

HEXO® CNC  
Router Bits for  
Stone Fabrication

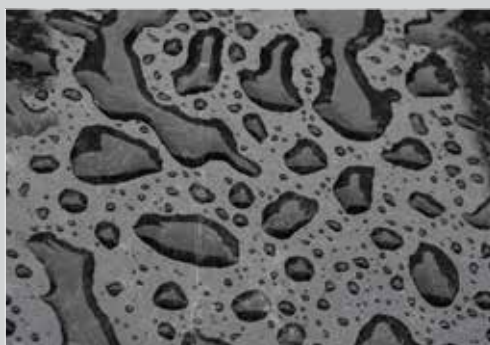
Finger Bits

Breaker Bits

Core Bits

Tool Holders

Application  
Data





## our commitment

Dear Valued Customer,

At Superabrasive, we are excited about the future and what it holds for our company. As our business grows, so does our opportunity to have an even greater impact on your business and your bottom line.

We have been manufacturing high quality diamond tooling and equipment since 1986. With a 200,000 sf manufacturing facility in Europe and a 46,000 sf warehouse facility in Atlanta, GA serving as a distribution point within easy reach for North America, South America, Australia and Asia, Superabrasive has grown and changed greatly through the years. Our advantage in the marketplace continues to be our dedication to research and development and the ability to classify, sort, test and control the quality of the diamond powder used in the manufacturing of diamond tools.

Our most popular brands continue to thrive, including LAVINA PRO, TORO-F™, TORO-B®, HEXO®, NATO® and T-BONE® floor polishing discs, Calibra, and V-HARR® polishing pads. Striving to meet the ever changing industry demands and offer a "one-stop" shop for our customers, we have also added many new great products to our portfolio, including vacuum systems, chemicals, dyes, and a variety of accessories. In 2011 we will continue to improve by adding a variety of new products, such as TORO PROEdge. We are also continuing to upgrade our most popular product lines, such as HEXO®, to which we are adding segmented position "O" steps, and increasing our portfolio of profiles.

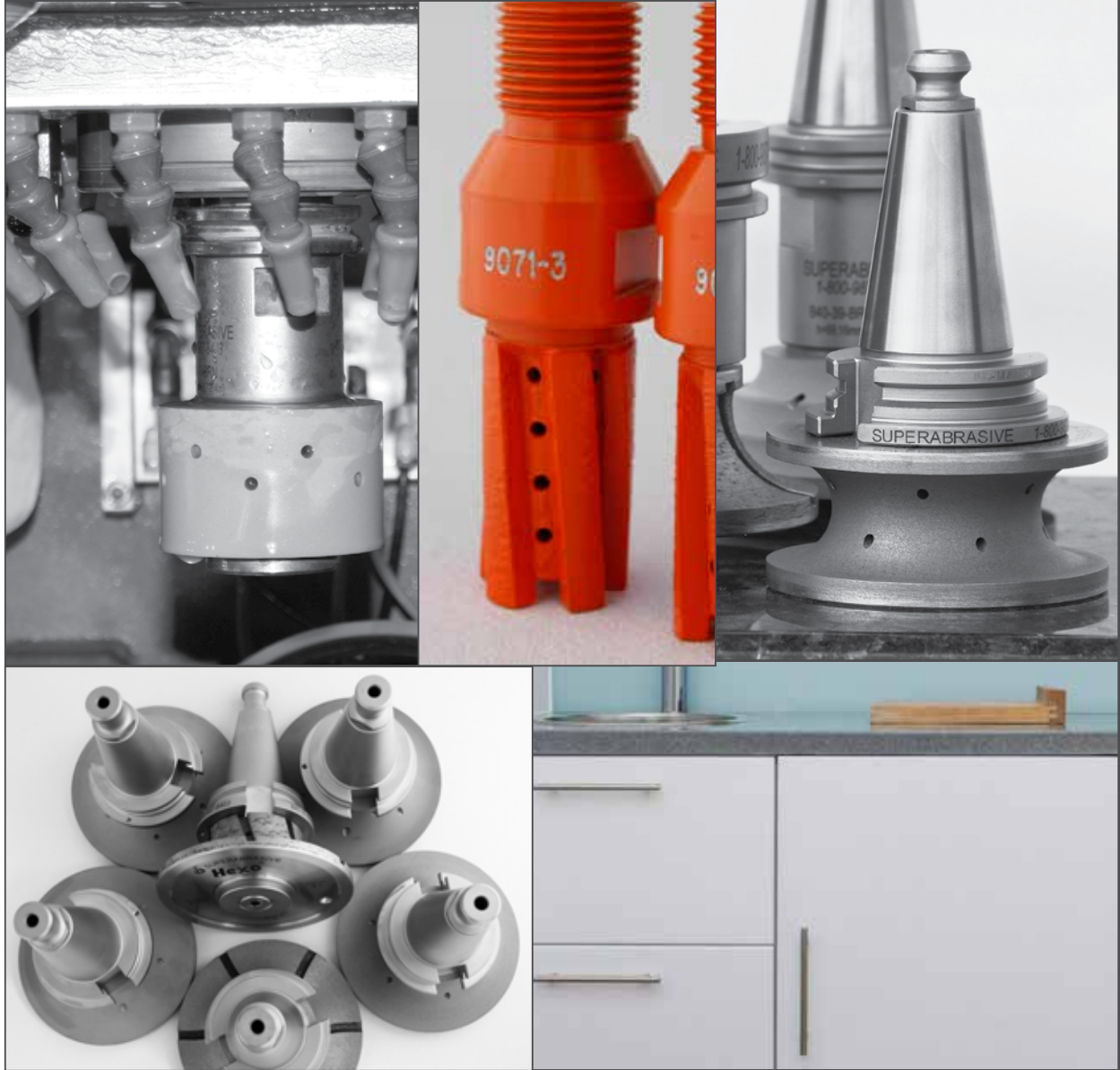
We are totally committed to providing exceptional products and outstanding customer service to you, our valuable customers. If you would like to get to know us better, please contact us. We thank you for your business, and we welcome the opportunity to speak with you and to contribute to your success.

Sincerely,



George Popov  
CEO  
SUPERABRASIVE, INC.





- All tooling is accompanied by data sheets with complete set-up information including pre-calibrated setting parameters, detailed operating information, and maintenance instructions. These data sheets save valuable time for operators and greatly reduce the possibility of set-up and calibration errors.
- All tools are carefully balanced and inspected by strict quality control standards before leaving the factory.
- Superabrasive is the only CNC tool manufacturer with the ability to redress the metal *and* polishing steps for continued use.
- Superabrasive has a highly trained on-site technical support team available for assistance via telephone and e-mail.

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# frequently asked questions

## General

### What is a CNC machine and what are CNC router bits?

A CNC machine is a **C**omputer **N**umerical **C**ontrolled machine that uses highly automated CAD/CAM programs to perform beginning-to-end component design production. CAD/CAM programs develop a computer file, which launches the commands needed to operate a particular CNC machine; in this catalog, we refer only to CNC machines designed for stone counter top fabrication. CNC machines require various CNC tools including router bits, finger bits, drills and saws for the fabrication process. Selecting the right system of CNC router bits will greatly impact the quality and the cost efficiency of the finished product.

### Why should I use the HEXO® 6-step System of Router Bits? What makes them unique?

HEXO® CNC tooling is a top performing, high speed, long life CNC system. In addition, there are many features which make HEXO® truly unique to any other system available on the market today. HEXO® is the only system utilizing only six steps (4 metal and 2 polishing steps) to process raw-cut stone slabs into ready-to-install counter tops. In addition, HEXO® is the only system with a 6mm diamond layer on each tool - including the polishing steps - which is much greater than the 0.8mm layer found in our competitors' rubber polishing steps, ensuring HEXO® tools a 7.5 times longer life. These features, in combination with the high quality polish guarantee superb results for less time and money than any other system on the market.

### If I purchase a HEXO® system, what kind of technical support does Superabrasive provide?

Superabrasive staffs a highly skilled technical support team. Our staff has completed extensive CNC training, possesses fabrication shop experience, and conducts regular R&D in-house on Superabrasive's own CNC machine. They are available for contact via telephone and email, and are in some cases also available for on-site assistance.

### Does Superabrasive redress all HEXO® positions, including the polishing steps? What is the advantage of redressing?

Yes, we do! Due to the extremely thick 6mm diamond layer on each tool, including the polishing steps, we are able to redress every HEXO® CNC tool. Redressing will prolong the life of the tools, a key advantage for HEXO® as our competitors' rubber polishing steps cannot be reshaped due to their extremely thin diamond layers. However, please keep in mind that this does not apply to the optional position "0" - unfortunately, these are unable to be redressed.

### Can I skip a step, or do I have to use all 6?

Although you can skip a step, we strongly advise against it. Each step performs a specific task that adds to the quality of the final product. During the various stages of the manufacturing process, Superabrasive has tested the work of all the steps vs. fewer steps. Results show that a complete set of bits achieves a higher-end finish compared to a set lacking a step. In addition, combining sets can damage some of the bits and the stone.

### Can I special order a profile that Superabrasive doesn't currently offer?

Yes, Superabrasive does accept orders for special profiles for the first three positions only. All special order profiles will be produced in a vacuum brazed bond, and production times may vary. Please contact us for additional information, including quotes and lead time.

## Setting and Calibrating

### Why must CNC tools be calibrated before use?

Calibration is essential for ensuring the proper performance of CNC tooling. Calibration is simply the validation of the specific measurements of the CNC tool set against those of the CNC machine. All sets new to a particular machine must be calibrated before use. However, there is no need for a second calibration for the same set.

### Why should I use the Data Sheet provided with the CNC tools when I can take the measurements myself?

It is possible to take the measurements yourself; however, the average measuring devices and procedures commonly used are not precise enough. Inexact measurements will prolong the time needed to calibrate the tooling, and also leave room for costly errors. Therefore, we always recommend using the Data Sheet provided by Superabrasive. By investing in state-of-the-art technologies designed to take the most precise of measurements, we have done the difficult work in advance, guaranteeing HEXO®'s performance.

### Why should CNC finger bits be calibrated after CNC tools have been used?

CNC finger bits must be calibrated regularly as they wear quickly and their tool diameter changes with each use. For this reason, a finger bit that has not been recalibrated regularly will leave too much material for the first step to remove, and this will cause uneven wear to the first position.

## frequently asked questions

**Can I switch CNC tools from one machine to another without calibrating them, only using the data sheet from the first machine?**

No, we strongly advise against this. Tolerance limits are unique to each CNC machine, and the tooling must be recalibrated to ensure proper performance.

**Can I combine tools of the same profile by different manufacturers?**

CNC bits by different manufacturers are not interchangeable. Each CNC tool is designed to perform a specific function within a set. Testing has proven that the best results are achieved when the entire set is used according to manufacturers' instructions. In addition, lack of tool compatibility may result in costly damage to the machine, tooling, or the end product.

### Tool Holders

**What is the advantage of purchasing CNC tools that are premounted to CNC tool holders?**

Purchasing bits that have been premounted to tool holders saves valuable time and money. Premounted tooling also reduces the possibility of costly mistakes.

**What is the proper way to mount the tool on the tool holder?**

The side of the tool marked "base side" should connect with the V-Flange on the tool holder. It is very important that the tool is mounted onto the holder via the correct side, as they are not interchangeable. Please see the diagram on page 35 for additional information about tool holders and mounting.

### Polishing

**Why are HEXO® resin polishing steps a better alternative to our competitors' rubber polishing steps?**

Because the working surface of our resin polishing steps is completely coated by a 6mm thick diamond layer, they are able to achieve a "full-body" polish that performs equally well on a variety of different stones. The rubber in rubber polishing bits expands during work and cracks the diamond layer, resulting in an "orange peel" effect on the stone's edge. The solid diamond layers of the HEXO® resin steps achieve a straight, smooth profile. In addition, the thick 6mm layer guarantees longer tool life and enables the tooling to be redressed; redressing is not an option for the thinner rubber bits.

**By increasing the tension between the router bit and the stone, will I achieve a better polish?**

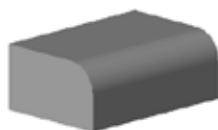
No. Increasing the tension results in greater heat and friction, which can result in deep lines, burns, and an "orange peel" effect.

### More Useful Tips for HEXO® CNC Users...

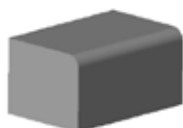
- Using the correct sized tool holder is very important. Within this catalog and next to each tool, we have listed the correct size appropriate for each individual profile. Refer to pages 14 - 33 for this information.
- If using existing tool holders, always use their original locking kit (nut and bolt) to prevent internal water blockage. Also, always ensure the water channels in the tool and tool holder are free of debris. Water blockage can result in damage to the tool holders' seals as well as the CNC tooling itself.
- All measuring devices should be kept clean and stored in a safe location.
- When mounting the tool on the tool holder, the marked "base side" of the tool must face the V-Flange of the tool holder. Tools may only be mounted in one direction; they are not reversible. Please refer to page 35 for a technical drawing and additional information.
- Store CNC tooling in their original wooden boxes and keep the boxes in a safe and dust-free place, if possible.
- It is important to maintain the machines' water nozzles and ensure they are always in optimal working condition. Water flow is critical to the performance of the CNC tooling. In addition, always ensure that the water nozzles are facing the tool while working.
- When calibrating HEXO® polishing steps, be sure there is minimal tension between the tool and the stone. The operator should be able to rotate the tool by hand with ease when in contact with the stone. Increased tension can cause damage to the polishing steps.

## our profiles

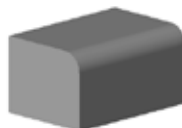
We frequently add new profiles to our library, and we can also produce special profiles upon request. Please check our website frequently for additions - [www.superabrasive.com](http://www.superabrasive.com) - or contact us with any questions.



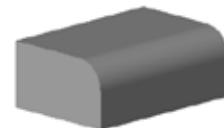
A2-R10



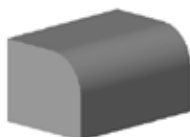
A3-R5



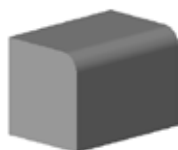
A3-R8



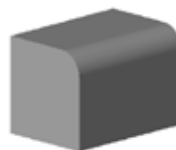
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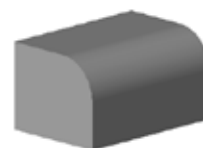
A3-R15



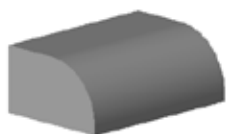
A4-R8



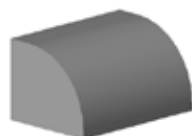
A4-R10



A4-R15



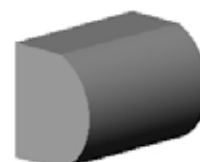
B2-R20



B3-R30



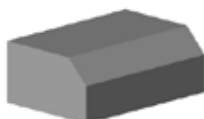
BR3



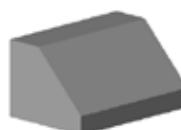
C3



E2-C17



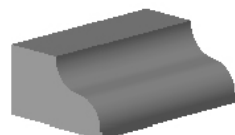
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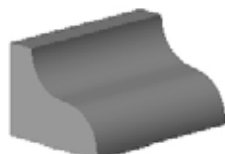
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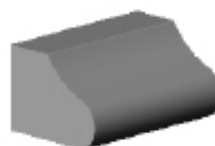
E4-C9



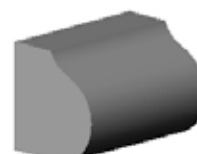
F2



F3

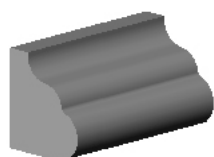


FG3

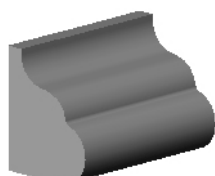


FGS4

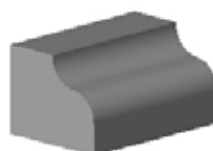




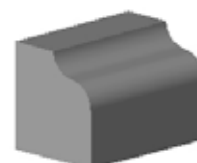
FV3



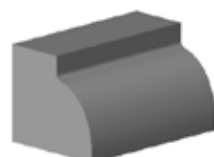
FV4



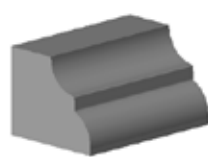
FZ3



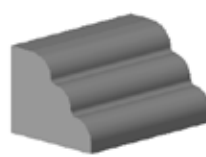
FZ4



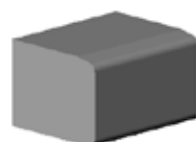
H3



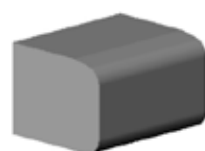
O3



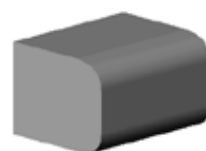
O/S3



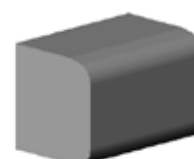
T3-R3



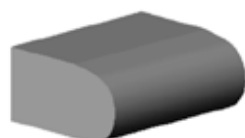
T3-R6



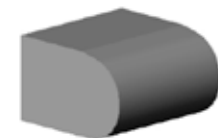
T3-R8



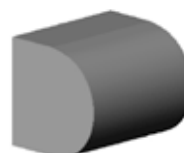
T4-R8



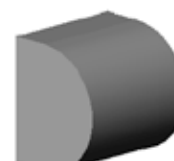
V2



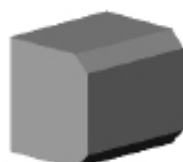
V3



V4



V6



X3



Z2/Z3/Z4



Z2/Z3/Z4-D60

# HEXO® CNC tooling

## Six steps, six mm diamond layer, and the longest tool life in the industry...

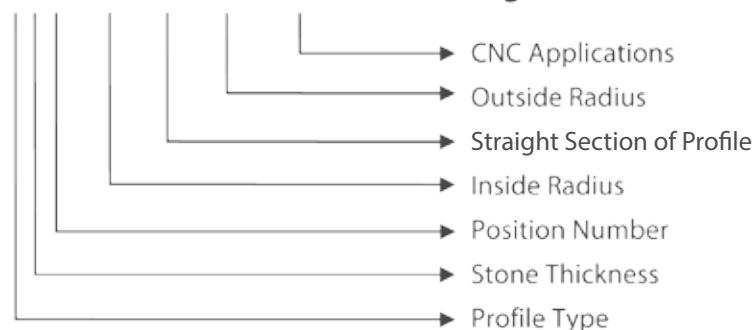
HEXO® CNC router bit system, manufactured by SUPERABRASIVE, is an exceptional quality diamond bit system for stone fabrication. The HEXO® CNC system features 6 steps - 4 metal and 2 polishing. SUPERABRASIVE has invested significantly in the latest state-of-the-art technology for determining and measuring the parameters of the CNC bits. This effort on our behalf, will tremendously reduce the operator's time and effort in setting up the tools. All HEXO® CNC bits come with pre-calculated setting parameters, detailed operating information, maintenance instructions and professional support.

SUPERABRASIVE complements the HEXO® CNC router bit system with the latest technology CNC tool holders and offers already assembled, pre-measured CNC TOOLS WITH HOLDERS for easy and error-free setup.

We have also added a new optional position "0" - a segmented first step which allows for even faster stock removal!

### O3.1-R12+P6+R12-CNC

### Legend of CNC Item Numbers



## How to understand the HEXO® CNC technical data sheets and data legend...

**SUPERABRASIVE**  
DIAMOND POWDER • DIAMOND TOOLS

**Hexo®**  
ROUTER BITS FOR CNC MACHINES

CONGRATULATIONS ON BUYING SUPERABRASIVE'S TOP QUALITY **Hexo®** CNC SYSTEM!  
PROFILE V3-R15

POSITION I - STOCK REMOVAL & SHAPING

I. GENERAL INFORMATION:  
IN ORDER TO ACHIEVE EXCELLENT RESULTS AND TO EXTEND THE LIFE OF THE TOOLS:  
• USE ONLY SUPERABRASIVE'S WHEELS ON ALL POSITIONS AND DO NOT COMBINE OUR WHEELS WITH WHEELS MANUFACTURED BY OTHER COMPANIES AS THIS.  
• ALWAYS CALIBRATE THE SLAB FOR PROFILES V, T AND X.  
• DO NOT EXERT EXTRA PRESSURE ON THE EDGE WHEN WORKING ON THE POLISHING STEPS (POSITION 4, 5 AND 6).  
• REFER TO CUTTING CAPACITY PARAMETERS FOR PRECISE LIMITS.  
• USE SUFFICIENT AMOUNT OF WATER FOR BETTER LUBRICATION AND COOLING.  
• SET THE WEAR FACTOR OF THE MACHINE TO 0.

II. FEED:  
ROTATION SPEED(RPM): 6000  
ENTRY FEED: MM/MIN (IN/MIN) 2000-3000 (80-120)  
FEED: MM/MIN (IN/MIN) 2000-3000 (80-120)  
FINAL FEED: MM/MIN (IN/MIN) 2000-3000 (80-120)  
CUTTING CAPACITY: MM (IN) 0.5 (0.02)  
(INCREMENT)/(OFFSET)

III. GEOMETRIC DATA:  
PROFILE V3-R15: BORE Ø 35MM (1.378IN) LENGTH 38 MM (1.496IN)

• CTL= CALCULATED TOOL LENGTH

Tool No:	MM	IN
d		
D		
(R)		
B		
L		
A		
h		
CTL		

OCC: \_\_\_\_\_ DATE: \_\_\_\_\_

Unlike other CNC tooling systems, every HEXO® tool is accompanied by data sheets, which provide detailed information critical to the accurate set up of the tools. With this information at hand, operators are saving valuable set-up time, and also eliminating the possibility of making costly mistakes, which can damage both the machine and the tooling.

d	working or small diameter
D	overall or large diameter
(R)	profile radius
A	distance from the marked "base side" of the tool to the working point of the tool
L	total length of the tool
B	distance from the marked "base side" of the tool to the center of the radius
h	distance from the gauge line to the face of the V-Flange
CTL	calculated tool length

# HEXO® Z breaker

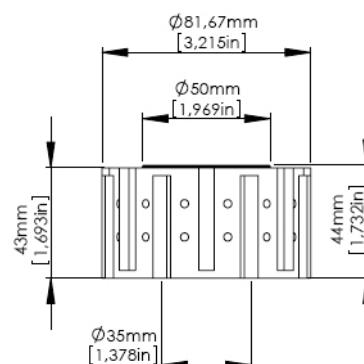
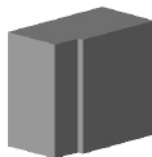
## HEXO® CNC Breaker Bits

### NEW! "Zero Tolerance" Z Breaker

Item Number	Slab Thickness (mm)	Rotation Speed (RPM)	Over Material (mm/in)	Feed (mm/in)
ZTB2/3/4-CNC	20-30-40	5000 - 6000	1.52 / 0.06	1000 - 1500 (40-60)

The HEXO® CNC Zero Tolerance Z breaker is a segmented diamond tool designed for stock removal and pre-cutting. This optional step compensates for the finger bit or bridge saw by removing additional material on the stone that is left behind, and eliminates the need to frequently replace and re-calibrate the finger bit.

May be used before position "0" for every HEXO® CNC profile.



# HEXO® single breaker

## HEXO® CNC Breaker Bits

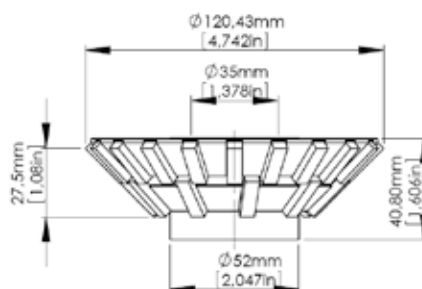
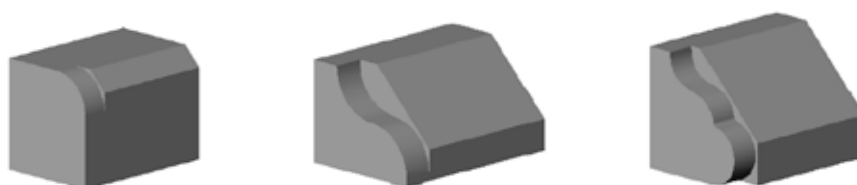
### Single Breaker

Item Number	Slab Thickness (mm)	Rotation Speed (RPM)	Over Material (mm/in)	Feed (mm/in)
SB-2/3/4-CNC	20-30-40	5000 - 6000	1.52 / 0.06	1000 - 1500 (40-60)

The HEXO® single breaker is a segmented diamond tool designed for stock removal and pre-cutting. It is important to note that the single breaker is an optional step and should be followed by position "0". HEXO® single breaker is recommended for the following profiles:

A3-R15, A4, B2, B3, BR3, E2, E3-C24, F2, F3, FG3, FV3, FV4, FZ3, H3, O3, O/S3

Optional for the following profiles: A3-R10, E3-C9, E4



2cm, 3cm, 4cm

# HEXO® double breaker

## HEXO® CNC Breaker bits

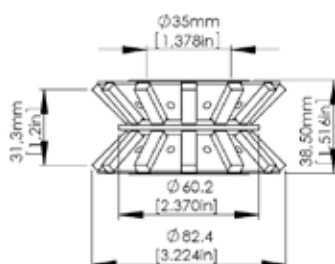
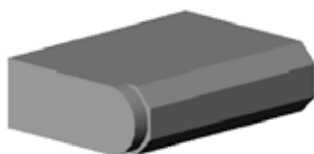
### Double Breaker

Item Number	Slab Thickness (mm)	Rotation Speed (RPM)	Over Material (mm/in)	Feed (mm/in)
DB-2/3/4-CNC	20-30-40	5000 - 6000	1.52 / 0.06	760 - 1500 (30-60)

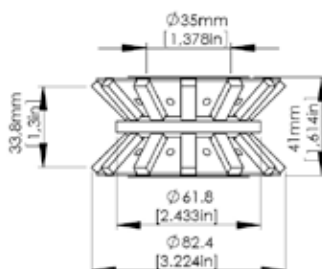
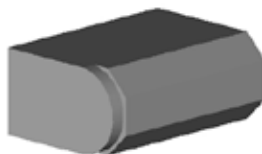
The HEXO® double breaker is a segmented diamond tool designed for stock removal and pre-cutting. It is important to note that the double breaker is optional and should be followed by position "0". HEXO® double breaker is recommended for the following profiles:

V2, V3, V4

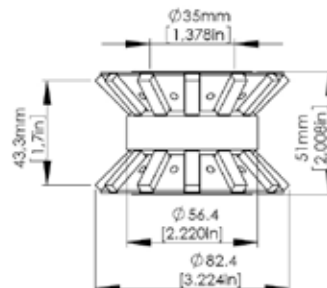
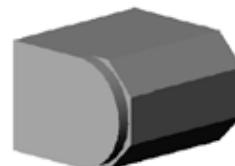
Optional for the following profiles: C3, FG\$4



2cm



3cm



4cm



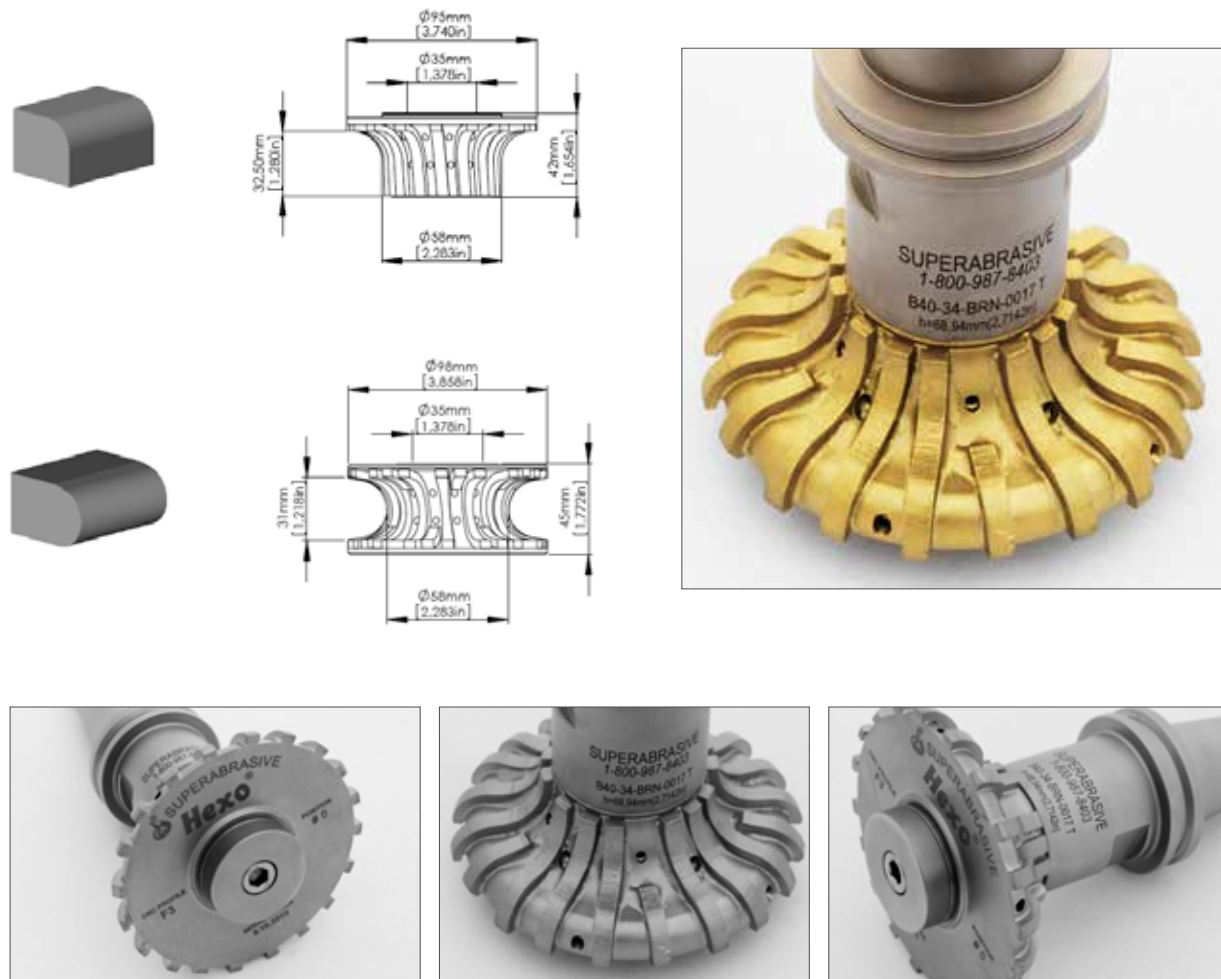
## New! HEXO® Segmented Position “0”

### NEW! Segmented First Step for HEXO® CNC Tooling

Superabrasive is proud to announce the addition of segmented position “0” steps to our HEXO® CNC line of tooling! Customized for each individual profile, these new segmented position “0” steps are ideal for removing just the right amount of material from the stone before beginning with traditional step 1. While this position is optional, we guarantee that it will increase the life of the entire set of tools by reducing wear, and make cutting with step 1 even faster and more efficient than before.

Contact Superabrasive for additional information about the appropriate tools for your CNC needs.

### See below for a few examples of new segmented position “0”





### Superabrasive's Redressing Service...

Unlike other CNC tooling available on the market today, Superabrasive can redress every position of HEXO® tooling, including the polishing steps. HEXO® features a very thick 6mm diamond layer, which not only ensures long tool life, but allows each of the positions to be reshaped. The reshaping process is conducted within our factory, with the same strict quality control measures.



# Profile A

## Pencil Round HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

### A2-R10

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
A2.0-R10-CNC	Optional Segmented Step	2cm	10	0	84mm	metal	Ø35mm
A2.1-R10-CNC	Stock Removal & Shaping	2cm	10	1	84mm	metal	Ø35mm
A2.2-R10-CNC	Honing	2cm	10	2	84mm	metal	Ø35mm
A2.3-R10-CNC	Pre-Polishing	2cm	10	3	84mm	metal	Ø35mm
A2.4-R10-CNC	Pre-Polishing	2cm	10	4	84mm	metal	Ø35mm
A2.5-R10-CNC	Polishing	2cm	10	5	84mm	resin	Ø35mm
A2.6-R10-CNC	Polishing	2cm	10	6	84mm	resin	Ø35mm

### A3-R5

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
A3.0-R5-CNC	Optional Segmented Step	3cm	5	0	81mm	metal	Ø35mm
A3.1-R5-CNC	Stock Removal & Shaping	3cm	5	1	81mm	metal	Ø35mm
A3.2-R5-CNC	Honing	3cm	5	2	81mm	metal	Ø35mm
A3.3-R5-CNC	Pre-Polishing	3cm	5	3	81mm	metal	Ø35mm
A3.4-R5-CNC	Pre-Polishing	3cm	5	4	81mm	metal	Ø35mm
A3.5-R5-CNC	Polishing	3cm	5	5	81mm	resin	Ø35mm
A3.6-R5-CNC	Polishing	3cm	5	6	81mm	resin	Ø35mm

### A3-R8

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
A3.0-R8-CNC	Optional Segmented Step	3cm	8	0	81mm	metal	Ø35mm
A3.1-R8-CNC	Stock Removal & Shaping	3cm	8	1	81mm	metal	Ø35mm
A3.2-R8-CNC	Honing	3cm	8	2	81mm	metal	Ø35mm
A3.3-R8-CNC	Pre-Polishing	3cm	8	3	81mm	metal	Ø35mm
A3.4-R8-CNC	Pre-Polishing	3cm	8	4	81mm	metal	Ø35mm
A3.5-R8-CNC	Polishing	3cm	8	5	81mm	resin	Ø35mm
A3.6-R8-CNC	Polishing	3cm	8	6	81mm	resin	Ø35mm

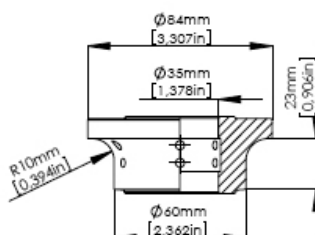
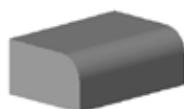
### A3-R10

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
A3.0-R10-CNC	Optional Segmented Step	3cm	10	0	84mm	metal	Ø35mm
A3.1-R10-CNC	Stock Removal & Shaping	3cm	10	1	84mm	metal	Ø35mm
A3.2-R10-CNC	Honing	3cm	10	2	84mm	metal	Ø35mm
A3.3-R10-CNC	Pre-Polishing	3cm	10	3	84mm	metal	Ø35mm
A3.4-R10-CNC	Pre-Polishing	3cm	10	4	84mm	metal	Ø35mm
A3.5-R10-CNC	Polishing	3cm	10	5	84mm	resin	Ø35mm
A3.6-R10-CNC	Polishing	3cm	10	6	84mm	resin	Ø35mm

# Profile A

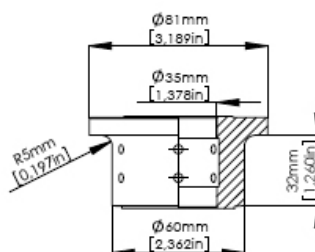
## Pencil Round HEXO® CNC

A2-R10  
pencil round



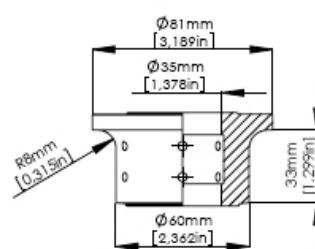
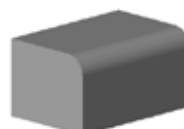
Tool  
Holder  
Size  
B40-34

A3-R5  
pencil round



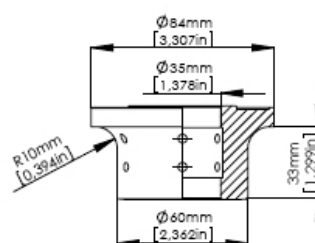
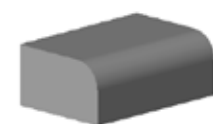
Tool  
Holder  
Size  
B40-39

A3-R8  
pencil round



Tool  
Holder  
Size  
B40-39

A3-R10  
pencil round



Tool  
Holder  
Size  
B40-39

# Profile A

## Pencil Round HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

### A3-R15

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
A3.0-R15-CNC	Optional Segmented Step	3cm	15	0	95mm	metal	Ø35mm
A3.1-R15-CNC	Stock Removal & Shaping	3cm	15	1	95mm	metal	Ø35mm
A3.2-R15-CNC	Honing	3cm	15	2	95mm	metal	Ø35mm
A3.3-R15-CNC	Pre-Polishing	3cm	15	3	95mm	metal	Ø35mm
A3.4-R15-CNC	Pre-Polishing	3cm	15	4	95mm	metal	Ø35mm
A3.5-R15-CNC	Polishing	3cm	15	5	95mm	resin	Ø35mm
A3.6-R15-CNC	Polishing	3cm	15	6	95mm	resin	Ø35mm

### A4-R8

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
A4.0-R8-CNC	Optional Segmented Step	4cm	8	0	81mm	metal	Ø35mm
A4.1-R8-CNC	Stock Removal & Shaping	4cm	8	1	81mm	metal	Ø35mm
A4.2-R8-CNC	Honing	4cm	8	2	81mm	metal	Ø35mm
A4.3-R8-CNC	Pre-Polishing	4cm	8	3	81mm	metal	Ø35mm
A4.4-R8-CNC	Pre-Polishing	4cm	8	4	81mm	metal	Ø35mm
A4.5-R8-CNC	Polishing	4cm	8	5	81mm	resin	Ø35mm
A4.6-R8-CNC	Polishing	4cm	8	6	81mm	resin	Ø35mm

### A4-R10

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
A4.0-R10-CNC	Optional Segmented Step	4cm	10	0	84mm	metal	Ø35mm
A4.1-R10-CNC	Stock Removal & Shaping	4cm	10	1	84mm	metal	Ø35mm
A4.2-R10-CNC	Honing	4cm	10	2	84mm	metal	Ø35mm
A4.3-R10-CNC	Pre-Polishing	4cm	10	3	84mm	metal	Ø35mm
A4.4-R10-CNC	Pre-Polishing	4cm	10	4	84mm	metal	Ø35mm
A4.5-R10-CNC	Polishing	4cm	10	5	84mm	resin	Ø35mm
A4.6-R10-CNC	Polishing	4cm	10	6	84mm	resin	Ø35mm

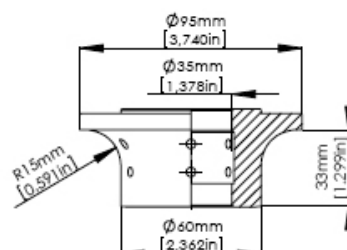
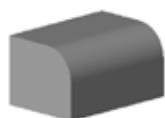
### A4-R15

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
A4.0-R15-CNC	Optional Segmented Step	4cm	15	0	95mm	metal	Ø35mm
A4.1-R15-CNC	Stock Removal & Shaping	4cm	15	1	95mm	metal	Ø35mm
A4.2-R15-CNC	Honing	4cm	15	2	95mm	metal	Ø35mm
A4.3-R15-CNC	Pre-Polishing	4cm	15	3	95mm	metal	Ø35mm
A4.4-R15-CNC	Pre-Polishing	4cm	15	4	95mm	metal	Ø35mm
A4.5-R15-CNC	Polishing	4cm	15	5	95mm	resin	Ø35mm
A4.6-R15-CNC	Polishing	4cm	15	6	95mm	resin	Ø35mm

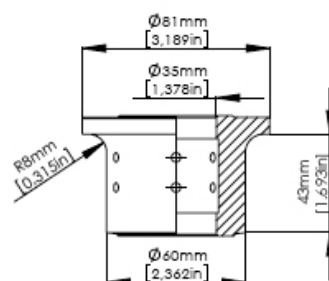
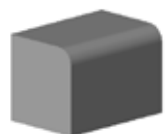


# Profile A Pencil Round HEXO® CNC

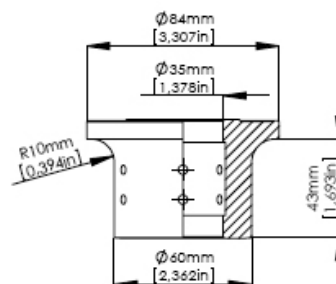
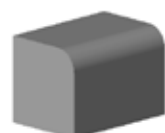
A3-R15  
pencil round



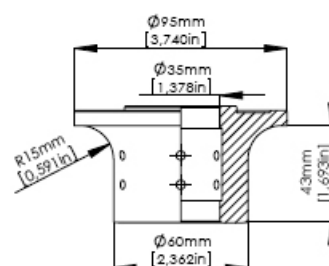
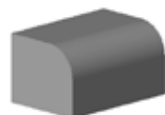
A4-R8  
pencil round



A4-R10  
pencil round



A4-R15  
pencil round



## Profile B, BR, C

### Half Bullnose, Crescent HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

#### B2-R20

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
B2.0-CNC	Optional Segmented Step	2cm	20	0	104mm	metal	Ø35mm
B2.1-CNC	Stock Removal & Shaping	2cm	20	1	104mm	metal	Ø35mm
B2.2-CNC	Honing	2cm	20	2	104mm	metal	Ø35mm
B2.3-CNC	Pre-Polishing	2cm	20	3	104mm	metal	Ø35mm
B2.4-CNC	Pre-Polishing	2cm	20	4	104mm	metal	Ø35mm
B2.5-CNC	Polishing	2cm	20	5	104mm	resin	Ø35mm
B2.6-CNC	Polishing	2cm	20	6	104mm	resin	Ø35mm

#### B3-R30

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
B3.0-R30-CNC	Optional Segmented Step	3cm	30	0	120mm	metal	Ø35mm
B3.1-R30-CNC	Stock Removal & Shaping	3cm	30	1	120mm	metal	Ø35mm
B3.2-R30-CNC	Honing	3cm	30	2	120mm	metal	Ø35mm
B3.3-R30-CNC	Pre-Polishing	3cm	30	3	120mm	metal	Ø35mm
B3.4-R30-CNC	Pre-Polishing	3cm	30	4	120mm	metal	Ø35mm
B3.5-R30-CNC	Polishing	3cm	30	5	120mm	resin	Ø35mm
B3.6-R30-CNC	Polishing	3cm	30	6	120mm	resin	Ø35mm

#### BR3

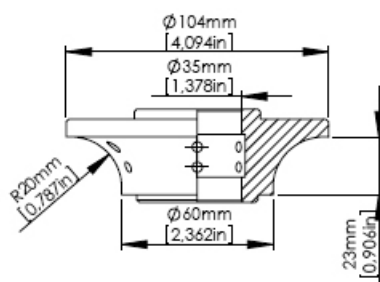
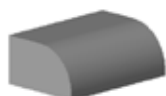
Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
BR3.0-CNC	Optional Segmented Step	3cm	30	0	110mm	metal	Ø35mm
BR3.1-CNC	Stock Removal & Shaping	3cm	30	1	110mm	metal	Ø35mm
BR3.2-CNC	Honing	3cm	30	2	110mm	metal	Ø35mm
BR3.3-CNC	Pre-Polishing	3cm	30	3	110mm	metal	Ø35mm
BR3.4-CNC	Pre-Polishing	3cm	30	4	110mm	metal	Ø35mm
BR3.5-CNC	Polishing	3cm	30	5	110mm	resin	Ø35mm
BR3.6-CNC	Polishing	3cm	30	6	110mm	resin	Ø35mm

#### C3

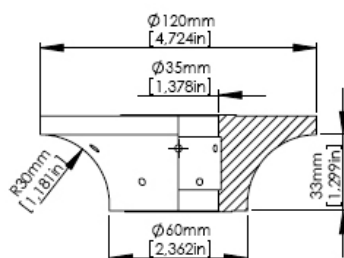
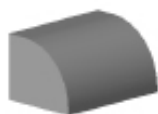
Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
C3.0-CNC	Optional Segmented Step	3cm	23	0	74mm	metal	Ø35mm
C3.1-CNC	Stock Removal & Shaping	3cm	23	1	74mm	metal	Ø35mm
C3.2-CNC	Honing	3cm	23	2	74mm	metal	Ø35mm
C3.3-CNC	Pre-Polishing	3cm	23	3	74mm	metal	Ø35mm
C3.4-CNC	Pre-Polishing	3cm	23	4	74mm	metal	Ø35mm
C3.5-CNC	Polishing	3cm	23	5	74mm	resin	Ø35mm
C3.6-CNC	Polishing	3cm	23	6	74mm	resin	Ø35mm

# Profile B, BR, C Half Bullnose, Crescent HEXO® CNC

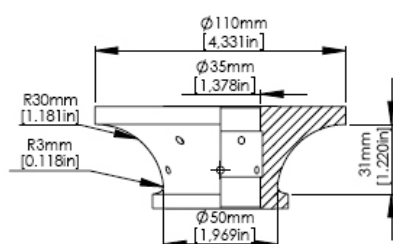
B2-R20  
half bullnose



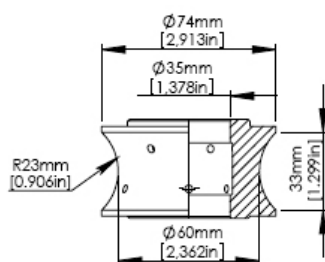
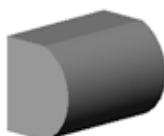
B3-R30  
half bullnose



BR3  
half bullnose



C3  
crescent



# Profile E

## Bevel HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

### E2-C17

Item Number	Description	Size	Bevel	Position	OD	Bond	Attachment
E2.0-C17-CNC	Optional Segmented Step	2cm	17mm bevel	0	94mm	metal	Ø35mm
E2.1-C17-CNC	Stock Removal & Shaping	2cm	17mm bevel	1	94mm	metal	Ø35mm
E2.2-C17-CNC	Honing	2cm	17mm bevel	2	94mm	metal	Ø35mm
E2.3-C17-CNC	Pre-Polishing	2cm	17mm bevel	3	94mm	metal	Ø35mm
E2.4-C17-CNC	Pre-Polishing	2cm	17mm bevel	4	94mm	metal	Ø35mm
E2.5-C17-CNC	Polishing	2cm	17mm bevel	5	94mm	resin	Ø35mm
E2.6-C17-CNC	Polishing	2cm	17mm bevel	6	94mm	resin	Ø35mm

### E3-C9

Item Number	Description	Size	Bevel	Position	OD	Bond	Attachment
E3.0-C9-CNC	Optional Segmented Step	3cm	9mm bevel	0	78mm	metal	Ø35mm
E3.1-C9-CNC	Stock Removal & Shaping	3cm	9mm bevel	1	78mm	metal	Ø35mm
E3.2-C9-CNC	Honing	3cm	9mm bevel	2	78mm	metal	Ø35mm
E3.3-C9-CNC	Pre-Polishing	3cm	9mm bevel	3	78mm	metal	Ø35mm
E3.4-C9-CNC	Pre-Polishing	3cm	9mm bevel	4	78mm	metal	Ø35mm
E3.5-C9-CNC	Polishing	3cm	9mm bevel	5	78mm	resin	Ø35mm
E3.6-C9-CNC	Polishing	3cm	9mm bevel	6	78mm	resin	Ø35mm

### E3-C24

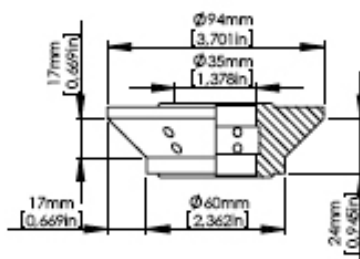
Item Number	Description	Size	Bevel	Position	OD	Bond	Attachment
E3.0-C24-CNC	Optional Segmented Step	3cm	24mm bevel	0	108mm	metal	Ø35mm
E3.1-C24-CNC	Stock Removal & Shaping	3cm	24mm bevel	1	108mm	metal	Ø35mm
E3.2-C24-CNC	Honing	3cm	24mm bevel	2	108mm	metal	Ø35mm
E3.3-C24-CNC	Pre-Polishing	3cm	24mm bevel	3	108mm	metal	Ø35mm
E3.4-C24-CNC	Pre-Polishing	3cm	24mm bevel	4	108mm	metal	Ø35mm
E3.5-C24-CNC	Polishing	3cm	24mm bevel	5	108mm	resin	Ø35mm
E3.6-C24-CNC	Polishing	3cm	24mm bevel	6	108mm	resin	Ø35mm

### E4-C9

Item Number	Description	Size	Bevel	Position	OD	Bond	Attachment
E4.0-C9-CNC	Optional Segmented Step	4cm	9mm bevel	0	78mm	metal	Ø35mm
E4.1-C9-CNC	Stock Removal & Shaping	4cm	9mm bevel	1	78mm	metal	Ø35mm
E4.2-C9-CNC	Honing	4cm	9mm bevel	2	78mm	metal	Ø35mm
E4.3-C9-CNC	Pre-Polishing	4cm	9mm bevel	3	78mm	metal	Ø35mm
E4.4-C9-CNC	Pre-Polishing	4cm	9mm bevel	4	78mm	metal	Ø35mm
E4.5-C9-CNC	Polishing	4cm	9mm bevel	5	78mm	resin	Ø35mm
E4.6-C9-CNC	Polishing	4cm	9mm bevel	6	78mm	resin	Ø35mm

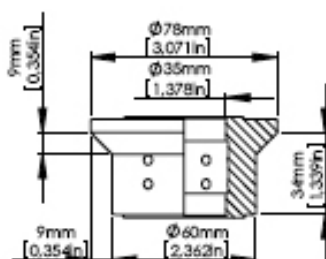
# Profile E Bevel HEXO® CNC

E2-C17  
bevel



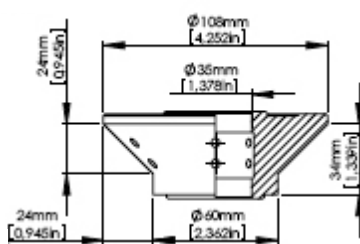
Tool  
Holder  
Size  
B40-34

E3-C9  
bevel



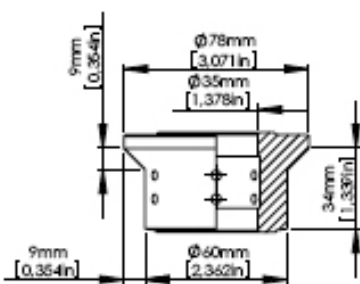
Tool  
Holder  
Size  
B40-39

E3-C24  
bevel



Tool  
Holder  
Size  
B40-39

E4-C9  
bevel



Tool  
Holder  
Size  
B40-47



## Profile F, FGS

### Deep Roman Ogee, Cove Full Bullnose HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

#### F2

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
F2.0-R10+R9.8-CNC	Optional Segmented Step	2cm	10+9.8	0	100mm	metal	Ø35mm
F2.1-R10+R9.8-CNC	Stock Removal & Shaping	2cm	10+9.8	1	100mm	metal	Ø35mm
F2.2-R10+R9.8-CNC	Honing	2cm	10+9.8	2	100mm	metal	Ø35mm
F2.3-R10+R9.8-CNC	Pre-Polishing	2cm	10+9.8	3	100mm	metal	Ø35mm
F2.4-R10+R9.8-CNC	Pre-Polishing	2cm	10+9.8	4	100mm	metal	Ø35mm
F2.5-R10+R9.8-CNC	Polishing	2cm	10+9.8	5	100mm	resin	Ø35mm
F2.6-R10+R9.8-CNC	Polishing	2cm	10+9.8	6	100mm	resin	Ø35mm

#### F3

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
F3.0-R15+R14.7-CNC	Optional Segmented Step	3cm	15+14.7	0	120mm	metal	Ø35mm
F3.1-R15+R14.7-CNC	Stock Removal & Shaping	3cm	15+14.7	1	120mm	metal	Ø35mm
F3.2-R15+R14.7-CNC	Honing	3cm	15+14.7	2	120mm	metal	Ø35mm
F3.3-R15+R14.7-CNC	Pre-Polishing	3cm	15+14.7	3	120mm	metal	Ø35mm
F3.4-R15+R14.7-CNC	Pre-Polishing	3cm	15+14.7	4	120mm	metal	Ø35mm
F3.5-R15+R14.7-CNC	Polishing	3cm	15+14.7	5	120mm	resin	Ø35mm
F3.6-R15+R14.7-CNC	Polishing	3cm	15+14.7	6	120mm	resin	Ø35mm

#### FG3

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
FG3.0-CNC	Optional Segmented Step	3cm	1.6+30+9	0	110	metal	Ø35mm
FG3.1-CNC	Stock Removal & Shaping	3cm	1.6+30+9	1	110	metal	Ø35mm
FG3.2-CNC	Honing	3cm	1.6+30+9	2	110	metal	Ø35mm
FG3.3-CNC	Pre-Polishing	3cm	1.6+30+9	3	110	metal	Ø35mm
FG3.4-CNC	Polishing	3cm	1.6+30+9	4	110	metal	Ø35mm
FG3.5-CNC	Polishing	3cm	1.6+30+9	5	110	resin	Ø35mm
FG3.6-CNC	Polishing	3cm	1.6+30+9	6	110	resin	Ø35mm

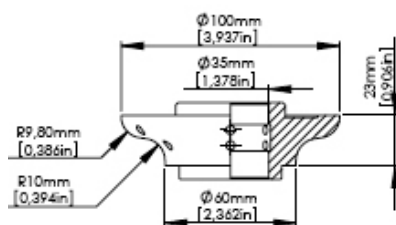
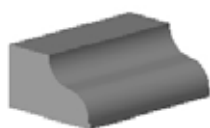
#### FGS4

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
FGS4.0-CNC	Optional Segmented Step	4cm	12+16+18	0	100mm	metal	Ø35mm
FGS4.1-CNC	Stock Removal & Shaping	4cm	12+16+18	1	100mm	metal	Ø35mm
FGS4.2-CNC	Honing	4cm	12+16+18	2	100mm	metal	Ø35mm
FGS4.3-CNC	Pre-Polishing	4cm	12+16+18	3	100mm	metal	Ø35mm
FGS4.4-CNC	Polishing	4cm	12+16+18	4	100mm	metal	Ø35mm
FGS4.5-CNC	Polishing	4cm	12+16+18	5	100mm	resin	Ø35mm
FGS4.6-CNC	Polishing	4cm	12+16+18	6	100mm	resin	Ø35mm

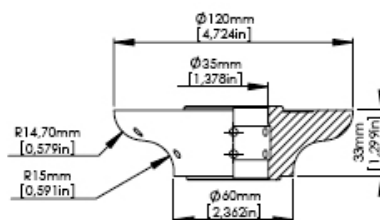
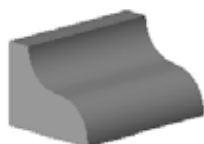
# Profile F, FGS

Deep Roman Ogee, Cove Full Bullnose HEXO® CNC

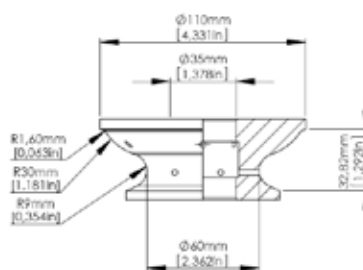
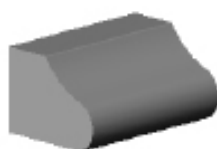
F2  
deep roman ogee



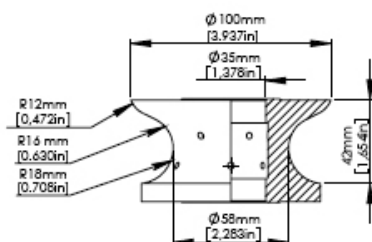
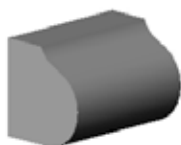
F3  
deep roman ogee



FG3  
ogee over full bullnose



FGS4  
cove full bullnose



## Profile FV, FZ

### Ogee plus Full Bullnose, Roman Ogee HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

#### FV3

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
FV3.0-CNC	Optional Segmented Step	3cm	7.5 + 7.5 + 7.5	0	104mm	metal	Ø35mm
FV3.1-CNC	Stock Removal & Shaping	3cm	7.5 + 7.5 + 7.5	1	104mm	metal	Ø35mm
FV3.2-CNC	Honing	3cm	7.5 + 7.5 + 7.5	2	104mm	metal	Ø35mm
FV3.3-CNC	Pre-Polishing	3cm	7.5 + 7.5 + 7.5	3	104mm	metal	Ø35mm
FV3.4-CNC	Pre-Polishing	3cm	7.5 + 7.5 + 7.5	4	104mm	metal	Ø35mm
FV3.5-CNC	Polishing	3cm	7.5 + 7.5 + 7.5	5	104mm	resin	Ø35mm
FV3.6-CNC	Polishing	3cm	7.5 + 7.5 + 7.5	6	104mm	resin	Ø35mm

#### FV4

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
FV4.0-CNC	Optional Segmented Step	4cm	9.8 + 10 + 10	0	110mm	metal	Ø35mm
FV4.1-CNC	Stock Removal & Shaping	4cm	9.8 + 10 + 10	1	110mm	metal	Ø35mm
FV4.2-CNC	Honing	4cm	9.8 + 10 + 10	2	110mm	metal	Ø35mm
FV4.3-CNC	Pre-Polishing	4cm	9.8 + 10 + 10	3	110mm	metal	Ø35mm
FV4.4-CNC	Pre-Polishing	4cm	9.8 + 10 + 10	4	110mm	metal	Ø35mm
FV4.5-CNC	Polishing	4cm	9.8 + 10 + 10	5	110mm	resin	Ø35mm
FV4.6-CNC	Polishing	4cm	9.8 + 10 + 10	6	110mm	resin	Ø35mm

#### FZ3

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
FZ3.0-R10+R9.8-CNC	Optional Segmented Step	3cm	10+9.8	0	100mm	metal	Ø35mm
FZ3.1-R10+R9.8-CNC	Stock Removal & Shaping	3cm	10+9.8	1	100mm	metal	Ø35mm
FZ3.2-R10+R9.8-CNC	Honing	3cm	10+9.8	2	100mm	metal	Ø35mm
FZ3.3-R10+R9.8-CNC	Pre-Polishing	3cm	10+9.8	3	100mm	metal	Ø35mm
FZ3.4-R10+R9.8-CNC	Pre-Polishing	3cm	10+9.8	4	100mm	metal	Ø35mm
FZ3.5-R10+R9.8-CNC	Polishing	3cm	10+9.8	5	100mm	resin	Ø35mm
FZ3.6-R10+R9.8-CNC	Polishing	3cm	10+9.8	6	100mm	resin	Ø35mm

#### FZ4

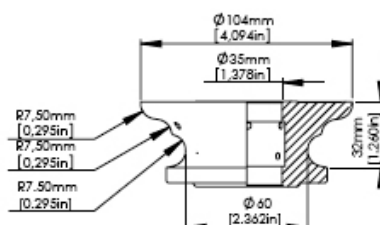
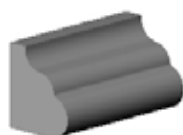
Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
FZ4.0-R10+R9.8-CNC	Optional Segmented Step	4cm	10+9.8	0	100mm	metal	Ø35mm
FZ4.1-R10+R9.8-CNC	Stock Removal & Shaping	4cm	10+9.8	1	100mm	metal	Ø35mm
FZ4.1-R10+R9.8-CNC	Honing	4cm	10+9.8	2	100mm	metal	Ø35mm
FZ4.1-R10+R9.8-CNC	Pre-Polishing	4cm	10+9.8	3	100mm	metal	Ø35mm
FZ4.1-R10+R9.8-CNC	Pre-Polishing	4cm	10+9.8	4	100mm	metal	Ø35mm
FZ4.1-R10+R9.8-CNC	Polishing	4cm	10+9.8	5	100mm	resin	Ø35mm
FZ4.1-R10+R9.8-CNC	Polishing	4cm	10+9.8	6	100mm	resin	Ø35mm

# Profile FV, FZ

Ogee plus Full Bullnose, Roman Ogee HEXO® CNC

## FV3

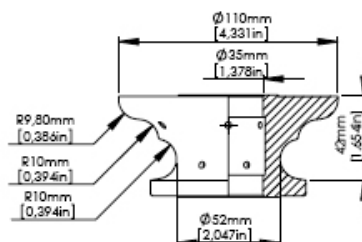
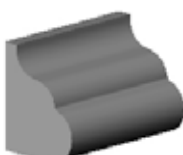
ogee plus full bullnose



Tool Holder  
Size B40-39

## FV4

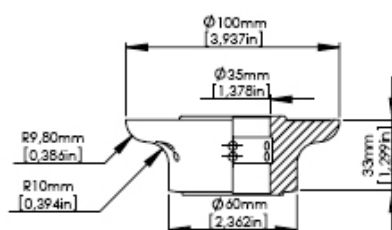
ogee plus full bullnose



Tool Holder  
Size B40-47

## FZ3

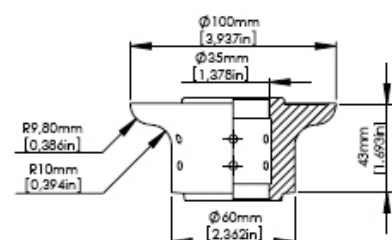
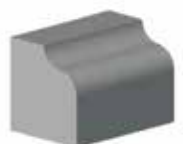
roman ogee



Tool Holder  
Size B40-34

## FZ4

roman ogee



Tool Holder  
Size B40-47

# Profile H, O, O/S

## Dupont, Cove Dupont, Triple Roman Ogee HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

### H3

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
H3.0-CNC	Optional Segmented Step	3cm	18.5 + 30	0	94.4mm	metal	Ø35mm
H3.1-CNC	Stock Removal & Shaping	3cm	18.5 + 30	1	94.4mm	metal	Ø35mm
H3.2-CNC	Honing	3cm	18.5 + 30	2	94.4mm	metal	Ø35mm
H3.3-CNC	Pre-Polishing	3cm	18.5 + 30	3	94.4mm	metal	Ø35mm
H3.4-CNC	Pre-Polishing	3cm	18.5 + 30	4	94.4mm	metal	Ø35mm
H3.5-CNC	Polishing	3cm	18.5 + 30	5	94.4mm	resin	Ø35mm
H3.6-CNC	Polishing	3cm	18.5 + 30	6	94.4mm	resin	Ø35mm

### O3

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
O3.0-R12+P6+R12-CNC	Optional Segmented Step	3cm	12+P6+12	0	108mm	metal	Ø35mm
O3.1-R12+P6+R12-CNC	Stock Removal & Shaping	3cm	12+P6+12	1	108mm	metal	Ø35mm
O3.2-R12+P6+R12-CNC	Honing	3cm	12+P6+12	2	108mm	metal	Ø35mm
O3.3-R12+P6+R12-CNC	Pre-Polishing	3cm	12+P6+12	3	108mm	metal	Ø35mm
O3.4-R12+P6+R12-CNC	Pre-Polishing	3cm	12+P6+12	4	108mm	metal	Ø35mm
O3.5-R12+P6+R12-CNC	Polishing	3cm	12+P6+12	5	108mm	resin	Ø35mm
O3.6-R12+P6+R12-CNC	Polishing	3cm	12+P6+12	6	108mm	resin	Ø35mm

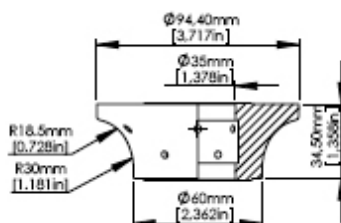
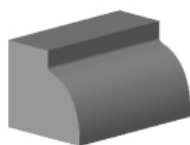
### O/S

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
O/S3.0-R8+R8+R8-CNC	Optional Segmented Step	3cm	8+8+8	0	120mm	metal	Ø35mm
O/S3.1-R8+R8+R8-CNC	Stock Removal & Shaping	3cm	8+8+8	1	120mm	metal	Ø35mm
O/S3.2-R8+R8+R8-CNC	Honing	3cm	8+8+8	2	120mm	metal	Ø35mm
O/S3.3-R8+R8+R8-CNC	Pre-Polishing	3cm	8+8+8	3	120mm	metal	Ø35mm
O/S3.4-R8+R8+R8-CNC	Pre-Polishing	3cm	8+8+8	4	120mm	metal	Ø35mm
O/S3.5-R8+R8+R8-CNC	Polishing	3cm	8+8+8	5	120mm	resin	Ø35mm
O/S3.6-R8+R8+R8-CNC	Polishing	3cm	8+8+8	6	120mm	resin	Ø35mm

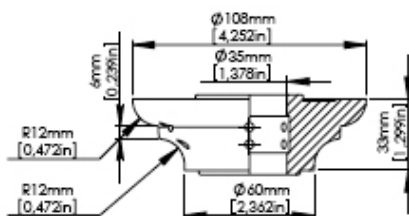
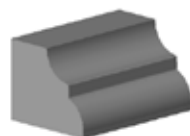
# Profile H, O, O/S

Dupont, Cove Dupont, Triple Roman Ogee HEXO® CNC

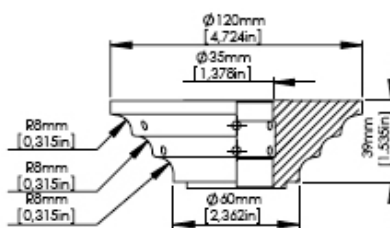
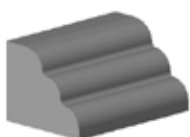
H3  
dupont



O3  
cove dupont



O/S  
triple roman ogee



# Profile T

## Pencil Round, Top and Bottom HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

### T3-R3

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
T3.0-R3-CNC	Optional Segmented Step	3cm	3	0	77mm	metal	Ø35mm
T3.1-R3-CNC	Stock Removal & Shaping	3cm	3	1	77mm	metal	Ø35mm
T3.2-R3-CNC	Honing	3cm	3	2	77mm	metal	Ø35mm
T3.3-R3-CNC	Pre-Polishing	3cm	3	3	77mm	metal	Ø35mm
T3.4-R3-CNC	Pre-Polishing	3cm	3	4	77mm	metal	Ø35mm
T3.5-R3-CNC	Polishing	3cm	3	5	77mm	resin	Ø35mm
T3.6-R3-CNC	Polishing	3cm	3	6	77mm	resin	Ø35mm

### T3-R6

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
T3.0-R6-CNC	Optional Segmented Step	3cm	6	0	82.6mm	metal	Ø35mm
T3.1-R6-CNC	Stock Removal & Shaping	3cm	6	1	82.6mm	metal	Ø35mm
T3.2-R6-CNC	Honing	3cm	6	2	82.6mm	metal	Ø35mm
T3.3-R6-CNC	Pre-Polishing	3cm	6	3	82.6mm	metal	Ø35mm
T3.4-R6-CNC	Pre-Polishing	3cm	6	4	82.6mm	metal	Ø35mm
T3.5-R6-CNC	Polishing	3cm	6	5	82.6mm	resin	Ø35mm
T3.6-R6-CNC	Polishing	3cm	6	6	82.6mm	resin	Ø35mm

### T3-R8

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
T3.0-R8-CNC	Optional Segmented Step	3cm	8	0	82.6mm	metal	Ø35mm
T3.1-R8-CNC	Stock Removal & Shaping	3cm	8	1	82.6mm	metal	Ø35mm
T3.2-R8-CNC	Honing	3cm	8	2	82.6mm	metal	Ø35mm
T3.3-R8-CNC	Pre-Polishing	3cm	8	3	82.6mm	metal	Ø35mm
T3.4-R8-CNC	Pre-Polishing	3cm	8	4	82.6mm	metal	Ø35mm
T3.5-R8-CNC	Polishing	3cm	8	5	82.6mm	resin	Ø35mm
T3.6-R8-CNC	Polishing	3cm	8	6	82.6mm	resin	Ø35mm

### T4-R8

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
T4.0-R8-CNC	Optional Segmented Step	4cm	8	0	82.6mm	metal	Ø35mm
T4.1-R8-CNC	Stock Removal & Shaping	4cm	8	1	82.6mm	metal	Ø35mm
T4.2-R8-CNC	Honing	4cm	8	2	82.6mm	metal	Ø35mm
T4.3-R8-CNC	Pre-Polishing	4cm	8	3	82.6mm	metal	Ø35mm
T4.4-R8-CNC	Pre-Polishing	4cm	8	4	82.6mm	metal	Ø35mm
T4.5-R8-CNC	Polishing	4cm	8	5	82.6mm	resin	Ø35mm
T4.6-R8-CNC	Polishing	4cm	8	6	82.6mm	resin	Ø35mm

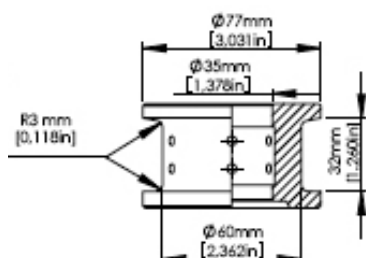
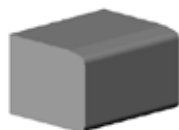


# Profile T

## Pencil Round, Top and Bottom HEXO® CNC

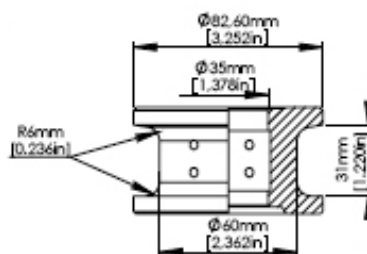
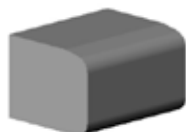
### T3-R3

pencil round,  
top and bottom



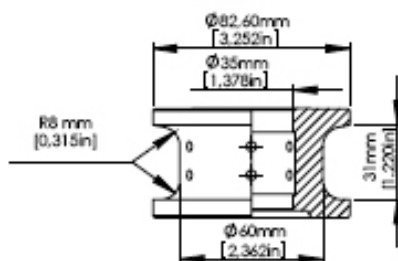
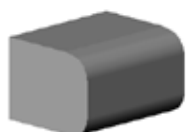
### T3-R6

pencil round,  
top and bottom



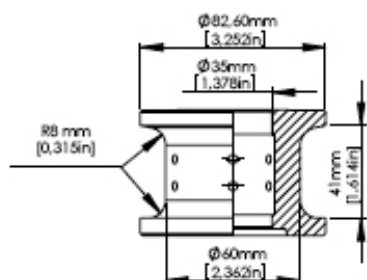
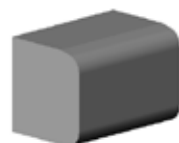
### T3-R8

pencil round,  
top and bottom



### T4-R8

pencil round,  
top and bottom



# Profile V

## Full Bullnose HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

### V2

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
V2.0-CNC	Optional Segmented Step	2cm	10	0	86mm	metal	Ø35mm
V2.1-CNC	Stock Removal & Shaping	2cm	10	1	86mm	metal	Ø35mm
V2.2-CNC	Honing	2cm	10	2	86mm	metal	Ø35mm
V2.3-CNC	Pre-Polishing	2cm	10	3	86mm	metal	Ø35mm
V2.4-CNC	Pre-Polishing	2cm	10	4	86mm	metal	Ø35mm
V2.5-CNC	Polishing	2cm	10	5	86mm	resin	Ø35mm
V2.6-CNC	Polishing	2cm	10	6	86mm	resin	Ø35mm

### V3

Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
V3.0-CNC	Optional Segmented Step	3cm	15	0	98mm	metal	Ø35mm
V3.1-CNC	Stock Removal & Shaping	3cm	15	1	98mm	metal	Ø35mm
V3.2-CNC	Honing	3cm	15	2	98mm	metal	Ø35mm
V3.3-CNC	Pre-Polishing	3cm	15	3	98mm	metal	Ø35mm
V3.4-CNC	Pre-Polishing	3cm	15	4	98mm	metal	Ø35mm
V3.5-CNC	Polishing	3cm	15	5	98mm	resin	Ø35mm
V3.6-CNC	Polishing	3cm	15	6	98mm	resin	Ø35mm

### V4

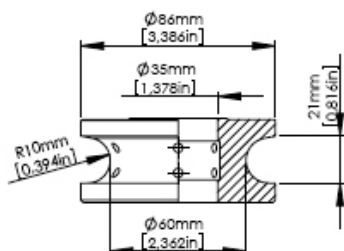
Item Number	Description	Size	Radius	Position	OD	Bond	Attachment
V4.0-CNC	Optional Segmented Step	4cm	20	0	103mm	metal	Ø35mm
V4.1-CNC	Stock Removal & Shaping	4cm	20	1	103mm	metal	Ø35mm
V4.2-CNC	Honing	4cm	20	2	103mm	metal	Ø35mm
V4.3-CNC	Pre-Polishing	4cm	20	3	103mm	metal	Ø35mm
V4.4-CNC	Pre-Polishing	4cm	20	4	103mm	metal	Ø35mm
V4.5-CNC	Polishing	4cm	20	5	103mm	resin	Ø35mm
V4.6-CNC	Polishing	4cm	20	6	103mm	resin	Ø35mm

### V6

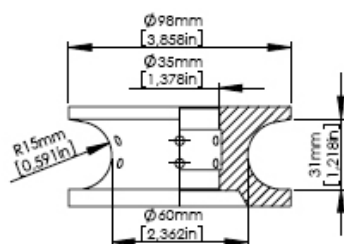
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V6.0-CNC	Optional Segmented Step	6cm	30	0	122mm	metal	Ø35mm
V6.1-CNC	Stock Removal & Shaping	6cm	30	1	122mm	metal	Ø35mm
V6.2-CNC	Honing	6cm	30	2	122mm	metal	Ø35mm
V6.3-CNC	Pre-Polishing	6cm	30	3	122mm	metal	Ø35mm
V6.4-CNC	Pre-Polishing	6cm	30	4	122mm	metal	Ø35mm
V6.5-CNC	Polishing	6cm	30	5	122mm	resin	Ø35mm
V6.6-CNC	Polishing	6cm	30	6	122mm	resin	Ø35mm

# Profile V Full Bullnose HEXO® CNC

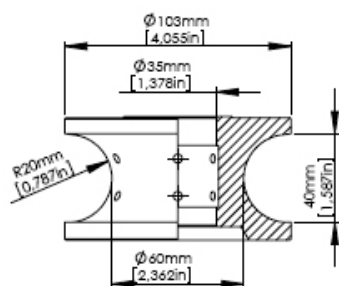
V2  
full bullnose



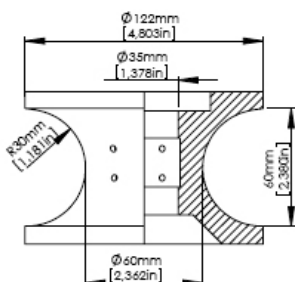
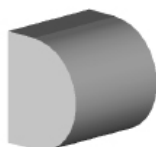
V3  
full bullnose



V4  
full bullnose



V6  
full bullnose



## Profile X, Z

### Quarter Bevel Top and Bottom & Straight, Eased Edge HEXO® CNC

All CNC profiles are produced with a standard 35mm bore.  
Smaller bore diameters are available upon request.

#### X3

Item Number	Description	Size	Position	OD	Bond	Attachment
X3.0-CNC	Optional Segmented Step	3cm	0	70mm	metal	Ø35mm
X3.1-CNC	Stock Removal & Shaping	3cm	1	70mm	metal	Ø35mm
X3.2-CNC	Honing	3cm	2	70mm	metal	Ø35mm
X3.3-CNC	Pre-Polishing	3cm	3	70mm	metal	Ø35mm
X3.4-CNC	Pre-Polishing	3cm	4	70mm	metal	Ø35mm
X3.5-CNC	Polishing	3cm	5	70mm	resin	Ø35mm
X3.6-CNC	Polishing	3cm	6	70mm	resin	Ø35mm

#### Z2, Z3, Z4 (large diameter, 76mm)

Item Number	Description	Size	Position	OD	Bond	Attachment
Z2/3/4.0-CNC	Optional Segmented Step	2cm/3cm/4cm	0	76mm	metal	Ø35mm
Z2/3/4.1-CNC	Stock Removal & Shaping	2cm/3cm/4cm	1	76mm	metal	Ø35mm
Z2/3/4.2-CNC	Honing	2cm/3cm/4cm	2	76mm	metal	Ø35mm
Z2/3/4.3-CNC	Pre-Polishing	2cm/3cm/4cm	3	76mm	metal	Ø35mm
Z2/3/4.4-CNC	Pre-Polishing	2cm/3cm/4cm	4	76mm	metal	Ø35mm
Z2/3/4.5-CNC	Polishing	2cm/3cm/4cm	5	76mm	resin	Ø35mm
Z2/3/4.6-CNC	Polishing	2cm/3cm/4cm	6	76mm	resin	Ø35mm

#### Z2, Z3, Z4-D60 (small diameter, 60mm)

Item Number	Description	Size	Position	OD	Bond	Attachment
Z2/3/4.1-D60-CNC	Optional Segmented Step	2cm/3cm/4cm	0	60mm	metal	Ø35mm
Z2/3/4.1-D60-CNC	Stock Removal & Shaping	2cm/3cm/4cm	1	60mm	metal	Ø35mm
Z2/3/4.2-D60-CNC	Honing	2cm/3cm/4cm	2	60mm	metal	Ø35mm
Z2/3/4.3-D60-CNC	Pre-Polishing	2cm/3cm/4cm	3	60mm	metal	Ø35mm
Z2/3/4.4-D60-CNC	Pre-Polishing	2cm/3cm/4cm	4	60mm	metal	Ø35mm
Z2/3/4.5-D60-CNC	Polishing	2cm/3cm/4cm	5	60mm	resin	Ø35mm
Z2/3/4.6-D60-CNC	Polishing	2cm/3cm/4cm	6	60mm	resin	Ø35mm

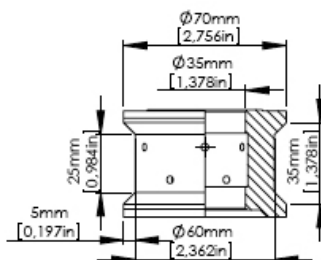
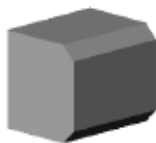
\*Both Z profiles are designed for 2,3 and 4cm stone slabs. Use the tool on same-size slabs only. If changing the thickness of the slab, uneven wear may occur in the tool's profile.

## Profile X, Z

### Quarter Bevel Top and Bottom & Straight, Eased Edge HEXO® CNC

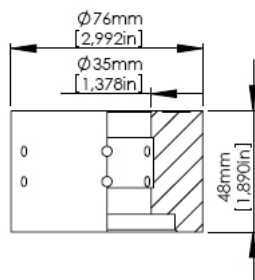
#### X3

quarter bevel, top & bottom



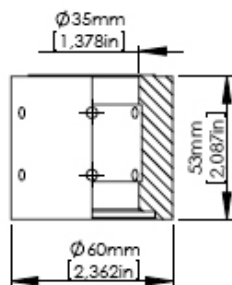
#### Z2, Z3, Z4

straight, eased edge



#### Z2, Z3, Z4-D60

straight, eased edge



## tool holders

for Brembana, Bavelloni, Intermac, Park Industries, and Northwood machines

Tool holders for other machines / models available upon request.

### BREMBANA machines - ISO 40

US Item Number	Description	Diameter	Shaft
B40-1/2GAS-BRN	Drill Point Holder with Pull Stud	50	50
B40-34-BRN	Tool Holder with Pull Stud and Locking Kit	35	34
B40-39-BRN	Tool Holder with Pull Stud and Locking Kit	35	39
B40-47-BRN	Tool Holder with Pull Stud and Locking Kit	35	47

### BAVELLONI machines - ISO 40

US Item Number	Description	Diameter	Shaft
B40-1/2GAS-BV	Drill Point Holder with Pull Stud	50	50
B40-34-BV	Tool Holder with Pull Stud and Locking Kit	35	34
B40-39-BV	Tool Holder with Pull Stud and Locking Kit	35	39
B40-47-BV	Tool Holder with Pull Stud and Locking Kit	35	47

### INTERMAC machines - ISO 40

US Item Number	Description	Diameter	Shaft
B40-1/2GAS-IM	Drill Point Holder with Pull Stud	N/A	N/A
B40-34-IM	Tool Holder with Pull Stud and Locking Kit	35	34
B40-39-IM	Tool Holder with Pull Stud and Locking Kit	35	39
B40-47-IM	Tool Holder with Pull Stud and Locking Kit	35	47

### PARK INDUSTRIES machines - ISO 40

US Item Number	Description	Diameter	Shaft
B40-1/2GAS-PI	Drill Point Holder with Pull Stud	50	50
B40-34-PI	Tool Holder with Pull Stud and Locking Kit	35	34
B40-39-PI	Tool Holder with Pull Stud and Locking Kit	35	39
B40-47-PI	Tool Holder with Pull Stud and Locking Kit	35	47

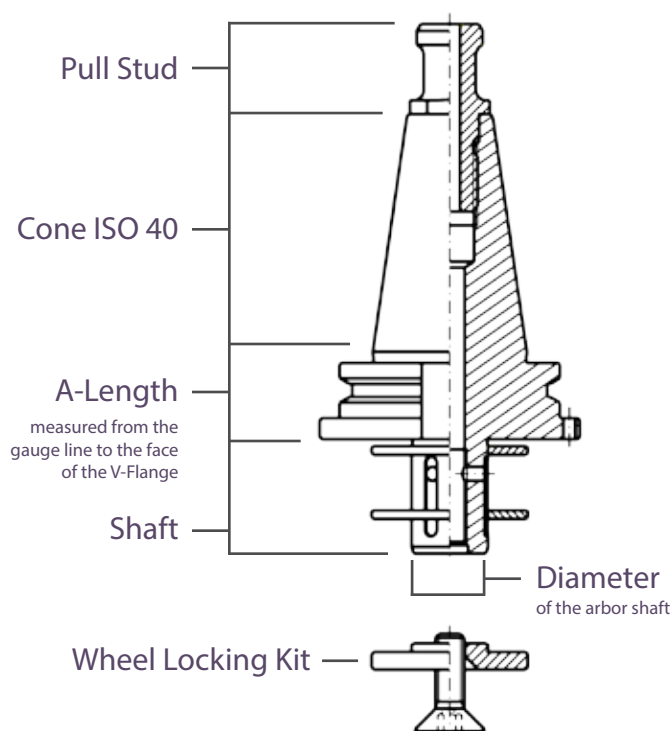
### NORTHWOOD machines - ISO 40

US Item Number	Description	Diameter	Shaft
B40-1/2GAS-NW	Drill Point Holder with Pull Stud	N/A	N/A
B40-34-NW	Tool Holder with Pull Stud and Locking Kit	35	34
B40-39-NW	Tool Holder with Pull Stud and Locking Kit	35	39
B40-47-NW	Tool Holder with Pull Stud and Locking Kit	35	47

## tool holders

for Brembana, Bavelloni, Intermac, Park Industries, and Northwood machines

Understanding the anatomy of a tool holder...



### Why order HEXO® CNC tooling premounted on tool holders?

Because CNC tooling can be complicated and time consuming to set, Superabrasive has taken great strides to simplify this process. Purchasing premounted HEXO® tooling saves time and reduces the possibility of making costly mistakes. Plus, every premounted tool is packaged in an individual wooden box at no extra cost, ideal for shipping and storage.



## additional tooling

Superabrasive offers a variety of additional tooling to accompany HEXO® tooling

### finger bits

Item Number	Description	Feed Rate (inches)	Speed (RPM)
FB-23-40S	CNC finger bit for soft material, 1/2 GAS, 23mm x 40mm	20in/500mm / minute	5000
FB-23-40H	CNC finger bit for hard material, 1/2 GAS, 23mm x 40mm	16in/400mm / minute	5000

### core bits

Item Number	Description	Feed Rate (inches)	Speed (RPM)
CB20-1/2GAS	20mm core bit, 70mm length, brazed, 1/2 GAS	1.5 in per minute	2500
CB25-1/2GAS	20mm core bit, 70mm length, brazed, 1/2 GAS	1.5 in per minute	2500
CB30-1/2GAS	20mm core bit, 70mm length, brazed, 1/2 GAS	1.5 in per minute	2500
CB32-1/2GAS	20mm core bit, 70mm length, brazed, 1/2 GAS	1.5 in per minute	2500
CB35-1/2GAS	20mm core bit, 70mm length, brazed, 1/2 GAS	1.5 in per minute	2500
CB40-1/2GAS	20mm core bit, 70mm length, brazed, 1/2 GAS	1.5 in per minute	2500

### sink wheels

Item Number	Grit	Size	Bond	Attachment
SW1x2-050-BR-1/2	50	1x2 in / 25x50 mm	brazed	1/2 GAS
SW1x2-100-BR-1/2	100	1x2 in / 25x50 mm	brazed	1/2 GAS
SW1x2-200-BR-1/2	200	1x2 in / 25x50 mm	brazed	1/2 GAS
SW2x2-050-BR-1/2	50	2x2 in / 50x50 mm	brazed	1/2 GAS
SW2x2-100-BR-1/2	100	2x2 in / 50x50 mm	brazed	1/2 GAS
SW2x2-200-BR-1/2	200	2x2 in / 50x50 mm	brazed	1/2 GAS
SW2x2.5-050-BR-1/2	50	2x2.5 in / 50x64 mm	brazed	1/2 GAS
SW2x2.5-100-BR-1/2	100	2x2.5 in / 50x64 mm	brazed	1/2 GAS
SW2x2.5-200-BR-1/2	200	2x2.5 in / 50x64 mm	brazed	1/2 GAS

### adapters

Item Number	Description
AD1/2-5/8-11	Adapter 1/2 inch, 5/8-11
AD-G1/2x5/8-11	Adapter 1/2 GAS thread to 5/8-11
AD-G1/2-ROUT-10mm	Adapter for router bits with a 10mm bolt to 1/2 GAS
AD-G1/2-M14-CNC-L58	Adapter for attaching 1/2 GAS to M14 male thread for CNC



Helpful Tip: The "hard" and "soft" designations in our finger bit item numbers refer only to the type of material for which the bits are designed to work; it does not refer to the hardness of the bond on the tool. The orange bit to the left is designed for soft material.



We produce our sink wheels with a small radius, designed for working in tight areas for accommodating a variety of jobs.

breakers
A
B
C
E
F
FG/S/FV
FZ
H
O
O/S
T
V
X,Z
tool holders
additional tooling
speed/feed
FAQ

## speed and feed recommendations

*recommended speed and feed rates for specific profiles*

Speed and feed recommendation for profiles **A, C, E-C9, T, V, X, Z**

Position	Slab Thickness	Rotation Speed (RPM)	Over Material (mm/in)	Cutting Capacity (mm/in)	Feed (mm/in)	Tool
0	20-30-40	5000	1.02mm / 0.04in	0.51mm / 0.02in	600-900mm / 24-35in	stock removal
1	20-30-40	5000 - 6000	0.51mm / 0.02in	0.51mm / 0.02in	2000-2500mm / 80-100in	stock removal, shaping
2	20-30-40	5000 - 6000	0.23mm / 0.009in	0.28 / 0.011	3000-3300mm / 120-130in	honing
3	20-30-40	5000 - 6000	0.05 / 0.002	0.18 / 0.007	2500-3000mm / 100-120in	pre-polishing
4	20-30-40	5000 - 5500	0	0.05 / 0.002	760-1270mm / 30-50in	polishing
5	20-30-40	3000 - 4000	0	0	500-1000mm / 20-40in	polishing
6	20-30-40	3000 - 4000	0	0	500-1000mm / 20-40in	polishing

Speed and feed recommendation for profiles **B, E-C17, E-C24, F, FG, FGS, FV, FZ, H, O, O/S**

Position	Slab Thickness	Rotation Speed (RPM)	Over Material (mm/in)	Cutting Capacity (mm/in)	Feed (mm/in)	Tool
0	20-30-40	5000	1.02mm / 0.04in	0.51mm / 0.02in	380-500mm / 15-20in	stock removal
1	20-30-40	5000 - 6000	0.51mm / 0.02in	0.51mm / 0.02in	1500-2000mm / 60-80in	stock removal, shaping
2	20-30-40	5000 - 6000	0.23mm / 0.009in	0.28 / 0.011	2000-2500mm / 80-100in	honing
3	20-30-40	5000 - 6000	0.05 / 0.002	0.18 / 0.007	1500-2000mm / 60-80in	pre-polishing
4	20-30-40	5000 - 5500	0	0.05 / 0.002	760-1270mm / 30-50in	polishing
5	20-30-40	3000 - 4000	0	0	500-1000mm / 20-40in	polishing
6	20-30-40	3000 - 4000	0	0	500-1000mm / 20-40in	polishing

Please note that "over material" refers to the amount of material that the said step will leave for the next. Many machines request this information; however, some request the cutting capacity. Please be sure you understand which type of information your machine is requesting before entering any data.

Machines requesting "over material" include: Brembana, Breton, Intermac, and Bavelloni

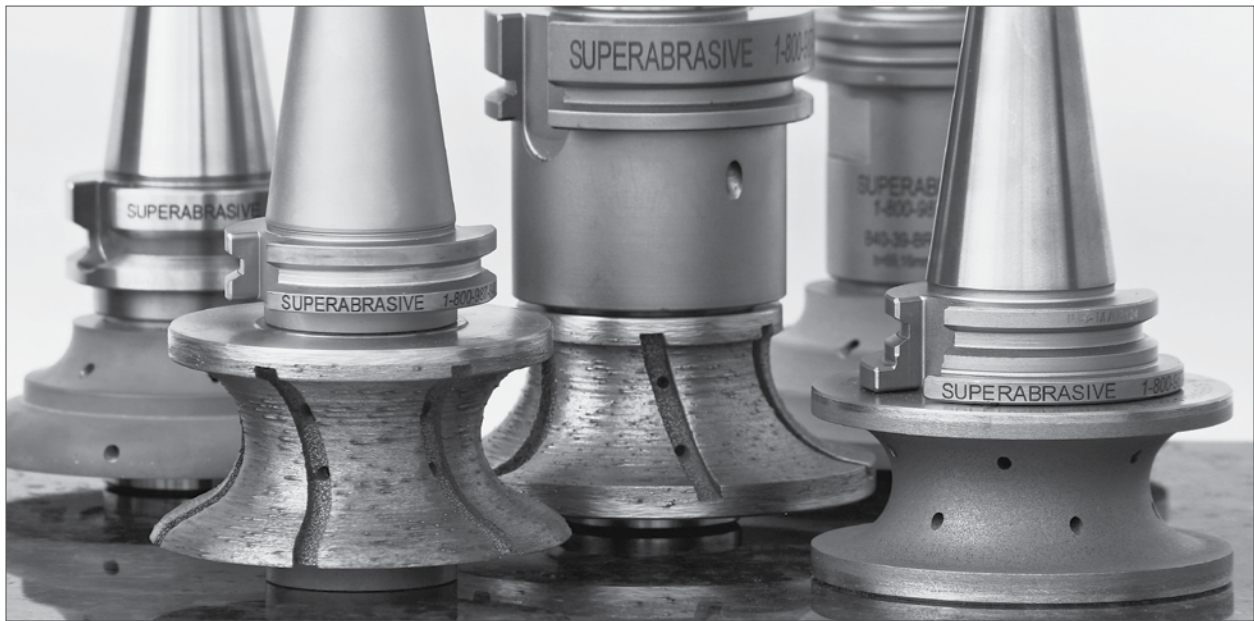
Machines requesting the "cutting capacity" include: Northwood and Park Industries

# speed and feed recommendations

*recommended speed and feed rates for specific profiles*

Speed and feed recommendation for **Engineered Stone, all profiles**

Position	Slab Thickness	Rotation Speed (RPM)	Over Material (mm/in)	Cutting Capacity (mm/in)	Feed (mm/in)	Tool
0	20-30-40	5000	1.02mm / 0.04in	0.51mm / 0.02in	500-600mm / 20-25in	stock removal
1	20-30-40	5000 - 6000	0.51mm / 0.02in	0.51mm / 0.02in	1500-2000mm / 60-80in	stock removal, shaping
2	20-30-40	5000 - 6000	0.23mm / 0.009in	0.28 / 0.011	2500-3000mm / 100-120in	honing
3	20-30-40	5000 - 6000	0.05 / 0.002	0.18 / 0.007	2000-2500mm / 80-100in	pre-polishing
4	20-30-40	5000 - 5500	0	0.05 / 0.002	760-1270mm / 30-50in	polishing
5	20-30-40	3000 - 4000	0	0	500-760mm / 20-30in	polishing
6	20-30-40	3000 - 4000	0	0	500-760mm / 20-30in	polishing



## business terms

### Business Terms

- Operating business hours are Monday through Friday from 8:30am to 5:00pm EST.
- Orders may be placed via fax, phone or e-mail.
- No order limits.
- Orders placed by 3:30p.m. EST will be shipped out the same day in most cases.
- Available shipping options: Red (to most locations), 2nd Day, 3rd Day and Ground via UPS. International shipping is also available.
- All shipments are F.O.B. Atlanta (Hoschton), GA unless otherwise stated.
- Shipping charges are based on the package weight, value, and final destination.
- Pricing is subject to change due to manufacturing cost increases. However, we always strive to deliver the highest quality products at the lowest possible price.
- Payment terms of net 30 days is available with approved credit.
- A late payment charge of 1.5% per month will be added to accounts after 30 days.
- All major credit cards are accepted – Visa, Master Card, American Express and Discover.

### Return Policy

- SUPERABRASIVE does not accept returns after 90 days from the date of invoice.
- Before returning items, first contact a representative who will determine the best solution for your individual situation and issue an RA form if needed.
- Returns will not be accepted without a completed RA form and an RA number. RA numbers are issued by sales representatives on a case-by-case basis.
- All returned items are subject to inspection prior to credit processing. In some instances, items can be replaced or repaired.
- A 15% restocking fee will be applied to non-defective product(s) and stock adjustment returns.
- Custom manufactured products cannot be returned (or refunded). Exceptions are made in cases involving manufacturing defects.

### Damaged Shipments

- All shipments are carefully inspected before leaving our warehouse. If products are damaged during transit, be sure the driver acknowledges the damage on the delivery documents. If the driver does not acknowledge the damage on the documents, or if the said damage is not reported to the driver, damage costs may not be recuperated.

### Liability

- In the case of defective products, SUPERABRASIVE will replace only the quantities determined to be defective.
- We are not liable for any injury, loss, or damage that is caused by improper use of the product(s). It is the responsibility of the customer to educate himself/herself and fully understand the products' intended use; therefore, the customer assumes all risks associated with the use of the product(s).
- Warranties do not apply to any products which have been altered, changed or modified in any way.



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