

# Inweld

Alloy ER316L

AWS A5.9



## Description and Applications:

This classification is the same as ER316, except for the carbon content. Low carbon (0.03 percent max.) in ER316L reduces the possibility of intergranular chromium carbide precipitation and thereby increases the resistance to intergranular corrosion without the use of stabilizers such as columbium (niobium) or titanium. It is primarily used for welding low-carbon molybdenum-bearing austenitic alloys. AFM ER316L, however, is not as strong at elevated temperature as the columbium (niobium)-stabilized alloys or Type ER316H.

## Chemical Composition of ER316L

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| C    | Cr        | Cu   | Mn      | Mo      | Ni        | P    | S    | Si        |
|------|-----------|------|---------|---------|-----------|------|------|-----------|
| 0.03 | 18.0-20.0 | 0.75 | 1.0-2.5 | 2.0-3.0 | 11.0-14.0 | 0.03 | 0.03 | 0.30-0.65 |

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Single values are maximum unless otherwise specified.

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