

INDEXABLE TOOLING

Custom Indexable Tooling

INNOVATION

FROM CONCEPT TO CUT

Made In The U.S.A.

Message from VIT

"Innovation from Concept to Cut." This is our well-recognized motto, so I thought I should shed some light on the meaning behind it. Every one of us is asked almost daily by our customers to innovate. How soon can I have this? How do we run this part? Is our machinery capable? What tool should be used? We need it faster. We need it cheaper. We need a lot more of them. The need for innovation comes to us in many forms and from many places.

Innovation. It isn't just a motto. Vermont Indexable Tooling takes pride in being able to respond to our customers' needs with innovative, creative, cost-effective solutions. We know one cut does not fit all.

Concept. Vermont Indexable Tooling has the knowledge, equipment, and skill to deliver unique concepts to solve unique problems. We listen to those who know. We work from conversations, sketches, and even bar napkin drawings that look nothing like the final tool, yet spark the ideas that make things work. We are and want to remain your reliable source of information to help grow manufacturing in the US and abroad.

Cut. Without this, all of the above are just words. Vermont Indexable Tooling stands behind what we do, say, and manufacture. PERIOD.

Our mission is to provide our customers with the best American made custom indexable tooling, and assist them in being globally competitive. We invest heavily in our people, machinery, inventory, and relationships. In doing so, we feel we are securing our future, and the future of manufacturing. We view our customers, and suppliers as valued partners, with invaluable insight and experience. The people of Vermont Indexable Tooling are knowledgeable, smart, well trained, independent, free thinking and creative. We encourage them to step out of the box, and take risks to give our customers the best solutions possible. Our flexible manufacturing systems allow us to rapidly respond, and produce your product in the most efficient, cost effective manner.

We believe that America is still the best place in the world to manufacture and live. We believe that your customer is our customer, so we must be an extension of you. We value this above all. We have come a long way in our 30 years. Vermont Indexable Tooling, has, is, and will be a family owned business. The areas where we have been strong, we have recommitted ourselves to remain strong. In other areas in need of improvement, we have a renewed emphasis on getting it right.

We appreciate and enjoy all of the help and assistance we are receiving in these areas (WE REALLY DO). We continue to invest in all areas of the business. We believe that this helps provide the strong core we need, the agility to lead the custom indexable tooling market, and find new ways to serve our customers. What is new you ask? The answer is simple, but long, so here we go:

Website - New, interactive, full of information, maintained.

Social Media – New, full length videos, tool demos, chats, explanations.

Catalogs & Literature – New, up to date, direct, usable, descriptive.

Machinery – New 5 axis CNC mills, new bar fed CNC lathe, new 7 axis Multi-tasking center.

People – New ownership, additional Engineers, additional Programmers, Expediter/Production Control (new position), additional Machinists, new Field Sales Engineers.

Facility – Twice the manufacturing space as before.

Products – Several new "stock" products, new VMI products, many new tool designs

Business System – New ERP system to manage all aspects of the business in one system.

Design and Programming Software – Upgraded Solidworks, Camworks, and Mastercam software.

Thank you to all of those who have entrusted Vermont Indexable Tooling in the past. Without these relationships, both tried and trusted, we would not be here today. We appreciate, you, your insight, your professionalism, your challenges, your continued business, and your trust.

Welcome to all who put your trust in us moving forward. It will be a fun, exciting, and profitable journey. That is for sure.

Whether you are a former, current, existing, or new customer, you have our word on this: the people of Vermont Indexable Tooling will take care of your needs, answer your questions, provide you with excellent service, design and build you the best, most innovative solution possible.

Warren Snover

Jo Ellen Snover

President/CEO

VP Customer Service & Sales Support

Vermont Indexable Tooling

Vermont Indexable Tooling

Made in the USA

For more than 30 years Vermont Indexable Tooling has produced 100% of our products in the United States of America. That is not going to change.

We make this commitment because we believe that American manufacturing is essential to keep our country's economy strong, and to maintain a stable platform for those entering into the workforce for years to come.

This dedication to American manufacturing can be seen in the value of the indexable tooling that we produce on a daily basis; and in the passion that our employees put into making the highest quality, most reliable and cost efficient products possible. That is the American way.

It is our promise to keep manufacturing in the United States and to make sure that there will always be a manufacturer for an American made indexable tool. We are proud to be able to say today and tomorrow that every product we produce is Made in the USA.

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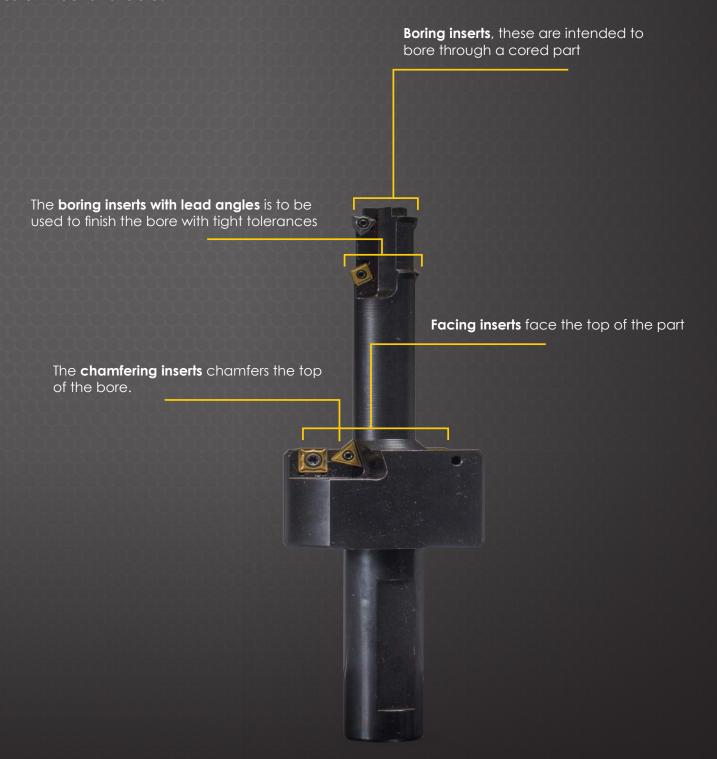
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Custom Tooling Introduction

Custom indexable tooling has many benefits in today's manufacturing environment, primarily because it gives you options. Custom tooling allows you to cut operations, decrease the need for part repositioning, increase quality, and lessen the machine time that it takes to run a particular job. The benefits of custom indexable tooling clearly outweigh their cost and are a valuable asset for today's large and small manufacturers.

In the example below, the customized tool is a rough/finish bore/ ID chamfer/ face tool that combines four operations into one, saving thousands of dollars in solid carbide and reduced machining time. This example shows how the right custom tool, built to your specifications, can save you time and money.

We became the leader in customized tooling by an unswerving commitment to precision manufacturing, quality control, continuous product improvement and customer service you can trust. We are number one in our industry dedicated to helping you to be number one in your industry. Put simply - If you didn't get your custom tool from Vermont Indexable Tooling, you didn't get the best custom tool available.



Angle-Chamfer Tooling

Angle chamfer tools are a very versatile type of tooling that can be utilized on several applications requiring weld preps, edge prep, or chamfering holes. They are used for any chamfer or beveling application, including chamfering, countersinking, lead-in for tapping, deburring, and tapered reaming for tapered threads.

An alternate use is facing at a fixed angle to a top surface. They reduce tooling, setups and secondary operations as well as human error for deburring. They are valuable additions to any milling machine or boring mill including general and production machine shops.



Back Profiling Tooling

Back profiling tools have the head of the tool on center to the shank of the tool and are used in lathe applications. They are utilized for boring or profiling the back side of bored holes, as well as back-boring and back-spot facing. Using back profiling tools can reduce setups, machine time, secondary operations, and eliminate re-positioning errors. This versatile type of tooling has a number of applications at a manufacturing facility, particularly specialty machine shops, and valve and fluids processing manufacturers.



Back Counterbore Tooling

Back counterbore tools have the head of the tool offset from the shank of the tool, and can be used in any milling machine or lathe applications. They are utilized for boring or spot facing back side of bored holes. You can also utilize these tools in certain lathe applications, and for back-shouldering and micro-adjustable boring. Using back counterbore tools can reduce setups and secondary operations, and eliminate re-positioning errors. These versatile tools have applications for general and production machine shops, particularly for the aerospace and valve manufacturing industries.

In milling machines the tool is designed to plunge the counterbore (no interpolation). With the spindle off, orient the tool on center with the hole, then offset the tool to its specified offset, plunge through the hole, and return back to center. Turn the spindle on and plunge back to produce the spot face or counterbore, then reverse procedure to exit the hole. In a lathe you can profile or bore with this tool.

Back Chamfer Tooling

Back chamfer tools have the head of the tool offset from the shank of the tool, and can be used in any milling machine or lathe application, including chamfer on the back side of bored holes, forward and back countersinking/chamfering, and forward and back deburring. In some cases you can also use these tools in front and back chamfer applications. Additional uses are side grooving, single-point boring, and single point threading. The advantages of this type of tool are reduced setups, reduced secondary operations and the elimination of re-positioning errors. This is a versatile type of tooling that could be utilized on several applications in your manufacturing facility, particularly general and production machine shops, and the aerospace and automotive industries.

In milling machines, the tool is designed to plunge the chamfer (no interpolation). With the spindle off, orient the tool shank on center with the hole, then offset the tool to its specified offset, plunge through the hole, and return back to center. Turn the spindle on and plunge back to produce the chamfer, then reverse the procedure to exit the hole. In a lathe application the tools can be utilized to plunge or profile chamfers and bores.



I was experiencing some very frustrating manual deburr problems which were also ergonomic problems, I was introduced to Vermont Indexable Tooling and asked them to come to my facility to analyze my process. Within 2 months I incorporated numerous dual countersink tools and that was 10 years ago. I have since eliminated all manual deburring in my plant and I now have over 45 Vermont Indexable tools running every day. I would have been lost without VIT. They are the best.

- A Very Happy Customer Greenville, SC

Hollow Milling Tooling

Hollow milling tooling can be used in applications where a boss, shaft or tube needs to be turned. Uses include tube-end/bar/boss finishing and ID/OD/face/chamfer of same feature that can be cut simultaneously. In conditions where a pre-existing hole doesn't exist, facing may not be performed all the way to center. If facing needs to happen, a preexisting hole must be in the part. They can be used in lathes for dedicated geometry, and in screw machines for higher productivity. In addition to saving time by combining applications, these tools can also provide cutting stability by removing all material at once.



Integral Tooling

Integral tools are used in high production environments with dedicated tooling and short tool projection. They provide a more rigid connection to the machine spindle and are particularly useful for low rigidity setups or setups with greater L:D ratios. Users include general and production machine shops, particularly in the aerospace industry.



Multi-Step Bore Tooling

Every manufacturer is looking to combine applications to save time and tool changes to an application. These tools combine boring, chamfering and facing all into one tool. In some cases, we can combine two or three different applications on the same part into one tool. In doing this, an application can cut manufacturing time and tooling cost in half. They can significantly reduce tooling, setup, and cycle time, and reduce secondary operations to ensure part accuracy by machining alike features in the same setup. This can be an invaluable advantage in today's competitive manufacturing sector. Uses include (back) boring, (back) chamfering, (back) spot facing, drilling, (back) grooving and threading. They can also be used to share cutting forces for unstable work setups, and for single or multiple features on other areas of the work part. Users include production machine shops, particularly valve and fluids processing manufacturers.

The multi – step boring tool that you folks made for us has increased my production by 22%. Thank you so much. When can you come back and look at some more possibilities?."

- Manufacturing Engineer

A Major Transportation Component Company



Drill Combo Tooling

Every manufacturer is looking to combine applications to save time and tool changes to an application. Drill combo tools combine drilling, boring, chamfering and facing all in one tool. In some cases, we can combine two or three different applications on the same part into one tool. By using these tools, manufacturers can cut manufacturing time and tooling cost in half. These tools reduce tooling and cycle time, and increase hole accuracy and concentricity. Users include production machine shops, and valve and fluids processing manufacturers.



Combined Operation Tooling

Every manufacturer is looking to combine operations and tooling into one application in order to save time and tool changes. These tools can combine boring, chamfering, facing and other operations, into one tool. In some cases, we can find a way to cut two or three different features of the same part into one tool. In doing this, a single application can cut manufacturing time and tooling costs in half. They can significantly reduce tooling, setup, cycle time, and reduce secondary operations to ensure part accuracy by machining alike features in the same setup. This can be an invaluable advantage in today's competitive manufacturing sector.



Combined Operation Tooling

Uses include (back) boring, (back) chamfering, (back) spot facing, drilling, (back) grooving and threading. They can also be used to share cutting forces for unstable work setups, and for single or multiple features on other areas of the work part. Users include production machine shops, particularly valve and fluids processing manufacturers.



Milling

Milling tools can be used for profiling, shouldering, facing, interpolating, helix boring, and can be customized and optimized to suit customer needs. Users include general and production machine shops.



The development of the removable cap helical mill, and custom return flange mills has saved us 100's of thousands of dollars in tooling expenses, and time. I had a problem and Vermont Indexable Tooling had a solution.

- Lead Manufacturing Engineer
Tier 1 Aircraft Component Manufacturer



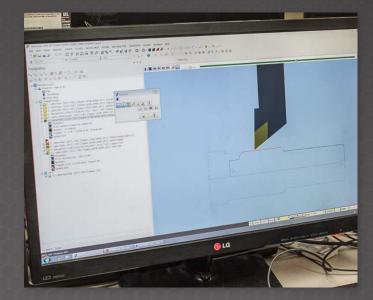
Detachable Head Tooling

In large back bore applications, detachable heads serve a couple of different purposes. They can be valuable in large tooling applications, because if inserts let loose the whole tool is destroyed. The detachable head of the tool can be replaced, allowing the tool to be salvaged. This also allows in most cases the ability to utilize standard shell adapters to mount on the tooling heads. These tools can also be used for quick changeover for high-variation work, or for families of similar work part features. They add modularity to tooling for reduced costs, have compatibility with standard tool holders, can ease replacement, and be cost effective for damaged tooling. Users include general machine shops, particularly in the aerospace, valve manufacturing, energy and aviation industries.



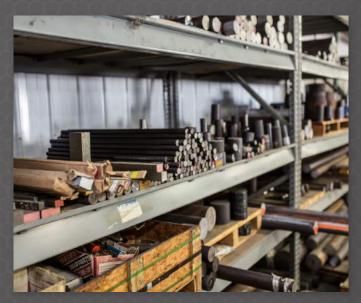
Our Process

At Vermont Indexable Tooling, we have established processes to make sure our customers get the highest quality, most reliable and cost-efficient products possible.



Development.

This process begins with product design and testing. Our engineers and programmers, with their commitment to innovation, use the latest cutting edge software to push the foundations of what people think is possible with indexable tooling.



Inventory.

We keep a large inventory of raw stock available for each of our jobs. This allows us to keep the job flow moving, and accommodate the rush orders that come from our customers.



Organization.

We know that an efficient organizational structure is vital to making sure we produce our tooling on time, on budget and to our customers' specifications. Before any of our tools are processed, job schedules are set and job boxes are made. This allows our machinists to maintain deadlines and keep job flow at an optimum level.

Our Process

CNC Machinery.

VIT has a number of CNC machines that allow us to produce custom indexable tools with the quickest lead time in the industry. We pride ourselves on being large enough to ensure quality and precision in a cost effective manner regardless of the order size, and small enough to keep in touch with a customer's needs, and expectations on what their tool should be able to do.









Quality Control.

Quality control and inspection is a key commitment at VIT. To this end, all of our tools are double checked to ensure tolerances are correct and the tools are ready for use. We do not let products out the door unless we are confident our products will meet or exceed our customers' expectations.

Stock Tool Introduction

Vermont Indexable Tooling holds patents on multiple stock tools that we manufacture and sell, such as the spot centering tool and back counterbore line of tools. All of our stock tools are manufactured in the United States to the highest tolerances, and can be made into an almost limitless amount of custom tool configurations. Plus every tool comes with a guarantee against all manufacturers defects. You can trust that our stock tooling will meet or exceed your expectations. Vermont Indexable Tooling's stock tools have been a key part of our business since the late 1980s and demonstrate our commitment to maintaining and continuously improving this product line.



Plunge Mill/Drill Mill - PM Series

Applications: Drilling, Plunging, Milling, Slotting, Helical Interpolation, Shoulder Milling, Contours, Facing, Core Drilling, Boring



Weldon Shank - Coolant Style

Part#	EDP#	Dia. of Cut	Length of Insert	# of Flutes	Shank Dia.	OAL	Max. DOC	Length of Flute	Insert	Screw(s)
PM0480-0500-0001	V12035	.480"	.23"	1	.500"	3.03"	1.25"	.67"	SECW 21.21	F663
PM0605-0625-0001	V12036	.605"	.29"	1	.625"	3.41"	1.50"	.74"	SECW 2.51.51	F708
PM0750-0750-0002	V12037	.750"	.29"	2	.750"	4.22"	2.19"	1.05"	SECW 2.51.51	F708
PM0875-0750-0002	V12038	.875"	.29"	2	.750"	4.41"	2.38"	1.05"	SECW 2.51.51	F708
PM1000-1000-0002	V12039	1.000"	.34"	2	1.000"	4.66"	2.38"	1.36"	SD-322P	F1099
PM1125-1000-0002	V12040	1.125"	.34"	2	1.000"	4.78"	2.50"	1.36"	SD-322P	F1099
PM1250-1250-0002	V12042	1.250"	.47"	2	1.250"	5.00"	2.75"	1.69"	SD-422P	F610
PM1500-1250-0002	V12044	1.500"	.59"	2	1.250"	6.00"	3.75"	1.73"	SD-532P	F1185
PM1625-1250-0002	V12046	1.625"	.59"	2	1.250"	6.25"	3.97"	1.73"	SD-532P	F1185
PM1750-1250-0002	V12047	1.750"	.59"	2	1.250"	6.05"	4.22"	1.73"	SD-532P	F1185
PM1875-1250-0002	V12048	1.875"	.59"	2	1.250"	6.75"	4.47"	1.73"	SD-532P	F1185
PM2000-1250-0002	V12049	2.000"	.59"	2	1.250"	6.75"	4.47"	1.73"	SD-532P	F1185

Spot/Centering Tool - SCT Series

Manual Mills or CNC Spotting, Centering, Slotting
Manual Lathe or CNC Centering, Facing, Grooving, OD, ID Chamfer

Unique design to produce a multitude of applications



Straight Shank - Coolant Style

Part#	EDP#	Tool Description and Included Angle	OAL	Shank Length	Max. Cut Dia.	Shank Dia.	Insert Description	Screw
SCT0490-0375-2250	V8122	82° - 1/4" IC Insert	2.25"	1.50"	⊘.49"	.375"	C1356	F1109
SCT0520-0375-2250	V8120	90° - 1/4" IC Insert	2.25"	1.50"	○.52"	.375"	C1356	F1109
SCT0860-0750-3700	V8000	90° - 3/8" IC Insert	3.68"	2.50"	⊘.86"	.750"	C1350	F575
SCT0860-0750-3700X	V8620	90° - V8000 w/ no flat	3.68"	2.50"	○.87"	.750"	C1350	F575
SCT0560-0375-2250	V9150	100° - 1/4" IC Insert	2.25"	1.50"	⊘.56"	.375"	C1356	F1109
SCT1030-0750-3700	V8172	120° - 3/8" IC Insert	3.69"	2.50"	○1.03"	.750"	C1350	F575
SCT0680-0750-3500	V1361	144° - 1/2" IC Insert	3.50"	2.00"	⊘.68"	.750"	C1045	F610

As Production Manager I am in charge of ordering tooling and finding companies to build special tooling. I use Vermont Indexable Tooling. We use the spot centering tool and they work amazing for centering, chamfering and general deburring. In addition, I have several Custom Indexable milling cutters that we use in our production runs. Their Engineering/Quoting departments are both *knowledgeable* and *timely*. They are there to answer any questions with speed and feed issues on their tooling. I've have been *very impressed* with all aspects of Vermont Indexable Tooling and look forward to working with them in the future.

⁻ Programmer/Manufacturing Engineer

A Major Construction Equipment Manufacturing Company

Forward Counterbore Tool - FCB Series

Standard coolant through bodies

Applications: Plunge Boring on mill or lathe, Counterbore, Spot Face



Straight Shank - Coolant Style

Part#	EDP#	Cap Screw	Dia. of Cut	Min. Hole Size	OAL	Max. DOC	Shank Dia.	Insert	# of Flutes	Screw(s)
FCB0432-0500-3200	V4764	M6	.432"	.266"	3.20"	1.20"	0.500"	CPGT 1.51.21	1	F908
FCB0438-0500-3250	V7900	1/4"	.438"	.266"	3.25"	1.25"	0.500"	CPGT 1.51.21	1	F908
FCB0531-0500-3500	V7901	5/16"	.531"	.328"	3.50"	1.44"	0.500"	CPGT 1.51.21	1	F908
FCB0552-0500-3375	V4765	M8	.552"	.240"	3.38"	1.38"	0.500"	CPGT 1.51.21	1	F908
FCB0561-0500-3375	V13574	M8	.561"	.328"	3.75"	1.75"	0.500"	CPGT 1.51.21	1	F908
FCB0625-0750-4125	V7902	3/8"	.625"	.391"	4.13"	1.63"	0.750"	CPGT 1.51.21	2	F908
FCB0679-0750-4060	V7922	M10"	.679"	.360"	4.06"	1.56"	0.750"	CPGT 1.51.21	2	F908
FCB0749-0750-4430	V4767	M12"	.750"	.315"	4.43"	1.93"	0.750"	CPMT 21.51	2	F663
FCB0781-0750-4500	V3764	1/2"	.781"	.328"	4.50"	1.89"	0.750"	CPMT 21.51	2	F663
FCB0813-0750-4625	V7903	1/2"	.813"	.516"	4.63"	2.13"	0.750"	CPMT 21.51	2	F663
FCB0875-0750-4625	V11021		0.875"	.516"	4.63"	2.13"	0.750"	CPMT 21.51	2	F663
FCB0987-0750-4800	V4768	M16	.987"	.641"	4.80"	2.00"	0.750"	CPMT 32.51	2	F899
FCB1000-0750-5000	V7904	5/8"	1.000"	.641"	5.00"	2.50"	0.750"	CPMT 32.51	2	F899
FCB1188-1000-5750	V7905	3/4"	1.188"	.766"	5.75"	2.75"	1.000"	CPMT 32.51	2	F899
FCB1250-1000-6000	V11022		1.250"	.766"	6.00"	3.00"	1.000"	CPMT 32.51	2	F899
FCB1375-1000-6000	V11023	-	1.375"	.766"	6.00"	3.00"	1.000"	CPMT 32.51	2	F899
FCB1463-1000-5880	V4770	M24	1.463"	.748"	5.88"	2.88"	1.000"	CPMT 32.51	2	F899
FCB1476-1000-5690	V7926	M24	1.476"	.964"	5.69"	2.69"	1.000"	CPMT 32.51	2	F899
FCB1500-1000-5500	V13258		1.500"	0.843	5.50"	2.50"	1.000"	CPMT 32.51	2	F899
FCB1532-1000-5500	V3767	1"	1.523"	.875"	5.50"	2.50"	1.000"	CPMT 32.51	2	F899
FCB1625-1000-5750	V7906	1"	1.625"	1.016"	5.75"	2.75"	1.000"	CPMT 32.51	2	F899
FCB1750-1000-6000	V11024	-	1.750"	.813"	6.00"	3.00"	1.000"	CCMT 432	2	F704

Back Chamfer Tool - BCT Series

Applications: 45° Back Chamfering on variety of hole sizes

Plunging - Tools are designed with an elliptical neck and are intended for offset entry similar to the offset neck style back spot facing tools.

Circular Interpolating - Tools can also be used for front & back chamfering by circular interpolating and through holes larger than Max Chamfer Diameter.

Milling - Tools can also be used for front & back chamfer milling on the side of a part.



Straight Shank - Coolant Style PLUNGE Applications:

2	Part#	EDP#	Max. Chf. Dia.	Min. Thru Hole	Head Dia.	Shank Dia.	Offset	OAL	Shank Length	Max. Part Thickness	Insert	Screw
	BCT0480-0744-0953-45	V12065	⊘.735"	⊘.438"	⊘.408"	○.500"	0.168"	3.12"	1.12"	.700"	SECW 21.21	F1109
	BCT0658-1139-1670-45	V12066	○1.121"	⊘.688"	○.658"	○.750"	0.241"	4.42"	1.92"	1.244"	SD-322	F1099
	BCT1000-1499-2926-45	V12067	○1.481"	○1.048"	⊗1.000"	⊗1.000"	0.250"	6.18"	3.18"	2.500"	SD-322	F1099
1	BCT1408-1969-3967-45	V12068	○1.951"	○1.438"	○1.408"	○1.500"	0.250"	7.31"	4.31"	3.500"	SD-422	F610

CIRCULAR INTERPOLATION Applications:

Part#	EDP#	Max. Chf. W	Min. Thru Hole	Shank Dia.	OAL	Shank Length	Max. Part Thickness	Insert	Screw
BCT0480-0744-0953-45	V12065	0.148"	⊘.774"	⊘.500"	3.12"	1.12"	.700"	SECW 21.21	F1109
BCT0658-1139-1670-45	V12066	0.216"	○1.169"	○.750"	4.42"	1.92"	1.244"	SD-322	F1099
BCT1000-1499-2926-45	V12067	0.216"	⊗1.529"	⊗1.000"	6.18"	3.18"	2.500"	SD-322	F1099
BCT1408-1969-3967-45	V12068	0.256"	⊗2.000"	○1.500"	7.31"	4.31"	3.500"	SD-422	F610

Back Counterbore - BCB Series

Applications: Back Counterboring or Back Spot Facing, on back side of holes Coolant style upon request (up to 3 day turn around).



Back Counterbore Tool

Daniell	EDD#	Сар	Hole	Tool Head	C'bore	Max. Part	Officet	Head Length Plus	041	lucout	Head	Shank Dia.	Screw
Part#	EDP#	Screw	Dia. Min.	Dia.	Dia.	Thickness	Offset	Shank Length	OAL	Insert	Head	Sildlik Did.	Screw
BCB0250-0406-0609	V1940	1/4"	.280"	.250"	.406"	.547"	0.078"	0.922"	2.92"	CDHB 1.20.61	.313"	0.500"	F716
BCB0236-0432-0472	V4757	M6	.266"	.236"	.432"	.412"	0.098"	0.785"	2.78"	CDHB 1.20.61	.313"	0.500"	F716
BCB0250-0438-0609	V7820	1/4"	.266"	.250"	.438"	.548"	0.094"	0.922"	2.92"	CDHB 1.20.61	.313"	0.500"	F716
BCB-0281-0500-0600	V10420	-	.313"	.281"	.500"	.531"	0.110"	0.913"	2.91"	CDHB 1.20.61	.313"	0.500"	F716
BCB-0313-0513-0781	V7821	5/16"	.328"	.313"	.531"	.719"	0.109"	1.094"	3.09"	CDHB 1.20.61	.313"	0.500"	F716
BCB0315-0561-0689	V7911	M8	.330"	.315"	.561"	.629"	0.123"	1.001"	3.00"	CDHB 1.20.61	.313"	0.500"	F716
BCB0375-0625-0937	V7822	3/8"	.391"	.375"	.625"	.875"	0.125"	1.375"	3.87"	CPGT 1.51.21	.438"	0.750"	F908
BCB0394-0679-0906	V7912	M10	.413"	.394"	.679"	.846"	0.143"	1.344"	3.84"	CPGT 1.51.21	.438"	0.750"	F908
BCB0470-0750-1250	V10421		.500"	.470"	.750"	1.188"	0.140"	1.750"	4.25"	CPMT 21.51	.500"	0.750"	F663
BCB0500-0781-1281	V1943	1/2"	.516"	.500"	.781"	1.218"	0.141"	1.719"	4.22"	CPMT 21.51	.438"	0.750"	F663
BCB0500-0813-1281	V7823	1/2"	.516"	.500"	.813"	1.219"	0.157"	1.719"	4.22"	CPMT 21.51	.438"	0.750"	F663
BCB0500-0875-1281	V11041	-	.516"	.500"	.875"	1.219"	0.188"	1.719"	4.44"	CPMT 21.51	.438"	0.750"	F663
BCB0625-1000-1625	V7824	5/8"	.641"	.625"	1.000"	1.563"	0.188"	2.250"	5.25"	CPMT 32.51	.625"	1.000"	F899
BCB0750-1156-1937	V1945	3/4"	.780"	.750"	1.156"	1.843"	0.203"	2.562"	5.56"	CPMT 32.51	.625"	1.000"	F899
BCB0750-1188-1937	V7825	3/4"	.766"	.750"	1.188"	1.875"	0.219"	2.562"	5.56"	CPMT 32.51	.625"	1.000"	F899
BNCB0720-1250-1729	V10422	-	.750"	.720"	1.250"	1.669"	0.265"	2.354"	5.35"	CPMT 32.51	.625"	1.000"	F899
BCB0720-1375-1500	V11130		.750"	.720"	1.375"	1.312"	0.328"	2.250"	4.75"	CPMT 32.51	.750"	0.750"	F899
BCB0945-1476-2441	V7916	M24	.964"	.945"	1.476"	2.381"	0.266"	3.066"	6.06"	CPMT 32.51	.625"	1.250"	F899
BCB0945-1500-2538	V10423	44-4	.975"	.945"	1.500"	2.478"	0.278"	3.163"	6.16"	CPMT 32.51	.625"	1.250"	F899
BCB1000-1625-2625	V7826	1"	1.016"	1.000"	1.625"	2.563"	0.313"	3.250"	6.25"	CPMT 32.51	.625"	1.250"	F899
BCB0970-1750-2204	V10424		1.000"	.970"	1.750"	2.144"	0.390"	2.954"	5.95"	CCMT 432	.750"	1.250"	F704
BCB0970-1875-2188	V11730	-	1.000"	.970"	1.875"	2.000"	0.453"	3.188"	6.18"	CCMT 432	1.000"	1.000"	F704

⁴⁴ We switched to your offset tools and we were able to reduce our counter bore cycle time by a third.⁷⁷

Programmer/Manufacturing Engineer
 A Power Generation Company