

LESSON V

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5.14.0.2 Arcaloy bare continuous solid stainless electrodes for gas metal arc or automated gas tungsten arc welding are smooth drawn to a bright finish. They are chemically cleaned, layer-wound on plastic spools, sealed in plastic bags, and packed in individual boxes.

5.14.0.3 Arcaloy bare solid stainless steel continuous electrodes for Submerged Arc Welding are furnished in the fully annealed (soft) condition for smoother, easier feeding. The electrodes are random wound on fiber rims into coils, packaged in plastic bags, and boxed.

5.14.0.4 Arcaloy bare solid stainless welding rods are furnished in 36" (914 mm) cut lengths for manual gas tungsten arc and oxyacetylene welding. Cut length rods are available with either flags or ink printed identification.



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5.15 APPLICATIONS AND COMPOSITIONS OF ARCALOY BARE SOLID STAINLESS STEEL ELECTRODES

5.15.1 Arcaloy ER308L (AWS ER308/308L) - is used for welding types 304L, 308L, 321, and 347 steels. The extra low carbon content prevents carbide precipitation in the weld metal. The chemical composition of the electrode is the same as that of ER 308, except that the carbon content is 0.02%.

5.15.2 Arcaloy ER308LSi (AWS ER308Si/308LSi) - The higher silicon content increases the wetting action of the weld metal, resulting in smooth uniform welds of good appearance.

The chemical composition is the same as ER 308 L, except that the silicon content is 0.75%.

5.15.3 Arcaloy ER309L (AWS ER309/309L) - The extra low carbon content provides freedom from carbide precipitation. The electrode is used for low carbon overlay work. The chemical composition of the electrode is the same as ER 309, except that the carbon content is 0.03%.

5.15.4 Arcaloy ER310 (AWS ER310) - Used for welding type 310 stainless steel. It is also used for welding stainless steel to mild steel, for welding 304 clad steels and for stainless steel overlay welding on carbon steel. Typical chemical composition of the electrode is:

Carbon	0.12%	Chromium	26.5%
Nickel	21.5%	Manganese	1.75%
Silicon	0.4%		



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