



For stainless steel

Type of covering	Brand name	Size (mm)	Equivalent specification	Welding position	Type of current	Typical chemical composition of all-weld-metal(%)						Typical mechanical properties of all-weld-metal			Main use
						C	Si	Mn	Ni	Mo	Nb	Mo	T.S N/ mm ² {kgf/ mm ² }	EI. (%)	
Lime type	UNI-308H	2.0-5.0	AWS E308 JIS D308	F,V,OH,H	DC(+)	0.06	0.42	1.26	19.82	9.23	—	—	620 {63}	46	Welding of 18%Cr-8%Ni steels such as AISI Types 301,302,304,305 and 308. Only use DCEP.
Lime titania type	UNI-308	2.0-5.0	AWS E308 DIN E19 9 R26 JIS D308	F,V,OH,H	AC or DC(+)	0.04	0.34	1.82	19.68	9.50	—	—	608 {62}	42	Welding of 18%Cr-8%Ni steels such as AISI Types 301,302,304,305 and 308.
	UNI-308L	2.0-5.0	AWS E308 DIN E19 9L R26 JIS D308L	F,V,OH,H	AC or DC(+)	0.02	0.42	1.65	19.70	10.30	—	—	578 {59}	42	Welding of low 18%Cr-8%Ni steels.
	UNI-308Mo	2.0-5.0	AWS E308Mo JIS D308Mo	F,V,OH,H	AC or DC(+)	0.07	0.45	1.76	19.72	9.43	—	2.32	580 {59}	44	Welding of ASTM CF8M stainless steel castings. Welding of wrought materials such as Type 316 stainless steels when increased ferrite is desired.
	UNI-309	2.0-5.0	AWS E309-16 JIS D309-16	F,V,OH,H	AC or DC(+)	0.08	0.42	1.63	22.80	13.10	—	—	608 {62}	40	Welding of 22%Cr-12%Ni steel. Welding dissimilar steels, such as joining Type 304 to carbon steel, welding the clad side of Type 304 clad steels.
	UNI-309L	2.0-5.0	AWS E309L DIN E23 12L R26 JIS D310L	F,V,OH,H	AC or DC(+)	0.023	0.39	1.98	23.90	12.90	—	—	588 {60}	40	Welding of 22%Cr-12%Ni steels, carbon steels or low alloy steels to stainless steels and stainless clad steels.
	UNI-309Mo	2.0-5.0	AWS E309Mo DIN E23 12L R26 JIS D309Mo	F,V,OH,H	AC or DC(+)	0.09	0.46	1.82	23.80	13.10	—	2.54	617 {63}	42	Welding of Type 316 clad steels or dissimilar steels. Corrosion resistant lining of carbon steels or low alloy steels.
	UNI-310	2.0-5.0	AWS E310 DIN E25 20 R26 JIS D310	F,V,OH,H	AC or DC(+)	0.08	0.40	2.01	27.40	21.80	—	—	608 {62}	40	Welding of 25%Cr-20%Ni steels and clad side of 18%Cr-8%Ni clad steels. Perfect austenitic microstructure.
	UNI-312	2.0-5.0	AWS E312 JIS D312	F,V,OH,H	AC or DC(+)	0.13	0.49	1.62	29.60	8.70	—	—	706 {72}	26	Welding of 29%Cr-9%Ni type cast steels. Joint welding difficult-to-weld steels. For a wear resistant build-up and buffer layer for hardfacing.
	UNI-316	2.0-5.0	AWS E316 DIN E19 12 2 R26 JIS D316	F,V,OH,H	AC or DC(+)	0.04	0.36	1.78	19.60	12.54	—	2.54	578 {59}	38	Welding of 18%Cr-12%Ni-Mo steel(AISI Type 316) Underlaying of the build-up welding of 13%Mn steel.
	UNI-316L	2.0-5.0	AWS E316L DIN E19 12 2L R26 JIS D316L	F,V,OH,H	AC or DC(+)	0.02	0.42	1.91	19.07	12.60	—	2.56	559 {57}	40	Welding of low carbon, molybdenum-bearing austenitic alloys. Welding of 18%Cr-12%Ni-2%Mo steel where the corrosion resistant qualities are required.
	UNI-317	2.0-5.0	AWS E317 DIN E19 13 4 R26 JIS D317	F,V,OH,H	AC or DC(+)	0.04	0.45	1.86	19.42	13.50	—	3.51	598 {61}	42	KST-317 has a greater molybdenum content than KST-316. The increased molybdenum content resulted in a weld deposit with higher tensile strength at elevated temperature, stronger resistance against pitting corrosion.
	UNI-317L	2.0-5.0	AWS E317L DIN E19 13 4L R26 JIS D317L	F,V,OH,H	AC or DC(+)	0.02	0.40	1.76	19.58	13.70	—	3.62	568 {58}	42	Welding of AISI Type 317, 317L.
	UNI-318	2.0-5.0	AWS E318 DIN E1912 2 Nb R26 JIS D318	F,V,OH,H	AC or DC(+)	0.06	0.35	1.66	19.23	13.10	0.52	2.40	588 {60}	41	KST-318 is similar to KST-316 but contains columbium to provide resistance to intergranular carbide precipitation.
	UNI-347	2.0-5.0	AWS E347 DIN E19 9 Nb R26 JIS D347	F,V,OH,H	AC or DC(+)	0.04	0.41	1.61	20.41	9.90	0.80	—	627 {64}	41	Welding of 18%Cr-8%Ni-Nb steel (AISI Type 347), 18%Cr-8%Ni-Ti steel (AISI Type 321) and low carbon 18%Cr-8%Ni steel (AISI Type 308L).
UNI-410	2.0-5.0	AWS E410 DIN E13 R26 JIS D410	F,V,OH,H	AC or DC(+)	0.08	0.35	0.65	13.01	—	—	0.50	519 {53}	34	Welding of 13%Cr steel. Surfacing of carbon steel to resist corrosion, erosion or abrasion.	