

Lastek 809

For welding dissimilar metals and different stainless steel types

CLASSIFICATION

EN ISO 3581-A : E 23 12 2 L R12

AWS A5.4 : E 309MoL-16

GENERAL DESCRIPTION

This molybdenum bearing stainless steel alloy, is especially suitable for joining all difficult to weld steels to themselves or to stainless steel, or for joining dissimilar stainless steels. The addition of Molybdenum provides higher corrosion resistance, higher strength and creep resistance at elevated temperatures. When welding low and unalloyed steels, a weld good with a high corrosion resistance is already obtained in the first layer.

The deposited metal is resistant to hot cracking and is practically spatter and porosity free.

Slag release is excellent, and weld pool control is easy to obtain.

The welded deposit is heat resistant up to 1.050°C. (1.922°F).

APPLICATIONS

Joining of dissimilar steels.

Welding of plated steels.

For salt water and pit type corrosive applications.

Welding of CrNiMo stainless steels.

Chemical, petrochemical and food industry applications.

Underlayer for stainless steel coatings.

Do not use on applications which are continuously submitted to temperatures between 600 and 900°C.

CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

C : < 0.03	Cr : 22.50 - 23.50	Mo : 2.00 - 2.50	Mn : 0.60 - 1.20	Si : < 1.00
Ni : 12.00 - 13.00	P : < 0.025	S : < 0.015	Cu : < 0.15	Fe : Balance

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 450 MPa	≥ 650 MPa	≥ 30%	≥ 60 J (20°C)

GENERAL INFORMATION

Welding positions All, except vertical down.

Shielding gas NA

Packing 5 kg in a plastic box

Polarity AC or DC, reverse polarity (electrode positive)

Diameter (mm) 2.0 2.5 3.2 4.0

Length (mm) 300 300 350 350

Approx. current (A) 25 - 45 50 - 75 65 - 100 100 - 140

Tips & tricks Weld with low heat input.
Preheat crack sensitive steels.
Use a stainless steel chipping hammer and brush.

The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.