

Wire/flux combination, high alloyed

Brand Standard AWS Standard EN ISO	Chemical Composition (%) Typical Values	Mechanical Properties Typical Values	Ø x L (mm)	Approvals	Characteristics and Applications
AVESTA S 308L S / AVESTA C 807 SAW Solid wire AWS A5.9: ER308L EN ISO 14343-A: S 19 9 L SAW Flux EN ISO 14174: SA FB 2	Wire C: 0.02 Si: 0.4 Mn: 1.7 Cr: 20.0 Ni: 9.5 Weld metal: C: 0.02 Si: 0.6 Mn: 1.4 Cr: 19.5 Ni: 9.5 FN: 5-10(*) (WRC-92) (*) special FN 3-8 available on request	UTS: 570 MPa YS: 400 MPa El: 44% CVN Impact: +20°C: 110J -196°C: 35J	2.0 2.4 3.2 4.0	-	Avesta S 308L S / Avesta C 807 is a wire flux combination for submerged arc welding of stainless steels grade like 1.4301/ASTM 304. The wire can also be used for welding titanium and niobium stabilised steels such as ASTM 321 and ASTM 347 in cases where the construction will be used at temperatures not exceeding 400°C. For higher temperatures a niobium stabilised consumable such as Avesta 347/MVNB is required. Avesta C 807 is an agglomerated basic welding flux for welding stainless high alloyed CrNi (Mo) steels. The weld seam are smooth and finely rippled without any slag residues. Besides the good slag detachability, the flux also provides good fillet weld properties. The weld metal show high degree of purity and good mechanical properties even at cryogenic temperatures.
AVESTA S 316L S / AVESTA C 807 SAW Solid wire AWS A5.9: ER316L SAW Flux EN ISO 14174: SA FB 2	Wire C: 0.02 Si: 0.4 Mn: 1.8 Cr: 18.5 Ni: 12.0 Mo: 2.3 Weld metal: C: 0.02 Si: 0.6 Mn: 1.4 Cr: 18.0 Ni: 11.7 Mo: 2.3 FN: 5-10(*) (WRC-92) (*) special FN 3-8 available on request	UTS: 560 MPa YS: 415 MPa El: 40% CVN Impact: +20°C: 100J -196°C: 34J	2.0 2.4 3.2 4.0	-	Avesta S 316L S / Avesta C 807 is a wire flux combination for submerged arc welding of austenitic stainless steel type 17 Cr 12 Ni 2.5 Mo or similar where high resistance to general and intercrystalline corrosion is required. The filler metal is also suitable for welding titanium and niobium stabilised steel such as ASTM 316Ti in cases where the construction will be used at temperatures not exceeding 400°C. For higher temperatures a niobium stabilised consumable such as Avesta 318/SKNb is required. Avesta C 807 is an agglomerated basic welding flux for welding stainless high alloyed CrNi (Mo) steels. The weld seam are smooth and finely rippled without any slag residues. Besides the good slag detachability, the flux also provides good fillet weld properties. The weld metal show high degree of purity and good mechanical properties even at cryogenic temperatures.