Low Carbon Steel and High Strength Steel Flux Cored Wire

Classification	Product Name	AWS Specificaiton <A5.20>	AWS Specificaiton <A5.20M>	ENISO Specificaiton <17632-A>	Polarity	Dimension (ø mm)	Typical mechanical properties of weld metal: Yield Strength Mpa	Tensile Strength Mpa	Elongation%	Impact Value J(°C)
CO2Gas Shielding	**KF61 C**	E61T-G	E431T-G	T 35 0 P C 1	DC+	1.2,1.4,1.6	400	500	28	120 (0)
	KF70 C	E70T-1C	E490T-1C	T 492T15-1CA	DC+	1.2,1.4,1.6	500	575	27	80 (-20)
	KF71 C	E71T-1C	E491T-1C	T 42 2 P C 1	DC+	1.2,1.4,1.6	485	550	28	125 (-20)
	KF71 CJ	E71T-9C-J	E491T-1C-J	T 42 4 P C 1	DC+	1.2,1.4,1.6	505	560	28	118 (-40)
Ar+CO2 mixed Gas Shielding	**KF71 M**	E71T-1M	E491T-1M	T 42 2 P M 1	DC+	1.2,1.4,1.6	495	555	26	120 (-20)
	KF71 C/M	E71T-1C/1M	E491T-1C/1M	T 42 2 P C/M 1	DC+	1.2,1.4,1.6	510 520	575 590	26 25	80 (-20) 120 (-20)
Self Shielding	**KSF-71-7**	E71T-7	E490T-7	T 42 Z P N 1	DC+	1.6,2.0,2.1	435	560	27	-
	KSF71-8	E71T-8	E490T-8	T 42 3 P N 1	DC+	1.6	460	555	26	100 (-30)
Stress Released	**KF71-SR**	E71T-1C	E491T-1C	T 42 2 P C 1	DC+	1.2,1.4,1.6	480 620°Cx4h	560 620°Cx4h	27 620°Cx4h	100(-20) 620°Cx4h
EGW		<A5.26>	<A5.26>	-						
	KGW70	EG70T-2	EG482T-2	-	DC+	1.6	455	575	30	85 (-20)
	KGW72	EG72T1-1	EG483T-1	-	DC+	3	510	620	25	110 (-30)
Metal Cored		<A5.18>	<A5.18M>	<17632-A>						
	KFM70-G	E70C-G	E48C-GC	T 42 2 P C 1	DC+	1.2,1.4,1.6	470	560	28	80 (-20)
	KFM70 GM	E70C-GM	E48C-GM	T 42 2 P M 1	DC+	1.0,1.2	405	490	28	120 (-20)
	KFM70 6C	E70C-6C	E48C-6C	T 42 3 P C 1	DC+	"0.8,0.9,1.0, 1.2,1.4,1.6"	445	550	29	50 (-30)
	KFM70 6M	E70C-6M	E48C-6M	T 42 3 P M 1	DC+	1.0,1.2,1.6	445	550	28	100 (-30)

Typical mechanical composition of weld metal (wt%) C	Mn	Si	Cr	Ni	Mo	Others	Applications
0.03	0.65	0.35	0.02	0.40	0.01	-	CO2 gas shielding flux cored wire for 430MPa strenth steel, suitable for the welding of pressure vessel, shipbuilding and petrochemical industry
0.045	1.45	0.5	0.02	0.02	0.01	V0.01	It is metal powder type flux cored wire for 490MPa high strength steel, excellent crack resistance, excellent porosity resistability in welding over Zinc-Primier surface and high speed fillet welding
0.04	1.3	0.4	0.02	0.01	0.01	V0.01	It is gas shielding flux cored wire for 490MPa high strength steel suitable for the welding of steel structure, pressure vessel, shipbuilding, offshore platform , steel structure , pipes and etc
0.034	1.24	0.37	0.03	0.46	0.01	V0.01	It is a gas shielding flux cored wire for mild steel and 490MPa high strength steel, good X-ray result and low temperaature impact toughness, suitable for the welding of offshore platform, port, machinery, low temperature vessel etc
0.033	1.34	0.49	0.02	0.01	0.01	-	Suitable for the welding of vessels, ocean platforms and pipes
0.035 0.040	1.32 1.51	0.42 0.52	0.03 0.03	0.02 0.02	0.01 0.01	-	Flux cored wire with the shielding gas of pure CO2 or Mix Gas for welding 490MPa grade high tensile steels, such as pipe, offshore plattform, shipbuilding, pressure vessels and steel structure.
0.13	1.30	0.22	0.02	0.01	0.01	A10.60	Self-shielded high tensile steel flux cored wire , suitable for the welding of heavier plate and 490MPa high tensile steel.
0.17	0.50	0.11	0.01	0.01	0.01	A10.60	Self shielding flux cored wire for welding 490MPa grade high tensile steels, with excellent crack resistance and impact toughness in the low temperature.
0.035	1.30	0.20	0.02	0.25	0.01	-	Excellent property of as weld and heat treatment, suitable for the welding steel construction, pressure vessel, shipbuilding, offshore platforms and pipes.
0.055	1.71	0.34	0.03	0.02	0.15	-	CO2 gas shiedling flux cored wire for a automatic vertical -up butt welding, applicable in shipbuilding, storage tank, offshore tank and etc
0.065	1.55	0.30	0.02	0.22	0.01	-	Slef-shielded flux cored wire for electrogas welding of 490MPa high tensile steel, suitable for the welding of box column diaphragm, heavy machinery structure , etc
0.065	1.30	0.50	0.02	0.02	0.01		Metal cored wires whose deposited metal contains Ti used for welding 490MPa high strength steels, such as shipbuilding, bridge, construction and excavator
0.020	1.20	0.40	0.02	0.02	0.01	-	460MPa metal cored wires used for welding X52pipelines
0.060	1.0	0.65	0.03	0.01	0.01	-	490MPa metal cored wires without copper coating, like solid wires, used for welidng vehicles, bridges, shipbuildings and pressure vessels
0.030	1.54	0.5	0.02	0.01	0.01	-	490MPa metal cored wire suitable for the welding of the same intensity level of low alloy steel and pipe line of X70steel.

Low Alloy Steel Electrode

Classification	Product Name	AWS Specificaiton <A5.51>	AWS Specificaiton <A5.5M>	ENISO Specificaiton <2560-A>	Grade No.	Dimension (ø mm)	Typical mechanical properties of weld metal: Yield Strength Mpa	Tensile Strength Mpa	Elongation%	Impact Value J(°C)
For Heat - Resistant Steel	**KE7016-A1**	E7016-A1	E4916-A1	E 42 A Mo B 3 2	R 106	2.6,3.2,4.0,5.0	620 °C x 1h 460	620 °C x 1h 560	620 °C x 1h 27	620 °C x 1h 130 Room Temperature
	KE7015-A1	E7015-A1	E4915-A1	E 42 A Mo B 4 2	R 107	2.6,3.2,4.0,5.0	620 °C x 1h 430	620 °C x 1h 540	620 °C x 1h 28	620 °C x 1h 150 Room Temperature
	KE7018-A1	E7018-A1	E4918-A1	E 42 A Mo B 3 2	R 106Fe	2.6,3.2,4.0,5.0	620 °C x 1h 480	620 °C x 1h 570	620 °C x 1h 26	620 °C x 1h 130 Room Temperature
		<A5.5>	<A5.5M>	<3580-A>						
	KE8016-B1	E8016-B1	E5516-B1	E(CrMo0.5) B 3 2	R 206	2.6,3.2,4.0,5.0	620 °C x 1h 480	620 °C x 1h 580	620 °C x 1h 20	620 °C x 1h 120 Room Temperature
	KE8018-B1	E8018-B1	E5518-B1 B 3 2	E(CrMo0.5) 5.0	R206Fe	2.6,3.2,4.0, 5.0	620 °C x 1h 560	620 °C x1h 640	620 °C x 1h 25	620 °C x 1h 130 Room Temperature
	KE8016-B2	E8016-B2	E5516-B2	E(CrMo1) B 3 2	R306	2.6,3.2,4.0, 5.0	690°C x 1 h 480	620 °C x1h 580	690 °C x 1h 22	690 °C x 1h 150 Room Temperature

Typical mechanical composition of weld metal (wt%) C	Mn	Si	Cr	Ni	Mo	Others	Applications
0.065	0.65	0.35	0.04	0.03	0.5	-	Suitable for welding of pipe for boiler(such as 1.50Mo), heat exchanger, etc, whose operating temperature is below 510 °C, such as ASTMA204 and A335-P1
0.07	0.75	0.35	0.04	0.028	0.55	-	
0.06	0.7	0.31	0.05	0.035	0.51	-	
0.063	0.73	0.35	0.52	0.015	0.55	-	low hydrogen potassium coating electrodes with the weld metals of 0.5%Cr-0.5%Mo, suitable for pearlite heat resistant steels under 510 °C, high temperature and high pressure pipelines
0.075	0.78	0.33	0.55	0.015	0.53	-	Iron powder low hydrogen potassium coating electrodes whose deposited metal contains 0.5%Cr-0.5%Mo used for pearlite heat-resistant steels such as high temperature pressure pipes and chemical conntainers under 510°C
0.081	0.72	0.32	1.3	0.013	0.56	-	For 1.25Cr-0.5Mo steel, suitable for the welding of pipe for boiler which temperature is below 550 °C, or steam pipe, high pressure vessel which temperature is below 520 °C, such as 15CrMo, 20CrMo, also applied in the welding of 30CrMnSi cast steel