

Stainless Steel Manual Electrode

Classification	Product Name	AWS Specificaiton <A5.4 / 5.4M>	ENISO Specificaiton <3581-A>	Grade No.	Dimension (ø mm)	Typical mechanical properties of weld metal			
						Yield Strength Mpa	Tensile Strength Mpa	Elongation%	Impact Value J(°C)
-16 series Stainless Steel	KE308L	E308L-16	E(19 9 L)R 1 2	A002	2.0,2.6,3.2,4.0,5.0	-	595	42	-
	KE308H	E308H-16	E(19 9 H)R 1 2	-	2.0,2.6,3.2,4.0,5.0	-	640	41	-
	KE308LT	E308L-16	E(19 9 L)R 1 2	A002	2.0,2.6,3.2,4.0,5.0	-	575	45	32 (-196)
	KE309L	E309L-16	E(23 12 L)R 1 2	A062	2.0,2.6,3.2,4.0,5.0	-	590	38	-
	KE309LMo	E309LMo-16	E(23 12 2 L)R 1 2	A042	2.0,2.6,3.2,4.0,5.0	-	675	35	-
	KE316H	E316H-16	E(19 12 2)R 1 2	-	2.0,2.6,3.2,4.0,5.0	-	625	39	-
	KE316L	E316L-16	E(19 9 L)R 1 2	A002	2.0,2.6,3.2,4.0,5.0	-	575	39	-

Typical mechanical composition of weld metal (wt%)							Applications
C	Mn	Si	Cr	Ni	Mo	Others	
0.032	0.89	0.60	19.70	9.50	0.01	Cu0.10	The weld metal is low carbon 18Cr-9Ni stainless steel, excellent weldability and stable mechanical properties and good X-ray result. Applicable in petrochemical industry, pressure vessel, food industry, medical device, fertilizer equipment and etc.
0.058	1.36	0.74	20.10	9.30	0.01	cu0.11	For high C-18Cr-9Ni steel, higher tensile than 308, it's applicable in petrochemical industry, pipes, pressure vessel and etc
0.032	0.7	0.5	18.2	10.7	0.15	cu0.10	For 18Cr-8Ni steel under extremely low temperature of -196°C, applicable in petrochemical industry, low temperature storage tank and etc
0.028	0.80	0.65	23.50	12.50	0.25	cu0.10	The weld metal is low carbon 22Cr-12Ni stainless steel, excellent weldability and stable mechanical properties, good x-ray result and excellent crack resistance. Suitable for dissimilar metals welding of joining mild steel to stainless steel or austenitic stainless steel to martensitic stainless steel.
0.028	1.1	0.77	22.7	13.4	2.5	cu0.19	The weld metal is low carbon 22Cr-12Ni-2Mo. Good crack resistance and corrosion resistance, suitable for dissimilar metals welding of joining mild steel to stainless steel and martensite stainless steel to ferrite stainless steel, cast iron as well.
0.054	1.51	0.68	18.70	11.30	2.70	cu0.13	The weld metal is high carbon 18Cr-12Ni-2Mo stainless steel, good high temperature strength. Applicable in fertilizer equipment, urea equipment and petrochemical facility and etc.
0.03	0.75	0.65	18.80	12.0	2.70	cu0.05	The weld metal is low carbon 18Cr-12Ni-2Mo stainless steel, good corrosion resistance against H ₂ SO ₄ and H ₃ PO ₃ . Applicable in fertilizer equipment, urea equipment and etc