

**Welding Electrodes For Stainless Steels:**

Electrodes Number	International Equals	Foreign Equals		Ob	o5	Main Welding Chemical Coposition								
		USA : AWS	JAP : JIS			MPa	%	C	Mn	Si	Cr	Ni	Mo	Nb
G202	E410-16	E410-16		450	20	0.12	1	0.9	11.0 - 13.5	0.7	0.75	Cu ≤ 0.75		
G207	E410-15	E410-15		450	20	0.12	1	0.9	11.0 - 13.5	0.7	0.75	Cu ≤ 0.75		
A002	E308L-16	E308L-16		520	35	0.04	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	0.75	Cu ≤ 0.75		
A002Nb			D347L-16	510	30	0.04	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	-	8xC - 1.0		
A002Mo	E308MoL-16			520	35	0.04	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 12.0	2.0 - 3.0	Cu ≤ 0.75		
A022	E316L-16	E316L-16		490	30	0.04	0.5 - 2.5	0.9	17.0 - 20.0	11.0 - 14.0	2.0 - 3.0	Cu ≤ 0.75		
A032	E317MoCuL-16			540	25	0.04	0.5 - 2.5	0.9	18.0 - 21.0	12.0 - 14.0	2.0 - 3.5	Cu ≤ 2.0		
A052				490	25	0.04	2	1	17.0 - 20.0	22.0 - 27.0	4.0 - 5.5	Cu ≤ 2.0		
A062	E309L-16	E309L-16		520	25	0.04	0.5 - 2.5	0.9	22.0 - 25.0	12.0 - 14.0	0.75	Cu ≤ 0.75		
A101	E308-16	E308L-16		550	35	0.08	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	0.75	Cu ≤ 0.75		
A102	E308-16	E308L-16		550	35	0.08	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	0.75	Cu ≤ 0.75		
A102T	E308-16	E308L-16		550	35	0.08	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	0.75	Cu ≤ 0.75		
A107	E308-15	E308L-15		550	35	0.08	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	0.75	Cu ≤ 0.75		
A112				540	25	0.12	2.5	1.5	17.0 - 20.0	7.0 - 11.0	-	8 x C-1.0 Cu ≤ 0.75		
A132	E347-16	E347-16		520	25	0.08	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	0.75	8 x C-1.0 Cu ≤ 0.75		
A132A	E347-17	E347-17		520	25	0.08	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	0.75	8 x C-1.0 Cu ≤ 0.75		
A137	E347-15	E347-15		520	25	0.08	0.5 - 2.5	0.9	18.0 - 21.0	9.0 - 11.0	0.75	8 x C-1.0 Cu ≤ 0.75		
A201	E316-16	E316-16		520	30	0.08	0.5 - 2.5	0.9	17.0 - 20.0	17.0 - 20.0	2.0 - 3.0	Cu ≤ 0.75		
A202	E316-16	E316-16		520	30	0.08	0.5 - 2.5	0.9	17.0 - 20.0	17.0 - 20.0	2.0 - 3.0	Cu ≤ 0.75		
A207	E316-15	E316-15		550	30	0.08	0.5 - 2.5	0.9	17.0 - 20.0	17.0 - 20.0	2.0 - 3.0	Cu ≤ 0.75		
A212	E318-16	E318-16		540	25	0.08	0.5 - 2.5	0.9	17.0 - 20.0	17.0 - 20.0	2.0 - 3.0	6 x C-1.0 Cu ≤ 0.75		
A222	E317MoCu-16			540	25	0.08	0.5 - 2.5	0.9	18.0 - 21.0	18.0 - 21.0	2.0 - 2.5	Cu ≤ 2.0		
A232	E318V-16			540	25	0.08	0.5 - 2.5	0.9	17.0 - 20.0	17.0 - 20.0	2.0 - 2.5	V0.30 - 0.71 Cm ≤ 0.5		
A237	E318V-15			550	25	0.08	0.5 - 2.5	0.9	17.0 - 20.0	17.0 - 20.0	2.0 - 2.5	V0.30 - 0.71 Cm ≤ 0.5		
A242	E317-16	E317-16		550	25	0.08	0.5 -	0.9	18.0 -	18.0 -	304 -	Cu ≤ 0.75		

							2.5		21.0	21.0	4.0	
A301	E309-16	E309-16		550	25	0.15	0.5 - 2.5	0.9	22.0 - 25.0	22.0 - 25.0	0.75	Cu ≤ 0.75
A302	E309-16	E309-16		550	25	0.15	0.5 - 2.5	0.9	22.0 - 25.0	22.0 - 25.0	0.75	Cu ≤ 0.75
A307	E309-15	E309-15		550	25	0.15	0.5 - 2.5	0.9	22.0 - 25.0	22.0 - 25.0	0.75	Cu ≤ 0.75
A312	E309Mo-16	E309Mo-16		550	25	0.12	0.5 - 2.5	0.9	22.0 - 25.0	22.0 - 25.0	2.0 - 3.0	Cu ≤ 0.75
A317	E309Mo-15	E309Mo-15		550	25	0.12	0.5 - 2.5	0.9	22.0 - 25.0	22.0 - 25.0	2.0 - 3.0	Cu ≤ 0.75
A402	E310-16	E310-16		550	25	0.08 - 0.20	1.5 - 2.5	0.75	25.0 - 28.0	22.0 - 28.0	0.75	Cu ≤ 0.75
A407	E310-15	E310-15		550	25	0.08 - 0.20	1.5 - 2.5	0.75	25.0 - 28.0	22.0 - 28.0	0.75	Cu ≤ 0.75
A412	E310Mo-16	E310Mo-16		550	25	0.12	1.5 - 2.5	0.75	25.0 - 28.0	22.0 - 28.0	2.0 - 3.0	Cu ≤ 0.75

**Note:** The properties listed in the table are the min. Value and the chemical composition values are max.

### Welding Electrodes For Carbon Steels:

Electrodes Number	International Equals GB / T5117 - 1995	Foreign Equals		Tensile Strength MPa	Yielding Point MPa	Elongation %	Impact Value °CJ	Content of Diffusible Hydrogen ml/100g	X-ray Inspection Grade
		USA : AWS	JAP : JIS						
J421	E4313	E6013	D4313	420	330	17	-	-	2
J421Fe	E4313	E6024	D4324	420	330	17	-	-	2
J421Fe13	E4324	E6024		420	330	17	-	-	2
J421Fe16	E4324		D4303	420	330	22	0.27	-	2
J422	E4303		D4303	420	330	22	0.27	-	2
J422Fe	E4303		D4324	420	330	22	0.27	-	2
J422Fe13	E4323			420	330	22	0.27	-	2
J422Fe16	E4323			420	330	22	0.27	-	2
J422CrCU	E4303			420	330	22	0.27	-	2
J422CuCrNi	E4301		D4301	420	330	22	0.27	-	2
J423	E4301			420	330	22	0.27	-	2

J424	E4320	E6020		420	400	17	-	-	2
J425	E4311	E6011		420	400	17	-30,27	-	2
J426	E4316	E6016		420	400	20	-30,27	≤8	1
J426Fe13	E4328	E6028		420	400	20	-30,27	≤8	1
J427	E4315	E6015		420	400	22	-30,27	≤8	1
J427Ni	E4315	E7015		420	400	20	-40,27	≤8	1
J501Fe	E5014	E7014		490	400	17	0,27	-	2
J501Fe15	E5024	E7024		490	400	17	0,27	-	2
J502	E5003		D5003	490	400	20	0,27	-	2
J502Fe	E5003		D5003	490	400	20	0,27	-	2
J502Fe16	E5023	E7023		490	400	22	0,27	-	2
J503	E5001	E7001		490	400	20	0,27	-	2
J505	E5011	E7011		490	400	20	-30,27	-	2
J506	E5016	E7016		490	400	22	-30,27	≤8	1
J506Fe	E5018			490	400	22	-30,27	≤8	1
J506X	E5016			490	400	22	-30,27	≤8	1
J506Fe-1	E5018-1			490	400	23	-46,27	≤8	1
J506Fe16	E5028			490	400	22	-20,27	≤8	2
J507	E5015			490	400	22	-30,27	≤8	1
J507XG	E5015			490	400	22	-30,27	≤8	1
J507Fe	E5018			490	400	22	-30,27	≤8	1
J507Fe16	E5028			490	400	22	-20,27	≤8	2

**Note:** The properties listed in the table are the min. Value and the chemical composition values are max.