Inweld 320LR

AWS A5.9 ER320LR

Chemical Composition of Inweld 320LR

Fe	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	Cb
Balance	0.025	19.0-21.0	32.0-36.0	2.0-3.0	1.5-2.0	0.15	0.15	0.02	3.0-4.0	8 x C Min/ 0.4 Max

Single values are maximum unless otherwise specified.

Description and Applications

ER320LR weld metal deposits have the same basic composition as that deposited by ER320; however, the elements of C, Si, P, and S are specified at lower maximum levels, and Cb (Nb) and Mn are controlled within narrower ranges. These changes reduce the weld metal fissuring (while maintaining the corrosion resistance) frequently encountered in fully austenitic stainless steel weld metals. Consequently, welding practices typically used for austenitic stainless steel weld metals containing ferrite can be used in bare filler metal welding processes such as gas tungsten arc and gas metal arc. ER320LR has been used successfully in submerged arc overlay welding.

Typical Weld Metal Properties

	AWS Spec
Tensile Strength:	75,000 psi
Yield Strength:	55,000 psi
Elongation:	30%

Recommended Parameters

GMAW (DCEP – Electrode+)

Wire Diameter	Voltage	Amperage
0.035”	26-29	150-130
0.045” (Spray)	28-32	180-250
1/16” (Spray)	29-33	200-300

GTAW (DCEN – Electrode-)

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