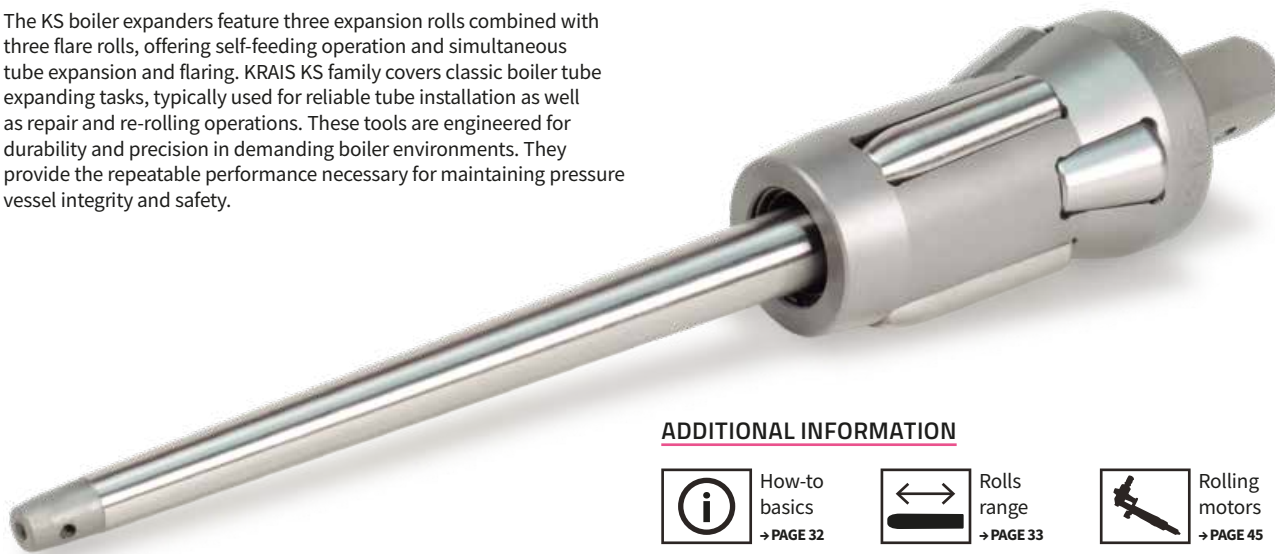


KS Series

The KS boiler expanders feature three expansion rolls combined with three flare rolls, offering self-feeding operation and simultaneous tube expansion and flaring. KRAIS KS family covers classic boiler tube expanding tasks, typically used for reliable tube installation as well as repair and re-rolling operations. These tools are engineered for durability and precision in demanding boiler environments. They provide the repeatable performance necessary for maintaining pressure vessel integrity and safety.



ADDITIONAL INFORMATION



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Tube OD		Tube Gauge	Tool No.	Expansion Range				Rolls			Mandrel			Short Mandrell Set (3 pcs.)			Square
				[mm]		[inch]		No.	Lenght		No.	Length		No.	Length		
[inch]	[mm]	[BWG]		min	max	min	max			[mm]		[inch]			[mm]	[inch]	
1"	25,40	9-11	KS-1942	19,0	22,0	0,75	0,87	RR12RK5/42	42	1,654	TK19	196	7,677	-	-	-	1/2
1"	25,40	13-14	KS-2042	20,0	23,0	0,79	0,91	RR12RK5/42	42	1,654	TK20	196	7,677	-	-	-	1/2
1-1/4"	31,75	7	KS-2242	22,0	25,0	0,87	0,98	RR12RK5/42	42	1,654	TK22	196	7,677	-	-	-	1/2
1-1/4"	31,75	9	KS-2342	23,0	26,0	0,91	1,02	RR13RK6/42	42	1,654	TK23	196	7,677	-	-	-	1/2
1-1/4"	31,75	10	KS-2442	24,0	27,0	0,94	1,06	RR13RK6/42	42	1,654	TK24	196	7,677	-	-	-	1/2
1-1/4"	31,75	11-13	KS-2542	25,0	28,0	0,98	1,10	RR13RK6/42	42	1,654	TK25	196	7,677	-	-	-	1/2
1-1/4"	31,75	12-14	KS-2642	26,0	29,0	1,02	1,14	RR13RK6/42	42	1,654	TK26	196	7,677	-	-	-	1/2
1-1/4"	31,75	14-15	KS-2742	27,0	30,0	1,06	1,18	RR15RK7/42	42	1,654	TK27	196	7,874	-	-	-	1/2
1-1/4"	31,75	16	KS-2842	28,0	32,0	1,10	1,26	RR16RK8/42	42	1,654	TK28	260	10,236	TKK28	175	6,890	3/4
			KS-2850	28,0	32,0	1,10	1,26	RR16RK8/50	50	1,969	TK28	260	10,236	TKK28	175	6,890	3/4
			KS-2860	28,0	32,0	1,10	1,26	RR16RK8/60	60	2,362	TK28	260	10,236	TKK28	175	6,890	3/4
			KS-2880	28,0	32,0	1,10	1,26	RR16RK8/80	80	3,150	TK28	260	10,236	TKK28	175	6,890	3/4
1-1/2"	38,10	7-10	KS-2942	29,0	33,0	1,14	1,30	RR16RK8/42	42	1,654	TK29	260	10,236	TKK29	175	6,890	3/4
			KS-2950	29,0	33,0	1,14	1,30	RR16RK8/50	50	1,969	TK29	260	10,236	TKK29	175	6,890	3/4
			KS-2960	29,0	33,0	1,14	1,30	RR16RK8/60	60	2,362	TK29	260	10,236	TKK29	175	6,890	3/4
			KS-2980	29,0	33,0	1,14	1,30	RR16RK8/80	80	3,150	TK29	260	10,236	TKK29	175	6,890	3/4
1-1/2"	38,10	10-12	KS-3042	30,0	34,0	1,18	1,34	RR16RK8/42	42	1,654	TK30	260	10,236	TKK30	175	6,890	3/4
			KS-3050	30,0	34,0	1,18	1,34	RR16RK8/50	50	1,969	TK30	260	10,236	TKK30	175	6,890	3/4
			KS-3060	30,0	34,0	1,18	1,34	RR16RK8/60	60	2,362	TK30	260	10,236	TKK30	175	6,890	3/4
			KS-3080	30,0	34,0	1,18	1,34	RR16RK8/80	80	3,150	TK30	260	10,236	TKK30	175	6,890	3/4
1-1/2"	38,10	12-14	KS-3242	32,0	36,0	1,26	1,42	RR17RK9/42	42	1,654	TK32	260	10,236	TKK32	175	6,890	3/4
			KS-3250	32,0	36,0	1,26	1,42	RR17RK9/50	50	1,969	TK32	260	10,236	TKK32	175	6,890	3/4
			KS-3260	32,0	36,0	1,26	1,42	RR17RK9/60	60	2,362	TK32	260	10,236	TKK32	175	6,890	3/4
			KS-3280	32,0	36,0	1,26	1,42	RR17RK9/80	80	3,150	TK32	260	10,236	TKK32	175	6,890	3/4
1-1/2"	38,10	13-20	KS-3342	33,0	38,0	1,30	1,50	RP33RR33/42	42	1,654	TK33	290	11,417	TKK33	181	7,126	3/4
			KS-3350	33,0	38,0	1,30	1,50	RP33RR33/50	50	1,969	TK33	290	11,417	TKK33	181	7,126	3/4
			KS-3360	33,0	38,0	1,30	1,50	RP33RR33/60	60	2,362	TK33	290	11,417	TKK33	181	7,126	3/4
			KS-3380	33,0	38,0	1,30	1,50	RP33RR33/80	80	3,150	TK33	290	11,417	TKK33	181	7,126	3/4
1-3/4"	44,45	8-9	KS-3542	35,0	41,0	1,38	1,61	RR21RK35 /42	42	1,654	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3550	35,0	41,0	1,38	1,61	RR21RK35 /50	50	1,969	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3560	35,0	41,0	1,38	1,61	RR21RK35 /60	60	2,362	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3580	35,0	41,0	1,38	1,61	RR21RK35 /80	80	3,150	TK37	310	12,205	TKK37	188	7,402	3/4
1-3/4"	44,45	10-12	KS-3742	37,0	43,0	1,46	1,69	RR22RK10/42	42	1,654	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3750	37,0	43,0	1,46	1,69	RR22RK10/50	50	1,969	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3760	37,0	43,0	1,46	1,69	RR22RK10/60	60	2,362	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3780	37,0	43,0	1,46	1,69	RR22RK10/80	80	3,150	TK37	310	12,205	TKK37	188	7,402	3/4

KS Series

Tube OD		Tube Gauge	Tool No.	Expansion Range				Rolls			Mandrel			Short Mandrell Set (3 pcs.)			Square
				[mm]		[inch]		No.	Lenght		No.	Length		No.	Length		
[inch]	[mm]	[BWG]		min	max	min	max			[mm]		[inch]			[mm]	[inch]	
1-3/4"	44,45	12-18	KS-3942	39,0	45,0	1,54	1,77	RR40RK40/42	42	1,654	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3950	39,0	45,0	1,54	1,77	RR40RK40/50	50	1,969	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3960	39,0	45,0	1,54	1,77	RR40RK40/60	60	2,362	TK37	310	12,205	TKK37	188	7,402	3/4
			KS-3980	39,0	45,0	1,54	1,77	RR40RK40/80	80	3,150	TK37	310	12,205	TKK37	188	7,402	3/4
2"	50,80	7-9	KS-4040	40,0	46,0	1,57	1,81	RR40RK40/40	40	1,575	TK42	310	12,205	TKK42	205	8,071	3/4
			KS-4050	40,0	46,0	1,57	1,81	RR40RK40/50	50	1,969	TK42	310	12,205	TKK42	205	8,071	3/4
			KS-4060	40,0	46,0	1,57	1,81	RR40RK40/60	60	2,362	TK42	310	12,205	TKK42	205	8,071	3/4
			KS-4080	40,0	46,0	1,57	1,81	RR40RK40/80	80	3,150	TK42	310	12,205	TKK42	205	8,071	3/4
2"	50,80	10-13	KS-4240	42,0	48,0	1,65	1,89	RR23RK11/40	40	1,575	TK42	310	12,205	TKK42	205	8,071	3/4
			KS-4250	42,0	48,0	1,65	1,89	RR23RK11/50	50	1,969	TK42	310	12,205	TKK42	205	8,071	3/4
			KS-4260	42,0	48,0	1,65	1,89	RR23RK11/60	60	2,362	TK42	310	12,205	TKK42	205	8,071	3/4
			KS-4280	42,0	48,0	1,65	1,89	RR23RK11/80	80	3,150	TK42	310	12,205	TKK42	205	8,071	3/4
2"	50,80	12-14	KS-4440	44,0	50,0	1,73	1,97	RR23RK11/40	40	1,575	TK44	310	12,205	TKK44	205	8,071	3/4
			KS-4450	44,0	50,0	1,73	1,97	RR23RK11/50	50	1,969	TK44	310	12,205	TKK44	205	8,071	3/4
			KS-4460	44,0	50,0	1,73	1,97	RR23RK11/60	60	2,362	TK44	310	12,205	TKK44	205	8,071	3/4
			KS-4480	44,0	50,0	1,73	1,97	RR23RK11/80	80	3,150	TK44	310	12,205	TKK44	205	8,071	3/4
2"	50,80	15-16	KS-4740	47,0	54,0	1,85	2,13	RR24RK12/40	40	1,575	TK47	340	13,307	TKK47	218	8,583	3/4
			KS-4750	47,0	54,0	1,85	2,13	RR24RK12/50	50	1,969	TK47	340	13,307	TKK47	218	8,583	3/4
			KS-4760	47,0	54,0	1,85	2,13	RR24RK12/60	60	2,362	TK47	340	13,307	TKK47	218	8,583	3/4
			KS-4780	47,0	54,0	1,85	2,13	RR24RK12/80	80	3,150	TK47	340	13,307	TKK47	218	8,583	3/4
2-1/4"	57,15	10-13	KS-4940	49,0	56,0	1,93	2,20	RR24RK12/40	40	1,575	TK49	340	13,307	TKK49	218	8,583	3/4
			KS-4950	49,0	56,0	1,93	2,20	RR24RK12/50	50	1,969	TK49	340	13,307	TKK49	218	8,583	3/4
			KS-4960	49,0	56,0	1,93	2,20	RR24RK12/60	60	2,362	TK49	340	13,307	TKK49	218	8,583	3/4
			KS-4980	49,0	56,0	1,93	2,20	RR24RK12/80	80	3,150	TK49	340	13,307	TKK49	218	8,583	3/4
2-1/4"	57,15	14-16	KS-5240	52,0	59,0	2,05	2,32	RR25RK13/40	40	1,575	TK49	340	13,307	TKK49	218	8,583	3/4
			KS-5250	52,0	59,0	2,05	2,32	RR25RK13/50	50	1,969	TK49	340	13,307	TKK49	218	8,583	3/4
			KS-5260	52,0	59,0	2,05	2,32	RR25RK13/60	60	2,362	TK49	340	13,307	TKK49	218	8,583	3/4
			KS-5280	52,0	59,0	2,05	2,32	RR25RK13/80	80	3,150	TK49	340	13,307	TKK49	218	8,583	3/4
2-1/2"	63,50	8-13	KS-5440	54,0	62,0	2,13	2,44	RR26RK14/40	40	1,575	TK54	375	14,764	TKK54	230	9,055	3/4
			KS-5450	54,0	62,0	2,13	2,44	RR26RK14/50	50	1,969	TK54	375	14,764	TKK54	230	9,055	3/4
			KS-5460	54,0	62,0	2,13	2,44	RR26RK14/60	60	2,362	TK54	375	14,764	TKK54	230	9,055	3/4
			KS-5480	54,0	62,0	2,13	2,44	RR26RK14/80	80	3,150	TK54	375	14,764	TKK54	230	9,055	3/4
2-1/2"	63,50	12-16	KS-5740	57,0	66,0	2,24	2,60	RR27RK15/40	40	1,575	TK57	395	15,551	TKK57	235	9,252	3/4
			KS-5750	57,0	66,0	2,24	2,60	RR27RK15/50	50	1,969	TK57	395	15,551	TKK57	235	9,252	3/4
			KS-5760	57,0	66,0	2,24	2,60	RR27RK15/60	60	2,362	TK57	395	15,551	TKK57	235	9,252	3/4
			KS-5780	57,0	66,0	2,24	2,60	RR27RK15/80	80	3,150	TK57	395	15,551	TKK57	235	9,252	3/4
2-3/4"	69,85	7-11	KS-6040	60,0	69,0	2,36	2,72	RR28RK16/40	40	1,575	TK57	395	15,551	TKK57	235	9,252	3/4
			KS-6050	60,0	69,0	2,36	2,72	RR28RK16/50	50	1,969	TK57	395	15,551	TKK57	235	9,252	3/4
			KS-6060	60,0	69,0	2,36	2,72	RR28RK16/60	60	2,362	TK57	395	15,551	TKK57	235	9,252	3/4
			KS-6080	60,0	69,0	2,36	2,72	RR28RK16/80	80	3,150	TK57	395	15,551	TKK57	235	9,252	3/4
3"	76,20	7-8	KS-6540	65,0	74,0	2,56	2,91	RR29RK17/40	40	1,575	TK65	395	15,551	TKK65	235	9,252	3/4
			KS-6550	65,0	74,0	2,56	2,91	RR29RK17/50	50	1,969	TK65	395	15,551	TKK65	235	9,252	3/4
			KS-6560	65,0	74,0	2,56	2,91	RR29RK17/60	60	2,362	TK65	395	15,551	TKK65	235	9,252	3/4
			KS-6580	65,0	74,0	2,56	2,91	RR29RK17/80	80	3,150	TK65	395	15,551	TKK65	235	9,252	3/4
3"	76,20	10-14	KS-6840	68,0	77,0	2,68	3,03	RR30RK18/40	40	1,575	TK72	403	15,866	TKK72	255	10,039	1
			KS-6850	68,0	77,0	2,68	3,03	RR30RK18/50	50	1,969	TK72	403	15,866	TKK72	255	10,039	1
			KS-6860	68,0	77,0	2,68	3,03	RR30RK18/60	60	2,362	TK72	403	15,866	TKK72	255	10,039	1
			KS-6880	68,0	77,0	2,68	3,03	RR30RK18/80	80	3,150	TK72	403	15,866	TKK72	255	10,039	1
3-1/4"	82,55	7-11	KS-7240	72,0	81,0	2,83	3,19	RR31RK19/40	40	1,575	TK72	403	15,866	TKK72	255	10,039	1
			KS-7250	72,0	81,0	2,83	3,19	RR31RK19/50	50	1,969	TK72	403	15,866	TKK72	255	10,039	1
			KS-7260	72,0	81,0	2,83	3,19	RR31RK19/60	60	2,362	TK72	403	15,866	TKK72	255	10,039	1
			KS-7280	72,0	81,0	2,83	3,19	RR31RK19/80	80	3,150	TK72	403	15,866	TKK72	255	10,039	1
3-1/4"	82,55	15-16	KS-7740	77,0	87,0	3,03	3,43	RR32RK20/40	40	1,575	TK77	422	16,614	TKK77	255	10,039	1
			KS-7750	77,0	87,0	3,03	3,43	RR32RK20/50	50	1,969	TK77	422	16,614	TKK77	255	10,039	1
			KS-7760	77,0	87,0	3,03	3,43	RR32RK20/60	60	2,362	TK77	422	16,614	TKK77	255	10,039	1
			KS-7780	77,0	87,0	3,03	3,43	RR32RK20/80	80	3,150	TK77	422	16,614	TKK77	255	10,039	1

Tube OD		Tube Gauge	Tool No.	Expansion Range				Rolls			Mandrel			Short Mandrell Set (3 pcs.)			Square
				[mm]		[inch]		No.	Lenght		No.	Length		No.	Length		
[inch]	[mm]	[BWG]		min	max	min	max		[mm]	[inch]		[mm]	[inch]		[mm]	[inch]	[mm]
3-1/2"	88,90	10-13	KS-8240	82,0	92,0	3,23	3,62	RR33RK21/40	40	1,575	TK82	422	16,614	TKK82	255	10,039	1
			KS-8250	82,0	92,0	3,23	3,62	RR33RK21/50	50	1,969	TK82	422	16,614	TKK82	255	10,039	1
			KS-8260	82,0	92,0	3,23	3,62	RR33RK21/60	60	2,362	TK82	422	16,614	TKK82	255	10,039	1
			KS-8280	82,0	92,0	3,23	3,62	RR33RK21/80	80	3,150	TK82	422	16,614	TKK82	255	10,039	1
3-3/4"	95,25	8-12	KS-8640	86,0	96,0	3,39	3,78	RR34RK22/40	40	1,575	TK86	422	16,614	TKK86	255	10,039	1
			KS-8650	86,0	96,0	3,39	3,78	RR34RK22/50	50	1,969	TK86	422	16,614	TKK86	255	10,039	1
			KS-8660	86,0	96,0	3,39	3,78	RR34RK22/60	60	2,362	TK86	422	16,614	TKK86	255	10,039	1
			KS-8680	86,0	96,0	3,39	3,78	RR34RK22/80	80	3,150	TK86	422	16,614	TKK86	255	10,039	1
4"	101,60	9-12	KS-9040	90,0	100,0	3,54	3,94	RR34RK22/40	40	1,575	TK90	422	16,614	TKK90	275	10,827	1
			KS-9050	90,0	100,0	3,54	3,94	RR34RK22/50	50	1,969	TK90	422	16,614	TKK90	275	10,827	1
			KS-9060	90,0	100,0	3,54	3,94	RR34RK22/60	60	2,362	TK90	422	16,614	TKK90	275	10,827	1
			KS-9080	90,0	100,0	3,54	3,94	RR34RK22/80	80	3,150	TK90	422	16,614	TKK90	275	10,827	1
4"	101,60	16	KS-9640	96,0	106,0	3,78	4,17	RR35RK23/40	40	1,575	TK96	422	16,614	TKK96	275	10,827	1
			KS-9650	96,0	106,0	3,78	4,17	RR35RK23/50	50	1,969	TK96	422	16,614	TKK96	275	10,827	1
			KS-9660	96,0	106,0	3,78	4,17	RR35RK23/60	60	2,362	TK96	422	16,614	TKK96	275	10,827	1
			KS-9680	96,0	106,0	3,78	4,17	RR35RK23/80	80	3,150	TK96	422	16,614	TKK96	275	10,827	1

* 100 mm roll length made to order only if technically possible