C	Cr	Ni	Mo	Mn	Si	P	S	V	Other
Balance	0.10	8.0-10.5	0.50	0.80-1.20	0.40-0.70	0.50	0.025	0.025	---	0.50

Single values are maximum unless otherwise specified.

## Description and Applications

80S-B8 contains 8.0 to 10.5 percent chromium and about 1.0 percent molybdenum. It is used for welding base metal of similar compositions, usually in the form of pipe or tubing. It is air-hardening material and, therefore, when welding with ER80S-B8, preheating and post-weld heat treatment is required. ER80S-B8 is similar to that previously classified as ER505 in AWS A5.9-81.

## Typical Weld Metal Properties

	<u>AWS Spec</u>
Tensile Strength:	80,000 psi
Yield Strength:	68,000 psi
Elongation:	17%

## Recommended Parameters

### GTAW

<u>Wire Diameter</u>	<u>Voltage</u>	<u>Amperage</u>
0.035"	7-13	50-120
0.045"	10-16	120-200
1/16"	12-18	150-220

### GMAW

<u>Wire Diameter</u>	<u>Voltage</u>	<u>Amperage</u>
0.035"	14-20	90-160
0.045"	16-20	120-200
1/16"	---	---

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