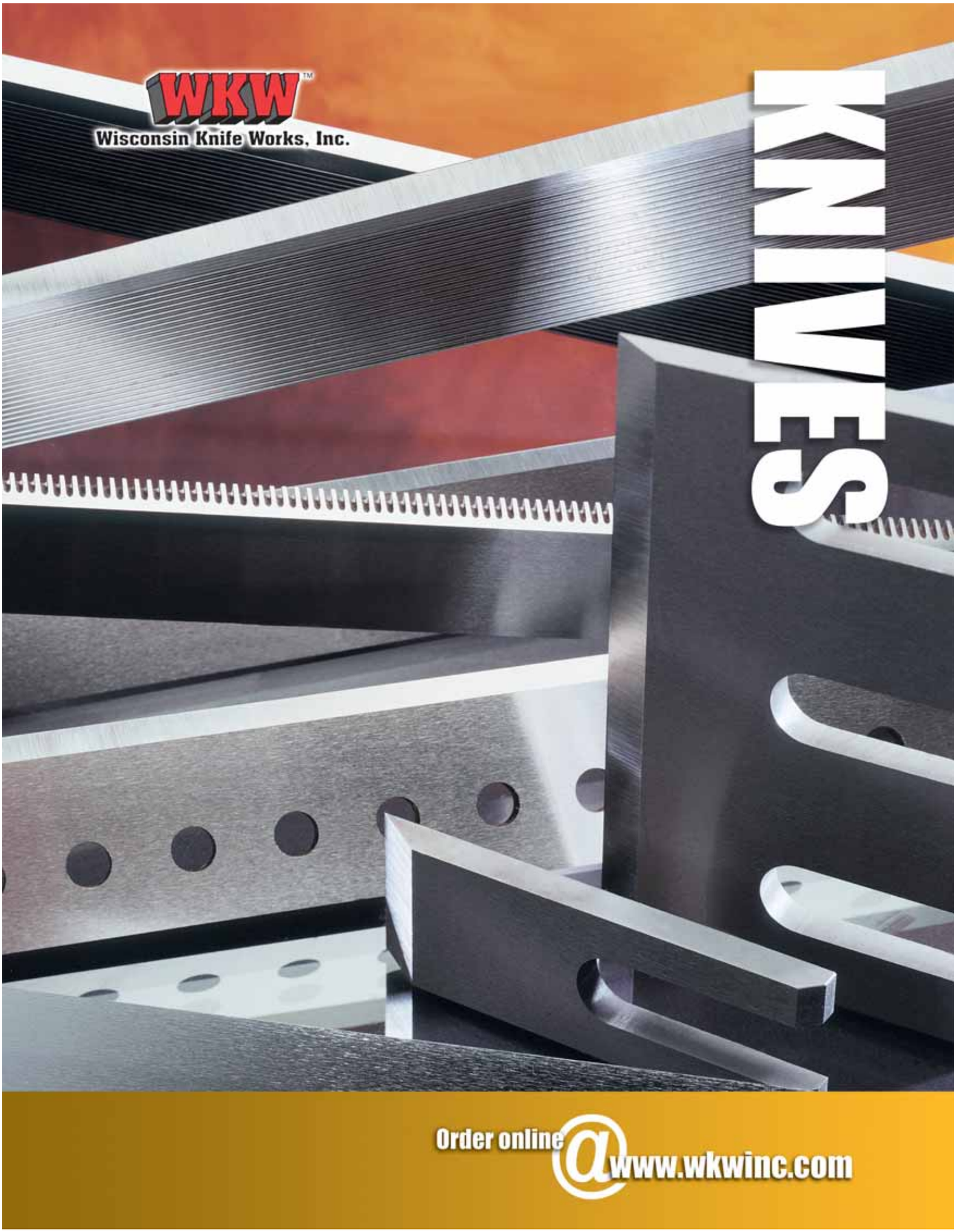
36094JBA_Sec2_Layout 1 6/17/10 12:21 PM Page 1



36094JBA_Sec2_Layout 1 6/17/10 12:21 PM Page 2

BAK-PAK® AND EURO BAK-PAK™ CARBIDE KNIFE SYSTEMS

Wisconsin Knife Works BAK-PAK® and EURO BAK-PAK™ carbide knife systems are the ideal solution for a multitude of moulding applications from MDF and glued materials to natural woods. Wisconsin Knife Works now offers two corrugations systems, a fully corrugated system (BAK-PAK) and a system utilizing micro corrugations (EURO BAK-PAK). Both systems are made from premium C-3 micro grain carbide for ultimate wear resistance and performance.

Total thickness of the carbide and the steel backer for both BAK-PAK and EURO BAK-PAK is 10 mm (.394) allowing either system to be used in any 60 degree corrugated head that will accept 3/8" or 10 mm knives.

38 MM BAK-PAK® AND EURO BAK-PAK™ CARBIDE KNIFE SYSTEMS

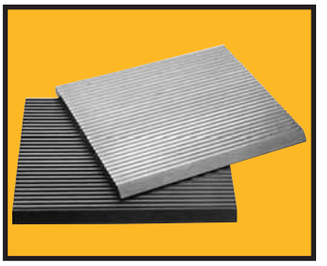
BAK-PAK SET PART NUMBER	BAK-PAK CARBIDE ONLY PART NUMBER	LENGTH mm	WIDTH mm	EURO BAK-PAK SET PART NUMBER	EURO BAK-PAK CARBIDE ONLY PART NUMBER
40510	40511	10	38	41510	41511
40514	40515	20	38	41514	41515
40518	40519	30	38	41518	41519
40522	40523	40	38	41522	41523
40526	40527	50	38	41526	41527
40530	40531	60	38	41530	41531
40534	40535	70	38	41534	41535
40538	40539	80	38	41538	41539
40542	40543	90	38	41542	41543
40546	40547	100	38	41546	41547
40550	40551	110	38	41550	41551
40554	40555	120	38	41554	41555
40558	40559	130	38	41558	41559
40562	40563	140	38	41562	41563
40566	40567	150	38	41566	41567
40570	40571	160	38	41570	41571
40574	40575	170	38	41574	41575
40578	40579	180	38	41578	41579
40582	40583	190	38	41582	41583
40586	40587	200	38	41586	41587
40590	40591	210	38	41590	41591
40594	40595	220	38	41594	41595
40598	40599	230	38	41598	41599

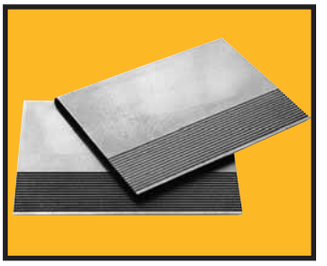
Note: *Please see WKW's price list for a complete listing of part numbers and pricing for backers.*

Carbide Thickness -1/8"

Backer Thickness – 17/64"

Total Thickness – 25/64"





50 MM BAK-PAK® AND EURO BAK-PAK™ CARBIDE KNIFE SYSTEMS

BAK-PAK SET PART NUMBER	BAK-PAK CARBIDE ONLY PART NUMBER	LENGTH mm	WIDTH mm	EURO BAK-PAK SET PART NUMBER	EURO BAK-PAK CARBIDE ONLY PART NUMBER
40310	40311	10	50	41310	41311
40314	40315	20	50	41314	41315
40318	40319	30	50	41318	41319
40322	40323	40	50	41322	41323
40326	40327	50	50	41326	41327
40330	40331	60	50	41330	41331
40334	40335	70	50	41334	41335
40338	40339	80	50	41338	41339
40342	40343	90	50	41342	41343
40346	40347	100	50	41346	41347
40350	40351	110	50	41350	41351
40354	40355	120	50	41354	41355
40358	40359	130	50	41358	41359
40362	40363	140	50	41362	41363
40366	40367	150	50	41366	41367
40370	40371	160	50	41370	41371
40374	40375	170	50	41374	41375
40378	40379	180	50	41378	41379
40382	40383	190	50	41382	41383
40386	40387	200	50	41386	41387
40390	40391	210	50	41390	41391
40394	40395	220	50	41394	41395
40398	40399	230	50	41398	41399

Note: *Please see WKW's price list for a complete listing of part numbers and pricing for backers.*

36094JBA_Sec2_Layout 1 6/17/10 12:21 PM Page 3

BAK-PAK® Grinding Instructions

Best results are obtained by rough grinding the carbide with a 100 to 120 grit diamond wheel and the finish grinding with a grit of 220 to 320 or finer. 3,000 RPM will generally give the best results when both rough and finish grinding. Best results are obtained with a bevel on the carbide of 45 to 50 degrees and a bevel on the steel backer of 35 to 40 degrees.

Jointing may be accomplished by using a 150 to 230 grit aluminum oxide stone.

60 MM BAK-PAK® AND EURO BAK-PAK™ CARBIDE KNIFE SYSTEMS

BAK-PAK SET PART NUMBER	BAK-PAK CARBIDE ONLY PART NUMBER	LENGTH mm	WIDTH mm	EURO BAK-PAK SET PART NUMBER	EURO BAK-PAK CARBIDE ONLY PART NUMBER
40410	40411	10	60	41410	41411
40414	40415	20	60	41414	41415
40418	40419	30	60	41418	41419
40422	40423	40	60	41422	41423
40426	40427	50	60	41426	41427
40430	40431	60	60	41430	41431
40434	40435	70	60	41434	41435
40438	40439	80	60	41438	41439
40442	40443	90	60	41442	41443
40446	40447	100	60	41446	41447
40450	40451	110	60	41450	41451
40454	40455	120	60	41454	41455
40458	40459	130	60	41458	41459
40462	40463	140	60	41462	41463
40466	40467	150	60	41466	41467
40470	40471	160	60	41470	41471
40474	40475	170	60	41474	41475
40478	40479	180	60	41478	41479
40482	40483	190	60	41482	41483
40486	40487	200	60	41486	41487
40490	40491	210	60	41490	41491
40494	40495	220	60	41494	41495
40498	40499	230	60	41498	41499

Note: *Please see WKW's price list for a complete listing of part numbers and pricing for backers.*

70 MM BAK-PAK® CARBIDE KNIFE SYSTEM

BAK-PAK SET PART NUMBER	BAK-PAK CARBIDE ONLY PART NUMBER	LENGTH mm	WIDTH mm
40810	40811	10	70
40814	40815	20	70
40818	40819	30	70
40822	40823	40	70
40826	40827	50	70
40830	40831	60	70
40834	40835	70	70
40838	40839	80	70
40842	40843	90	70
40846	40847	100	70
40850	40851	110	70
40854	40855	120	70
40858	40859	130	70
40862	40863	140	70
40866	40867	150	70
40870	40871	160	70
40874	40875	170	70
40878	40879	180	70

Note: *Please see WKW's price list for a complete listing of part numbers and pricing for backers.*

DELRIN® FILLER STRIPS

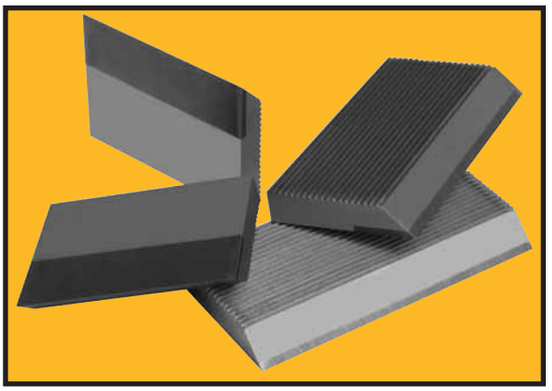
Order your Delrin® filler strips now for grinding BAK-PAK® carbide if your current grinding abrasives cannot grind carbide and steel together.

PART NUMBER	LENGTH	WIDTH	THICKNESS
40700	180 MM	1-1/2	3/32
40701	230 MM	1-1/2	3/32
40711	230 MM	2	3/32
40713	230 MM	2-1/2	3/32

36094JBA_Sec2_Layout 1 6/17/10 12:21 PM Page 4

CORRUGATED CARBIDE INLAYED KNIVES

Corrugated Carbide Inlayed Knives are used in applications where longer cutting edge life is required over premium steel. Applications include man-made materials, wood materials with glue lines and natural hard woods with abrasive characteristics. Corrugated Carbide Inlayed Knives are manufactured with a 45° bevel and 16-60° corrugations.



32mm WIDE 15mm INLAY		38mm WIDE 15mm INLAY		45mm WIDE 20mm INLAY		50mm WIDE 25mm INLAY		60mm WIDE 35mm INLAY	
PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm
44010	10	44210	10	44410	10	44610	10	44927	317.5
44014	20	44214	20	44414	20	44614	20	44929	10
44018	30	44218	30	44418	30	44618	30	44931	20
44022	40	44222	40	44422	40	44622	40	44933	30
44026	50	44226	50	44426	50	44626	50	44935	40
44030	60	44230	60	44430	60	44630	60	44937	50
44034	70	44234	70	44434	70	44634	70	44939	60
44038	80	44238	80	44438	80	44638	80	44940	70
44042	90	44242	90	44442	90	44642	90	44943	80
44046	100	44246	100	44446	100	44646	100	44945	90
44050	110	44250	110	44450	110	44650	110	44947	100
44054	120	44254	120	44454	120	44654	120	44949	110
44058	130	44258	130	44458	130	44658	130	44951	120
44062	140	44262	140	44462	140	44662	140	44953	130
44066	150	44266	150	44466	150	44666	150	44950	140
44070	160	44270	160	44470	160	44670	160	44957	150
44074	170	44274	170	44474	170	44674	170	44959	160
44078	180	44278	180	44478	180	44678	180	44961	170
44082	190	44282	190	44482	190	44682	190	44963	180
44086	200	44286	200	44486	200	44686	200	44965	190
44090	210	44290	210	44490	210	44690	210	44967	200
44094	220	44294	220	44494	220	44694	220	44969	210
44098	230	44298	230	44498	230	44698	230	44971	220
44099	240	44299	240	44499	240	44699	240	44973	230
44001	635	44201	635	44401	635	44601	635	44975	240

Note: *All corrugated carbide inlayed knives have a thickness of 8mm. Lengths between 240mm and 635mm are available. Please contact WKW for prices.*

SOLID CARBIDE KNIVES 45° BEVEL

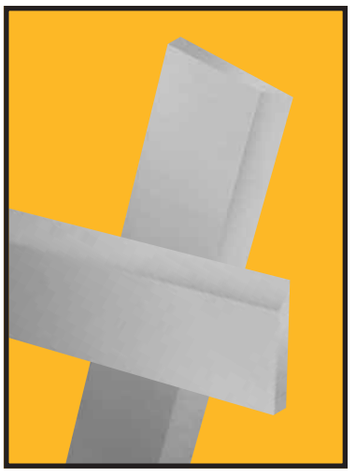
PART NUMBER	LENGTH	WIDTH	THICKNESS
40208	6	5/8	1/8
40209	6	3/4	1/8
40215	8	5/8	1/8
40216	8	3/4	1/8

Other sizes available upon request.

36094JBA_Sec2_Layout 1 6/17/10 12:21 PM Page 5

Carbide Inlayed Thin Knives are used in applications where longer cutting edge life is required over premium steel. Applications include man-made materials, wood materials with glue lines and natural hardwoods with abrasive characteristics.

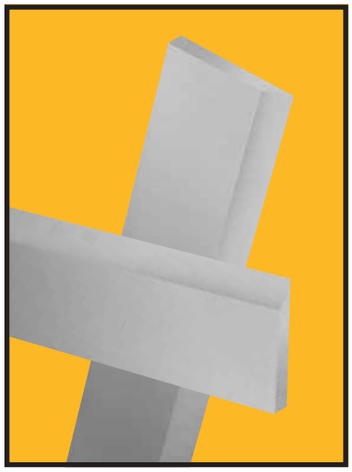
25mm WIDE 3mm THICKNESS 10mm INLAY		30mm WIDE 3mm THICKNESS 10mm INLAY		35mm WIDE 3mm THICKNESS 10mm INLAY		38mm WIDE 6mm THICKNESS 10mm INLAY	
PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm
45103	640	45205	650	45305	650	45502	610
45107	10	45207	10	45307	10	45707	10
45109	20	45209	20	45309	20	45709	20
45111	30	45211	30	45311	30	45711	30
45113	40	45213	40	45313	40	45713	40
45115	50	45215	50	45315	50	45715	50
45117	60	45217	60	45317	60	45717	60
45119	70	45219	70	45319	70	45719	70
45121	80	45221	80	45321	80	45721	80
45123	90	45223	90	45323	90	45723	90
45125	100	45225	100	45325	100	45725	100
45127	110	45227	110	45327	110	45727	110
45129	120	45229	120	45329	120	45729	120
45131	130	45231	130	45331	130	45731	130
45133	140	45233	140	45333	140	45733	140
45135	150	45235	150	45335	150	45735	150
45137	160	45237	160	45337	160	45737	160
45139	170	45239	170	45339	170	45739	170
45141	180	45241	180	45341	180	45741	180
45143	190	45243	190	45343	190	45743	190
45145	200	45245	200	45345	200	45745	200
45147	210	45247	210	45347	210	45747	210
45149	220	45249	220	45349	220	45749	220
45151	230	45251	230	45351	230	45751	230
45153	240	45253	240	45353	240	45753	240



36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 6

CARBIDE INLAYED THIN KNIVES

Carbide Inlayed Thin Knives are used in applications where longer cutting edge life is required over premium steel. Applications include man-made materials, wood materials with glue lines and natural hardwoods with abrasive characteristics.



32mm WIDE 8mm THICKNESS 15mm INLAY		38mm WIDE 8mm THICKNESS 15mm INLAY		45mm WIDE 8mm THICKNESS 20mm INLAY		50mm WIDE 8mm THICKNESS 25mm INLAY	
PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm	PART NUMBER	LENGTH mm
44001	635	44201	635	44401	635	44601	635
44010	10	44210	10	44410	10	44610	10
44014	20	44214	20	44414	20	44614	20
44018	30	44218	30	44418	30	44618	30
44022	40	44222	40	44422	40	44622	40
44026	50	44226	50	44426	50	44626	50
44030	60	44230	60	44430	60	44630	60
44034	70	44234	70	44434	70	44634	70
44038	80	44238	80	44438	80	44638	80
44042	90	44242	90	44442	90	44642	90
44046	100	44246	100	44446	100	44646	100
44050	110	44250	110	44450	110	44650	110
44054	120	44254	120	44454	120	44654	120
44058	130	44258	130	44458	130	44658	130
44062	140	44262	140	44462	140	44662	140
44066	150	44266	150	44466	150	44666	150
44070	160	44270	160	44470	160	44670	160
44074	170	44274	170	44474	170	44674	170
44078	180	44278	180	44478	180	44678	180
44082	190	44282	190	44482	190	44682	190
44086	200	44286	200	44486	200	44686	200
44090	210	44290	210	44490	210	44690	210
44094	220	44294	220	44494	220	44694	220
44098	230	44298	230	44498	230	44698	230
44099	240	44299	240	44499	240	44699	240

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 7

Wisconsin Knife Works has manufactured woodworking knives for over eighty years. In fact, knives were our first and most important product, as our name implies. For reliable, long lasting knives at a competitive price look to Wisconsin Knife Works, the #1 company for quality cutting tools.

Precision grinding and machining to tight tolerances, heat-treating for long life, and custom machining for special knife patterns are just some of our manufacturing capabilities. Knives are 100% inspected for tight tolerance, conformity, craftsmanship and material. Uniform thickness allows for reduced balance and set-up time. Wisconsin Knife Works has a diverse inventory of standard stock knives for immediate delivery. Custom knives made to order.

HIGH-SPEED STEEL THIN KNIVES 35° BEVEL

Lumber and woodworking plants the world over specify M-2 High-Speed Steel knives to produce the finest finish cuts in planer, jointer, moulder and tenoner operations. The consistent hardness and high molybdenum content give an excellent edge and allows for easy grinding. High-Speed Steel is ideal for medium to long runs. Use Wisconsin Knife Works BAK-PAK® and Carbide Inlayed Knives when cutting abrasive materials.

PART NUMBER	LENGTH	WIDTH	THICKNESS
42000	25	3/4	1/8
42004	25	7/8	1/8
42006	25	1	1/8
42012	25	1-1/8	1/8
42018	25	1-1/4	1/8
42019	31	1-1/4	1/8
42021	36	1-1/4	1/8
42026	25	1-3/8	1/8
42027	31	1-3/8	1/8
42029	36	1-3/8	1/8
42034	25	1-1/2	1/8
42035	31	1-1/2	1/8
42037	36	1-1/2	1/8
42058	25	1-1/4	5/32
42059	31	1-1/4	5/32
42061	36	1-1/4	5/32
42066	25	1-1/2	5/32
42067	31	1-1/2	5/32
42069	36	1-1/2	5/32
42074	25	1-3/4	5/32
42075	31	1-3/4	5/32
42077	36	1-3/4	5/32
42078	31	1-7/8	5/32
*42079	7-1/2	2	5/32
*42080	12	2	5/32
*42081	15	2	5/32
42082	25	2	5/32
42083	31	2	5/32
42085	36	2	5/32

WKW can cut knives to other lengths upon request.

*These knives have a 30° bevel.

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 8

OPTI® THIN KNIVES 45° BEVEL

An exclusive product offered by Wisconsin Knife Works, this is a knife "specially treated" in a state-of-the-art process that produces an ultra-hard surface which, unlike coating, will not chip, flake, or peel. It is specifically designed for natural woods where you want to obtain the finish of High-Speed Steel tooling, but want up to 50% or more longer life.

OPTI® Knife Grinding Instructions
When grinding WKW's exclusive OPTI® knife, the procedure is the same as on regular steel knives with a couple of exceptions. The best results are achieved when the knife is ground to a 45° or 50° bevel, or in other words, a more "blunt" bevel that leaves more knife material at the cutting edge. On most profile grinders, this is obtained by setting the clearance angle on the grinder at either 35° or 30° for a 10° hook angle head or by setting the clearance angle at 25° to 20° for a 20° hook angle head.

In addition, it is important to be careful not to chip the cutting edge on the OPTI® knife as it is much harder than conventional tool steels. A better finish will be obtained on OPTI® knives if the grinding wheel RPM is increased by 500 RPM above the normal tool steels for the rough and finish grind. Be sure, however, to check with your wheel manufacturer and never exceed maximum recommended RPM.

Never grind or hone the face on OPTI® knives as this may remove ultra hard surface of the knife.

WKW can cut knives to other lengths upon request.

PART NUMBER	LENGTH	WIDTH	THICKNESS
46602	25	3/4	1/8
46606	25	1	1/8
46654	31	1-1/4	5/32
46660	31	1-1/2	5/32
46666	31	1-3/4	5/32
46672	31	2	5/32

AKM THIN KNIVES 35° BEVEL

AKM is an excellent alternative to the M-2 with similar characteristics. Excellent for medium to short runs, but often performs as well as M-2 in some applications.

PART NUMBER	LENGTH	WIDTH	THICKNESS
46240	25	5/8	1/8
46241	25	11/16	1/8
46242	25	3/4	1/8
46244	25	7/8	1/8
46246	25	1	1/8
46248	25	1-1/8	1/8
46250	25	1-1/4	1/8
46256	25	1-3/8	1/8
*46258	25	2	5/32
46282	31	1-1/4	5/32
46288	31	1-1/2	5/32
46294	31	1-3/4	5/32
46300	31	2	5/32
*46302	31	2	5/32

**46258 & 46302 have 30° bevels.*

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 9

KARBO-KROME® THIN KNIVES 30° BEVEL

Karbo-Krome® is a high-carbon, high-chrome knife steel particularly favored on the West Coast where moisture content and acid conditions are troublesome with other types of steel. Typically not recommended for use on dry hardwoods.

PART NUMBER	LENGTH	WIDTH	THICKNESS
42167	31	1-1/2	5/32
42175	31	1-3/4	5/32
42180	25	2	5/32
42182	15	2	5/32
42183	31	2	5/32
*42183SB	31	2	5/32
42190	31	2-1/4	5/32
42198	31	2-1/2	5/32

**42183SB are sandblasted on one side.*

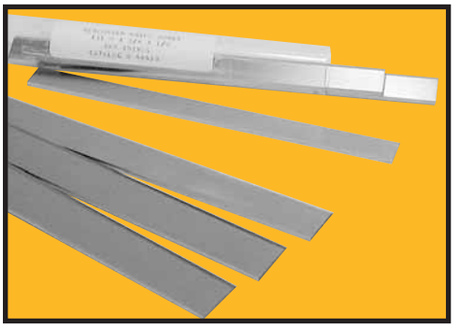
WKW can cut knives to other lengths upon request.

HIGH-SPEED STEEL JOINTER & PLANER KNIFE SETS

Many additional size sets available on a custom basis. Call Wisconsin Knife Works for pricing and lead times.

PART NUMBER	LENGTH	WIDTH	THICK-NESS	# OF KNIVES	MACHINE
46700	6-1/8	19/32	3/32	3	DELTA
46714	6	5/8	1/8	3	ROCKWELL/DELTA
46730	6	3/4	1/8	3	POWERMATIC
46702	8-1/16	5/8	3/32	3	DELTA
46722	8	5/8	1/8	3	ROCKWELL/DELTA
46738	8	3/4	1/8	3	POWERMATIC
46756	13-1/8	1	1/8	3	ROCKWELL/DELTA
*46802	13-1/8	11/16	5/32	3	ROCKWELL/DELTA
46760	15	1	1/8	3	VARIOUS
46810	18-1/4	1-1/4	5/32	3	POWERMATIC

** Knives are notched on ends.*

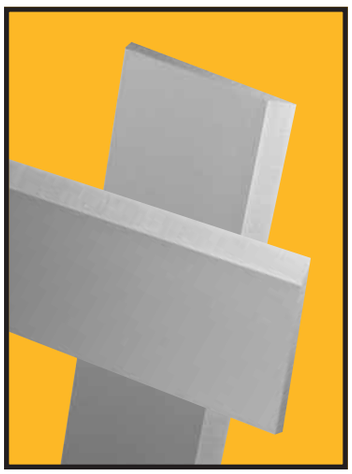


WKW can provide other lengths and widths of jointer and planer knife sets. Please contact WKW for details.

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 10

VALUE EDGE M2 THIN KNIVES

WKW is pleased to offer a cost competitive knife for applications where a 'value' priced knife is appropriate. Value Edge M2 Thin Knives are manufactured in our plant in Beloit, Wisconsin and are made using quality materials and our stringent in-house heat treat process yielding consistent quality knives, order after order.



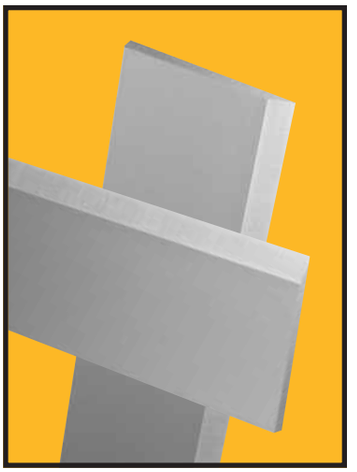
1-1/2 WIDE 5/32 THICKNESS		1-3/4 WIDE 5/32 THICKNESS		2 WIDE 5/32 THICKNESS	
PART NUMBER	LENGTH	PART NUMBER	LENGTH	PART NUMBER	LENGTH
VE067030	3	VE075030	3	VE083030	3
VE067035	3.5	VE075035	3.5	VE083035	3.5
VE067040	4	VE075040	4	VE083040	4
VE067045	4.5	VE075045	4.5	VE083045	4.5
VE067050	5	VE075050	5	VE083050	5
VE067055	5.5	VE075055	5.5	VE083055	5.5
VE067060	6	VE075060	6	VE083060	6
VE067065	6.5	VE075065	6.5	VE083065	6.5
VE067070	7	VE075070	7	VE083070	7
VE067075	7.5	VE075075	7.5	VE083075	7.5
VE067080	8	VE075080	8	VE083080	8
VE067085	8.5	VE075085	8.5	VE083085	8.5
VE067090	9	VE075090	9	VE083090	9
VE067095	9.5	VE075095	9.5	VE083095	9.5
VE067100	10	VE075100	10	VE083100	10
VE067105	10.5	VE075105	10.5	VE083105	10.5
VE067110	11	VE075110	11	VE083110	11
VE067115	11.5	VE075115	11.5	VE083115	11.5
VE067120	12	VE075120	12	VE083120	12
VE067125	12.5	VE075125	12.5	VE083125	12.5
VE067130	13	VE075130	13	VE083130	13
VE067135	13.5	VE075135	13.5	VE083135	13.5
VE067140	14	VE075140	14	VE083140	14
VE067145	14.5	VE075145	14.5	VE083145	14.5
VE067150	15	VE075150	15	VE083150	15
VE067155	15.5	VE075155	15.5	VE083155	15.5
VE067160	16	VE075160	16	VE083160	16
VE067165	16.5	VE075165	16.5	VE083165	16.5
VE067170	17	VE075170	17	VE083170	17
VE067175	17.5	VE075175	17.5	VE083175	17.5
VE067180	18	VE075180	18	VE083180	18
VE067185	18.5	VE075185	18.5	VE083185	18.5
VE067190	19	VE075190	19	VE083190	19
VE067195	19.5	VE075195	19.5	VE083195	19.5
VE067200	20	VE075200	20	VE083200	20
VE067205	20.5	VE075205	20.5	VE083205	20.5
VE067210	21	VE075210	21	VE083210	21
VE067215	21.5	VE075215	21.5	VE083215	21.5
VE067220	22	VE075220	22	VE083220	22
VE067225	22.5	VE075225	22.5	VE083225	22.5
VE067230	23	VE075230	23	VE083230	23
VE067235	23.5	VE075235	23.5	VE083235	23.5
VE067240	24	VE075240	24	VE083240	24
VE067245	24.5	VE075245	24.5	VE083245	24.5
VE067250	25	VE075250	25	VE083250	25
VE067255	25.5	VE075255	25.5	VE083255	25.5
VE067260	26	VE075260	26	VE083260	26
VE067265	26.5	VE075265	26.5	VE083265	26.5
VE067270	27	VE075270	27	VE083270	27
VE067275	27.5	VE075275	27.5	VE083275	27.5
VE067280	28	VE075280	28	VE838280	28
VE067285	28.5	VE075285	28.5	VE083285	28.5
VE067290	29	VE075290	29	VE083290	29
VE067295	29.5	VE075295	29.5	VE083295	29.5
VE067300	30	VE075300	30	VE083300	30
VE067305	30.5	VE075305	30.5	VE083305	30.5
VE067310	31	VE075310	31	VE083310	31

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 11

VALUE EDGE D2 THIN KNIVES

1-1/2 WIDE 5/32 THICKNESS		1-3/4 WIDE 5/32 THICKNESS		2 WIDE 5/32 THICKNESS	
PART NUMBER	LENGTH	PART NUMBER	LENGTH	PART NUMBER	LENGTH
VE167030	3	VE175030	3	VE183030	3
VE167035	3.5	VE175035	3.5	VE183035	3.5
VE167040	4	VE175040	4	VE183040	4
VE167045	4.5	VE175045	4.5	VE183045	4.5
VE167050	5	VE175050	5	VE183050	5
VE167055	5.5	VE175055	5.5	VE183055	5.5
VE167060	6	VE175060	6	VE183060	6
VE167065	6.5	VE175065	6.5	VE183065	6.5
VE167070	7	VE175070	7	VE183070	7
VE167075	7.5	VE175075	7.5	VE183075	7.5
VE167080	8	VE175080	8	VE183080	8
VE167085	8.5	VE175085	8.5	VE183085	8.5
VE167090	9	VE175090	9	VE183090	9
VE167095	9.5	VE175095	9.5	VE183095	9.5
VE167100	10	VE175100	10	VE183100	10
VE167105	10.5	VE175105	10.5	VE183105	10.5
VE167110	11	VE175110	11	VE183110	11
VE167115	11.5	VE175115	11.5	VE183115	11.5
VE167120	12	VE175120	12	VE183120	12
VE167125	12.5	VE175125	12.5	VE183125	12.5
VE167130	13	VE175130	13	VE183130	13
VE167135	13.5	VE175135	13.5	VE183135	13.5
VE167140	14	VE175140	14	VE183140	14
VE167145	14.5	VE175145	14.5	VE183145	14.5
VE167150	15	VE175150	15	VE183150	15
VE167155	15.5	VE175155	15.5	VE183155	15.5
VE167160	16	VE175160	16	VE183160	16
VE167165	16.5	VE175165	16.5	VE183165	16.5
VE167170	17	VE175170	17	VE183170	17
VE167175	17.5	VE175175	17.5	VE183175	17.5
VE167180	18	VE175180	18	VE183180	18
VE167185	18.5	VE175185	18.5	VE183185	18.5
VE167190	19	VE175190	19	VE183190	19
VE167195	19.5	VE175195	19.5	VE183195	19.5
VE167200	20	VE175200	20	VE183200	20
VE167205	20.5	VE175205	20.5	VE183205	20.5
VE167210	21	VE175210	21	VE183210	21
VE167215	21.5	VE175215	21.5	VE183215	21.5
VE167220	22	VE175220	22	VE183220	22
VE167225	22.5	VE175225	22.5	VE183225	22.5
VE167230	23	VE175230	23	VE183230	23
VE167235	23.5	VE175235	23.5	VE183235	23.5
VE167240	24	VE175240	24	VE183240	24
VE167245	24.5	VE175245	24.5	VE183245	24.5
VE167250	25	VE175250	25	VE183250	25
VE167255	25.5	VE175255	25.5	VE183255	25.5
VE167260	26	VE175260	26	VE183260	26
VE167265	26.5	VE175265	26.5	VE183265	26.5
VE167270	27	VE175270	27	VE183270	27
VE167275	27.5	VE175275	27.5	VE183275	27.5
VE167280	28	VE175280	28	VE183280	28
VE167285	28.5	VE175285	28.5	VE183285	28.5
VE167290	29	VE175290	29	VE183290	29
VE167295	29.5	VE175295	29.5	VE183295	29.5
VE167300	30	VE175300	30	VE183300	30
VE167305	30.5	VE175305	30.5	VE183305	30.5
VE167310	31	VE175310	31	VE183310	31

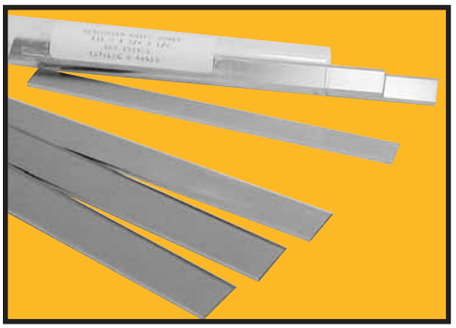
WKW is pleased to offer a cost competitive knife for applications where a 'value' priced knife is appropriate. Value Edge D2 Thin Knives are manufactured in our plant in Beloit, Wisconsin and are made using quality materials and our stringent in-house heat treat process yielding consistent quality knives, order after order.



36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 12

AKM JOINTER & PLANER KNIFE SETS

Many additional size sets available on a custom basis. Call Wisconsin Knife Works for pricing and lead times.



WKW can provide other lengths and widths of jointer and planer knife sets. Please contact WKW for details.

PART NUMBER	LENGTH	WIDTH	THICK-NESS	# OF KNIVES	MACHINE
46400	6-1/8	19/32	3/32	3	DELTA
46402	8-1/16	5/8	3/32	3	DELTA
46414	6	5/8	1/8	3	ROCKWELL/DELTA
46422	8	5/8	1/8	3	ROCKWELL/DELTA
46430	6	3/4	1/8	3	POWERMATIC
46438	8	3/4	1/8	3	POWERMATIC
46448	12	7/8	1/8	3	PARKS/POWERMATIC
46450	12-1/4	7/8	1/8	3	POWERMATIC
46452	12-1/2	11/16	1/8	3	FOLEY-BELSAW
46456	13-1/8	1	1/8	3	ROCKWELL/DELTA
46468	20	1	1/8	4	PARKS
*46502	13-1/8	11/16	5/32	3	ROCKWELL/DELTA
46504	18-1/8	1-1/8	5/32	3	ROCKWELL
46506	16-1/4	1-1/4	5/32	3	POWERMATIC
46508	18	1-1/4	5/32	3	POWERMATIC
46510	18-1/4	1-1/4	5/32	3	POWERMATIC
46512	20-1/4	1-1/4	5/32	3	POWERMATIC
46514	24	1-1/4	5/32	4	POWERMATIC
47024	13"	5/8"	1/8"	3	Grizzly
47020	12"	1"	1/8"	3	Grizzly
47016	10"	11/16"	1/8"	4	Grizzly
47018	10 1/4"	11/16"	1/8"	2	Grizzly

** Knives are notched on ends.*

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 13

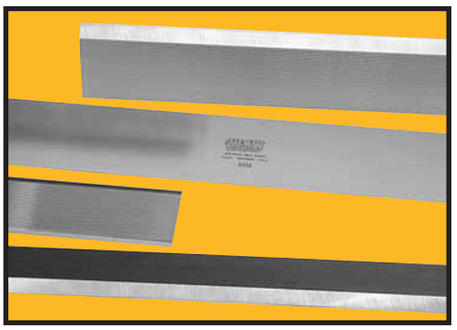
Wisconsin Knife Works corrugated back knives feature controlled uniform hardness and quality crush ground corrugations. Available in 16-60° and 16-90° corrugations, these knives are ground to exacting dimensions for perfect balance. A must for use on profile knife grinders.

HIGH SPEED STEEL CORRUGATED KNIVES 35° BEVEL

Lumber and woodworking plants the world over specify M-2 High-Speed Steel knives to produce the finest finish cuts in planer, jointer, moulder, and tenoner operations. The consistent hardness and high molybdenum content give an excellent edge and allows for easy grinding. High-Speed Steel is ideal for medium to long runs. See Wisconsin Knife Works BAK-PAK® when cutting abrasive materials.

PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
45503	25	1-1/2	3/16	16-60
45505	25	1-3/4	3/16	16-60
45507	25	2	3/16	16-60
45515	25	1-1/4	1/4	16-60
45517	25	1-1/2	1/4	16-60
45519	25	1-3/4	1/4	16-60
45521	25	2	1/4	16-60
45523	25	2-1/4	1/4	16-60
45525	25	2-1/2	1/4	16-60
45533	25	1-1/4	5/16	16-60
45535	25	1-1/2	5/16	16-60
45537	25	1-3/4	5/16	16-60
45539	25	2	5/16	16-60
45541	25	2-1/4	5/16	16-60
45543	25	2-1/2	5/16	16-60
45545	25	2-3/4	5/16	16-60
45547	25	3	5/16	16-60

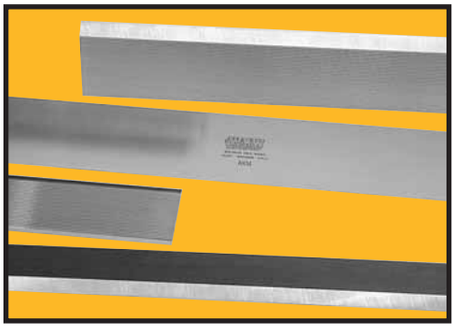
Knives with 16-90 corrugations available on a custom order basis.



36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 14

BADGER® CORRUGATED KNIVES 35° BEVEL

BADGER Knives are produced using a process developed exclusively for Wisconsin Knife Works. In certain applications BADGER Knives have demonstrated FOUR times the life of M-2 knife steel.

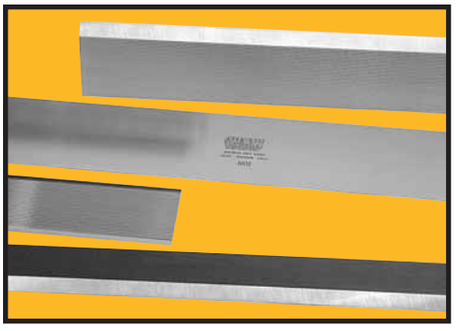


Knives with 16-90 corrugations available on a custom order basis.

PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
45933	25	1-1/4	5/16	16-60
45935	25	1-1/2	5/16	16-60
45937	25	1-3/4	5/16	16-60
45939	25	2	5/16	16-60
45941	25	2-1/4	5/16	16-60
45943	25	2-1/2	5/16	16-60
45945	25	2-3/4	5/16	16-60
45947	25	3	5/16	16-60

M-3 CORRUGATED KNIVES 35° BEVEL

M-3 Knife Steel has characteristics that can provide better finish and longer run times than other knife steels in certain applications. M-3 knives with 16-90 corrugations are available on a custom order basis.



PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
45617	25	1-1/2	1/4	16-60
45619	25	1-3/4	1/4	16-60
45621	25	2	1/4	16-60
45623	25	2-1/4	1/4	16-60
45625	25	2-3/8	1/4	16-60
45627	25	2-1/2	1/4	16-60
45635	25	1-1/2	5/16	16-60
45637	25	1-3/4	5/16	16-60
45639	25	2	5/16	16-60
45641	25	2-1/4	5/16	16-60
45643	25	2-3/8	5/16	16-60
45649	25	2-1/2	5/16	16-60
45645	25	2-3/4	5/16	16-60
45647	25	3	5/16	16-60

(please note 5/16" thick steel has a ground heel bevel)

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 15

OPTI® CORRUGATED KNIVES 45° BEVEL

An exclusive product offered by Wisconsin Knife Works, this is a knife "specially treated" in a new state-of-the-art process that produces an ultra-hard surface which, unlike coating, will not chip, flake, or peel. It is specifically designed for natural woods where you want to obtain the finish of High-Speed Steel tooling, but want up to 50% or more longer life.

OPTI® Knife Grinding Instructions

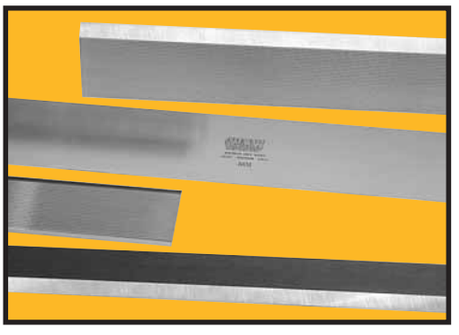
When grinding WKW's exclusive OPTI® knife, the procedure is the same as on regular steel knives with a couple of exceptions. The best results are achieved when the knife is ground to a 45° or 50° bevel, or in other words, a more "blunt" bevel that leaves more knife material at the cutting edge. On most profile grinders, this is obtained by setting the clearance angle on the grinder at either 35° or 30° for a 10° hook angle head or by setting the clearance angle at 25° to 20° for a 20° hook angle head.

In addition, it is important to be careful not to chip the cutting edge on the OPTI® knife as it is much harder than conventional tool steels. A better finish will be obtained on OPTI® knives if the grinding wheel RPM is increased by 500 RPM above the normal tool steels for the rough and finish grind. Be sure, however, to check with your wheel manufacturer and never exceed maximum recommended RPM.

Never grind or hone the face on OPTI® knives as this may remove ultra hard surface of the knife.

PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
46921	25	1-1/4	1/4	16-60
46923	25	1-1/2	1/4	16-60
46925	25	1-3/4	1/4	16-60
46927	25	2	1/4	16-60
46929	25	2-1/4	1/4	16-60
46931	25	2-1/2	1/4	16-60
46933	25	1-1/4	5/16	16-60
46935	25	1-1/2	5/16	16-60
46937	25	1-3/4	5/16	16-60
46939	25	2	5/16	16-60
46941	25	2-1/4	5/16	16-60
46943	25	2-1/2	5/16	16-60
46945	25	2-3/4	5/16	16-60
46947	25	3	5/16	16-60

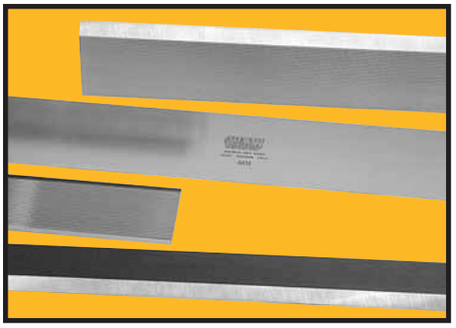
Knives with 16-90 corrugations available on a custom order basis.



36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 16

AKM CORRUGATED KNIVES 35° BEVEL

AKM is an excellent alternative to the M-2 with similar characteristics. Excellent for medium to short runs, but often performs as well as M-2 in some applications.

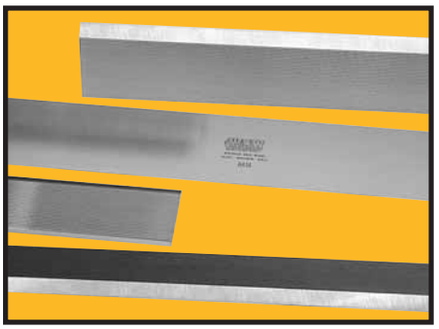


Knives with 16-90 corrugations available on a custom order basis.

PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
46835	25	1-1/4	1/4	16-60
46837	25	1-1/2	1/4	16-60
46839	25	1-3/4	1/4	16-60
46841	25	2	1/4	16-60
46843	25	2-1/4	1/4	16-60
46845	25	2-1/2	1/4	16-60
46853	25	1-1/4	5/16	16-60
46855	25	1-1/2	5/16	16-60
46857	25	1-3/4	5/16	16-60
46859	25	2	5/16	16-60
46861	25	2-1/4	5/16	16-60
46863	25	2-1/2	5/16	16-60
46865	25	2-3/4	5/16	16-60
46869	25	3	5/16	16-60
46879	25	2-1/2	3/8	16-60
46881	25	2-3/4	3/8	16-60
46883	25	3	3/8	16-60
46885	25	3-1/4	3/8	16-60
46887	25	3-1/2	3/8	16-60

KARBO-KROME® CORRUGATED KNIVES 35° BEVEL

Karbo-Krome® is a high-carbon, high-chrome knife steel particularly favored on the West Coast where moisture content and acid conditions are troublesome with other types of steel. Typically not recommended for use on dry, hardwoods.



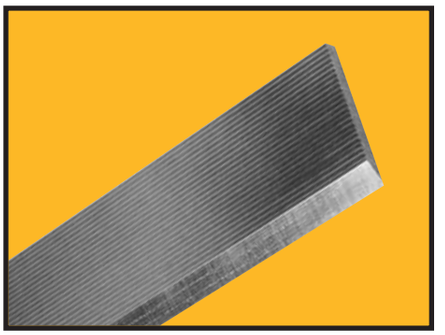
PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
45381	25	1-1/2	1/4	16-60
45383	25	1-3/4	1/4	16-60
45385	25	2	1/4	16-60
45387	25	2-1/4	1/4	16-60
45389	25	2-1/2	1/4	16-60
45401	25	1-1/2	5/16	16-60
45403	25	1-3/4	5/16	16-60
45405	25	2	5/16	16-60
45407	25	2-1/4	5/16	16-60
45409	25	2-1/2	5/16	16-60

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 17

VALUE EDGE M2 CORRUGATED

A cost competitive knife for applications where a 'value' priced knife is appropriate. Value Edge M2 Corrugated Knives, manufactured in our plant in Beloit, Wisconsin, are made using quality materials, a stringent in-house heat treat process and feature crush ground corrugations yielding consistent quality knives.

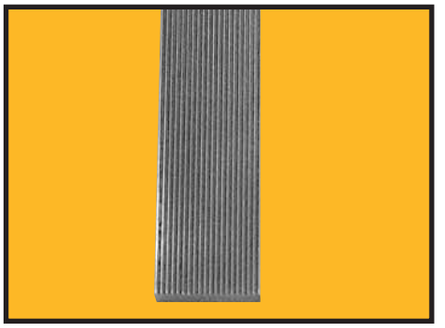
PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
VE10503	25	1-1/2	3/16	16-60
VE10505	25	1-3/4	3/16	16-60
VE10507	25	2	3/16	16-60
VE10517	25	1-1/2	1/4	16-60
VE10519	25	1-3/4	1/4	16-60
VE10521	25	2	1/4	16-60
VE10523	25	2-1/4	1/4	16-60
VE10525	25	2-1/2	1/4	16-60
VE10533	25	1-1/4	5/16	16-60
VE10535	25	1-1/2	5/16	16-60
VE10537	25	1-3/4	5/16	16-60
VE10539	25	2	5/16	16-60
VE10541	25	2-1/4	5/16	16-60
VE10543	25	2-1/2	5/16	16-60
VE10545	25	2-3/4	5/16	16-60
VE10547	25	3	5/16	16-60



CORRUGATED FILLER STOCK

Corrugated filler stock is used to fill unused knife slots in a head, and is made to Wisconsin Knife Works same high standards. WKW corrugated filler stock is marked with an identifying line for proper orientation and balance.

PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
45421	25	1	1/4	16-60
45425	25	1-3/16	1/4	16-60
45427	25	1	5/16	16-60
45429	25	1-3/16	5/16	16-60
45431	25	1	3/8	16-60

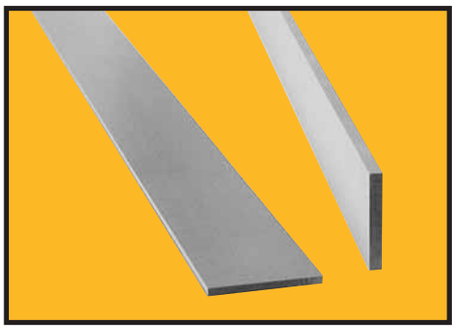


36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 18

HIGH-SPEED STEEL SQUARE EDGE

Wisconsin Knife Works square edge steel is manufactured from the finest quality steels available and is heat treated and ground to tight tolerances for maximum performance and life. For less than full bar lengths, specify length required.

PART NUMBER	LENGTH	WIDTH	THICKNESS
42402	31	1	5/32
42404	31	1-1/4	5/32
42406	31	1-1/2	5/32
42408	31	1-3/4	5/32
42410	31	2	5/32
42412	31	2-1/4	5/32
42414	31	2-1/2	5/32
42416	31	1	3/16
42418	31	1-1/4	3/16
42420	31	1-1/2	3/16
42422	31	1-3/4	3/16
42424	31	2	3/16
42426	31	2-1/4	3/16
42428	31	2-1/2	3/16
42430	31	1	1/4
42432	31	1-1/4	1/4
42434	31	1-1/2	1/4
42436	31	1-3/4	1/4
42438	31	2	1/4
42440	31	2-1/4	1/4
42442	31	2-1/2	1/4



KARBO-KROME® SQUARE EDGE STEEL

Wisconsin Knife Works square edge steel is manufactured from the finest quality steels available and is heat treated and ground to tight tolerances for maximum performance and life. For less than full bar lengths, specify length required.

PART NUMBER	LENGTH	WIDTH	THICKNESS
42510	31	2	5/32
42514	31	2-1/2	5/32
42520	31	2	3/16
42522	31	2-1/4	3/16
42524	31	2-1/2	3/16

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 19

HIGH-SPEED SHAPER STEEL 30° BEVEL

Notching of one or both sides of a full bar of shaper steel can be done upon request. Note that we cannot notch anything under 1" wide.

PART NUMBER	LENGTH	WIDTH	THICKNESS
41220	25	1/2	1/4
41222	25	3/4	1/4
41224	25	1	1/4
41226	25	1-1/4	1/4
41228	25	1-1/2	1/4
41230	25	1-3/4	1/4
41232	25	2	1/4
41234	25	2-1/4	1/4
41236	25	2-1/2	1/4
41254	25	3/4	5/16
41256	25	1	5/16
41258	25	1-1/4	5/16
41260	25	1-1/2	5/16
41262	25	1-3/4	5/16
41264	25	2	5/16
41266	25	2-1/4	5/16
41268	25	2-1/2	5/16
41270	25	2-3/4	5/16
41272	25	3	5/16
41288	25	1	3/8
41290	25	1-1/4	3/8
41292	25	1-1/2	3/8
41294	25	1-3/4	3/8
41296	25	2	3/8
41298	25	2-1/4	3/8
41300	25	2-1/2	3/8
41302	25	2-3/4	3/8
41304	25	3	3/8
41306	25	3-1/4	3/8

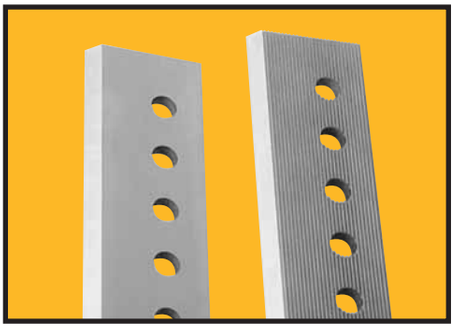
36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 20

AKM SHAPER STEEL 30° BEVEL

Notching of one or both sides of a full bar of shaper steel can be done upon request. Note that we cannot notch anything under 1" wide.

PART NUMBER	LENGTH	WIDTH	THICKNESS
46038	25	1	1/4
46040	25	1-1/4	1/4
46042	25	1-1/2	1/4
46044	25	1-3/4	1/4
46046	25	2	1/4
46048	25	2-1/4	1/4
46050	25	2-1/2	1/4
46052	25	1-1/4	3/8
46054	25	1-1/2	3/8
46056	25	1-3/4	3/8
46058	25	2	3/8
46062	25	2-1/2	3/8
46064	25	2-3/4	3/8
46066	25	3	3/8
46070	25	1	5/16
46072	25	1-1/4	5/16
46074	25	1-1/2	5/16
46076	25	1-3/4	5/16
46078	25	2	5/16
46080	25	2-1/4	5/16
46082	25	2-1/2	5/16
46084	25	2-3/4	5/16
46086	25	3	5/16
46108	25	3-1/4	3/8

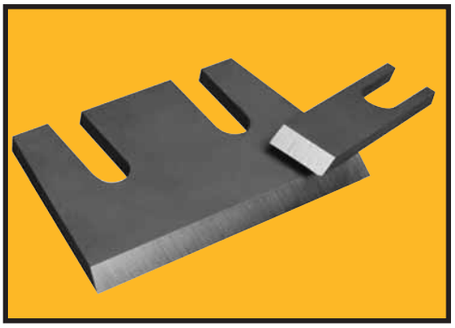
36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 21



Williams and Hussey knives are manufactured with an additional 1/16 grind stock on the width.

WILLIAMS AND HUSSEY KNIVES 45° BEVEL

PART NUMBER	LENGTH	WIDTH	THICKNESS	CORRUGATIONS
KA26388	25	1-3/4	3/16	Plain Back
KA26388A	25	2	3/16	Plain Back
KA26388B	25	2	1/4	Plain Back
KA26388C	25	2-1/4	1/4	Plain Back
KA26388D	25	2-1/2	1/4	Plain Back
KA26388E	25	2-1/2	5/16	Plain Back
KA26383	25	1-3/4	3/16	16-60
KA26383A	25	2	3/16	16-60
KA26383B	25	2	1/4	16-60
KA26383C	25	2-1/4	1/4	16-60
KA26383D	25	2-1/2	1/4	16-60
KA26383E	25	2-1/2	5/16	16-60

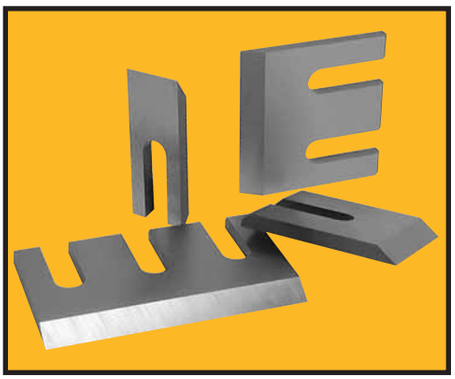


WKW Lathe Knives made from M-2 steel, are manufactured using state of the art manufacturing processes and are specially heat treated to deliver a consistent hardness through the entire knife.

Other sizes are available on a custom order basis.

WKW LATHE KNIVES 40° BEVEL

PART NUMBER	SLOTS	WIDTH	LENGTH
LK249S	1	3	1-1/4
LK250S	1	3	1-1/2
LK301S	1	3	1-3/4
LK251S	1	3	2
LK252S	1	3	2-1/2
LK253S	1	3	3
LK260S	2	3	6



HIGH-SPEED STEEL SLOTTED KNIVES 35° BEVEL

PART NUMBER	LENGTH	WIDTH	THICKNESS	# OF SLOT(S)
KN 164	2	4-1/2	3/8	1
KN 165	1-1/2	4-1/2	3/8	1
KN 341	1-1/2	4	3/8	1
KN 342	2	4	3/8	1
KN 343	2-1/2	4	3/8	1
KN 344	3	4	3/8	1
KN 348	4	4	3/8	2
KN 349	4	4-1/2	3/8	2
KN 465	6	4	3/8	3

Standard slot is 11/16 wide x 2-1/4 long to work with 5/8 bolts.

36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 22

WHAT IS A MILLED TO PATTERN (MTP) BIT?

All WKW Milled-To-Pattern Bits are precision machined for accuracy and finish. Made to your exact specifications, Milled-To-Pattern bits use AISI M-2 High-Speed Steel, carbide, or other tool steels, and are heat-treated for maximum wear. Machined to exacting tolerances, each bit is projected on an optical comparator to ensure minute detail accuracy.

Milled-To-Pattern bits can be designed to fit most standard makes of cutterheads. This means your pattern will provide constant and dependable production. Send us a drawing or sample of your pattern.

Milled-To-Pattern bits are recommended where long runs or frequent runs of the same moulding or pattern are made. The term “Milled-To-Pattern” bits is used because of the way the bits were originally manufactured. However, with the coming of modern technology, we now do 90-95% of our Milled-To-Pattern bits on our Wire E.D.M. computer-controlled machines. Our engineers utilize CAD-CAM to develop the proper information for the computer program. If bits are reordered by the part number stamped on the bits, you will receive the identical bit.

Wood patterns are cut with the bits and profiles are checked on our comparator against pattern drawings. All bits are balanced in sets for faster setup.

Milled-To-Pattern bits are easy to maintain. When they become dull, it is a simple process to face-sharpen them by taking off only a few thousands. (This is true with a proper maintenance schedule.)

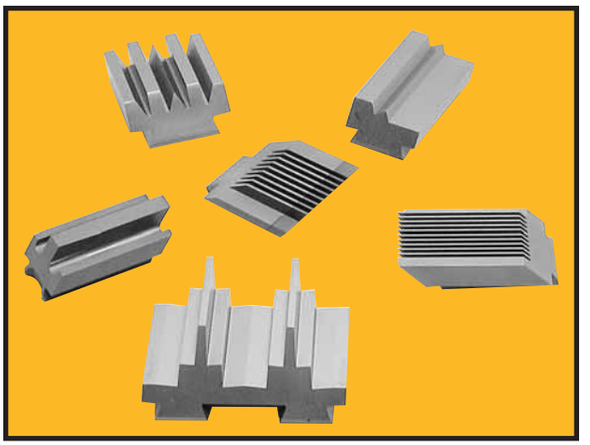
When face-sharpening, it is important to follow the same angle that is milled on the face. (If this angle is changed, the bit will not cut the correct pattern.) When bits are assembled in a head, they must be set to the head angle (see proper set-up sheet). When bits with corrugations are sharpened back 1/16 of an inch, they should be reset to the head angle. “L”-type bits must be ground to adjust for proper cutting angle.

The bevel that is milled on the face of the bit determines the cutting angle. Bits are designed to give the proper cutting angle when cutting a specific kind of wood. Bits will have more than one dovetail for wide patterns.

Bits are usually made from high-grade tool steels, including M-2, carbide-tipped and OPTI.

COMMON MTP APPLICATIONS

- Multiple dowel profiles
- Louvre slats
- Very long runs
- Critical fitting parts
- Rail and Stile



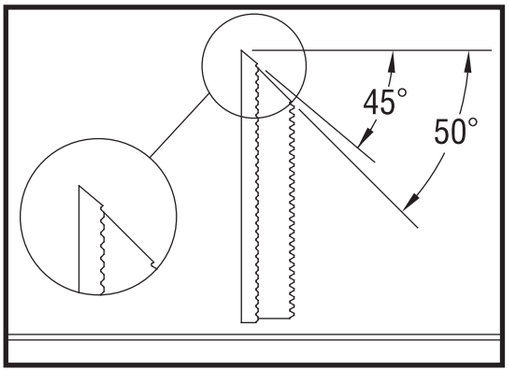
36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 23

GRINDING THE BAK-PAK® AND EURO BAK-PAK™ CARBIDE KNIFE SYSTEMS

The Bak-Pak and Euro Bak-Pak carbide knife system is best ground in two steps. The steel backer is first ground to the profile in the same manner that you would grind a steel knife. The carbide blank is then located into the head and ground to the profile.

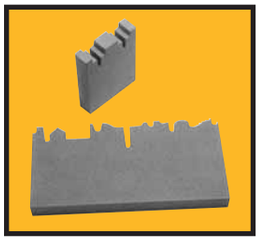
Best results are obtained by first grinding the carbide with a 100 to 120 grit diamond wheel and then finish grinding with a grit of 220 to 320 or finer. 3000 RPM will generally give best results when both rough and finish grinding. Be sure to contact a WKW Engineer if you are experiencing any difficulties with the Bak-Pak or Euro Bak-Pak knife system as many operators have achieved excellent results using widely different grinding techniques.

Best results are obtained with a bevel of 45 degrees on the carbide with a bevel on the steel backer of 50 degrees. Grinding the carbide blank to an angle sharper than 45 degrees will produce a cutting edge that will be prone to chipping and premature wear. See illustration. Several regrinds of the carbide are possible before the blank must be relocated into the next groove.



Jointing may be accomplished by using a 150 - 230 grit aluminum oxide stone. Be sure to follow the machinery manufacturer's recommended procedures.

Balancing is accomplished by balancing the carbide blank and the steel backer together, not as individual pieces. When necessary, grind material off the steel backer rather than off the carbide.



CUSTOM TEMPLATES

Wisconsin Knife Works delivers precision grinding and checking templates. Just send us a drawing or sample of the pattern you want. Our templates are CAD-CAM designed, then cut on a wire EDM to your exact specifications.

JOINTER STONES

Jointing is an underestimated operation that is critical to the quality of the finish and/or feed rate of your product. Jointing brings all of the bits or knives into the same cutting circle so that each knife will make exactly the same depth of cut.

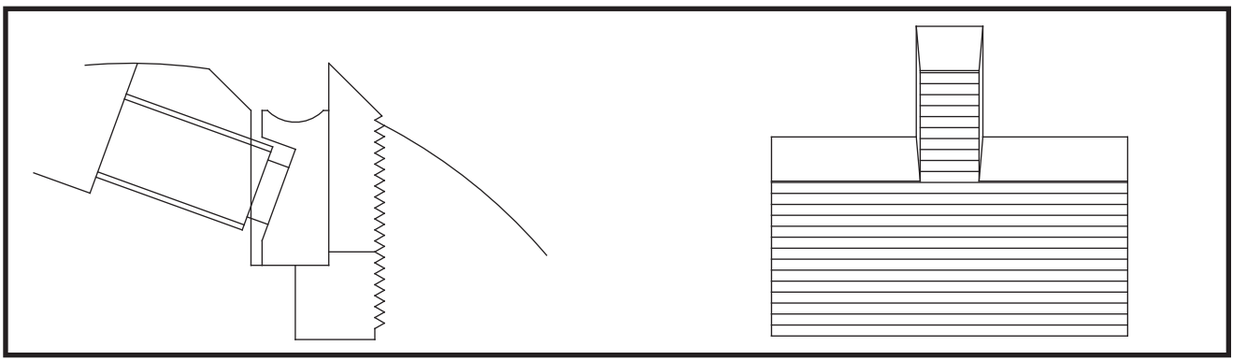
The best performance in jointing may be accomplished by using a 150–230 grit, "L" hardness aluminum oxide stone. As always, be sure to follow the machinery manufacturer's recommended procedures.

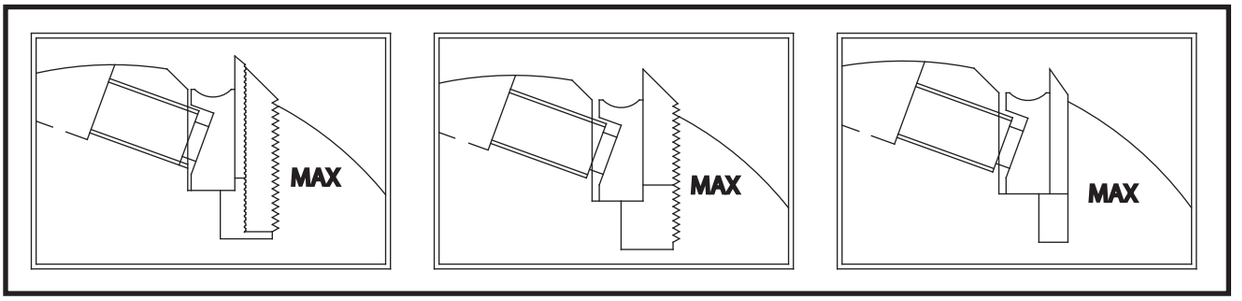
36094JBA_Sec2_Layout 1 6/17/10 12:22 PM Page 24

KNIFE PROJECTION

Maximum Profile Depth

Never use a knife that has a profile depth more than three times the thickness of the knife. Never project a knife beyond the head body diameter more than three times the thickness of the knife. Call your WKW engineer if you have any questions.



Maximum Knife Projection

When using smooth back knives, never adjust the knife out to a point higher than the bottom of the gib and never adjust the knife to protrude more than three times the knife thickness. When using corrugated or Bak-Pak knives, never position the heel of the knife above the max line etched on the head. Refer to illustrations below for maximum knife adjustment.