



# ENGINEERED SOLUTIONS

 **ClineTool**  
Customs

An AFC Industries Company

# CUSTOM TOOLS ARE OUR CORE BUSINESS.

SINCE 1948, MANUFACTURERS HAVE TRUSTED US TO UNCOVER EFFICIENCIES THROUGH INNOVATIVE CUTTING TOOL DESIGN AND PROCESS IMPROVEMENT.

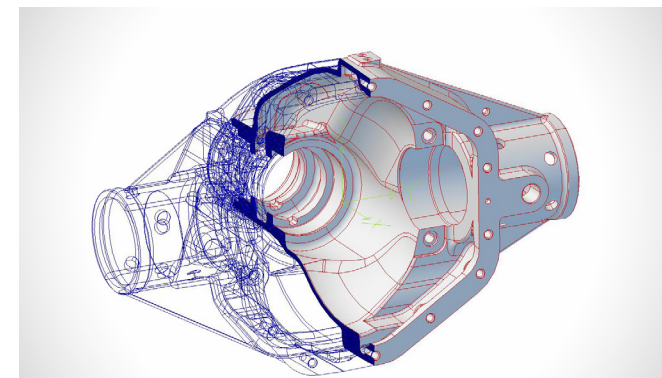
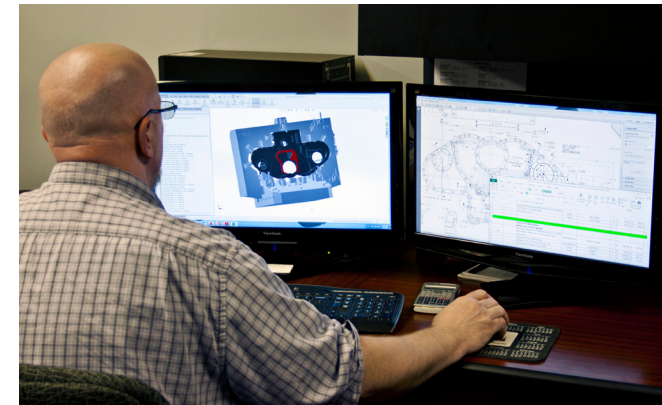


Cline Tool Customs is a partner who can assist you in every phase of the manufacturing process. Whether your application requires a simple tool or a complex design capable of machining multiple features at once, we have the expertise to design and manufacture a high quality cutting tool to fit your requirements. We understand metal removal better than anyone, and custom tool applications are a core competency of our business. Trust Cline Tool Customs to find the most productive machining processes that will reduce cycle times, improve quality and reduce costs.

- One of the largest custom cutting tools manufacturers in the U.S.
- Skilled tool craftsmen and tool design engineers with decades of experience
- Serving many industries including agriculture, aerospace, construction equipment, automotive, appliances and hydraulic valve controls
- Full-service design-and-build services

## WE PRODUCE A FULL RANGE OF CUSTOM CUTTING TOOLS:

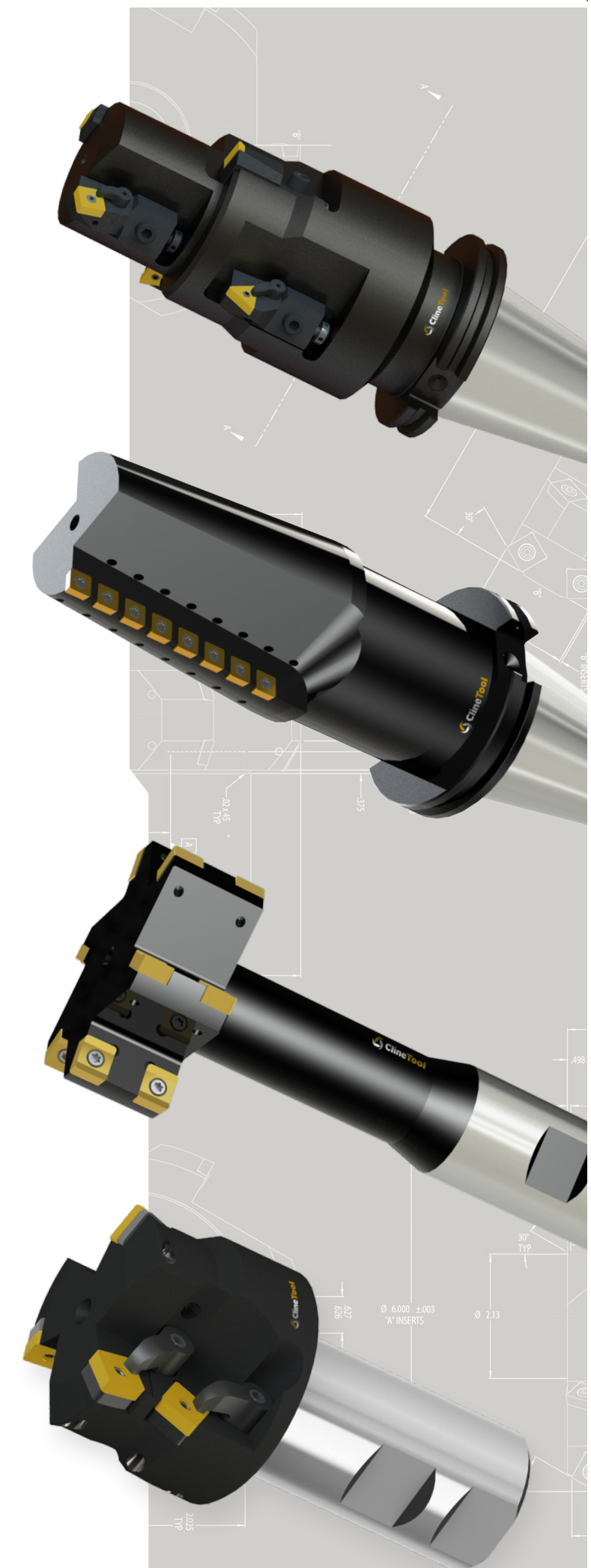
- |                                             |                                                        |
|---------------------------------------------|--------------------------------------------------------|
| ✓ Custom indexable drills                   | ✓ Multi-diameter indexable boring bars and reamers     |
| ✓ Solid carbide form tools and thread mills | ✓ Special form inserts                                 |
| ✓ Carbide-tipped form and porting tools     | ✓ Custom tool holders, inserts, cutters, collet chucks |
| ✓ Modular shanks: HSK, CAT, ABS® and CAPTO® | ✓ Custom carbide step drills                           |



## FROM CONCEPT TO REDUCED MANUFACTURING COSTS

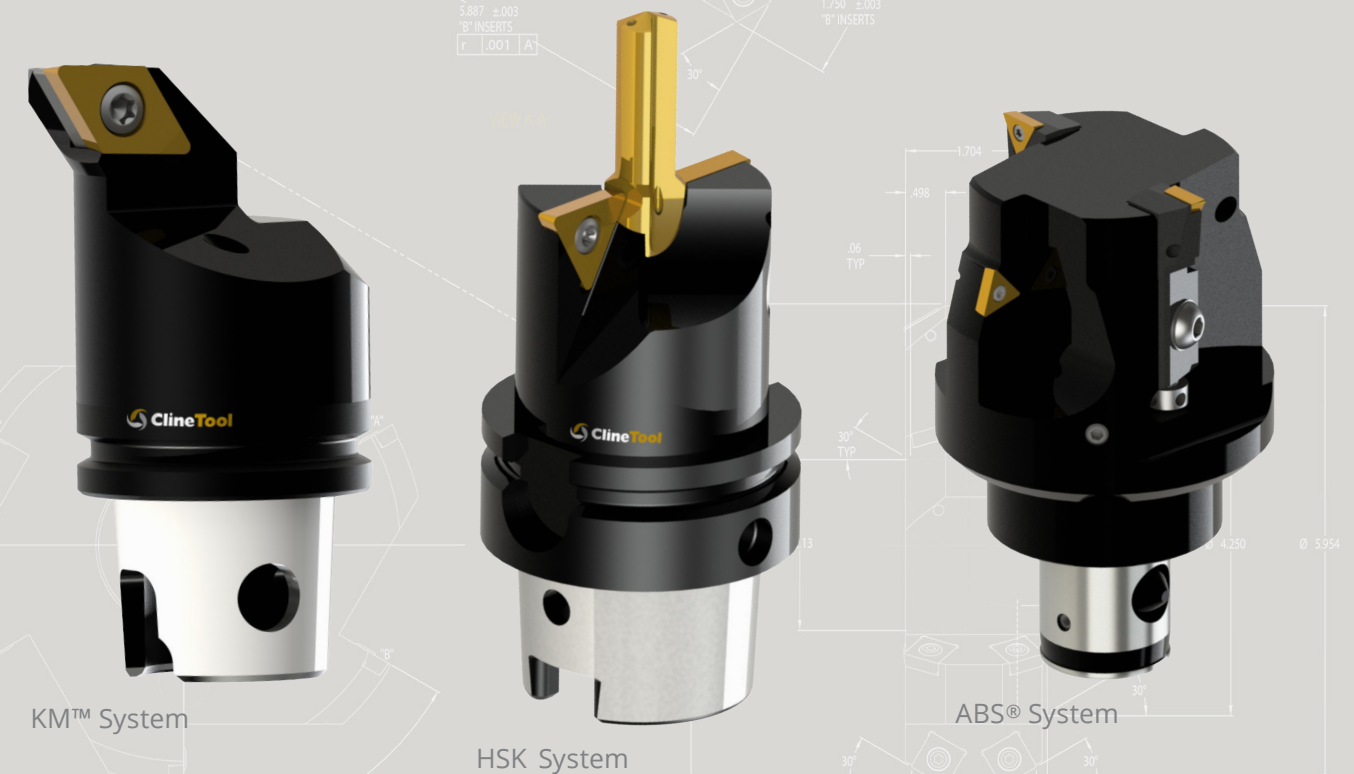
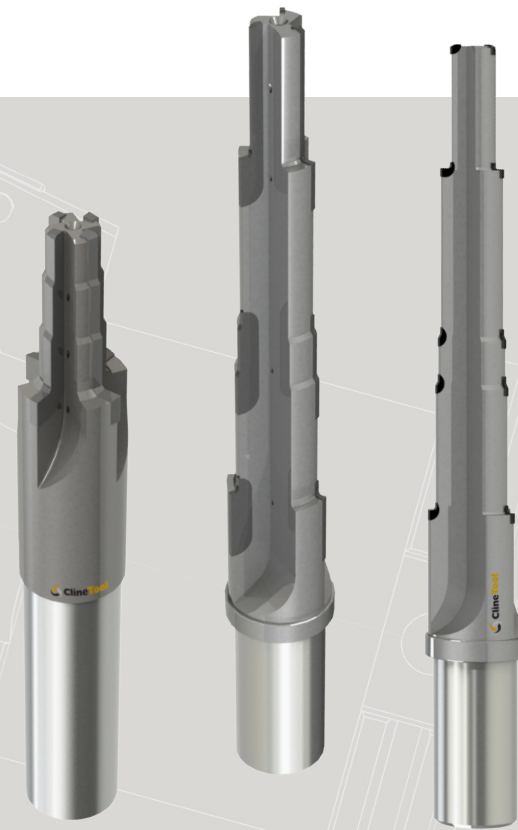
Cline Tool Customs will work with you from the very beginning of a project, providing the resources to develop the most cost-effective tool and process. Our highly experienced engineers have designed a vast variety of tools for a wide range of application areas.

- ✓ Experienced designers who understand manufacturing and custom tool design
- ✓ Designs provided in 3D models
- ✓ Veteran designers who draw from many years of experience
- ✓ Indexable, solid carbide and carbide-tipped complex tools



# ENGINEERED TOOLS INCREASE PERFORMANCE, REDUCE COSTS AND IMPROVE QUALITY

- ✓ We can design tools with multiple features or combine multiple tools into one operation
- ✓ Improved product quality and less waste
- ✓ Repeatability and reproducibility
- ✓ Reduced time in cut
- ✓ Less down time for tool changeover
- ✓ Designed for longer tool life



## ALWAYS ROOM FOR IMPROVEMENT

To improve the machining of a steering knuckle, the spindle boring and milling was performed with an engineered solution for the application. It incorporated a standard milling cutter and a boring tool to reduce the cycle time and eliminate a tool change.

On the second tool, a drill was incorporated with a straddle mill assembly, further reducing cycle time and increasing throughput.



## MODULAR TOOLING SYSTEMS = SMART MANUFACTURING

Modular systems have become very popular because they offer flexibility and functionality. Cline Tool Customs has the ability to design custom solutions for all modular systems, enabling our clients to take the advantages to the next level.

- ✓ Reduced set-up and change time
- ✓ Increased rigidity and accuracy
- ✓ Minimized tool inventory

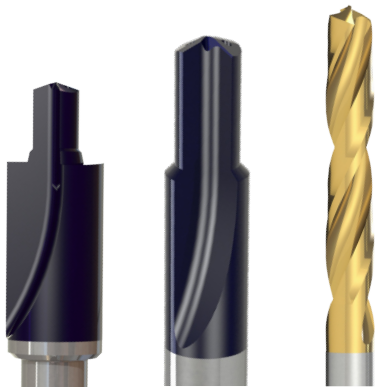


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CAPTO® is a registered trademark of Sandvik Coromant  
ABS® is a registered trademark of Komet®



# SPECIAL SOLID CARBIDE AND CARBIDE-TIPPED TOOLS

- ✓ Extensive offering of high performance drills and form tools/reamers in a full range of sizes
- ✓ Multiple diameter and steps for machining complex features
- ✓ Coolant-fed in spiral- and straight-flute configurations



# HELPING YOU MEET YOUR CUSTOMERS' DEMANDS

Precision, quality and quick turnarounds are critical to profitable manufacturing. Cline Tool Customs will work with urgency and dedication to service your needs so you can meet your customers' expectations.

- ✓ Ever-increasing demands of more complex parts, tighter tolerances
- ✓ The need to launch quickly new products and programs
- ✓ The pressure to improve quality

In today's competitive world, no one supports their customers better or consistently delivers the level of service and quality that has become Cline Tool Customs's trademark.

# NOT ALL REPAIR COMPANIES ARE EQUAL.

#LongLiveYourTools



# HIGH PERFORMANCE TOOLS REQUIRE HIGH QUALITY TOOL RECONDITIONING

It's no secret that reconditioning metal cutting tools will extend the life of the tools and reduce your overall tool spend, so why is Cline Tool Customs the best choice? We're a manufacturer too and have been in the tool refurbishing business since 1948. Trust your valuable tooling investment to Cline Tool Customs.

- ✓ Repair costs based on actual damage, not the standard "percentage of new"
- ✓ Restored to original factory specifications and quality for consistent, superior performance
- ✓ Returned with all hardware and components
- ✓ Latest technology in equipment set up for both tool production and tool reconditioning
- ✓ Skilled tool craftsmen and engineers with decades of experience



# CLINE TOOL CUSTOMS REGRINDING

HIGH PERFORMANCE TOOL REGRIND AND RECOAT SERVICES

- ✓ High-precision tool regrinding
- ✓ State-of-the-art equipment
- ✓ Quality control and comprehensive inspection processes
- ✓ Complete recoating services available: TiN, TiCN and TiALN

# PERFORMANCE GUARANTEE

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We take quality seriously, so we offer an unconditional performance guarantee on every tool we manufacture. Our reputation is built on a long history of honesty, integrity and standing behind our products. You can expect quality, value and unwavering commitment to the ultimate customer experience.



1.866.561.3022 | [www.ClineTool.com](http://www.ClineTool.com)