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FLUX CORE WIRES FOR HIGH TENSILE STRENGTH STEEL (560~1000MPA)

Brand Name	Size (mm)	Equivalent Specification		Welding Position	Shielding Gas	Type of Current	Typical Chemical Composition of All-Weld Metal (%)								Typical Mechanical Properties of All-Weld Metal				Characteristics and Applications	Approvals
							C	Si	Mn	P	S	Cr	Ni	Mo	Y.S (MPa)	T.S (MPa)	Z El. (%)	I.V (J)		
K-81T	1.2~1.6	AWS A5.29 JIS Z3313 KS D7104 EN ISO 17632-A EN ISO 17632-B	E81T1-Ni1C T57 3 T1-1C AP-N2 YFW-C602R T50 3 1Ni P C 1 T55 3 T1-1CA-N2	F,V,OH, H,VD	CO_2	DC(+)	0.02	0.51	1.28	0.014	0.011	-	1.04	0.20	580	630	28	50 (-30℃)	K-81T is designed for welding of 560MPa high tensile steel with outstanding mechanical properties. Wire is a titania type of flux cored wire for all- position welding with 1.0% Ni component.	ABS, BV, DNV, GL, LR, NK, KR, RINA, CWB, RS, CE, KS, JIS
K-81TM	1.2~1.6	AWS A5.29 JIS Z3313 KS D7104 EN ISO 17632-A EN ISO 17632-B	E81T1-Ni1M T57 4 T1-1MA-N2-U YFW-A604R T50 4 1Ni P M 1 T55 4 T1-1MA-N2	F,V,OH, H,VD	Ar+20%CO_2	DC(+)	0.03	0.35	1.17	0.013	0.010	-	0.92	0.20	590	650	28	100 (-40℃)	K-81TM is designed for welding of 560MPa high tensile steel with outstanding mechanical properties. Wire is a titania type of flux cored wire for all-position welding with 1.0% Ni component.	ABS, BV, DNV, GL, LR, NK, KR, RINA, CWB, TUV, DB, CE, JIS, KS
K-80ST	1.2~1.6	AWS A5.29 JIS Z3313 KS D7104 EN ISO 17632-A EN ISO 17632-B	E80T1-Ni1C T57 3 T1-0CA-N2 YFW-C602R T50 3 1Ni R C 4 T55 3 T1-0CA-N2	F, H-Fil	CO_2	DC(+)	0.03	0.35	1.17	0.014	0.011	-	0.92	0.20	590	650	28	100 (-30℃)	K-80ST is designed for welding of 560MPa high tensile steel with outstanding mechanical properties. Typical applications include machineries, shipbuilding, offshore structures, bridges and general fabrications (ASTM A537, JIS SM520 / 540 / 570)	CE, JIS
KX-300	1.2~1.6	AWS A5.29 JIS Z3313 KS D7104 EN ISO 17632-A EN ISO 17632-B	E80T1-Ni1C T57 3 T1-0 CA-N2 YFW-C602M T50 3 1Ni R C 4 T55 3 T1-0 CA-N2	F, H-Fil	CO_2	DC(+)	0.03	0.47	1.34	0.014	0.011	-	0.97	-	610	640	25	47 (-30℃)	KX-300 is designed for welding of 560MPa high tensile steel with outstanding mechanical properties. Wire is a metal type of flux cored wire for flat and horizontal position welding.	CE, JIS
K-82T	1.2~1.6	AWS A5.29 JIS Z3313 EN ISO 17632-A EN ISO 17632-B	E81T1-Ni2C T57 4 T1-1CA-N5-U T50 4 2Ni P C 1 T55 4 T1-1CA-N5-U	F,V,OH, H,VD	CO_2	DC(+)	0.03	0.35	1.17	0.012	0.010	-	2.02	-	584	673	24	120 (-30℃)	K-82T is designed for welding of 560MPa high tensile steel with outstanding mechanical properties. Wire is a titania type of flux cored wire for all- position welding with 2.0% Ni component.	CE
K-82TM	1.2~1.6	AWS A5.29 JIS Z3313 EN ISO 17632-A EN ISO 17632-B	E81T1-Ni2M T57 4 T1-1MA-N5-U T50 4 2Ni P M 1 T55 4 T1-1MA-N5-U	F,V,OH, H,VD	Ar+20%CO_2	DC(+)	0.03	0.55	1.26	0.013	0.010	-	1.92	-	570	655	24	75 (-40℃)	K-82TM is designed for welding of 560MPa high tensile steel with outstanding mechanical properties. Wire is a titania type of flux cored wire for all-position welding with 2.0% Ni component.	CE
KX-80D2M	1.2~1.6	AWS A5.28	E80C-G	F, H-Fil	Ar+20%CO_2	DC(+)	0.04	0.45	1.50	0.012	0.010	-	-	0.50	620	680	27	45 (-30℃)	KX-80D2M is designed for welding of 560MPa high tensile steel with outstanding mechanical properties. Typical applications include sending oil pipe, machineries, pressure vessels and creep resistance of high temperature.	-
K-91T	1.2~1.6	AWS A5.29 JIS Z3313 KS D7104 EN ISO 17632-B	E91T1-G T62 4 T1-1CAP-N2-U YFW-C60GR T62 4 T1-1CAP-G	F,V,OH, H,VD	CO_2	DC(+)	0.03	0.42	1.37	0.012	0.010	-	0.93	-	650	720	23	100 (-40℃)	K-91T is designed for welding of 620MPa high tensile steel for low temperature service. Typical applications include many high-strength low alloy such as steel ASTM A302, A572, A575, A734.	CE, JIS

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							C	Si	Mn	P	S	Cr	Ni	Mo	Y.S (MPa)	T.S (MPa)	Z El. (%)	I.V (J)		
K-110TK3	1.2~1.6	AWS A5.29 JIS Z3313 EN ISO 18276-A EN ISO 18276-B	E110T1-K3C T76 2TI-ICA-N3M2 T69 Mn2NiMoP C 1 T76 2T1-1CA-N3M2	F,V,OH, H,VD	CO_2	DC(+)	0.04	0.51	1.72	0.011	0.009	-	2.04	0.42	751	834	21	100 (-20℃)	K-110TK3 is designed for welding of 760MPa high tensile steel with outstanding mechanical properties. Typical applications include high tensile steels that will be used a low temperature environment. (ASTM A514, A517, A710, JIS G 3128 SHY, HY-80 Grade.	ABS, CWB, CE
K-110TK3M	1.2~1.6	AWS A5.29 JIS Z3313 EN ISO 18276-A EN ISO 18276-B	E111T1-K3M T76 2T1-1MA-N3M2 T69 2 Mn2NiMo P M 1 T76 2 T1-1MA-N3M2	F,V,OH, H,VD	Ar+20%CO_2	DC(+)	0.04	0.48	1.65	0.010	0.008	-	2.00	0.45	740	785	19	80 (-20℃)	K-110TK3M is designed for welding of 760MPa high tensile steel with outstanding mechanical properties. Typical applications include high tensile steels that will be used a low temperature environment. (ASTM A514, A517, A710, JIS G 3128 SHY, HY-80 Grade.	-
K-115TK4M	1.2~1.6	AWS A5.29 JIS Z3313 EN ISO 18276-A EN ISO 18276-B	E110T5-K4M T76 5 T5-0MA-N4C1M2 T69 5 Mn2NiCrMo B M 4 T76 5 T5-0MA-N4C1M2	F,V,OH, H,VD	Ar+20%CO_2	DC(+)	0.03	0.35	1.43	0.010	0.009	0.44	1.85	0.42	830	875	18	50 (-50℃)	K-115TK4M is designed for welding of 760MPa high tensile steel with outstanding mechanical properties. Typical applications include low alloy steel, quenched and tempered high strength steels such as ASTM A514, A517, HY-100 Grade.	CE, JIS, KS
K-120TG	1.2~1.6	AWS A5.29	E121T1-G	F,V,OH, H,VD	CO_2	DC(+)	0.03	0.39	1.69	0.010	0.006	-	2.66	0.67	792	864	19	85 (-20℃)	K-120TG is designed for welding of 840MPa high tensile steel with outstanding mechanical properties. Typical applications include machineries, bridges and military equipment. (PFS 700, HSB 800, HSLA-100)	KR
K-145TM	1.2~1.6	EN ISO 18276-A	T89 A Mn2Ni1CrMo B M 3	F,V,OH, H,VD	Ar+20%CO2	DC(+)	0.06	0.42	1.85	0.015	0.014	0.85	2.40	0.45	990	1045	17	54 (20℃)	K-145TM is designed for welding of 1000MPa high tensile steel with outstanding mechanical properties.	-