

Arcaloy MC309L

Arcaloy MC309L is a composite metal cored stainless steel wire which has a stainless steel sheath. Arcaloy MC 309L is designed for welding type 309 wrought or for welding type 304 to mild carbon steel. It is also recommended for cladding 304 when welded to carbon steel. ~As a small diameter cored wire, it can be used for welding thin gauge 304L where increased corrosion resistance over Arcaloy MC308L is needed. It is also used for dissimilar welding between the 300 and 400 series stainless steels and mild and low alloys steels. Its higher deposition rate and less penetration compared to solid wire make it very suitable for making butt, fillet and lap welds on gauge material. ~Higher speeds are also possible compared to solid wire. The low spatter and slag-free welds make this electrode ideal for automatic and robotic welding. The pushing technique can be used to further minimize the penetration and oxide film formed on the surface of the weld. ~Typical applications include automobile catalytic converters, manifolds, mufflers, exhaust systems. ~For welding in the spray mode of metal transfer, the shielding gas should be argon with 1 or 2% oxygen or carbon dioxide. Pulse welding can also be used to further minimize penetration in thin gauge steels. This metal cored wire can also be used in submerged arc welding in combination with 10.93 Flux.

Specifications

Classifications	SFA/AWS A5.22 : EC309L
Industry	Ship/Barge Building Pipeline Mobile Equipment Industrial and General Fabrication Automotive Process

Welding Current	DC+
Alloy Type	MC309L

Typical Weld Metal Analysis %

C	Mn	Si	Ni	Cr	Mo	Cu	Ferrite FN
0.03	1.50	0.55	12.50	24	0.10	0.10	18

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.2 mm	144-441 A	16-30 V	4.06-14.73 m/min	1.9-7.2 kg/h