

Inweld

Alloy ER70S-2
 AWS A5.18
 UNS Number: K10726



Description and Applications:

ER70S-2 is used primarily for single-pass welding of killed, semi-killed, and rimmed steels, but may also be used for some multipass applications. Because of the added deoxidants, ER70S-2 can be used for welding steels that have a rusty or dirty surface, with a possible sacrifice of weld quality depending on the condition of the surface. Typical specifications for these steels are ASTM A36, A285-C, A515-55 and A516-70, which have UNS numbers K02600, K02801, K02001, and K02700, respectively.

Chemical Composition of ER70S-2

C	Mn	Si	P	S	Ni	Cr	Mo	V	Cu	Ti	Zr	Al
0.07	0.90-1.40	0.40-0.70	0.025	0.035	0.15	0.15	0.15	0.03	0.50	0.05-0.15	0.02-0.12	0.05-0.15

Single values are maximum unless otherwise specified.

(As Welded)

Shielding Gas:	CO ₂
Tensile Strength (min)	psi: 70,000 MPa: 480
Yield Strength (min)	psi: 58,000 MPa: 400
Elongation % (min)	22

