Inweld
Welding Alloys and Supplies

Datasheet

Chemical Composition of AWS A5.9 ER310

Fe	C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu	Other
Balance	0.08-0.15	25.0-28.0	20.0-22.5	0.75	1.0-2.5	0.30-0.65	0.03	0.03		0.75	

Single values are maximum unless otherwise specified.

Description and Application

ER310; the nominal composition (wt. %) of this classification is 26.5 Cr, 21 Ni. Filler metal of this classification is most often used to weld base metals of similar composition. ER310 stainless steel wire is used for welding base metal in cast or wrought iron form of similar type stainless steel. Deposit calls for low heat during welding and is fully austenitic.

Typical Weld Metal Properties

	AWS Spec
Tensile Strength:	95,000 psi
Yield Strength:	60,000 psi
Elongation:	34%

Recommended Parameters

GMAW

Wire Diameter	Voltage	Amperage
0.035”	16-26	70-160
0.035” (Spray)	26-31	150-230
0.045” (Spray)	28-32	180-280

GTAW

Wire Diameter	Voltage	Amperage
1/16”	14-18	90-130
3/32”	15-20	120-175
1/8”	15-20	150-220