

Classification	Product Name	AWS Specifcaiton		ENISO Specifcaiton	Grade No.	Dimension (ø mm)	Typical mechanical properties of weld metal			
		<A5.1>	<A5.1M>	<2560-A>			Yield Strength Mpa	Tensile Strength Mpa	Elongation%	Impact Value J (°C)
For Low Carbon Steel	KE6010	E6010	E4310	E 35 3 C 2 1	J425G	2.6,3.2,4.0,5.0	425	515	25	52 (-30)
	KE6011	E6011	E4311	E 35 3 C 2 1	J425	2.6,3.2,4.0,5.0	440	540	22	48 (-30)
	KE6013	E6013	E4313	E 35 Z R 1 2	J421	2.6,3.2,4.0,5.0	447	533	22	-
	KE6019	E6019	E4319	-	-	2.6,3.2,4.0,5.0	415	490	26.5	72 (-20)
For High Strength Steel Under 620MPa Grade		<A5.1>	<A5.1M>	<2560-A>						
	KE7016-H	A5.5 E7016-G	A5.5M E4916-G	E 42 4 B 1 2	J506RH	2.6,3.2,4.0,5.0	485 620 °C x 1h	575 620 °C x 1h	27 620 °C x 1h	130 (-40) 620 °C x 1h
	KE7016	E7016	E4916	E 42 3 B 1 2	J506D	2.6,3.2,4.0,5.0	445	540	34	55 (-30)
	KE7048	E7048	E4948	E 42 3 B 3 5	J506FeX	2.6,3.2,4.0,5.0	525	625	27	105 (-30)
	KE7015-H	A5.5 E7015-G	A5.5M E4915-G	E 42 4 B 2 2	J507RH	2.6,3.2,4.0,5.0	495	585	27	128 (-40)
	KE7015	A5.5 E7015-G	A5.5M E4915-G	E 42 4 B 2 2	J507Ni	2.6,3.2,4.0,5.0	490	590	28	115 (-40)
	KE7018-Spl	E7018	E4918	E 42 3 B 3 2	J506Fe	2.6,3.2,4.0,5.0	495	590	27	138 (-45)
	KE7018-1	E7018-1	E4918-1	E 42 5 B 3 2	J506 Fe-1	2.6,3.2,4.0,5.0	490	590	28	128 (-46)
	KE8015-H	E8015-G	A5.5M E5515-G	E 46 4 B 2 2	J5 5 7RH	2.6,3.2,4.0,5.0	530	630	25	125 (-40) AW 110 (-40) 620 °C x 1h
	KE8015-G	E8018-G	A5.5M E5518-G	E 46 2 B 3 2	J5 5 6 Fe	2.6,3.2,4.0,5.0	550 620 °C x 1h	630 620 °C x 1h	24 620 °C x 1h	135(-20) 620 °C x 1h
For High Strength Steel Over 620MPa Grade		<A5.5>	<A5.5M>	<18275-A>						
	KE9016-G	E9016-G	E6216-G	E 55 4 Z B 3 2	J606	2.6,3.2,4.0,5.0	570 620 °C x 1h	600 620 °C x 1h	27 620 °C x 1h	126(-40) 620 °C x 1h
	KE9015-D1	E9015-D1	E-6215-D1	E 55 5 Mn1NiMo B 4 2	J607	2.6,3.2,4.0,5.0	585	670	24	120(-50) AW 80 (-50) 620 °C x 1h
	KE9015-G	E9015-G	E6215-G	E 55 5 1NiMo B 4 2	-	2.6,3.2,4.0,5.0	585 620 °C x 4h	660 620 °C x 4h	24 620 °C x 4h	85(-50) 620 °C x 4h
KE9018	E9018-G	E6218-G	E 55 5 Z B 3 2	J606Fe	2.6,3.2,4.0,5.0	600 620 °C x 1h	685 620 °C x 1h	24 620 °C x 1h	80(-50) 110 (-30) 620 °C x 1h	
For High Strength Steel Over 620MPa Grade		<A5.5>	<A5.5M>	<18275-A>						
	KE9018-M	E9018M	E6218M	E 55 5 1.5NiMo B 3 2	-	2.6,3.2,4.0,5.0	565	650	26	80 (-50)
	KE10015-D2	E10015-D2	E6915-D2	E 62 5 MnMo B 4 2	J707	2.6,3.2,4.0,5.0	655 620 °C x 1h	720 620 °C x 1h	24 620 °C x 1h	50 (-50) 620 °C x 1h
	KE10018-D2	E10018-D2	E6918-D2	E 62 5 Mn1NiMo B 3 2	J706Fe	2.6,3.2,4.0,5.0	695 620 °C x 1h	765 620 °C x 1h	20 620 °C x 1h	75(-50) 620 °C x 1h
	KE10015 -G	E10015-G	E6915-G	E 62 5 1.5NiMo B 4 2	J707Ni-	2.6,3.2,4.0,5.0	605 620 °C x 1h	675 620 °C x 1h	26 620 °C x 1h	50 (-40) 620 °C x 1h
	KE10018-M	E10018M	E6918M	E 62 5 1.5NiMo B 3 2	-	2.6,3.2,4.0,5.0	655 620 °C x 1h	750 620 °C x 1h	23 620 °C x 1h	71(-50) 620 °C x 1h
	KE11018-G	E11018-G	E7618-G	E 69 5 Z B 3 2	J756Fe	2.6,3.2,4.0,5.0	785	840	23	60 (-50)
	KE11018-M	E11018M	E7618-M	E 69 Mn2NiMo B 3 2	-	2.6,3.2,4.0,5.0	760	830	22	80 (-50)
KE12018-G	E12018-G	E8318-G	-	J806Fe	2.6,3.2,4.0,5.0	865	910	19	80 Room Temperature	

Typical mechanical composition of weld metal (wt%)							Applications
C	Mn	Si	Cr	Ni	Mo	Others	
0.098	0.38	0.17	0.013	0.023	0.004	-	High cellulose type covered electrode for DC(+) welding, suitable for the welding of pipelines, pressure pipes, oil tanker and boilers
0.142	0.48	0.38	0.014	0.018	0.04	-	High type covered electrode for DC(+) and AC welding, excellent performance in vertical and overhead positions on root pass, suitable for the welding of heat exchanger pipes, oil tanks, ships and boilers
0.142	0.47	0.38	0.01	0.018	0.004	-	High titanium potassium type covered electrode, designed for high efficiency welding with thin flux coating , suitable for the welding of vehicles, steel sheets and other light structure
0.076	0.58	0.11	0.013	0.021	0.003	-	Ilmenite coating electrodes for fillet and butt welding of low carbonsteel plates whose thickness is less 20mm
0.056	1.25	0.45	0.03	0.02	-	-	low hydrogen coating electrode for welding of 490MPa grade high tensile steel,suitable for welding offshore platform, shipbuilding, pressure vessels.
0.06	0.75	0.60	0.012	0.01	0.05	-	low hydrogen potassium coating electrode for welding 490MPa grade high tensile steels, used for the backing welding with two sides formation.
0.075	1.1	0.55	0.025	0.013	-	-	Iron powder low hydrogen coating electrodes for welding 490MPa high strength steels, especially for vertical down welding position.
0.065	1.4	0.35	0.04	0.52	-	-	Extra low hydrogen covered electrode type, with 490MPa grade high strength . It's suitable for the welding of pressure vessels, vertical pipes of hydropower station, ocean projects, bridges etc.
0.075	1.40	0.32	0.03	0.52	0.01	-	For 490MPa High tensile steel, good impact toughness at the temperature of -40OC and crack resistance, suitable for the welding of low alloy steels, medium high carbon steel and steel casting, such as offshore platforms, ship, pressure vessels and etc
0.071	1.28	0.45	0.02	0.01	0.005	-	Iron powder low hydrogen type covered electrodes for 490MPa high tensile steel, with high deposition rate, good X-ray soundness and mechanical properties, applicable in nuclear power plants, petrochemical plants, shipbuilding, offshore platform, port machinery and etc
0.065	1.4	0.45	0.03	0.01	0.006	-	Iron powder low hydrogen type covered electrode for 490MPa high tensile steel, excellent performance in large structure of pressure vessel, such as off shore platform , port machinery
0.074	1.53	0.33	0.03	0.76	0.28	-	low hydrogen sodium coating electrode with excellent crack resistance and high toughness for the welding of 550MPa grade high tensile steels.
0.073	1.45	0.3	0.06	0.53	0.41	-	Iron powder low hydrogen type covered electrode for 550MPa high tensile steel, suitable for the welding equivalent strength low alloy steel and A,B,C,D,E steel for ship building.
0.07	1.55	0.38	0.03	0.7	0.31	-	Low hydrogen potassium covered electrode for 590MPa high tensile steel, suitable for the welding of equivalent strength low alloy steel and medium carbon steel
0.078	1.58	0.36	0.04	0.73	0.37	-	Low hydrogen sodium covered electrode for 620MPa high tensile steel, grade suitable for the welding of equivalent strength low alloy steel and medium carbon steel.
0.065	1.21	0.42	0.025	1.1	0.33	-	Low hydrogen sodium coating electrode for welding 620MPa high strength steels, such as similar grade welding of low alloy steel in nuclear plants
0.068	1.57	0.32	0.03	1.55	0.34	-	Low hydrogen covered electrode for 590Mpa high tensile steel, suitable for the welding of low alloy steel, medium carbon steel, such as an engineering machinery and port machinery.
0.077	1.12	0.26	0.03	1.57	0.27	-	Iron powder low hydrogen covered electrode for 620MPa high tensile steel, suitable for the welding of equivalent strength low alloy steel
0.075	1.84	0.35	0.02	0.28	0.35	-	Low hydrogen sodium covered electrode for 690MPa high tensile steel, suitable for the welding of equivalent strength low alloy steel
0.050	1.82	0.18	0.02	0.85	0.40	-	Low hydrogen high strength covered electrode for 690MPa high tensile steel, suitable for the welding of equivalent grade low alloy steel,such as engineering machinery.
0.076	1.33	0.27	0.35	1.68	0.45	-	low hydrogen sodium coating electrode with excellent toughness in low temperature for the welding of 690MPa grade high tensile steels.
0.063	1.54	0.33	0.02	1.72	0.41	-	Iron powder low hydrogen high tensile steel covered electrode for 690MPa grade suitable for the welding of equivalent grade low alloy steel.
0.046	1.3	0.58	0.03	2.85	0.65	-	low hydrogen high tensile steel covered electrode for 760MPa, suitable for the welding of low alloy steel, medium carbon steel, such as engineering machinery and port machinery
0.067	1.69	0.30	0.13	2.29	0.38	-	low hydrogen potassium covered electrode for 760MPa high tensile steel, sand low temperature at -500c, suitable for the welding of low alloy steel structure, such as engineering machinery
0.056	1.73	0.34	0.63	2.32	0.01	-	iron powder low hydrogen coating electrodes for welding 830MPa high strength steels.