

# Arcaloy MC309L

AWS A5.29 EC309L / JIS Z3323 TS309L-MA1

Flux  
CORED  
WIRES

## Description and Application

- 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. Also recommended for cladding 304 when welded to carbon steel. 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.

Shielding Gas : 98%Ar/2%O<sub>2</sub>

## Typical Mechanical Properties of All Weld Metal

Yield Point N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	Tensile Strength N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	Elongation (%)
450 {46}	560 {56}	40

## Typical Undiluted Weld Metal Analysis %

C	Mn	Si	P	S	Cr	Ni
0.031	1.523	0.475	0.0015	0.017	23.3	12.35