

Weldcote Metals
 Alloy ER70S-2
 AWS A5.18



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 multi pass 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.

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: Argon (Ar)

Tensile Strength (min) psi: 70,000

MPa: 480

Yield Strength (min) psi: 58,000

MPa: 400

Elongation % (min) 22

Weldcote Metals believes this data to be accurate and to reflect qualified expert opinion regarding current research. However, Weldcote Metals can not make any expressed or implied warranty as to this information.