

COMPARISION TABLE

AWS	JIS	KISWEL	Bohler	ESAB	Hobart	KOBE	Lincoln	Nippon steel
E6019	D4301	KI-101LF				B-10, 14, B-17, BI-14		B-1
	D4303	KT-303				TB-24, 43, IBI-24		A-1
E6010		KCL-10	FOX CEL	Pipeweld 6010	60AP	KOBE-6010	Fleetweld 5P	
E6011	D4311	KCL-11			335A, 335C	KOBE-6011	Fleetweld 35	
E6012		K-6012			12	TB-62	Fleetweld 7	
E6013	D4313	KR-3000	FOX MSU	OK 43.32, 46.00	447A, 447C	RB-26	Fleetweld 37	S-132
E6027	D4327	KF-300LF		OK Femax 39.50		ZERODE 27	Jetweld 2	
E7014		K-7014		OK 46.16	14A		Fleetweld 47	
E7024	D4324	K-7024	FOX HL 180 Ti	OK Femax 33.65	24	ZERODE 50F	Jetweld 1	
E7016	D4316	KH-500LF		OK 53.00	716	LB-26		NITTETSU-16
	D5016	KK-50LF	FOX EV 50-A	OK 53.05		LB-24		EX-55
E7018		K-7018	FOX EV 50-AK	OK 48.00	718	LB-52-18	Jetweld LH70	NITTETSU 7018
E7028	D5026	K-7028LF	FOX HL 180 Kb	OK Femax 38.48	728	LB-52H	Jetweld LH3800	NITTETSU LM55-G
E7048		KH-500VLF		OK Femax 53.35		LB-6V		NITTETSU 16V
E9018-M		K-9018M			HOBALLOY 9018-M			
E10018-M		K-10018M	FOX EV 75		HOBALLOY 10018M			
E11018-M		K-11018M	FOX EV 85		HOBALLOY 11018-M		Jetweld	
E12018-M		K-12018M						
E7010-A1		K-7010A1	FOX CEL Mo	Pipeweld 85			Shield-Arc 85	
E7016-A1	DT1216	K-7016A1				CMA-76		N-05
E7018-A1		K-7018A1	FOX DMO Kb	OK 74.46	HOBALLOY 7018-A1			
E8016-B1		K-8016B1				CMB 86		
E8016-B2	DT2316	K-8016B2				CMA 98		N-15
E8018-B2	DT2318	K-8018B2	FOX DCMS Kb		HOBALLOY 8018-B2	CMB-98	Jetweld LH-90MR	
E9016-B3	DT2416	K-9016B3				CMA-106		
E9018-B3	DT2418	K-9018B3	FOX CM 2 Kb		HOBALLOY 9018-B3	CMA 108		
E502-16	DT2516	K-502				CM-5		
E505-16	DT2616	K-505		OK 76.96		CM-9		
E8016-C1	DL5016-6P2	K-8016C1				CM-2		
E8018-C1		K-8018C1	FOX 2.5 Ni	OK 73.68	HOBALLOY 8018-C1		Jet-LH8018-C1MR	
E8016-C2	DL5016-6P3	K-8016C2		OK 73.79				
E8018-C2		K-8018C2		OK 73.78	HOBALLOY 8018-C2			
E8018-C3		K-8018C3	FOX EV 60	OK 73.35	HOBALLOY 8018-C3		Jet-LH8018-C3MR	
E308-16	D308-16	KST-308			Belinox 308-16	NC-38	Stainweld308-16	NITTETSU-308R
E308L-16	D308L-16	KST-308L	FOX EAS 2-TS	OK 61.30	Belinox 308L-16	NC-38L	Stainweld308L-16	NITTETSU-308LR
E309-16	D309-16	KST-309		OK 67.62	Belinox 309-16	NC-39	Stainweld309-16	NITTETSU-309R
E309L-16	D309L-16	KST-309L		OK 67.60	Belinox	NC-39L		NITTETSU-309LR

AWS	JIS	KISWEL	Bohler	ESAB	Hobart	KOBE	Lincoln	Nippon steel
					309L-16			
E310-16	D310-16	KST-310	FOX FFB-A	OK 67.13	Soudocrom 310-16	NC-30	Stainweld 310-16	NITTETSU-310R
E312-16	D312-16	KST-312	FOX CN 29/9	OK 67.81	Soudocrom 312-16	NC-32		
E316-16	D316-16	KST-316			Soudocrom 316-16	NC-36		NITTETSU-316R
E316L-16	D316L-16	KST-316L	FOX EAS 4 M-TS	OK 63.30	Belinox 316-16	NC-36L	Stainweld 316L-16	NITTETSU-316LR
E318-16	D318-16	KST-318		OK 63.30		NC-318		
E347-16	D347-16	KST-347		OK 61.81	Belinox 347-16	NC-37	Stainweld 347-16	NITTETSU-347R
E410-16	D410-16	KST-410		OK 68.12		CR-40		
E430-16	D430-16	KST-430				CR-43		
	DF2A-250	KM-100		OK 83.28	Tufanhard 250	HF-240	Jet LH BU-90	H-250B
	DF2A-300	KM-300				HF-330		H-300C
	DF2B-450	KM-500				HF-500		H-500
	DF4B	KM-11Cr		OK 84.58	Cromecoat			H-13Cr
	DFMA	KM-900		OK 86.08	Cro-Nimang	HF-11	MANGJET	H-13M
ENI-CI	DFCNI	KSN-100		OK 92.18	Cast-Tex 99	CIA-1	Softweld 99 Ni	C-1N
ENiFe-CI	DFCNIfe	KFN-50		OK 92.58	Cast-Tex 55	CIA-2	Softweld 55 Ni	C-5N
ER70S-3		KC-25			HB-25	MIX-50	LNT/LNM 25	YM-25
ER70S-6		KC-28	EMK 6	OK Autorod 12.51	Hb-28	MG-51T	LNM 26	YM-28
ER70S-G		KC-26				MG-50		YM-26
E71T-1	YFW-C50DR	K-71T		OK Tubrod 15.13	FabCo 825	DW-100	Outershield 71-H	SF-1
E71T-1/1M	YFW-C502R	K-71TLF	Ti-52-FD	OK Tubrod 15.15				SF-1A
E70T-1	YFW-C50DM	KX-200		OK Tubrod 15.12	FabCo 90	MX-200	Outershield 70	SM-1
	YFW-C502R	K-70ST				DW-200		
E71T-5/5M	YFW-C502B	K-71TB		OK Tubrod 15.00	FabCo 85	DWA-51B	Outershield T55-H	SF-36
E70C-6M	YFW-A502M	KX-706M						
E71T-1/9J	YFL-C504R	K-71UT		OK Tubrod 15.13S	Excel-ARC 71	DW-55E		
E71T-12J	YFL-C504R	K-71TSR			Formula XL-550	DW-55ESR		
E81T1-K2	YFL-C506R	K-81TK2			FabCOR 81K2-C	DW-55L	Outershield 81K2-H	
E81T1-B2	YF1CM-C	K-81TB2					Outershield 81B2-H	
E110T1-K3		K-110TK3						
E308T0-1/4	YF308C	K-308T				DW-308		SF-308
E308LT1-1/4	YF308LC	K-308LT	EAS 2 PW-FD	OK Tubrod 14.30		DW-308LP	Cor-A-Rosta 304L	SF-308LP
E309T0-1/4	YF309C	K-309T				DW-309		
E309LT1-1/4	YF309LC	K-309LT	CN 23/12 PW-FD	OK Tubrod 14.32		DW-309LP	Cor-A-Rosta 309L	SF-309LP
E316T0-1/4	YF316C	K-316T				DW-316		
E316LT1-1/4	YF316LC	K-316LT	EAS 4 PW-FD	OK Tubrod 14.31		DW-316LP	Cor-A-Rosta 316L	SF-316LP
E2209T1-1/4		K-329T	CN 22/9 PW-FD	OK Tubrod 14.37		DW-329A		
EC409		K-409TIT			FabCOR 409			
ER308	Y308	M-308			308	MGS-308	Lincolnweld L 18/8	YM-308
ER308L	Y308L	M-308L	EAS 2-IG	OK Autorod 16.10	308L	MGS-308L	LNT/LNM 304L	YM-308L
ER308LSi	Y308LSi	M-308LSi	EAS 2-IG (Si)	OK Autorod 16.12	308L-Si	MGS-308LS	LNT/LNM 304LSi	
ER309	Y309	M-309	FA-IG		309	MGS-309		YM-309
ER309L	Y309L	M-309L	CN 23/12 PW-FD	OK Autorod 16.53	309L		LNT/LNM 309 LHF	
ER316	Y316	M-316		OK Autorod 16.35				YM-316
ER316L	Y316L	M-316L	EAS 4 M-IG	OK Autorod 16.30	316L		LNT/LNM 316L	YM-316L

Approvals

Brand name	KS	AWS	KR		ABS		LR	
			Grade	Welding positions	Grade	Welding positions	Grade	Welding positions
KI-101LF	E4301	E6019	RMW3	All, H-Fil, F	3	All, F	3m	All
KT-303	E4303	—	RMW3	All	3, D4303	All, F	3m	All
KCL-10	E4311	E6010	—	—	3, E6010	All, F	3m	All
KCL-11	E4311	E6011	—	—	3, E6011	All, F	3m	All
KR-3000	E4313	E6013	RMW2	All, H-Fil, F	2	All, F	2m	All
KR-3000V	E4313	E6013	—	—	2	All, V-down	2m	All, V-down
KH-500LF	E4316	E7016	RMW3H	All, H-Fil, F	3H10, 3Y	All, F	3m,3Ym,H15	All
KH-500VLF	E4316	E7048	RMW53H RMW3H	F, H, V-down	3H10, 3Y	All, V-down	3m,3Ym,H15	All, V-down
KH-500W	E4316	E7016	—	—	3H10, 3Y	All	—	—
KH-500T	E4316	E7016	—	—	3H10, 3Y	All, V-down	3m,3Ym,H15	All, V-down
KF-300LF	E4327	E6027	RMW3	Flat, H-Fil	3	Flat	3m	Flat
K-7014	—	E7014	RMW52	All, H-Fil, F	2Y, E7014	All, F	2m,2Ym	All
K-7024	E4324	E07024	RMW53	All, H-Fil, F	2Y, E7024	Flat	2m,2Ym	Flat
KK-50LF	D5016	E7016	RMW53H	All, H-Fil, F	3H10, 3Y	All, F	3m,3Ym,H15	All
K-7018	D5016	E7018	RMW53H	All, H-Fil, F	3H10, 3Y, E7018	All, F	3m,3Ym,H15	All
K-7028LF	D5026	E7028	RMW53HH	Flat, H-Fil	3H10, 3Y	Flat	3m,3Ym,H15	Flat
K-8018	D5316	E8018-G	—	—	3, 3Y	All, V-down	—	—
K-7010A1	—	E7010-A1	—	—	3Y, E7010-A1	All, F	—	—
K-8018B2	DT2318	E8018-B2	—	—	3H10, 3Y, E8018-B2	All, F	3m,3Ym,H15	All
K-8018C1	—	E8018-C1	—	—	3H10, 3Y, E8018-C1	All, F	3m,3Ym,H15	All
K-8018C3	—	E8018-C3	—	—	3H10, 3Y, E8018-C3	All, F	3m,3Ym,H15	All
KK-50N	DL5016-4A0	E7016-G	—	—	—	—	5Y40m,H15	All
K-7018N	—	E7018-1	—	—	—	—	5Y40m,H15	All
KST-308	D308-16	E308-16	RD308	All, H-Fil, F	A5.4-92, E308-16	All, F	—	—
KST-308L	D308L-16	E308L-16	—	—	A5.4-92, E308L-16	All, F	304L m	F, H, V-up
KST-309	D309-16	E309-16	RD309	All, H-Fil, F	A5.4-92, E309-16	All, F	SS/CMn	F, H, V-up
KST-309L	D309L-16	E309L-16	—	—	A5.4-92, E309L-16	All, F	—	—
KST-309Mo	D309Mo-16	E309Mo-16	—	—	—	—	—	—
KST-309MoL	D309MoL-16	E309MoL-16	RD309MoL	D, V, H	—	—	—	—
KST-310	D310-16	E310-16	—	—	—	—	—	—
KST-316	D316-16	E316-16	—	—	A5.4-92, E316-16	All, F	—	—
KST-316L	D-316L-16	E316L-16	RD316L	All, H-Fil, F	A5.4-92, E316L-16	All, F	316L m	F, H, V-up
KC-25(100%CO ₂)	YGW14	ER70S-3	RSW53G (C1)	All	3SA, ER70S-3	Flat, V	3S,3YS,H15	All, V-down
KC-26(100%CO ₂)	YGW11	ER70S-G	RSW53G (C1)	All	3YSA	All, V-down, F	3S,3YS,H15	All, V-down
			RAW53MG (C1)	Downhand				

DNV		NK		BV		GL		CCS		RINA		CWB	TÜV	KS	JIS
Grade	Welding positions	Grade	Welding positions	Grade	Welding positions	Grade	Welding positions	Grade	Welding positions	Grade	Welding positions				
3	All	KMW3	All	3	All	3	All	—	—	—	—			○	○
3	All	KMW3	All	—	—	3	All	—	—	—	—			○	○
—	—	KMW3	All	3	All	—	—	—	—	—	—	○*			○
3	All	—	—	—	—	—	—	—	—	—	—	○*			○
2	All	KMW2	All	2	All	2	All	—	—	—	—	○*		○	○
—	—	—	—	2	All, V-down	—	—	—	—	—	—			○	○
3YH10	All	KMW3H	All	3YHH	All	3H10	All	—	—	—	—			○	○
3YH10	All, V-down	KMW3H	All, V-down	3YHH	All, V-down	—	—	—	—	—	—			○	○
3YH10	All	—	—	—	—	—	—	—	—	—	—			○	○
—	—	KMW53HH	All, V-down	—	—	—	—	—	—	—	—			○	○
3	Falt, H-Fil	KMW3	Flat, H-Fil	3	Flat, H-Fil	3	Flat, H	—	—	—	—			○	○
—	—	KMW52	All	—	—	—	—	—	—	—	—	○*			○
3	Flat	KMW52	Flat	2Y	Flat, H-Fil	2Y	Flat, H	—	—	—	—	○*			○
3YH10	All	KMW53H	All	3YHH	All	3YH10	All	—	—	—	—			○	○
3YH10	All	KMW53H	All	3YHH	All	3YH10	All	—	—	—	—	○		○	○
3YH10	Flat, H-Fil	KMW53HH	Flat, H-Fil	3YHH	Flat, H-Fil	3YH10	Flat, H	—	—	—	—			○	○
—	—	—	—	—	—	—	—	—	—	—	—				○
—	—	—	—	—	—	—	—	—	—	—	—				○
3YH15	All	—	—	—	—	—	—	—	—	—	—				○
3YH15	All	—	—	—	—	—	—	—	—	—	—				○
—	—	—	—	—	—	—	—	—	—	—	—				○
5YH10	All/NV2(4)-4L	—	—	—	—	—	—	—	—	—	—				○
5YH10	All/NV2(4)-4L	—	—	—	—	—	—	—	—	—	—	○*			○
308	All	—	—	UP	All	4306	All	—	—	—	—	○*			○
—	—	—	—	UP	All	4306	All	—	—	—	—	○*	○		○
309	All	—	—	UP	All	4332	All	—	—	—	—	○*			○
—	—	—	—	—	—	—	—	—	—	—	—	○*			○
309Mo	All	—	—	—	—	—	—	—	—	—	—				○
—	—	—	—	—	—	—	—	—	—	—	—				○
—	—	—	—	—	—	—	—	—	—	—	—				○
—	—	—	—	UP	All	4435	All	—	—	—	—	○*			○
316L	All	—	—	UP	All	4435	All	—	—	—	—	○*	○		○
YMS	All, V-down	kSW 53G(C)	All	—	—	—	—	—	—	—	—	○*		○	○
YMS	All, V-down	kSW 53G(C)	All	SA3YM	All, V-down	3YS	F, H, V-up, V-down	—	—	—	—			○	○

Approvals

Brand name	KS	AWS	KR		ABS		LR	
			Grade	Welding positions	Grade	Welding positions	Grade	Welding positions
KC-26(Ar+20%CO ₂)	YGW11	ER70S-G	-	-	-	-	-	-
KC-27(Ar+20%CO ₂)	YGW15	ER70S-G	-	-	3YSA	All, V-down	-	-
KC-28(100%CO ₂)	YGW12	ER70S-6	RSW53G (C1)	All	3SA, ER70S-6	Flat, V, V-down	3S, 3YS, H15	All, V-down
KC-28(Ar+20%CO ₂)	YGW12	ER70S-6	-	-	3SA, 3YSA	All, V-down	-	-
ZO-26(100%CO ₂)	YGW11	ER70S-G	RSW53G (C1)	D,H,V-up,V-down	3SA, 3YSA	All, V-down	3S, 3YS, H15	F,H,V-up,V-down
ZO-27(Ar+20%CO ₂)	YGW15	ER70S-G	-	-	3SA, 3YSA	All, V-down	3S, 3YS, H15	F,H,V-up,V-down
ZO-28(100%CO ₂)	YGW12	ER70S-6	-	-	3SA, 3YSA	All, V-down	3S, 3YS, H15	F,H,V-up,V-down
ZO-28(Ar+25%CO ₂)	YGW12	ER70S-6	RAW53MG(M21)	Downhand	3A, 3YA	Flat	3M, 3YM, H15	Downhand
ZO-60(100%CO ₂)	YGW21	ER80S-G	-	-	-	-	-	-
ZO-60/K-CM/DB-1-4	-	-	-	-	2A,2YA	Flat	-	-
T-50	YGT-50	ER70S-6	-	-	2YSA	All	-	-
T-308L	Y308L	ER308L	RY308LG(I)	All	-	-	304L	All
T-308LSi	Y308LSi	ER308LSi	-	-	-	-	-	-
T-309L	Y309L	ER309L	RY309LG(I)	All	-	-	SS/CMn	F, H, V-up, OH
T-316L	Y316L	ER316L	RY316LG(I)	D,H,V-up	A5.9-93,ER316L	All, V-down	316L	F,H,V-up,V-down
KW-T61	YNi-1	ERNi-1	-	-	AWS A5.14-97 ERNi-1	All	-	-
KW-TCuNi	YCuNi-3	ERCuNi	-	-	AWS A5.7-84R ERCuNi	All	-	-
M-308LSi	Y308LSi	ER308LSi	-	-	-	-	-	-
M-309	Y-309	ER309	-	-	-	-	-	-
M-316L	Y316L	ER316L	RY316LG(M1)	D,H	-	-	-	-
M-316LSi	Y316LSi	ER316LSi	-	-	-	-	-	-
KW-M625	ERNiCrMo-3	ERNiCrMo-3	-	-	A5.14-89,ERNiCrMo-3	All	3M,3YM,3YT	-
KD-40/EF-200	S502-H	F7A(P)4/EL8	RAW53TM	Flat	3TM, 3YTM	Flat	3M,3YM,3YT	Downhand
KD-42/EF-200K	S502-H	F7A(P)6/EM12K	RAW53TM	Flat	3TM, 3YTM	Flat	3M,3YM,3YT	Downhand
KD-50/EF-100	S502-H	F7A(P)2/EH14	RAW53TM	Flat	3TM, 3YTM	Flat	3M,3YM,3YT	Downhand
KD-50/EF-100H	S502-H	F7A(P)2/EH14	RAW53TM	Flat	3TM, 3YTM	Flat	-	Downhand
K-40/K-CM EF-200/DB-1-1	-	-	RAW525R	Flat	2A, 2YA	Flat	2S,2YS,H15	-
K-71T(100%CO ₂)	YFW-C50DR	E71T-1	RSW52G	All,V-down	2SA, 2YSA, H10	All, V-down	-	All, V-down
K-71T(Ar+20%CO ₂)	YFW-A50DR	E71T-1M	-	-	-	-	2S,2YS,H15	-
K-71T/CBM-8061	-	-	RAW52MRG(C1)H	F,H,V-up,V-down	2SA, 2YSA, H15	F, H, V, V-down	3S,3YS,H10	F,H,V-up,V-down
K-71TLF(100%CO ₂)	YFW-C50DR	E71T-1	RSW53G(C1)HH	All,V-down	3SA, 3YSA, H10	All, V-down	3S,3YS	All, V-down
K-71TLF(Ar+20%CO ₂)	YFW-A50DR	E71T-1M	-	-	3SA, 3YSA, E71T-1M	All, V-down	-	All, V-down
K-71TM(100%CO ₂)	YFW-C50DR	E71T-1	-	-	2SA, 2YSA, E71T-1/1M	All, V-down	3S,3YS	-
K-71TM(Ar+20%CO ₂)	YFW-A50DR	E71T-1M	-	-	3SA, 3YSA	All, V-down	-	All, V-down
K-70T(100%CO ₂)	YFW-C50DM	E70T-1	-	-	-	-	-	-
K-70T(Ar+20%CO ₂)	YFW-A50DM	E70T-1M	-	-	-	-	3S,3YS	-
K-70ST(100%CO ₂)	YFW-C50DR	E70T-1	RSW53G(C1)	Flat	3SA, 3YSA, E70T-1/1M	Flat	3S,3YS,H10	Downhand
K-70LB(100%CO ₂)	YFW-C50DR	E70T-1	RSW53G(C1)HH	Falt	3SA, 3YSA, H10	Flat	-	Downhand

Grade	Welding positions	DNV		NK		BV		GL		CCS		RINA		CWB	TUV	KS	JIS
		Grade	Welding positions	Grade	Welding positions	Grade	Welding positions	Grade	Welding positions	Grade	Welding positions	Grade	Welding positions				
-	-	-	-	KSW53G(M2)	F,H,V-up,V-down	-	-	-	-	-	-	-	-	-	-	-	○
III YMS	All,V-down	-	-	KSW53G(M2)	F,H,V-up,V-down	-	-	-	-	-	-	-	-	○*	○	○	○
III YMS	All,V-down	-	-	KSW53G(C)	All	SA3YM	All,V-down	3YS	All,V-down	3S,3YS	All,V-down	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○
III YMS	All,V-down	-	-	KSW53G(C)	F,H,V-up,V-down	SA3YM	All,V-down	3YS	All,V-down	-	-	-	-	-	-	-	○
III YMS	All,V-down	-	-	KSW53G(M2)	F,H,V-up,V-down	-	-	-	-	-	-	-	-	-	-	-	○
-	-	-	-	KSW53G(C)	F,H,V-up,V-down	-	-	-	-	-	-	-	-	-	-	-	○
III YM	Flat,H-Fil	-	-	KAW53MG(M2)	Flat	A3TM	Flat	3YS	F,H	-	-	-	-	-	-	-	○
-	-	-	-	KSW3Y46G(C)	F,H,V-up,V-down	-	-	-	-	-	-	-	-	-	-	-	○
II Y	Flat	-	-	KAW525PG(C)	Flat	-	-	-	-	-	-	-	-	-	-	-	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
308LM	All,V-down	-	-	-	-	UP	All	-	-	-	-	-	-	-	-	-	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○*
309LM	All,V-down	-	-	-	-	UP	All	-	-	-	-	-	-	-	-	-	-
316LM	All,V-down	-	-	-	-	UP	All	-	-	-	-	-	-	-	-	-	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○*
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○
316LMS	All,V-down	-	-	-	-	UP	Flat,H-Fil	-	-	-	-	-	-	-	-	-	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III YTM	Flat	-	-	KAW53TM	Flat	A3TM,A3YTM	Downhand	3YTM	F	-	-	-	-	-	-	-	-
III YTM	Flat	-	-	KAW53TM	Flat	A3TM,A3YTM	Downhand	3YTM	F	-	-	-	-	-	-	-	-
III YTM	Flat	-	-	KAW53TM	Flat	A3TM,A3YTM	Downhand	3YTM	F	-	-	-	-	-	-	-	-
III YTM	Flat	-	-	KAW53TM	Flat	3TM,3YTM	Downhand	3YM	F	-	-	-	-	-	-	-	-
II Y	Flat	-	-	-	-	-	-	2YM	F	-	-	-	-	-	-	-	-
II YMS	All,V-down	-	-	KSW52G(C)	All,V-down	SA2YM	All,V-down	2YH15S	All,V-down	3S,3YS	All,V-down	2YSHH	All,V-down	○	○	○	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	○*	○	○	○
III YMS(H15)	F,H,V,V-down	-	-	KAW52MPG(Q)H15	F,H,V-up,V-down	SA2YMH	F,H,V-up,V-down	2YH15S	F,H,V-up,V-down	-	-	-	-	-	-	-	○
III YMS(H10)	All,V-down	-	-	KSW53G(C)H10	All,V-down	3S,3YS,H10	All,V-down	3YH10S	All,V-dwon	3S3YS,H10	All,V-down	3YS	All,V-down	-	-	-	○
III YMS	All,V-down	-	-	-	-	3Y,3YS	All,V-down	3YS	All,V-dwon	-	-	-	-	-	-	-	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○
III YMS	All,V-down	-	-	-	-	SA3YM	All,V-down	-	-	-	-	3YSHH	All,V-down	-	-	-	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○*
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○*
III YMS	Flat,H-Fil	-	-	KSW53G(C)	Flat	3S,3YS	Flat,H-Fil	3YS	Flat,H	-	-	-	-	-	-	-	○
III YMS(H10)	Flat,H-Fil	-	-	-	-	-	-	3YH10S	Flat,H	-	-	-	-	-	-	-	○


Approvals

Brand name	KS	AWS	KR		ABS		LR	
			Grade	Welding positions	Grade	Welding positions	Grade	Welding positions
KX-100(100%CO ₂)	YFW-C50DM	E70C-3C	RSW53G(C1)	Flat	2SA,2YSA	Flat	3S,3YS	Downhand
KX-200(100%CO ₂)	YFW-C50DM	E70T-1	RSW53G(C1)	Flat	2SA,2YA,H10	Flat	2S,2YS	Downhand
			RAW53MG(C1)	Flat	3A,3YA,E70T-1	Flat	3M,3YM	Downhand
KX-200(Ar+20%CO ₂)	YFW-A50DM	E70T-1M	-	-	-	-	-	-
KX-200H(100%CO ₂)	YFW-C50DM	E70T-1	RSW53G(C1)HHH	F,H	3SA,3YSA,H5,E70T-1	F,H	3S,3YS,H10	F,H
			RAW53MG(C1)	Flat	3A,3YA,E70T-1	Flat	3M,3YM,H10	Downhand
KX-70CM(Ar+20%CO ₂)	YFW-A50DM	E70C-3M	-	-	2SA,2YSA	Flat	2S,2YS	Downhand
KX-706M(100%CO ₂)	YFW-C502M	E70C-6C	-	-	3SA,3YSA	Flat	3S,3YS	Downhand
KX-706M(Ar+20%CO ₂)	YFW-A502M	E70C-6M	-	-	3SA,3YSA	Flat	3S,3YS	Downhand
KX-706M(Ar+2%CO ₂)	YFW-A502M	E70C-6M	-	-	-	-	-	-
K-NGS	YFW-S50GB	E71T-GS	-	-	-	-	-	-
K-81T(100%CO ₂)	YFW-C602R	E81T1-Ni1	RSW54G(C1)HHH	All,V-down	3SA,4YSA,H5	All,V-down	4YS,H5	All,V-down
K-110TK3(100%CO ₂)	-	E110T1-K3	-	-	E110T1-K3,H5	All,V-down	-	-
K-71UT(100%CO ₂)	YFL-C504R	E71T-1/9J	RSW54G(C1)HHH	All,V-down	3SA,4YSA,H5	All,V-down	4YS, H10	All,V-down
K-71TSR(100%CO ₂)	YFL-504R	E71T-12J	RSW54G(C1)HHH	All,V-down	3SA,4YSA,H5	All,V-down	4YS,H5	All,V-down
K-80TK2(100%CO ₂)	YFL-C506M	E80T1-K2	RSWL3G(C1)HHH	Flat	4YSA,4Y400SA,H5**47J/-60°C	Flat	5Y40S, H10	Downhand
			RAWL3MG(C1)HHH	Flat	4YA,4Y400A,H5**41J/-60°C	Flat	5Y40M, H10	Downhand
K-81TK2(100%CO ₂)	YFL-C506R	E81T1-K2	RSWL3G(C1)HHH	All,V-down	4YSA,400SA,H5**47J/-60°C	All,V-down	5Y40S, H5	All,V-down
K-81TK2/CBM-8061	-	-	RAW53MR(C1)H	F,H,V-up,V-down	3SA,3YSA,H15	F,H,V,V-down	3S,3YS,H15	F,H,V-up,V-down
K-308T(100%CO ₂)	YF308C	E308T0-1	RW308G	All	E308T1-1	All	-	-
K-308LT(100%CO ₂)	YF308LC	E308LT1-1	RW308LG	All	E308LT1-1	All	-	-
K-308LT(Ar+20%CO ₂)	YF308LC	E308LT1-4	-	-	-	-	-	-
K-309T(100%CO ₂)	YF309C	E309T0-1	RW309G	All	E309T1-1	All	SS/CMnS	F,V-up,OH
K-309LT(100%CO ₂)	YF309LC	E309LT1-1	RW309LG	All	E309LT1-1	All	SS/CMnS	All,V-down
K-309LT(Ar+20%CO ₂)	YF309LC	E309LT1-4	-	-	-	-	-	-
K-309MoLT(100%CO ₂)	YF309MoLC	E309LMoT1-1	RW309MOLG (C1)	Downhand	-	-	-	-
K-316T(100%CO ₂)	YF316C	E316T0-1	RW316G	All	E316T1-1	All	-	-
K-316LT(100%CO ₂)	YF316LC	E316LT1-1	RW316LG	All	E316LT1-1	All	-	-
K-316LT(Ar+20%CO ₂)	YF316LC	E316LT1-4	-	-	-	-	-	-
K-317LT(100%CO ₂)	YF317LC	E317LT1-1	-	-	E317LT1-1	Flat	-	-
K-329T(100%CO ₂)	-	E2209T1-1	-	-	A5.22-95,E2209T1-1	All	-	-
K-409TiT(Ar+2%CO ₂)	-	EC409	-	-	E409T0-G	Flat	-	-

Remarks.

- The abbreviations indicate the approval as follows;
 ABS : American Bureau of Shipping BV : Bureau Veritas CCS : China Classification Society CWB : Canadian Welding Bureau
 DNV : Det Norske Veritas GL : Germanischer Lloyd KR : Korean Register of Shipping LR : Lloyd's Register of Shipping NK : Nippon Kaiji Kyokai
 TÜV : Technischen Überwachungs-Vereine
- The abbreviations indicate the welding position as follows;
 F : Flat H : Horizontal H-Fil : Horizontal fillet OH : Overhead V : Vertical VD : Vertical down
- * indicate marketing approvals from the marketing companies.

DNV	NK	BV	GL	CCS		RINA		CWB	TÜV	KS	JIS		
				Grade	Welding positions	Grade	Welding positions						
III YMS	Flat,H-Fil	KSW53G(C)	Flat	SA3YM	Flat	3YS	F	-	-	-	-	○	○
II YMS	Flat	KSW53G(C)	Flat	SA2YM	Flat	3YS	F	3S,3YS	Flat	-	-	○	○
III YM	Flat	KAW53MG(C)	Flat	3M,3YM	Flat	3YM	F	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
II YMS(H5)	F,H,H-Fil	-	-	-	-	3YH5S	F,H	-	-	-	-	○	○
III YM	Flat	-	-	-	-	3YM	F	-	-	-	-	○	○
II YMS	Flat,H-Fil	-	-	SA2,SA2Y	Downhand	2YS	Flat,H	-	-	2YS	F,H-Fil	○	○
III YMS	Flat,H-Fil	-	-	SA3,SA3Y	Downhand	3YS	Flat,H	-	-	3YS	F,H-Fil	○	○
III YMS	Flat,H-Fil	-	-	3S,3YS	Downhand	3YS	Flat,H	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
IVYM(H5)	All,V-down	KSW54G(C)H5	All,V-down	4YS,H5	All,V-down	4YH5S	All,V-down	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
IVYMS(H5)	All,V-down	KSW54G(C)H5	All,V-down	4S,4YS,H5	All,V-down	4YH5S	All,V-down	-	-	-	-	○	○
IVYMS(H5)	All,V-down	KSW54G(C)H5	All,V-down	4YS,H5	All,V-down	4YH5S	All,V-down	-	-	-	-	○	○
IVY40MSH5, -60°C	Flat	KSWL3G(C)H5	Flat	5Y40S,H5	Flat	6Y40H5S	F	-	-	-	-	○	○
IVY40MH5, -60°C	Flat,H-Fil	-	-	5Y40M,H5	Flat	-	-	-	-	-	-	○	○
IVY40MS(H5), -60°C	All,V-down	KSWL3G(C)H5	All,V-down	5Y40S,H5	All,V-down	6Y40H5S	All,V-down	-	-	-	-	○	○
III YMS(H15)	F, H,V,V-down	KAW53MPG(C)H15	F,H,V-up,V-down	SA3YMH	F,H,V-up,V-down	3YH15S	F,H,V-up,V-down	-	-	-	-	○	○
308MS	All	KW308G(C)	F,H,V-up,V-down	UP	All	-	-	-	-	-	-	○	○
-	-	KW308LG(C)	All	UP	All	-	-	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
309MS	All	KW309G(C)	F,H,V-up,V-down	UP	All	-	-	-	-	-	-	○	○
309LMS	All,V-down	KW309LG(C)	All	UP	All	-	-	-	-	309LS	All,V-down	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
316LMS	All,V-down	KW316LG(C)	All	UP	F,H,V-up	-	-	-	-	316LS	All,V-down	○*	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○
-	-	-	-	-	-	-	-	-	-	-	-	○	○



CAUTION

Welding may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases, use the adequate ventilation. The arc is harmful to skin and eyes and please use adequate protection equipment. Attention for electric shock and don't touch to the electric parts.

CAUTIONS FOR CUSTOMER

- ▲ The general data shown on this catalogues of welding consumables, weld metals, is to explain the representative characteristics, not guarantee it except of the on shown of specification.
- ▲ The welding efficiency is depend on the chemical compositions of base metal and welding conditions, the experiences of welder, etc.
- ▲ The loss caused by misunderstanding and using of the technical information shown on this catalogues is up to user.