Inweld Nickel 55

AWS A5.15 ENiFe-Cl

Chemical Composition of Inweld Nickel 55

Fe	C	Al	Ni	Mo	Mn	Si	P	S	Other	Cu
Balance	2.0	1.0	45.0-60.0	---	2.5	4.0	---	0.03	1.0	2.5`

Single values are maximum unless otherwise specified.

Description and Applications

Inweld 55 is used for TIG and MIG welding of cast iron. This filler metal is extensively employed to overlay the cast iron rolls. It is also used to repair the castings. The weld metal of Inweld 55 is harder than that of Inweld 99. However, the machining can be accomplished by using carbide tipped tools. A preheat and inter-pass temperature of 350ºF (175ºC) minimum is recommended during welding, without which the weld and heat affected zones could develop cracks.

Typical Weld Metal Properties

	AWS Spec
Tensile Strength:	78,000 psi
Yield Strength:	59,000 psi
Elongation:	10%

Recommended Parameters

GMAW (DCEP – Electrode+)

Wire Diameter	Voltage	Amperage
0.035”		160-180
0.045”		180-220
1/16”		210-250

GTAW Unspecified