



Drilling



Reaming



Burnishing



Threading



Specials



## Wohlhaupter®

► **BORING**

Special Boring Solutions



SECTION

# B10-K

Special Boring Solutions



# Wohlhaupter® Special Boring Tools

Cobalt Outils Coupants



## Special Design Tooling

When it comes to special solutions for customers, Wohlhaupter has unique capabilities to effectively design and develop special boring tools. Our special boring tools are designed for specific machines, processes, and materials to help save you time and money.

If you have a particularly unique or difficult application, give our Application Engineering team a call.

phone: 330.343.4283 ext: 7611 | email: [appeng@alliedmachine.com](mailto:appeng@alliedmachine.com)

Your safety and the safety of others is very important. This catalog contains important safety messages. Always read and follow all safety precautions.



This triangle is a safety hazard symbol. It alerts you to potential safety hazards that can cause tool failure and serious injury.

When you see this symbol in the catalog, look for a related safety message that may be near this triangle or referred to in the nearby text.

There are safety signal words also used in the catalog. Safety messages follow these words.

### **WARNING**

**WARNING** (shown above) means that failure to follow the precautions in this message could result in tool failure and serious injury.

**NOTICE** means that failure to follow the precautions in this message could result in damage to the tool or machine but not result in personal injury.

**NOTE** and **IMPORTANT** are also used. These are important that you read and follow but are not safety-related.

Visit [www.alliedmachine.com](http://www.alliedmachine.com) for the most up-to-date information and procedures.

## Applicable Industries



Aerospace



Agriculture



Automotive



Firearms



General  
Machining



Oil & Gas



Renewable  
Energy

**Special Tooling Solutions**

EK Goover   Lay Down Cartridge . . . . .	2
Anti-Vibration   Multistep Boring Tool . . . . .	3
OD Turning Tool   Padded Line Boring Tool . . . . .	4
3E <sup>TECH</sup> Special Tools . . . . .	5
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#### GROOVING TOOLS

### EK GROOVER

- ▶ Create complex grooves faster and deeper than ever before
- ▶ Eliminate chatter in hard-to-reach internal forms
- ▶ The electronically-controlled insert release can be adapted to most machine tools
- ▶ Single or double grooving in one operation

#### ROUGH BORING TOOLS

### LAY DOWN CARTRIDGE

- ▶ Increase the productivity of your roughing tool while protecting your investment
- ▶ If the tool is ever damaged, simply replace a cartridge and resume making chips



#### SPECIAL BORING TOOLS

### ANTI-VIBRATION

- ▶ Vibration dampening rings
- ▶ Optimized tool weight
- ▶ Used to reduce harmonic vibration in deeper boring applications



#### SPECIAL BORING TOOLS

### MULTISTEP BORING TOOL

- ▶ Fine adjustment tool for reverse machining
- ▶ Combined with multidiameter fine adjustable cartridges for finish machining



#### SPECIAL BORING TOOLS

### OD TURNING TOOLS

- ▶ Multistep OD turning
- ▶ Drastically reduce cycle time
- ▶ Improve surface finish and feature concentricity

#### SPECIAL BORING TOOLS

### PADDED TOOLING

- ▶ Aids in stable part processing
- ▶ Expands length to diameter capabilities
- ▶ Improves surface finish
- ▶ Pads are replaceable to extend tool life





**NOTE:** Imperial item pictured

**NOTE:** Adjustment accuracy of 0.0001" or 0.002mm on diameter

3E<sup>TECH</sup> BORING TOOL

## MULTISTEP BORING TOOL

- ▶ Easy diameter adjustments with 3E<sup>TECH</sup>
- ▶ One digital readout module to use on all steps



**NOTE:** Imperial item pictured

**NOTE:** Adjustment accuracy of 0.0001" or 0.002mm on diameter

3E<sup>TECH</sup> BORING TOOL

## LINE BORING TOOL

- ▶ One digital readout module used on all steps
- ▶ Easy diameter adjustment at the machine spindle



## DigiBore Special Boring Tools



**NOTE:** Imperial item pictured

**NOTE:** Adjustment accuracy of 0.0001" or 0.002mm on diameter



**NOTE:** Imperial item pictured

**NOTE:** Adjustment accuracy of 0.0001" or 0.002mm on diameter

### FINISH BORING TOOLS

## DIGIBORE WITH 249 (248)

- ▶ Standard DigiBore head, standard 249 (248) head, and special slide for precise two-step bore
- ▶ MVS connection

### FINISH BORING TOOLS

## DIGIBORE SPECIAL

- ▶ Standard DigiBore boring head with OD turn and OD chamfer insert holder
- ▶ MVS connection

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*ROUGH, FINISH, and CHAMFER BORING TOOLS*

## COMBI-LINE

- ▶ Standard Combi-Line tooling with added chamfer cartridge
- ▶ MVS connection



# ToolMD®

www.toolmd.com



## Design Your Own Solutions

ToolMD is a configurator for Wohlhaupter modular tooling systems that allows customers to virtually build their own solution. This online-based simulator puts the entire Wohlhaupter product line at your fingertips. It provides a digital bank of every individual part that Wohlhaupter manufactures in either inch or metric.

Once you select a component, you will be guided by a series of user-friendly prompts to select the next components until you have built your tooling system. Throughout the process, you can monitor the size of your custom tool and ensure what you're building matches your real-life specifications. Once a complete system is virtually assembled, the program will render the tool in either a 2D or 3D drawing to view on your device.

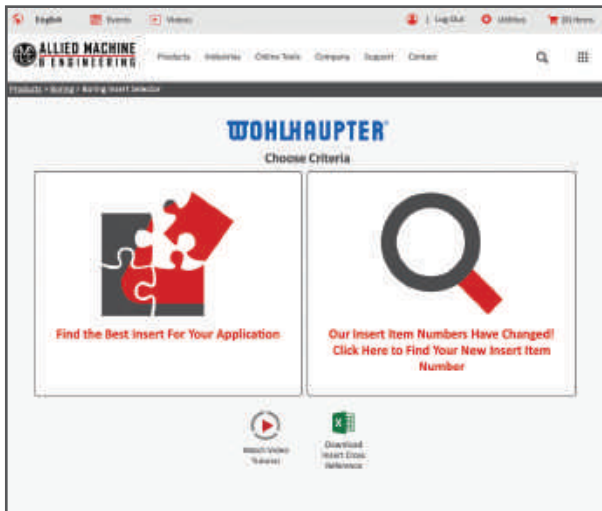
Designing your tools with ToolMD saves you time and allows you to instantly obtain the right tool for the job.



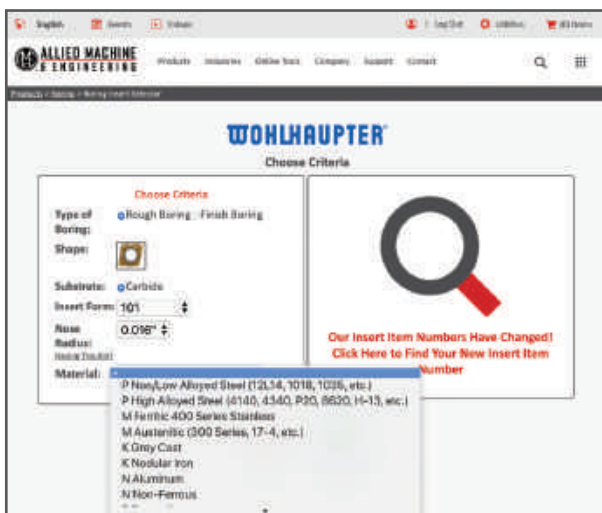
Design anytime from anywhere.  
Available online 24/7.

# WOHLHAUPTER® | Boring Insert Selector

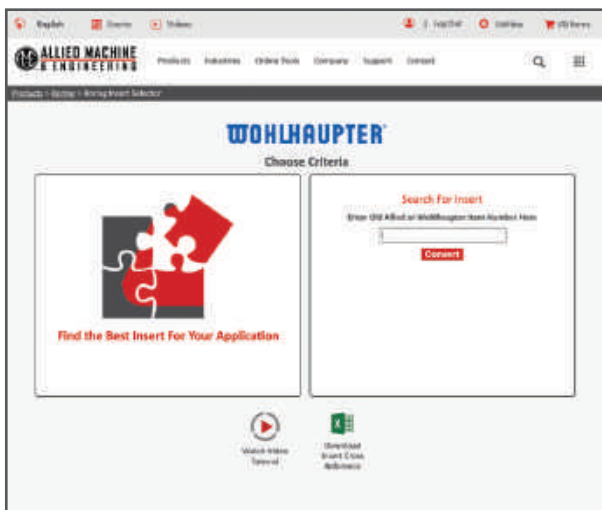
[www.alliedmachine.com/bis](http://www.alliedmachine.com/bis)



- Generate the correct boring insert for your application in just six easy steps



- Choose type, shape, substrate, insert form, nose radius, and workpiece material
- Order easily by adding the item to your cart



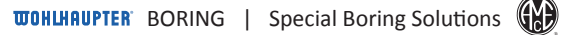
- Search for your new insert item number by entering your old item number



## Cobalt Outils Coupants

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## Interactive Experience

Visit our digital platform.

- Explore various locations and zones to see real people in real positions
- See our training and engineering departments
- Get a glimpse of our state-of-the-art logistical and machining equipment
- Virtually meet our customer service and marketing teams
- Access digital resources like literature, videos, and online tools and training



[experience.alliedmachine.com](http://experience.alliedmachine.com)



# ToolMD®

Increase the production and success of your applications today.

- Direct access to 2D drawings and 3D models
- Assemble and view tool images in your browser
- Download drawings for use in most machining software programs
- Browse products, search item numbers, and save assemblies for future use

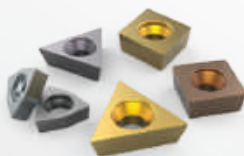
[toolmd.com](http://toolmd.com)

## WOHLHAUPTER®

Boring Insert Selector

Find the best insert for your application.

- Generate the correct boring insert for your job in just six easy steps
- Choose type, shape, substrate, insert form, nose radius, and material
- Order easily by adding the item to your cart



[alliedmachine.com/bis](http://alliedmachine.com/bis)

# Insta-Code®

**Eliminate the wait. Get your program now.**

- Choose the best thread mill for your application
- Create program code for your machine
- Available as a PC download app (that can be used offline)
- Website app available 24/7



Insta-Code also has a  
**Cycle Time Calculator**

[alliedmachine.com/InstaCode](http://alliedmachine.com/InstaCode)

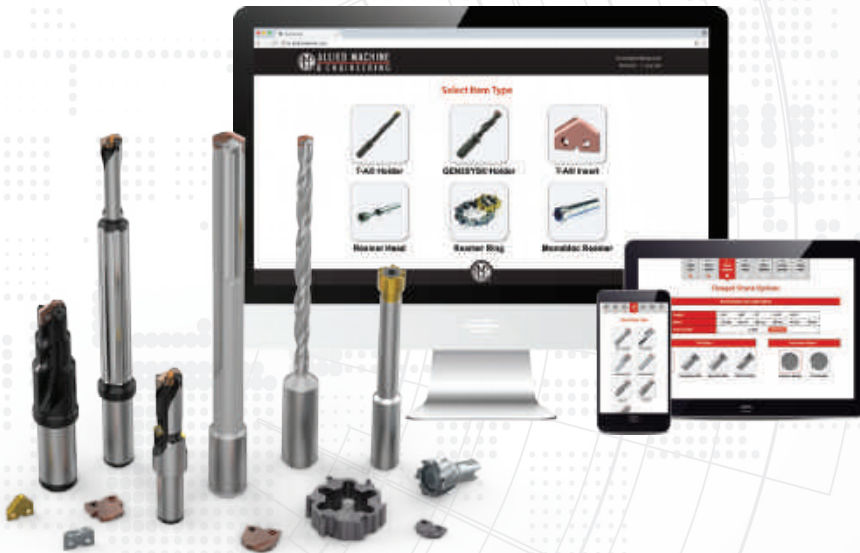


# Insta-Quote®

**Design your custom tooling and receive a drawing and quote...all within minutes.**

- Design and quote your own tooling
- Generate the solution you need in just a few steps
- Features the following products:

- T-A® Inserts
- T-A® Holders
- GEN3SYS® XT Holders
- ALVAN® Reamers



[iq.alliedmachine.com](http://iq.alliedmachine.com)

## Solution Hub App

**All Allied all the time.**

- Quickly look up product information
- Links to our free online tools
- Locate distributors
- Stay up to date on news and events



## Machinist Tool App

**Quickly convert cutting tool parameters for the machine inputs you need.**

- Input data to calculate the RPM and speed and feed rates
- Also features the Boring Insert Selector
- Access product literature right at your fingertips





### Support You Can Count On

Allied Machine has many lines of support to ensure we're available to assist you at all times. It's important to establish relationships with new customers, but we also know it's equally important to strengthen and support relationships with existing customers. Whether you need help with an order or you need someone to come assist you at the spindle, we have the right people to get you what you need.



1

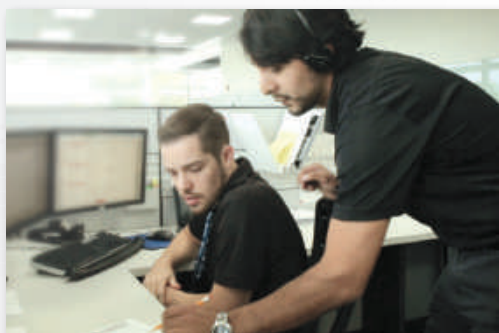
#### Inside Sales Support

Our inside sales team is trained to handle your account information and general inquiries. We are happy to assist you and find the answers to your questions.

☎ 1.330.343.4283 ext. 8610

☎ 1.800.321.5537 (toll free United States and Canada)

✉ [insidesales@alliedmachine.com](mailto:insidesales@alliedmachine.com)



2

#### Engineering Support

Our highly trained and skilled Application Engineers are here to assist you. If you are experiencing technical difficulties, our engineers will recommend the best solutions to the problem. Speeds and feeds, coolant pressure, and other machining components all affect the performance of our tooling. Our AEs are experienced in working with difficult materials in many different environments. Give us a call and put our knowledge to the test.

☎ 1.330.343.4283 ext. 7611

☎ 1.800.321.5537 (toll free United States and Canada)

✉ [appeng@alliedmachine.com](mailto:appeng@alliedmachine.com)

3

#### Field Support

Allied Machine provides local engineering support all over the world. Our Field Sales Engineers (FSEs) spend months training in-house before going to the field. This support line allows us to provide assistance to our customers right at the spindle. They are available to visit your facility, run demos and tests, and work hand-in-hand with machine operators and engineers to find the best possible tooling solutions.

Visit [www.alliedmachine.com/fse](http://www.alliedmachine.com/fse) to get in touch with your local Field Sales Engineer.

☎ 1.330.343.4283

☎ 1.800.321.5537 (toll free United States and Canada)

✉ [info@alliedmachine.com](mailto:info@alliedmachine.com)





# Allied Tool Academy



Online | On-site Technical Education Seminar (TES) | LIVE (Broadcasting)

## Online Training

Get **all** the tooling training of our 3-day in-person Technical Education Seminar (TES) through the online **Allied Tool Academy** training platform. Level up your tooling IQ through a series of product overviews, demos, and short quizzes.

- Online TES Certification as well as other training modules
- On demand
- On YOUR schedule



Register online today:  
[www.alliedtoolacademy.com](http://www.alliedtoolacademy.com)



Register online today:  
[www.alliedmachine.com/live](http://www.alliedmachine.com/live)

## Allied LIVE (Broadcasting)

Join us for **LIVE broadcast** training events where you will have the ability to learn about our tooling, watch live demos, and ask our trainers questions.

- Online
- Quick brief presentation provides basic knowledge of our products
- Watch live demos of tools at the spindle at different speeds and feeds

## On-site Technical Education Seminar (TES)

Allied Machine's **Technical Education Seminar (TES)** puts the attendees in front of the machines. When you attend our three day TES program, you'll gain first-hand experience in **real-life** application situations. Test and experiment with different speeds and feeds, observe the results, and discover the best solution.

- Training Lab: In-depth training at the spindle allows you to choose speeds and feeds
- Learning Lab: Quick, brief sessions provide basic knowledge of our products
- Facility Tours: Take guided tours of our two manufacturing facilities located in Dover, Ohio



Register online today:  
[www.alliedmachine.com/TES](http://www.alliedmachine.com/TES)



**Allied Machine  
Training Facility**  
485 West 3rd Street  
Dover, OH 44622

# Guaranteed Test / Demo Application



Cobalt Outlets Coupants

Distributor PO #

The following must be filled out completely before your test will be considered

**IMPORTANT:** For processing, send Purchase Order to your Allied Field Sales Engineer (FSE). Please clearly mark the paperwork as "Test Order."

## Distributor Information

Company Name: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Account Number: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

## End User Information

Company Name: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Industry: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

**Current Process** List all tooling, coatings, substrates, speeds and feeds, tool life, and any problems you are experiencing

**Test Objective** List what would make this a successful test (i.e. penetration rate, finish, tool life, hole size, etc.)

## Application Information

Hole Diameter: \_\_\_\_\_ in/mm Tolerance: \_\_\_\_\_ Material: \_\_\_\_\_  
(4150 / A36 / Cast Iron / etc.)  
Preexisting Diameter: \_\_\_\_\_ in/mm Depth of Cut: \_\_\_\_\_ in/mm Hardness: \_\_\_\_\_  
(BHN / Rc)  
Required Finish: \_\_\_\_\_ RMS State: \_\_\_\_\_  
(Casting / Hot rolled / Forging)

## Machine Information

Machine Type: \_\_\_\_\_ Builder: \_\_\_\_\_ Model #: \_\_\_\_\_  
(Lathe / Screw machine / Machine center / etc.) (Haas, Mori Seiki, etc.)  
Shank Required: \_\_\_\_\_ Power: \_\_\_\_\_ HP/KW  
(CAT50 / Morse taper, etc.)  
Rigidity: \_\_\_\_\_ Orientation: \_\_\_\_\_ Tool Rotating: \_\_\_\_\_ Thrust: \_\_\_\_\_ lbs/N  
☐ Excellent ☐ Vertical ☐ Yes  
☐ Good ☐ Horizontal ☐ No  
☐ Poor

## Coolant Information

Coolant Delivery: \_\_\_\_\_ Coolant Pressure: \_\_\_\_\_ PSI / bar  
(Through tool / Flood)  
Coolant Type: \_\_\_\_\_ Coolant Volume: \_\_\_\_\_ GPM / LPM  
(Air mist, oil, synthetic, water soluble, etc.)

## Requested Tooling

QTY	Item Number

QTY	Item Number



**ALLIED MACHINE  
& ENGINEERING**

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Dover, OH 44622

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Fax: (330) 602-3400  
Email: info@alliedmachine.com





## Warranty Information



Allied Machine & Engineering ("Allied Machine") warrants to original equipment manufacturers, distributors, industrial and commercial users of its products for one year from the original date of sale that each new product manufactured or supplied by Allied Machine shall be free from defects in material and workmanship.

Allied Machine's sole and exclusive obligation under this warranty is limited to, at its option, without additional charge, replacing or repairing this product or issuing a credit. For this warranty to be applied, the product must be returned freight prepaid to the plant designated by an Allied Machine representative and which, upon inspection, is determined by Allied Machine to be defective in material and workmanship.

Complete information as to operating conditions, machine, setup, and the application of cutting fluid should accompany any product returned for inspection. This warranty shall not apply to any Allied Machine products which have been subjected to misuse, abuse, improper operating conditions, improper machine setup or improper application of cutting fluid or which have been repaired or altered if such repair or alteration, in the judgement of Allied Machine, would adversely affect the performance of the product.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Allied Machine shall have no liability or responsibility for any claim, whether in contract, tort or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery or use of any product sold hereunder, in excess of the cost of replacement or repair as provided herein.

Allied Machine shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for economic losses of any kind or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform this agreement.

ALL PRICES, DELIVERIES, DESIGNS, AND MATERIALS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



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Wohlhaupter GmbH  
is registered to  
ISO 9001:2015 by QA TECHNIC

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(Engineering Dept.)

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India

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Your local Allied Machine representative:

[www.alliedmachine.com](http://www.alliedmachine.com)

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