Inweld

Alloy ER347
AWS A5.9
UNS Number: S34780

Description and Applications:

With the addition of Cb(Nb), the possibility of intergranular chromium carbide precipitation is reduced and thus susceptibility to intergranular corrosion. ER347 is usually used for welding alloys 321 and 347. Although Cb(Nb) is the stabilizing element usually specified in ER347, it should be recognized that tantalum (Ta) is also present. Ta and Cb(Nb) are almost equally effective in stabilizing carbon and in providing high-temperature strength. If dilution by the base metal produces a low ferrite or fully austenitic weld metal, the crack sensitivity of the weld may increase substantially.

Chemical Composition of ER347

C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu	Cb
0.08	19.0-21.5	9.0-11.0	0.75	1.0-2.5	0.30-0.65	0.03	0.03	-	0.75	10 x C min / 1.0 max

Single values are maximum unless otherwise specified.

(As Welded)
Shielding Gas:

Tensile Strength (min)	psi:
	MPa:
Yield Strength (min)	psi:
	MPa:
Elongation % (min)	