



i-Form

Engineered
Specials

ALLIED MACHINE & ENGINEERING CORP.
www.alliedmachine.com

Insta-Quote™ - HOLDERS

Insta-Quote™ is a web based program that allows the user to request a quote and receive prints in as little as 30 seconds. To access Insta-Quote™, go to www.alliedmachine.com and click on the Insta-Quote™ link listed under products. From here the user will be able to log in and have complete access to our state-of-the-art tool quoting system. If you do not have a log-in, please contact your local Allied Territory Manager. If you don't know who your local Territory Manager is, please email insidesales@alliedmachine.com. This easy to use tool is free and accessible 24/7 from anywhere you can access the internet.

Insta-Quote™ offers versatility because you can use standard T-A® or GEN3SYS® inserts with Insta-Quote™ Holders.

Insta-Quote™ holders are available in 7 different styles:

- One Step ICS
- Two Step ICS
- Three Step ICS
- Chrome Bushing
- Chrome Helix
- Special Length
- Guided T-A®

Other options available for Holder Design through Insta-Quote™ include:

- Shank Style
- Thru Spindle Coolant Options
- IC Insert Styles
- Chrome Bearing Areas
- Black Oxide

⚠ WARNING Tool failure can cause serious injury. To prevent:

- When using a 9xD or longer holder without support bushing, use a short holder to establish an initial hole that is 2-3 diameters deep.
- Do not rotate tool more than 50 RPM unless it is engaged with workpiece or fixture.

Follow the Deep Hole Guidelines for best practices in deep hole drilling. Visit www.alliedmachine.com/deepholeguidelines.aspx for most up-to-date information and procedures. Factory technical assistance is also available at (800) 321-5537 or at (330) 343-4283 outside the U.S. and Canada.





Chrome Helix



Chrome Bushing



Guided T-A[®]



Special Length



One Step ICS



Two Step ICS



Three Step ICS

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INSTA-QUOTE[™]



THE MOST COMPREHENSIVE TOOL QUOTING SYSTEM AVAILABLE

Insta-Quote™ - T-A® INSERTS

Insta-Quote™ Inserts can be used in standard T-A® or Insta-Quote™ holders. There are 7 different styles of inserts available through Insta-Quote™ that cover a wide range of industries and applications. As with any Insta-Quote™ application, the user will receive a quote that can be printed instantly 24/7. Not having to wait on your quote means quicker turnaround time and a simplified process.

Insta-Quote™ inserts are available in 7 different substrates:

- C1
- C2
- C3
- C5
- HSS
- Super Cobalt
- Premium Cobalt

Inserts are available in 4 coating options as well:

- TiN
- TiCN
- TiAlN
- AM200®

Other options available for Blade Design through Insta-Quote™ include:

- Lip Geometry Options
- Web Geometry Options
- Chipbreaker Options
- Corner Options
- Regrind Options



History of True
Tradition of



Flat Bottom



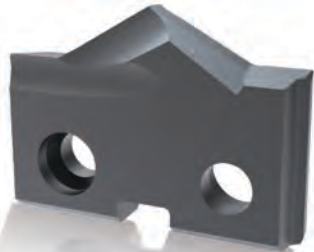
Double Angle



Ball Nose



Step Blade



Spur Point



Special Angle



Spot & Chamfer

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INSTA-QUOTE™



THE MOST COMPREHENSIVE TOOL QUOTING SYSTEM AVAILABLE

i-Form

Custom Indexable Drill/Form Tool System

What if you didn't have to send off your brazed carbide tools to be resharpened? What if you could choose a geometry with faster penetration rates for your hole-making needs? Welcome to a new reality.

Allied Machine & Engineering Corp. brings you the i-Form Custom Indexable Drill/Form Tool System. With i-Form, you can design complex forms for any style hole with increased productivity in mind. The i-Form product line (blade and form inserts) provides custom engineered forms that allow for complex design with replaceable cutting edges, and improved consistency while outperforming brazed and solid carbide tools. i-Form tools will also increase your productivity by minimizing setup times and eliminating regrind tool float and inconsistency.

The i-Form holders also have coolant-through capabilities, and can utilize Insta-Quote™ and/or special insert designs.

With a delivery time in as little as 10 days, the i-Form tool system is truly incredible.

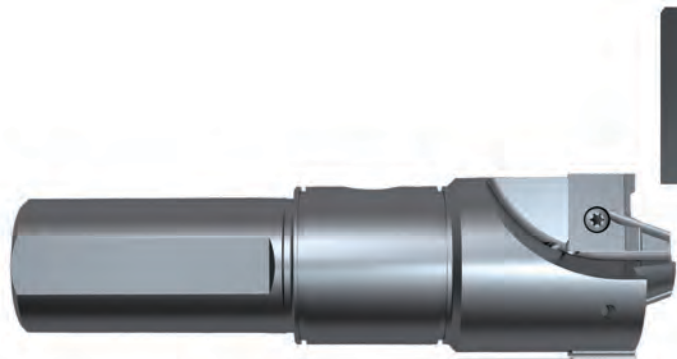
At Allied Machine & Engineering Corp., your imagination is our reality.

⚠ WARNING Tool failure can cause serious injury. To prevent:

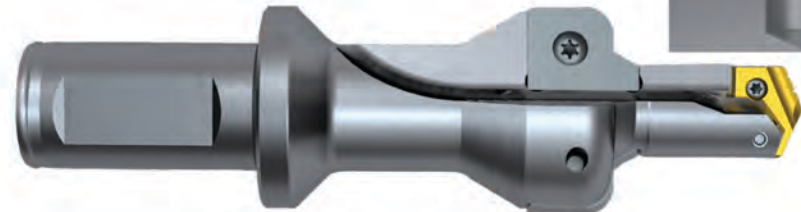
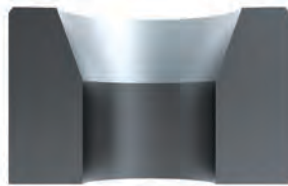
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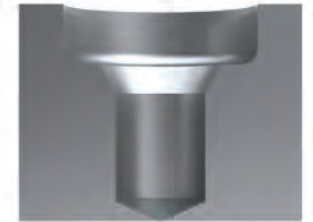
History of True
Tradition of



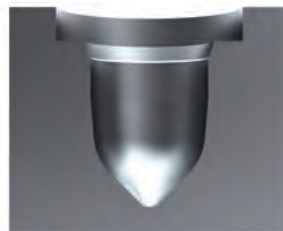
i-Form Drill for facing operation with ID-OD Chamfer.



Lug Hole Drill for complex forms using i-Form Inserts



IGS Drill with special T-A[®] Form Insert for special hydraulic ports.



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i-Form

Custom Indexable Drill/Form Tool System

Engineered Specials - Holders and Inserts

For over 50 years Allied has been a leader in designing and manufacturing special tooling solutions for the industry's most difficult applications.

Included in this catalog are images to help show Allied's capabilities. This is only a small sampling of what can be supplied by Allied. Contact our Application Engineering Department to start the design process. They can be reached by phone at (800) 321-5537 x7611 or by e-mail at aesupport@alliedmachine.com.

Engineered specials can drastically lower cycle times and remove unnecessary steps in the manufacturing process. This can save you significant amounts of money and dramatically lower your cost per hole. In many cases, Allied Engineered Specials can do in one step what used to take several.

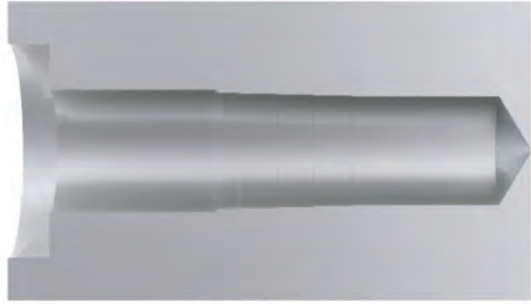
There is something to be said for having the right tool for the job. It is our job to help engineer a tooling solution. Contact us and we can start to save you time and money on your current applications.

⚠ WARNING Tool failure can cause serious injury. To prevent:

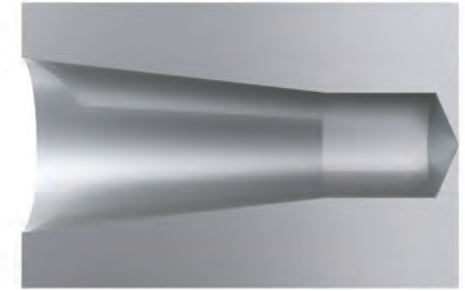
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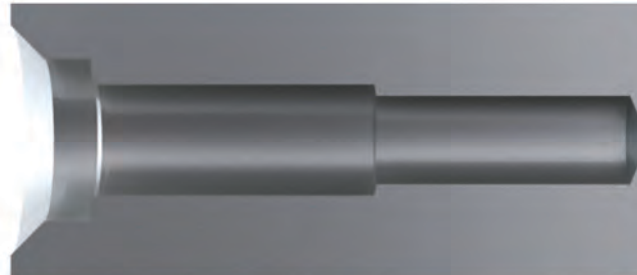




Multiple Step Drill used in the Mold and Die Industry.

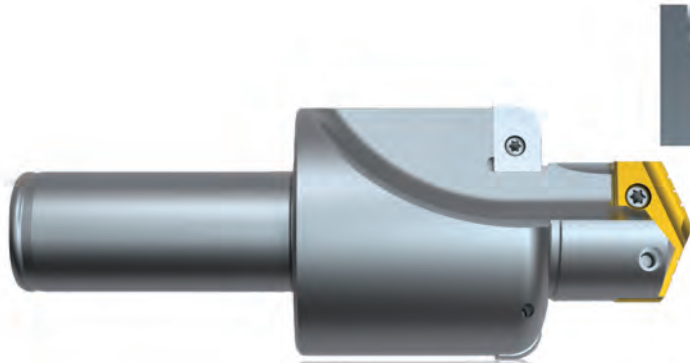


Multi-Insert T-A[®] ICS Drill for creating a tapered form used in automotive manufacturing.

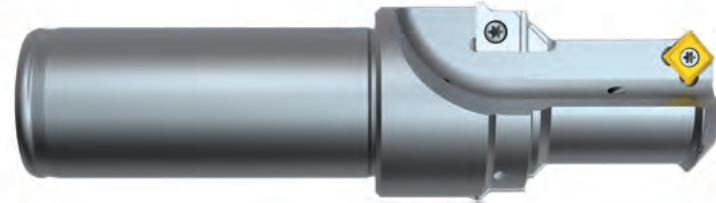


Multi-Step Cartridge Tool used to create complex forms in the automotive industry.

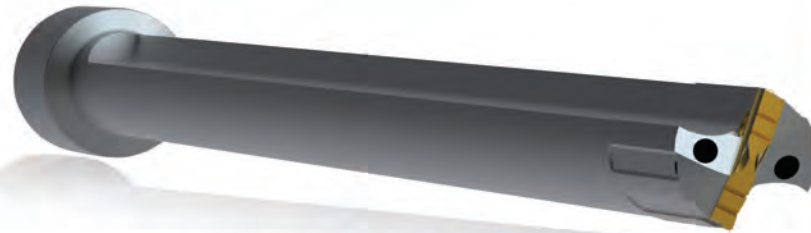




One Step T-A[®] ICS Drill with Form Inserts used to drill and counter bore with a large corner radius.



Indexable Carbide Form Tool used to bore and create complex forms.



Guided T-A[®] used in deep hole applications.



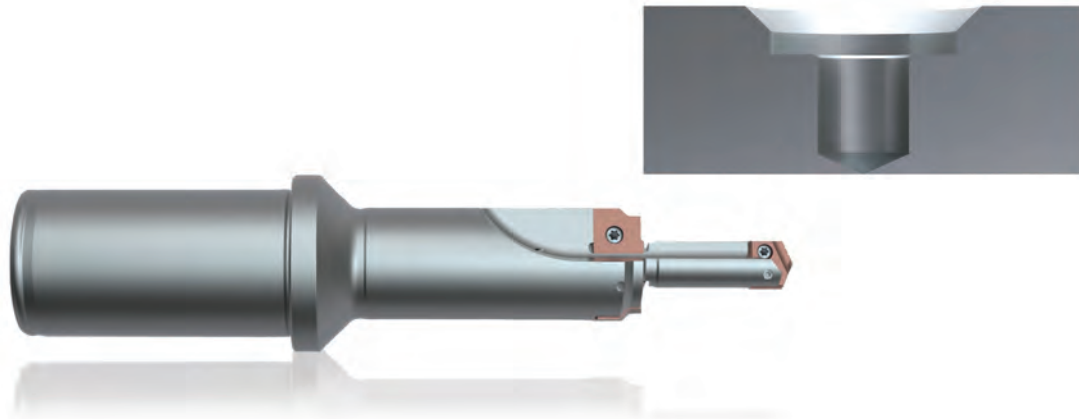
Drill Chamfer GEN3SYS[®] Drill used to pre-drill and chamfer a tapped hole.



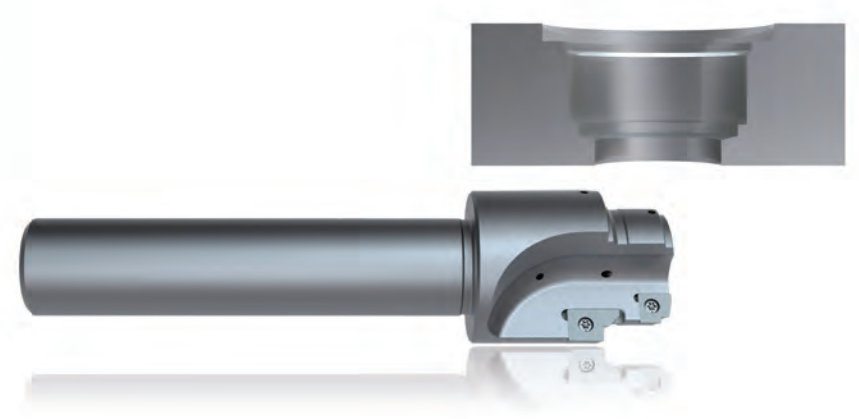
T-A[®] Counter Bore Tool using a micro adjustable cartridge.



History of True
Tradition of



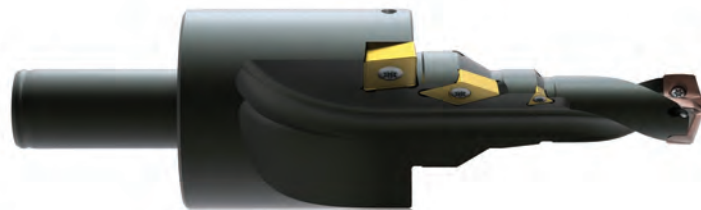
Form Tool used in the Locomotive Industry.



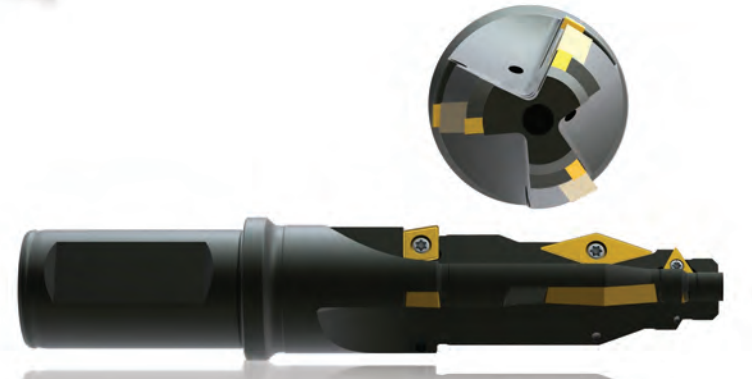
Form Tool used in the manufacturing of hydraulic manifolds.



Chrome Bushing Drill used in agriculture equipment manufacturing.

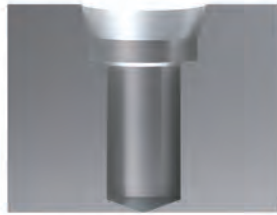


Three Step GEN3SYS® Drill used in renewable energy manufacturing.

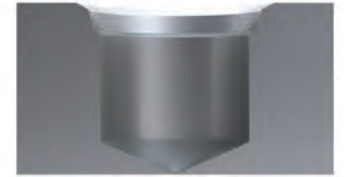


Three Flute IC Form Drill used to create complex forms in heavy equipment manufacturing.





GEN3SYS® Form Tool using i-Form Inserts.



Special AccuPort 432® tool used to create special hydraulic port forms.



Deburr Tool used to smooth hole edges in a single pass.



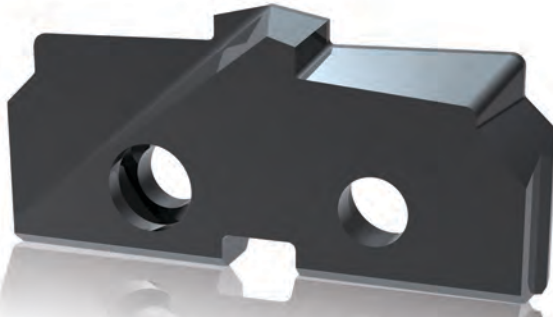
T-A® Lug Hole Drill used to put multiple steps in automotive aluminum wheels.



History of True
Tradition of



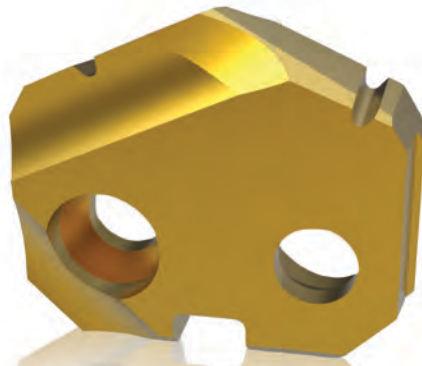
Non Center Cutting and Chamfer
T-A® Insert.



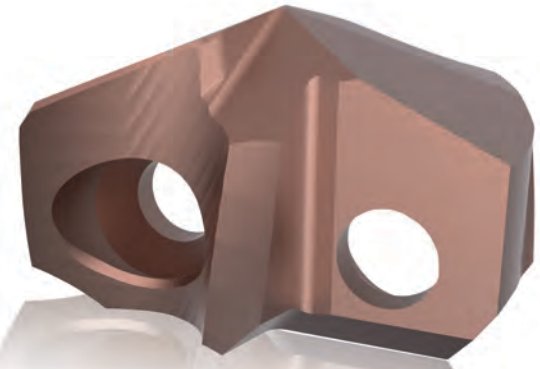
Flat Bottom T-A® with Pilot,
Corner Radius and Chamfer.



Form T-A® Insert for Drill, Chamfer.



T-A® Back Chamfer Insert.



GEN3SYS® Back Chamfer Insert.



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Engineered Specials - Other Products

Allied's Engineered Specials capabilities are not limited to T-A® and GEN3SYS® Products alone. Allied has the ability to design and manufacture specials for all of our product lines.

Below and to the right are images that show additional Allied offerings. This is just a small sampling of what can be truly offered by Allied. Contact our Application Engineering Department to start the design process. They can be reached by phone at (800) 321-5537 x7611 or by e-mail at aesupport@alliedmachine.com.

Engineered specials can eliminate costly steps from the manufacturing process. This can save you significant time and money while drastically lowering your cost per hole. In many cases, Allied Engineered Specials can do in one process what used to take several.

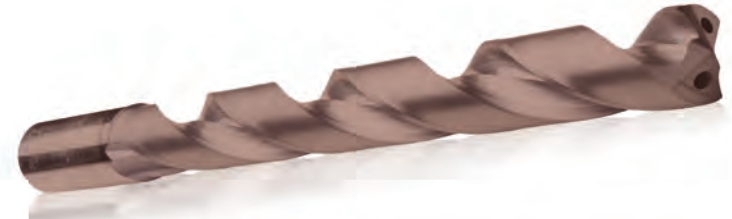


BT-A Drill - Internal Thread





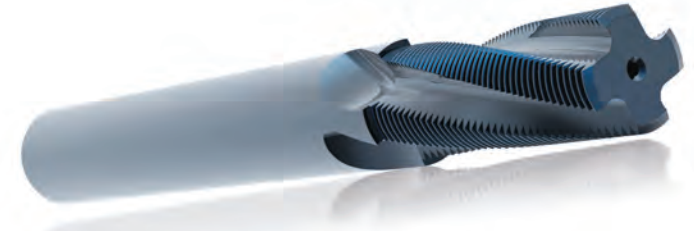
ALVAN[®] Reamer - Multiple Ring



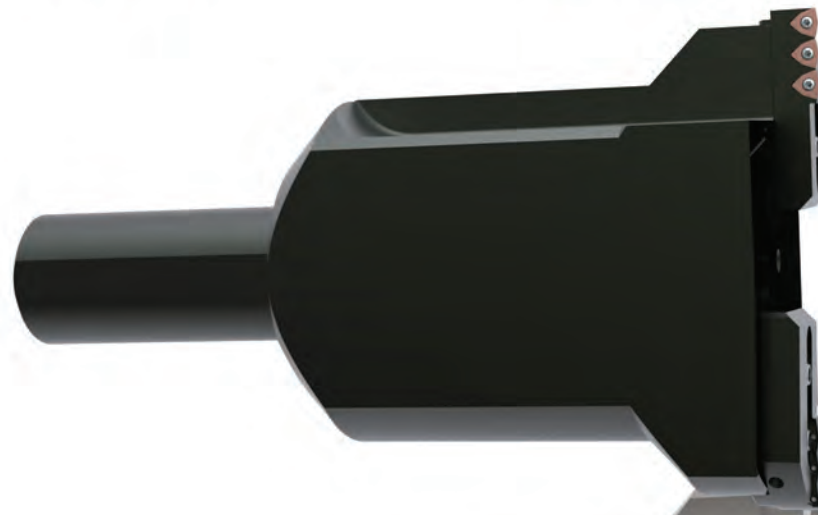
ASC 320[®] - Enhanced Geometry



AccuPort 432[®] - Special Length



AccuThread 856[®] - Coolant Through



Opening Drill[®] - Special Diameter





i-Form

ENGINEERED SPECIALS

Once you find the right tool for the job, things tend to fall in place. Cycle times lower, cost per hole lowers, tool life increases and you make more profit on each piece. Allied has an Application Engineering Department that is devoted to engineering the right tool for your job. In many cases, we can design a tool that can do in one step what previously took two, three, four or more. Every step you take out of the process lowers your cost per hole and lowers your inventory costs. This catalog is only a sampling of what Allied can do. Contact us today to start the process of consolidating your multiple step processes.

ALLIED MACHINE & ENGINEERING CORP.

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www.alliedmachine.com

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