

Flux cored wires, high alloyed

Brand Standard AWS Standard EN ISO	Chemical Composition (%) Typical Values	Mechanical Properties Typical Values	Ø (mm)	Approvals	Characteristics and Applications
FOXcore 308L-T0 DG AWS A5.22: E308LT0-4(1) EN ISO 17633-A: T 19 9 L R M21 (C1) 3	C: 0.03 Si: 0.7 Mn: 1.5 Cr: 19.5 Ni: 10.5 FN: 3-12 (WRC-92)	Heat treatment: As welded Shielding Gas: Ar + 18 % CO ₂ UTS: 530 MPa (≥520) YS: 365 MPa (≥320) El: 42% (≥30) CVN Impact: +20°C: 57J -120°C: 39J (≥32)	1.2 1.6	TÜV, CWB, DB, ABS, CE	Rutile flux-cored wire of T 19 9 L R / E308LT0 type designed for welding 1.4307 / 304L type stainless steels with very good corrosion resistance under fairly severe conditions, e.g. in oxidizing acids and cold or dilute reducing acids. Also suitable for welding stainless steels that are stabilized with titanium or niobium, such as 1.4541 / 321, 1.4878 / 321H and 1.4550 / 347 in cases where the construction will be operating at temperatures below 400 °C. Provides excellent weldability in flat as well as horizontal-vertical position. Great slag detachability and almost no spatter formation. Optimized to result in a shiny weld metal surface; also when welding with 100% CO ₂ .
FOXcore 316L-T0 DG AWS A5.22: E316LT0-4(1) EN ISO 17633-A: T 19 12 3 L R M21 (C1) 3	C: 0.03 Si: 0.7 Mn: 1.3 Cr: 18.4 Ni: 12.1 Mo: 2.6 FN: 3-12 (WRC-92)	Heat treatment: As welded Shielding Gas: Argon + 15 - 25 % CO ₂ ; 100%CO ₂ UTS: 550 MPa (≥510) YS: 390 MPa (≥320) El: 37% (≥30) CVN Impact: +20°C: 52J -20°C: 47J -120°C: 37J (≥32)	1.2 1.6	TÜV, CWB, DNV GL, ABS, CE	Rutile flux-cored wire of T 19 12 3 L R / E316LT0 type designed for welding 1.4404 / 316L type stainless steels with excellent resistance to general, pitting and intergranular corrosion in chloride containing environments and dilute hot acids. FOXcore 316L-T0 DG provides excellent weldability in flat as well as horizontal-vertical position. Great slag detachability and almost no spatter formation. Optimized to result in a shiny weld metal surface; also when welding with 100% CO ₂ .
FOXcore 309L-T0 DG AWS A5.22: E309LT0-4/1 EN ISO 17633-A: T 23 12 L R M21/C1 3	C: 0.03 Si: 0.7 Mn: 1.2 Cr: 23.1 Ni: 12.5 FN: 12-23 (WRC-92)	Heat treatment: As welded Shielding Gas: Ar + 18 % CO ₂ UTS: 560 MPa (≥520) YS: 390 MPa (≥320) El: 35% (≥30) CVN Impact: +20°C: 49J -60°C: 48J (≥32)	1.6	TÜV, DB, CWB, DNV GL, LR, RINA, BV, CE	Rutile flux-cored wire of T 23 12 L R / E309T0 type. Primarily intended for surfacing low-alloyed steels and for dissimilar welds between mild steel and stainless steels. When used for overlay welding on mild steel a corrosion resistance equivalent to that of base metal 1.4301 / 304 is obtained already in the first layer. Provides excellent weld ability in flat as well as horizontal-vertical position. Ferrite measured with FeritScope MP30: 14 – 22 FN. Great slag detachability and almost no spatter formation. Optimized to result in a shiny weld metal surface; also when welding with 100% CO ₂ . Maximum service temperature 300 °C.
Avesta FC 308L-T1 AWS A5.22: E308LT1-1	C: 0.02 Si: 0.70 Mn: 1.30 Cr: 19.2 Ni: 10.2 Mo: 0.01 FN : 3-10 (WRC -92)	Heat treatment: As welded Shielding Gas: 100% CO ₂ UTS: 570 MPa YS: 390 MPa El: 39% CVN Impact: - 20°C: 60J	1.2	ABS	Avesta FC 308L-T1 is designed for welding austenitic stainless steel type 19Cr 10Ni or similar. This filler metal is also suitable for welding titanium and niobium stabilised steels such as ASTM 321 and ASTM 347 in case where the construction will be operating at temperatures below 400°C. For higher temperatures a niobium stabilised consumable such as Avesta 347/MVNb is required. Avesta FC 308L-T1 provides the excellent usability with stable arc, less spattering, good bead appearance, better slag removal, and it is designed for all-round welding and can be used in all positions without changing parameter settings.

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Avesta FC 316L-T1 AWS A5.22: E316LT1-1	C: 0.03 Si: 0.70 Mn: 1.30 Cr: 18.0 Ni: 12.2 Mo: 2.5 FN : 3-10 (WRC -92)	Heat treatment: As welded Shielding Gas: 100% CO ₂ UTS : 560 MPa YS: 400 MPa El: 37% CVN Impact: -20°C: 60J	1.2	ABS	Avesta FC 316L-T1 is designed for welding austenitic stainless steel type 17Cr 12Ni 2.5Mo or similar. This filler metal is also suitable for welding titanium and niobium stabilised steels such as ASTM 316Ti in case where the construction will be operating at temperatures below 400°C. For higher temperatures a niobium stabilised consumable such as Avesta 347/MVNB is required. Avesta FC 316L-T1 provides the excellent usability with stable arc, less spattering, good bead appearance, better slag removal, and it is designed for all-round welding and can be used in all positions without changing parameter settings.
Avesta FC 309L-T1 AWS A5.22: E309LT1-1	C: 0.03 Si: 0.60 Mn: 1.50 Cr: 23.2 Ni: 12.8 Mo: 0.02 FN : 10-15 (WRC -92)	Heat treatment: As welded Shielding Gas: 100% CO ₂ UTS: 550 MPa YS: 390 MPa El: 35% CVN Impact: -20°C: 50J	1.2	ABS	Avesta FC 309L-T1 is a high-alloy 23Cr 13Ni wire primarily intended for surfacing on low-alloy steels and for dissimilar welds between mild steel and stainless steels. It provides the excellent usability with stable arc, less spattering, good bead appearance, and better slag removal. Avesta FC 309L-T1 is designed for all-round welding and can be used in all positions without changing parameter settings.
FOXcore 347-T0 AWS A5.22: E 347T0-4(1) EN ISO 17633-A: T 19 9 Nb R M21 (C1) 3	C: 0.03 Si: 0.6 Mn: 1.4 Cr: 19.5 Ni: 10.6 Nb: 0.37 FN: 5-13 (WRC-92)	Heat treatment: As welded Shielding Gas: Ar + 18 % CO ₂ UTS: 585 MPa (≥550) YS: 420 MPa (≥350) El: 40% (≥30) CVN Impact: +20°C: 65J -120°C: 35J (≥ 32)	1.2	TÜV, CE	Rutile flux-cored wire of T 19 9 Nb R / E347T0 type for welding of stainless steels such as 1.4546 / 347. Designed for single and multipass welding mainly in the flat and horizontal position and horizontal/vertical position. Good resistance to general corrosion. Easy handling and high deposition rate result in high productivity with excellent welding performance and very low spatter formation. Increased travel speeds as well as self-releasing slag with little demand for cleaning and pickling provide considerable savings. Stabilized with niobium and suitable for service temperatures from -196°C to 400°C.
FOXcore 347-T1 AWS A5.22: E347T1-4(1) EN ISO 17633-A: T 19 9 Nb P M21 (C1) 1	C: 0.03 Si: 0.7 Mn: 1.4 Cr: 19.0 Ni: 10.4 Nb: 0.35 FN: 5-13 (WRC-92)	Heat treatment: As welded Shielding Gas: Ar + 18% CO ₂ UTS: 600 MPa (≥550) YS: 450 MPa (≥350) El: 35% (≥30) CVN Impact: +20°C: 70J -120°C: 40J (≥ 32)	1.2	TÜV, CE, NAKS	Rutile flux-cored wire of T 19 9 Nb P / E347T1 type for welding of stainless steels such as 1.4546 / 347. Good resistance to general corrosion. The fast freezing slag offers excellent weldability and slag control in all positions. Easy handling and high deposition rate result in high productivity with excellent welding performance and very low spatter formation. Increased travel speeds as well as self-releasing slag with little demand for cleaning and pickling provide considerable savings. Stabilized with niobium and suitable for service temperatures from -120°C to 400°C.