

Inweld 430

AWS A5.9 ER430

Chemical Composition of Inweld 430

Fe	C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu
Balance	0.10	15.5- 17.0	0.6	0.75	0.6	0.5	0.03	0.03	---	0..75

Single values are maximum unless otherwise specified.

Description and Applications

Inweld 430 is a ferritic stainless steel which offers good ductility in heat treated condition. In addition to the applications of welding similar alloys, it is also used for overlays and thermal spraying.

NOTE: Mechanical properties listed below reflect utilization of a post-weld heat treatment between 1400°F and 1450°F for two hours.

Typical Weld Metal Properties

	<u>AWS Spec</u>
Tensile Strength:	77,500 psi
Yield Strength:	59,000 psi
Elongation:	25%

Recommended Parameters

GMAW (DCEP – Electrode +) 99% Ar / 1% CO₂ Mixture or 97% Ar / 3% CO₂

<u>Wire Diameter</u>	<u>Voltage</u>	<u>Amperage</u>
0.030"	24-28	140-180
0.035"	26-29	160-210
0.045"	28-32	180-250
1/16"	29-33	200-280

GTAW (DCEN – Electrode -) 100% Ar 2% Thoriated, 2% Ceriated or Lanthanum Tungsten Electrode

<u>Wire Diameter</u>	<u>Voltage</u>	<u>Amperage</u>
0.035"	12-15	60-90
0.045"	13-16	80-110
1/16"	14-18	90-130
3/32"	15-20	120-175
1/8"	15-20	150-220

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