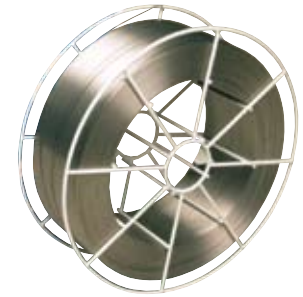


Alloys

Avesta Welding LLC offers you the broadest range of stainless steel welding consumables in the industry. They are the ideal choice for products used in extremely corrosive, high stress, and high temperature environments. The following is a list of available alloys.

Stainless Steel Alloys

- ER 308L Si
- ER 307 Si
- ER 316
- ER 308
- ER 308H
- ER 309L Mo
- 310L
- ER 309
- ER 308L
- ER 309L
- ER 309L Si
- ER317L
- ER 318
- ER 312
- ER 316
- ER 316H
- ER 316L Si
- ER 409
- ER 409 Cb
- ER 310
- ER 347
- ER 347 Si
- ER 385 (904L)
- ER 410
- ER 410 Ni Mo
- ER 420
- ER 318 Si



High Alloys - Corrosion Resistant

- ER NiCrMo-3
- ER NiCu-7
- ER Ni-1
- P 16
- P 100
- 253 MA
- 353 MA

Covered Electrodes

Avesta Welding manufactures a wide range of specialized alloys to meet stringent operating conditions. Avesta Welding LLC supplies covered electrodes for welding all of the more common ferritic, martensitic, duplex and austenitic stainless steels as well as nickel-based alloys. The product range also encompasses electrodes for dissimilar welds between, for example, stainless steel and mild steel, or stainless steel and nickel-based alloys. All electrodes are available manufactured to the requirements set forth by the nuclear power industry in ASME code section III and KTA 1408.

Alloy	Size				Applications
	3/32"	1/8"	5/32"	3/16"	
P 100*	59735	59736	59738		For welding SAF 2507® and similar type alloys.
P 16	59776	59777	59778		A nickel base electrode for welding Avesta Sheffield 654 SMO® also suitable for nickel-based C-type alloys.
253 MA	59664	59666	59667	59668	For welding Avesta Sheffield 253 MA, a high temperature alloy typically used for furnaces, combustion chambers, etc.
353 MA	60410	59669	59670		For welding Avesta Sheffield 353 MA, a high temperature alloy typically used in carburizing and nitriding atmospheres.

*Call or request special ordered items.

Covered Electrodes

Stainless Steel, Duplex & Nickel Alloys

Avesta covered electrodes are manufactured in strict accordance to the relevant specification and in full compliance with ISO 9001:2000 Quality System requirements. On-going research and development insures that the product line evolves to meet the needs of today's changing technical requirements, while continuing to provide to the welder uncompromising ease of use.

Special Purpose

Special purpose electrodes allow you to choose the easy to use, versatile electrode best suited to your application, resulting in improvements in productivity, weld appearance, and overall costs.

VDX-AC/DC

Developed for vertical-down applications, these electrodes are well suited for welding thin gauge material and duct work, plus offer substantial cost savings over TIG welding. The high speed of welding they provide gives time and cost savings when welding root beads in vertical positions. They also allow carefully controlled penetration, thereby minimizing root grinding costs.

HX-AC/DC

A high recovery - high deposition rate electrode that reduces the risk of heat distortion, reduces changeover time and the number of passes required. Fewer starts and stops means fewer defects, lower re-work costs and greater production output.

3D

Avesta 3D electrodes have been specially developed for flexible welding in all common welding positions. 3D electrodes have extremely good weldability and give a stable arc. The slag and weld pool are both easy to control.



Alloy	Diameter (in.)					
	1/16	5/64	3/32	1/8	5/32	3/16
E 308H-17	59639	59640	59642	59644	59646	59648
E 308L-15 Basic			59603	59604	59605	
E 308L-16			60745	60746	60747	64001
E 308L-17	60211	64007	64008	64009	64010	64011
E 309-17			59635	59637	60245	59638
E 309L-15 Basic			59631	59632	59633	
E 316L-16			60751	60752	60753	64002
E 309L-17	60218	64019	61909	61910	64017	64018
E 309MoL-17		64028	64027	64029	64030	64031
E 310-17			59657	59658	59661	59663
E 312-17			59764	59766	59767	59768
E 316H-17			59678	59680	59681	59682
E 316L-15 Basic			60449	59671	59672	66786
E 316L-16			60748	60749	60750	64003
E 316L-17	60264	64012	64013	64014	64015	64016
E 317L-17		59721	59722	59724	59726	59728
E 347-17		64964	64965	64966	64967	64968
E 385-17 (904L)			59730	59732	59733	59734
E 2209-15 Basic			59758	59760	59762	
E 2209-17			64032	64033	64034	64035
E NiCrMo-12 (P12R)			59773	59774	59775	
E NiCrFe-3			59779	59780	59781	59782
E 308L-17 VDX			59606	59607		
E 308L-17 (HX)					59609	59610
E 309MoL-17 VDX			59684	59718		
E 316L-17 VDX		59676	59694	59696		
E 316L-17 (HX)			59687	59689	59609	59691

Note: Custom weights of reel & drum products are also available.

Flux Cored Wire

Avesta flux cored wire is available in a wide selection of alloys. For use in flat and horizontal as well as all-position applications. Designed for use with 100% CO₂ or a 75% Argon 25% CO₂ shielding gas, they offer excellent economy in all applications. All alloys and sizes are formulated for flat and vertical up use with some out-of-position capability. Some alloys and sizes are also available in all position and high deposition (HD) formats which provide for even greater economies of use.



Part No.	Alloy	Description (Welding Position)	Diameter (in.)	Spool Weight (lbs.)	Applications
E308					
59526	E308TO-1	Flat & horizontal	.045	25	For welding austenitic stainless steel type 19 Cr10Ni and titanium and niobium stabilized steels like ASTM 321 and ASTM 347
59501	E308LTO-1	Flat & horizontal	.035	25	
59527	E308LTO-1	Flat & horizontal	.045	25	
59486	E308LTO-1	Flat & horizontal	.063	25	
59528	E308LT1-1	All position	.045	25	
E309					
59502	E309LTO-1	Flat & horizontal	.035	25	High alloyed 23 Cr13Ni wire primarily intended for surfacing low alloyed steels and for dissimilar welding between mild steel and stainless steels
59542	E309LTO-1	Flat & horizontal	.045	25	
59487	E309LTO-1	Flat & horizontal	.063	25	
59530	E309LT1-1	All position	.045	25	Molybdenum-alloyed wire for dissimilar joints between stainless steels and low-alloyed steels
59537	E309LMoTO-1	Flat & horizontal	.045	25	
59491	E309LMoTO-1	Flat & horizontal	.063	25	
E316					
59532	E316TO-1	Flat & horizontal	.045	25	For welding austenitic stainless steel type 17 Cr12Ni 2.5 Mo and welding titanium and niobium stabilized steels such as ASTM 316Ti
59503	E316LTO-1	Flat & horizontal	.035	25	
59533	E316LTO-1	Flat & horizontal	.045	25	
59488	E316LTO-1	Flat & horizontal	.063	25	
59534	E316LT1-1	All position	.045	25	
E317					
59504	E317LTO-1	Flat & horizontal	.035	25	For welding austenitic stainless steel type 18 Cr14Ni3Mo and similar.
59535	E317LTO-1	Flat & horizontal	.045	25	
59489	E317LTO-1	Flat & horizontal	.063	25	
E347					
59505	E347TO-4	Flat & horizontal	.035	25	Columbium stabilized alloy is generally used to weld AISI 321 and 347 materials.
59536	E347TO-4	Flat & horizontal	.045	25	
59490	E347TO-4	Flat & horizontal	.063	25	
E2209					
59524	E2209TO-1	Flat & horizontal	.045	25	For welding of ferritic-austenitic (duplex) stainless steels such as Outokumpu 2205 (ASTM S32205/S31803) and similar
59525	E2209TO-1 PW	All position	.045	25	