

ProGroove Toolholding System

ProGroove is our tool system for grooving and parting, offering unrivalled versatility and performance.

ProGroove Blade Style Tool Holder

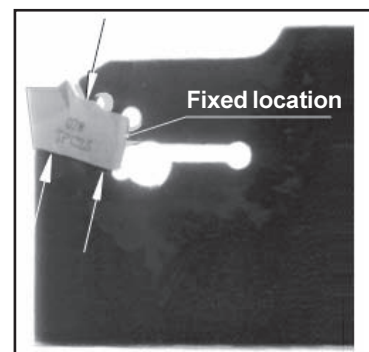
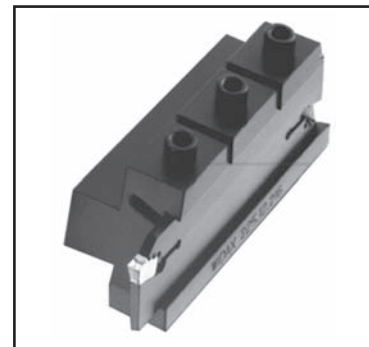
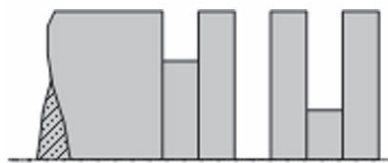
- True to size and reproducible cutting edge positioning due to double prism and fixed location face
- No displacing nor withdrawing during cutting action
- Easy and simple insert change with special wrench
- 2-piece design: Blade in tool block
- Blade adjustable to parting diameter
- Blade with 2 usable ends
- Blades fitting into existing blocks

Versatile applications:

Deep grooving

Parting

Grooving with long overhang



ProGroove Mono Tool Holder

- True to size and reproducible cutting edge positioning due to double prism and fixed location face
- Precise cutting edge height
- Constant grooving width
- No displacing nor withdrawing during cutting action
- Easy and simple insert change
- Holders for different depths of grooving available
- Trouble free chip flow
- Only one spare part

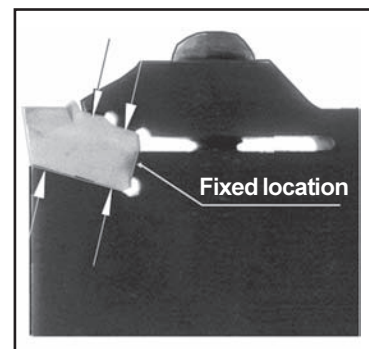
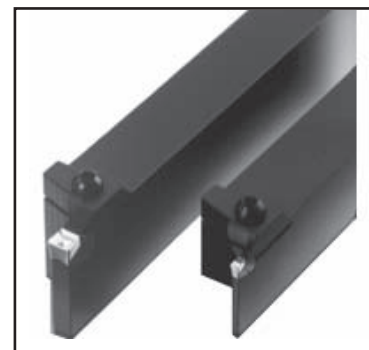
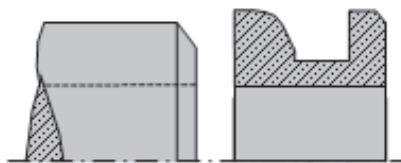
Versatile applications:

Grooving

Parting

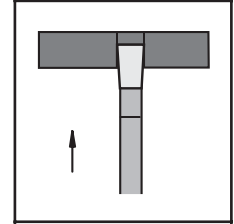
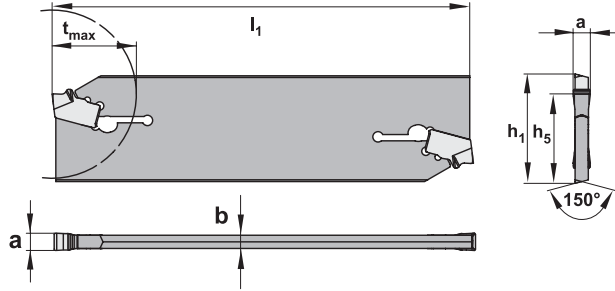
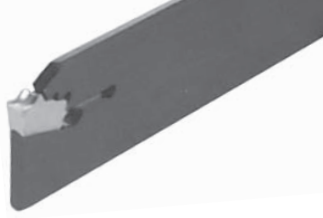
Excavating

Copying, chamfering



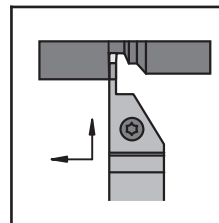
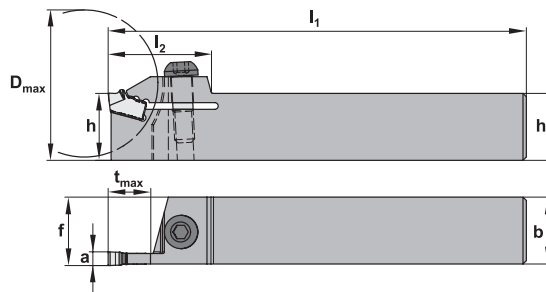
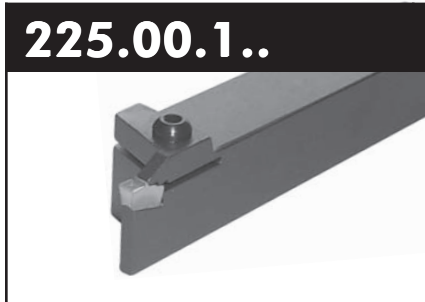
PROGROOVE PART-OFF BLADES

225.13.3

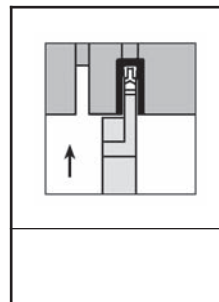
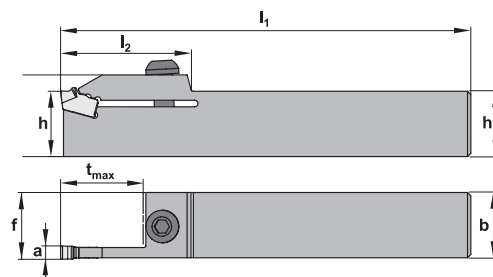
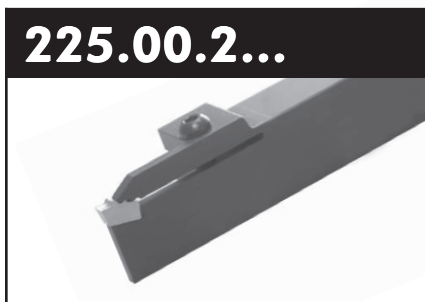


DESIGNATION	DIMENSIONS						INSERT (see pages 55-56)	SPARE PARTS
	a (mm)	a (inch.)	h ¹	b	l ¹	t max		Ejector Key
Blade height = .75"							235.67...	214.60.038
225.13.320	2	.079	.75	.067	3.54	.787	320/420	
Blade height = 1.02"							235.67...	
225.13.420	2	.079	1.02	.067	4.33	1.000	320/420	
225.13.430	3	.118	1.02	.094	4.33	1.575	330/430	
225.13.440	4	.157	1.02	.126	4.33	1.575	340/440	
Blade height = 1.25"							235.67...	
225.13.520	2	.079	1.25	.067	5.91	1.000	320/420	
225.13.530	3	.118	1.25	.094	5.91	2.000	330/430	
225.13.540	4	.157	1.25	.126	5.91	2.000	340/440	
225.13.550	5	.197	1.25	.165	5.91	2.360	350/450	
225.13.560	6	.236	1.25	.197	5.91	2.360	360/460	214.60.095
225.13.580	8	.315	1.25	.268	5.91	2.360	380/480	

PROGROOVE TOOLS



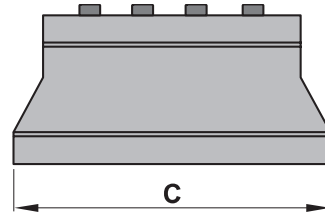
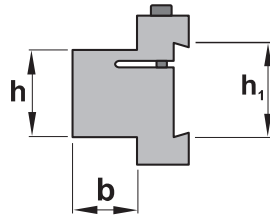
DESIGNATION	DIMENSIONS									INSERT (see pages 55-56)	SPARE PARTS	
	a mm	a inch	h	b	f	l ₁	l ₂	t _{max}	D _{max}		Clamping Screw	Wrench
<i>For Grooving, Parting & Profiling</i>										235.67...	214...	214...
225.00.134/135	3	.118	.625	.625	.638	4.00	1.02	.393	1.00	330/430/703/803	85.962	80.412
225.00.130/131	3	.118	.750	.750	.763	5.00	1.02	.393	1.00			
225.00.132/133	3	.118	1.000	1.000	1.013	6.00	1.02	.393	1.00			
225.00.140/141	4	.157	.750	.750	.767	5.00	1.22	.492	1.25	340/440/704/804		
225.00.142/143	4	.157	1.000	1.000	1.017	6.00	1.22	.492	1.25			
225.00.144/145	4	.157	1.250	1.000	1.017	7.00	1.22	.492	1.25			



DESIGNATION	DIMENSIONS									INSERT (see pages 55-56)	SPARE PARTS	
	a mm	a inch	h	b	f	l ₁	l ₂	t _{max}	D _{max}		Clamping Screw	Wrench
<i>For Grooving & Parting</i>										235.67..	214...	214...
225.00.230/231	3	.118	.750	.750	.763	5.00	1.25	.787	---	330/430/703/803	85.962	80.412
225.00.232/233	3	.118	1.000	1.000	1.013	6.00	1.57	.984	---			
225.00.236/237	3	.118	1.250	1.000	1.013	7.00	1.57	.984	---			
225.00.240/241	4	.157	.750	.750	.767	5.00	1.57	.984	---	340/440/704/804		
225.00.242/243	4	.157	1.000	1.000	1.017	6.00	1.57	.984	---			
225.00.244/245	4	.157	1.250	1.000	1.017	7.00	2.08	1.259	---			

PROGROOVE TOOL BLOCKS

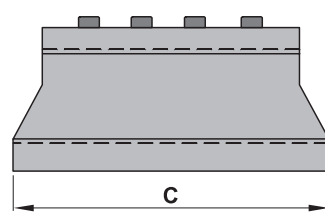
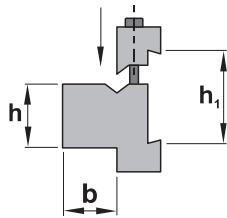
225.11...



1 Piece design
for
manual &
N.C. Lathes

DESIGNATION	DIMENSIONS				BLADE 225.13...	SPARE PARTS	
	h_1	C	h	b		Screw	Wrench
225.11.216-19I	.75	2.990	.625	.625	320	C-1075	C-5004
225.11.216-26I	1.02	3.430	.625	.625	420/430/440	C-1076	C-5005
225.11.220-26I	1.02	3.430	.750	.750			
225.11.220-32I	1.25	3.940	.750	.750			
225.11.225-32I	1.25	4.330	1.000	1.000			
225.11.232-32I	1.25	4.750	1.250	1.250			
225.11.240-32I	1.25	4.750	1.500	1.640			
					520/530/540/ 550/560/580		

225.12...



2 Piece design
for
manual &
N.C. Lathes

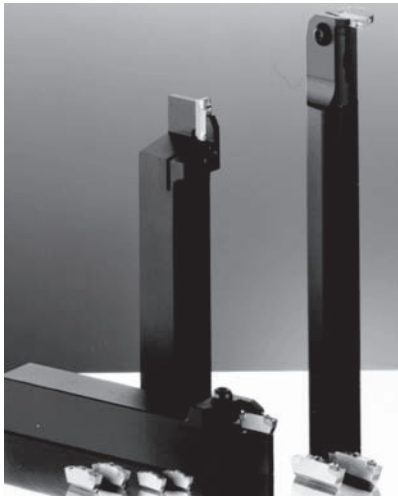
DESIGNATION	DIMENSIONS				BLADE 225.13...	SPARE PARTS	
	h_1	C	h	b		Screw	Wrench
225.12.216-19I	.75	2.990	.625	.625	320	C-1075	C-5004
225.12.216-26I	1.02	3.430	.625	.625	420/430/440	C-1076	C-5005
225.12.220-26I	1.02	3.430	.750	.750			
225.12.220-32I	1.25	3.940	.750	.750			
225.12.225-32I	1.25	4.330	1.000	1.000			
225.12.232-32I	1.25	4.750	1.250	1.250			
225.12.240-32I	1.25	4.750	1.500	1.640			
					520/530/540/ 550/560/580		

Metric toolblocks sizes available for 2, 3, 4, 5, 6, and 8 mm insert blade widths.

TWINGROOVE TOOLHOLDING SYSTEM

TwinGroove one name, two cutting edges and a host of other possibilities.

Mono Toolholder System



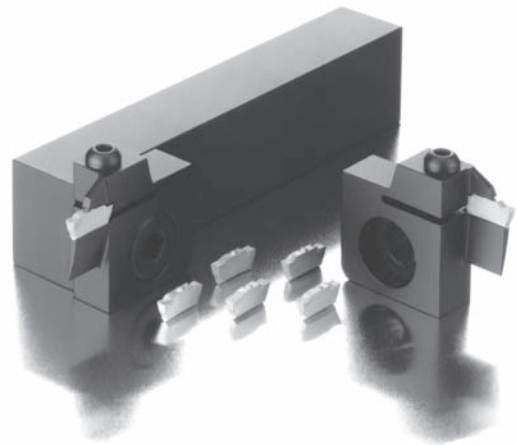
Range:

- Mono Toolholders
- Toolholder shanks:
 - 20 x 20 mm
 - 25 x 25 mm
 - 32 x 25 mm
- Boring bar shanks: 16 - 40 mm
- Minimum Bore from .787"
- Double edged inserts with cutting widths of .118" to .315"

Properties:

- Cartridges are precisely mounted and safely secured using a dowel screw
- Tongue and groove system for high rigidity
- Indexable inserts clamped in the proven TwinGroove system:
 - Indexable inserts secured in a auto-centering 90° V-support.
 - Indexable inserts secured lengthways and clamped via a universal ball joint clamp.
 - The clamping bridge integrated in the cartridge clamps the indexable inserts positively via the universal ball joint mechanism.
- Advantages of clamping in the middle of the insert:
 - Halves the length tolerance of the indexable insert and provides excellent indexing accuracy of the cutting edges.
 - The second cutting edge can be used on its own if the first cutting edge is worn or broken.

TwinGroove Cartridge System for Face Grooving

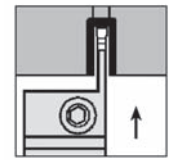
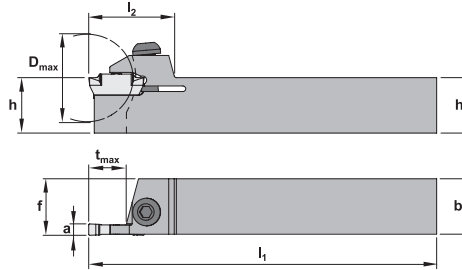
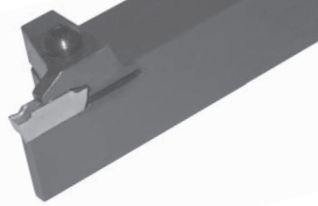


Range:

- Cartridge system
- Supports in the following tool shanks:
 - .75" x .75"
 - 1.00" x 1.00"
 - 1.25" x 1.00"Also available in metric
- Cartridges can be assembled on the face side
- Groove diameter range from $D_{\min} = 1.969"$
- Double edged inserts with cutting widths of .118" to .315"

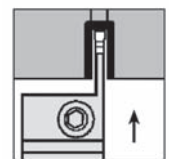
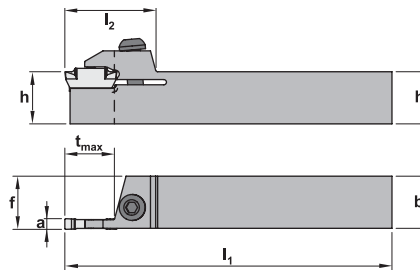
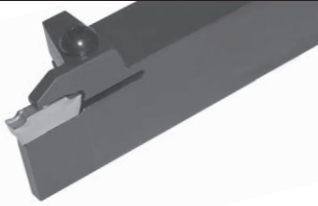
TWINGROOVE EXTERNAL GROOVING TOOLS

225.04.5...



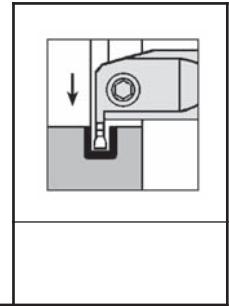
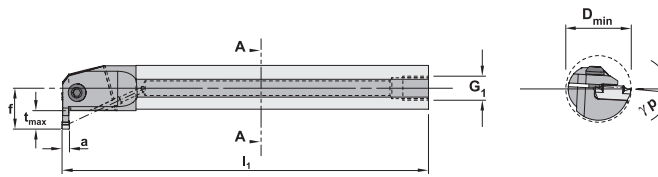
DESIGNATION	DIMENSIONS								INSERT (see page 59)	SPARE PARTS	
	a mm	a inch	h	b	f	l ₁	l ₂	t _{max}		Clamping Screw	Wrench
For Grooving, Parting & Profiling									235.69...	214...	214...
225.04.530/531	3	.118	.787	.787	.799	4.92	1.10	.393	730/830	85.962	80.412
225.04.532/533	3	.118	.984	.984	.996	5.90	1.10	.393			
225.04.534/535	3	.118	1.260	.984	.996	6.69	1.10	.393			
225.04.540/541	4	.157	.787	.787	.803	4.92	1.22	.492	740/840		
225.04.542/543	4	.157	.984	.984	1.000	5.90	1.22	.492			
225.04.544/545	4	.157	1.260	.984	1.000	6.69	1.22	.492			
225.04.550/551	5	.197	.787	.787	.807	4.92	1.22	.492	750/850		
225.04.552/553	5	.197	.984	.984	1.003	5.90	1.22	.492			
225.04.554/555	5	.197	1.260	.984	1.003	6.69	1.22	.492			
225.04.562/563	6	.236	.984	.984	1.003	5.90	1.49	.629	760/860		
225.04.564/565	6	.236	1.260	.984	1.003	6.69	1.49	.629			
225.04.582/583	8	.315	.984	.984	1.007	5.90	1.49	.629			
225.04.584/585	8	.315	1.260	.984	1.007	6.69	1.49	.629	780/880	60.127	80.413

225.04.6...



DESIGNATION	DIMENSIONS								INSERT (see page 59)	SPARE PARTS	
	a mm	a inch	h	b	f	l ₁	l ₂	t _{max}		Clamp Screw	Wrench
For Grooving & Parting									235.69...	214...	214...
225.04.630/631	3	.118	.787	.787	.799	4.92	1.18	.551	730/830	85.962	80.412
225.04.632/633	3	.118	.984	.984	.996	5.90	1.18	.551			
225.04.634/635	3	.118	1.260	.984	.996	6.69	1.18	.551			
225.04.640/641	4	.157	.787	.787	.803	4.92	1.37	.708	740/840		
225.04.642/643	4	.157	.984	.984	1.000	5.90	1.37	.708			
225.04.644/645	4	.157	1.260	.984	1.000	6.69	1.37	.708			
225.04.650/651	5	.197	.787	.787	.807	4.92	1.37	.708	750/850		
225.04.652/653	5	.197	.984	.984	1.003	5.90	1.37	.708			
225.04.654/655	5	.197	1.260	.984	1.003	6.69	1.37	.708			
225.04.664/665	6	.236	1.260	.984	1.003	6.69	1.88	1.102	760/860	60.127	80.413
225.04.684/685	8	.315	1.260	.984	1.007	6.69	1.88	1.102	780/880		

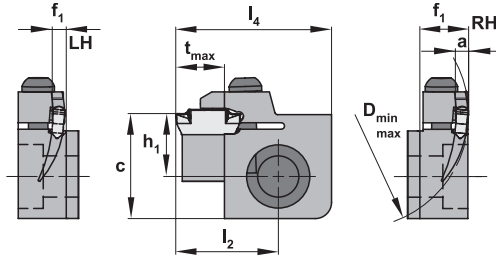
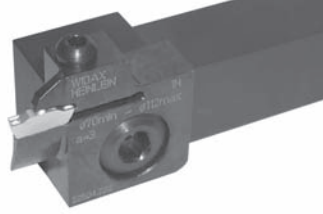
TWINGROOVE INTERNAL GROOVING TOOLS



DESIGNATION	DIMENSIONS								INSERT (see page 59)	SPARE PARTS	
	a mm	a inch	D min	d	f	l	y ^P	T _{max}		Clamping Screw	Wrench
For Grooving, Parting & Profiling									235.69...	214...	214...
225.10.626/627	3	.118	.787	.629	.507	7.08	-9°	.157	730/830	85.781	80.410
225.10.628/629	3	.118	.984	.787	.551	7.08	-6°	.157		80.448	
225.10.630/631	3	.118	1.260	.787	.826	7.87	-4°	.393			
225.10.632/633	3	.118	1.338	.984	.811	7.87	-2°	.314			
225.10.634/635	3	.118	1.574	1.260	.909	9.84	-1°	.236			80.412
225.10.640/641	4	.157	1.260	.787	.822	7.87	-4°	.393	740/840	76.700	
225.10.642/643	4	.157	1.417	.984	.881	7.87	-3°	.354			
225.10.644/645	4	.157	1.732	1.260	1.059	9.84	-1°	.393			
225.10.646/647	4	.157	2.047	1.574	1.212	11.81	-1°	.393		60.127	80.413
225.10.652/653	5	.197	1.417	.984	.881	7.87	-3°	.354	750/850	76.700	80.412
225.10.654/655	5	.197	1.732	1.260	1.059	9.84	-1°	.393			
225.10.656/657	5	.197	2.047	1.574	1.212	11.81	-1°	.393			
225.10.664/665	6	.236	1.811	1.260	1.137	9.84	-5°	.472	760/860		
225.10.666/667	6	.236	2.165	1.574	1.334	11.81	-3.5°	.472		60.127	80.413
225.10.684/685	8	.315	1.811	1.260	1.137	9.84	-5°	.472	780/880		
225.10.686/687	8	.315	2.165	1.574	1.334	11.81	-3.5°	.472			

TWINGROOVE FACE GROOVING CARTRIDGES

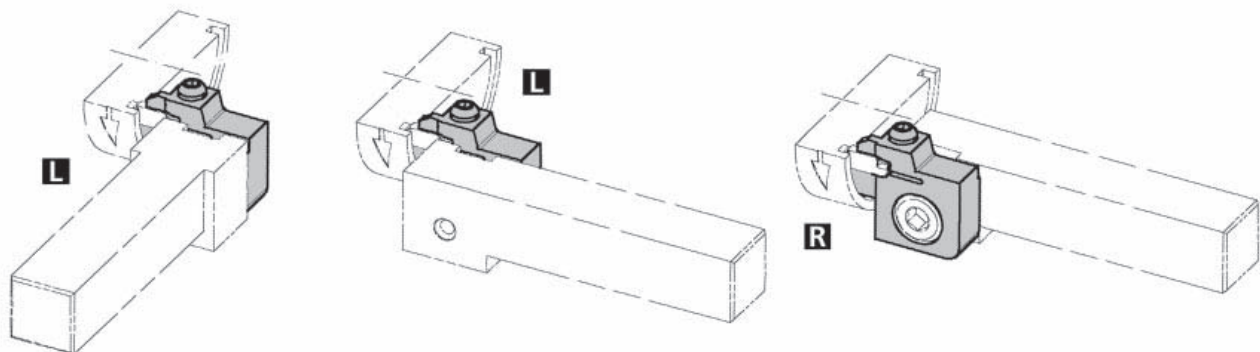
225.04.7..



* Cartridge Only.
Toolholder block sold
separately.
See Page #128

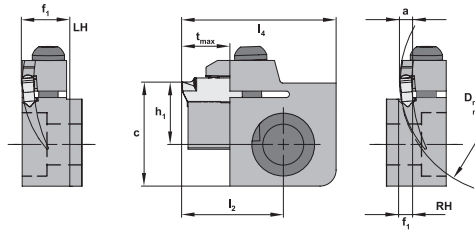
DESIGNATION	DIMENSIONS									INSERT (see page 59)	SPARE PARTS	
	R.H./L.H.	D _{min}	D _{max}	a mm inch	h ₁	c	l ₂	l ₄	t _{max}		Clamping Screw	Wrench
<i>For Counter Clockwise Turning Workpieces</i>										235.69...	214....	214....
225.04.730/731		1.97	2.83									
225.04.732/733		2.76	4.40									
225.04.734/735		4.33	11.88	3	.118	.75	1.26	1.30	1.95	.55	730/830	
225.04.736/737		11.81	---									
225.04.740/741		2.48	4.01									
225.04.742/743		4.33	11.88	4	.157	.75	1.26	1.46	2.11	.70	740/840	85.962 80.412
225.04.744/745		11.81	---									
225.04.750/751		2.48	4.01									
225.04.752/753		4.33	11.88	5	.197	.75	1.26	1.46	2.11	.70	750/850	
225.04.754/755		11.81	---									
225.04.760/761		3.14	5.00									
225.04.762/763		4.92	11.88	6	.236	.75	1.26	1.97	2.62	1.10	760/860	
225.04.764/765		11.81	---									
225.04.780/781		3.14	5.00									
225.04.782/783		4.92	11.88	8	.315	.75	1.26	1.97	2.62	1.10	780/880	60.127 80.413
225.04.784/785		11.81	---									

Combination variations with a counter clockwise turning workpiece.



TWINGROOVE FACE GROOVING CARTRIDGES

225.04.8...



* Cartridge Only.
Toolholder block sold separately.
See Page #128

DESIGNATION	DIMENSIONS									INSERT (see page 59)	SPARE PARTS	
	D _{min}	D _{max}	a		h ₁	c	l ₂	l ₄	t _{max}		Clamping Screw	Wrench
R.H./L.H.			mm	inch								
<i>For Clockwise Turning Workpieces</i>										235.69...	214....	214....
225.04.830/831	1.97	2.83										
225.04.832/833	2.76	4.40										
225.04.834/835	4.33	11.88	3	.118	.75	1.26	1.30	1.95	.55	730/830		
225.04.836/837	11.81	---										
225.04.840/841	2.48	4.01										
225.04.842/843	4.33	11.88	4	.157	.75	1.26	1.46	2.11	.70	740/840	85.962	80.412
225.04.844/845	11.81	---										
225.04.850/851	2.48	4.01										
225.04.852/853	4.33	11.88	5	.197	.75	1.26	1.46	2.11	.70	750/850		
225.04.854/855	11.81	---										
225.04.860/861	3.14	5.00										
225.04.862/863	4.92	11.88	6	.236	.75	1.26	1.97	2.62	.110	760/860		
225.04.864/865	11.81	---										
225.04.880/881	3.14	5.00									60.127	80.413
225.04.882/883	4.92	11.88	8	.315	.75	1.26	1.97	2.62	.110	780/880		
225.04.884/885	11.81	---										

Combination variations with a clockwise turning workpiece.

