

CARBIDE TOOL SERVICES, INC.

For over 30 years, Carbide Tool Services, Inc. has been revolutionizing the tool repair industry. Our 22,000 square foot facility in Anoka, MN is home to state-of-the-art equipment and highly skilled employees. We specialize in developing cost savings repair programs that reduce tooling costs.



MILLING CUTTERS/ ENDMILLS

Damaged milling cutters and endmills are repaired for a fraction of replacement costs. All tools are repaired to original specifications. Every tool is inspected 100% and guaranteed to perform like new.



COST SAVINGS UP TO 70%! ALL BRANDS-STANDARD OR SPECIAL



DRILLS



DRILLS

Indexable drills are rebuilt to original specifications. All drills are repaired and inspected in OEM fixtures. Our proprietary welding process insures that you will receive a strong, non-porous tool after repair. Our exclusive Q3 inspection process insures the tool will be accurate.



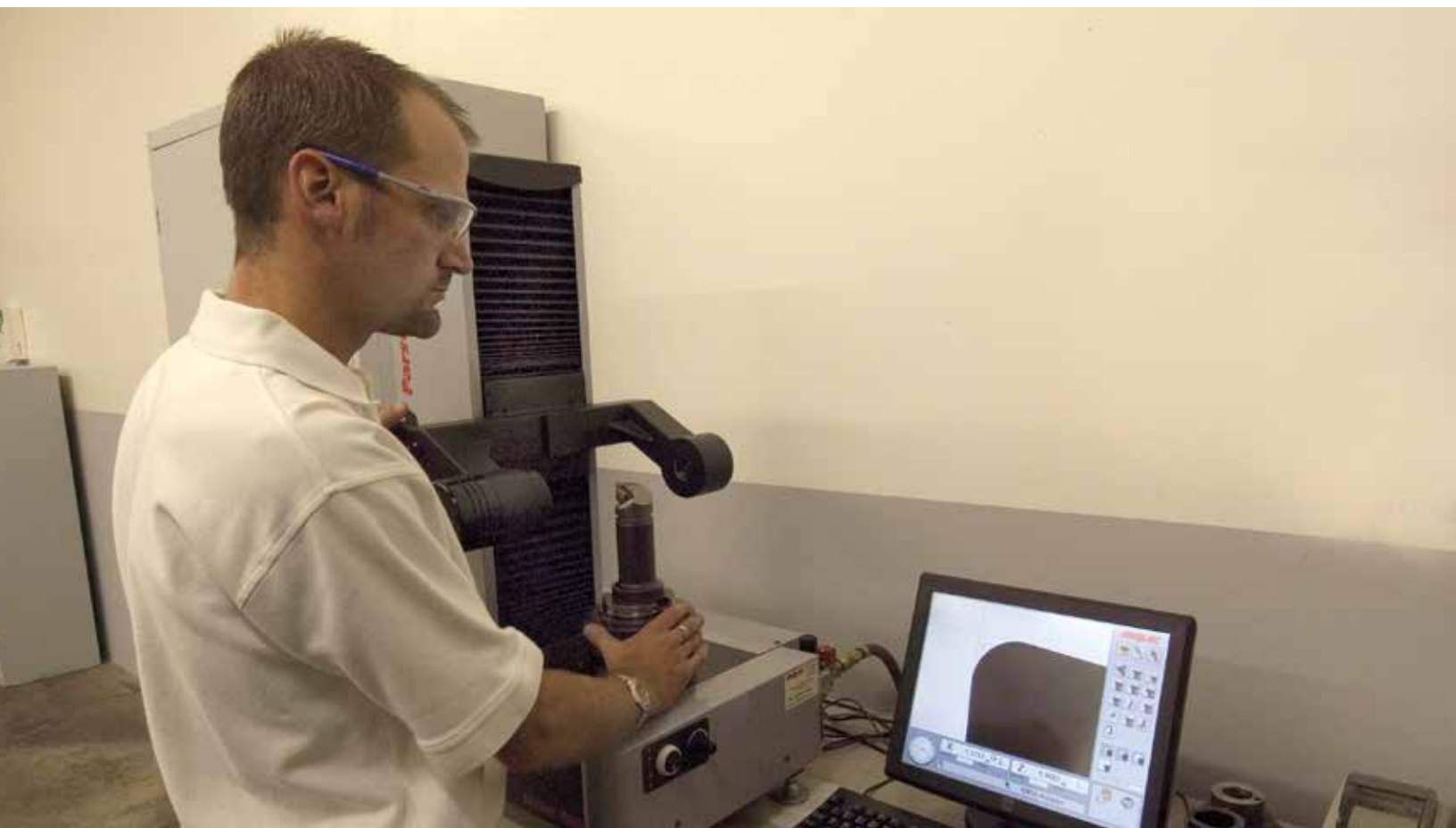
SPECIALS AND MODIFICATIONS

SPECIALS

Carbide Tool Services, Inc. excels at repairing special tools that require tight tolerances. Our exclusive Q3 inspection process, and ISO certified procedures, guarantee that these sophisticated tools are repaired accurately every time. Eliminate downtime and the need for expensive back-up inventory by repairing custom tools.

TOOL MODIFICATIONS

We modify existing tools to change hardware, inserts and tool size. Alterations allow customers the flexibility to keep using existing tools without buying expensive replacements. Modification of tools is cost effective and time saving.



QUICK-CHANGE TOOLS

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Quick-Change heads, carbide boring bars and all other lathe tools can be repaired economically. All tools are repaired to original specifications. We use OEM fixturing to machine and inspect all styles of tools.



GEAR/CRANKSHAFT TOOLING

Sophisticated tooling that is used for manufacturing gears and crankshafts are repaired back to original condition for a fraction of replacement cost. CTS experience in milling and broaching applications is unmatched in the industry. All repair work is backed by a 100% satisfaction guarantee. Expedited delivery services make it possible to get these tools back into production quickly, limiting downtime.



TOOL HOLDER REPAIR

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Carbide Tool Services, Inc. offers complete repair services on all major brands of tool holders. Quick-change tap chucks, tap adapters, clamping units (KM/CAPTO/HSK) and many others can be repaired for a fraction of replacement cost. All tools are repaired using OEM parts and are guaranteed to perform like new.

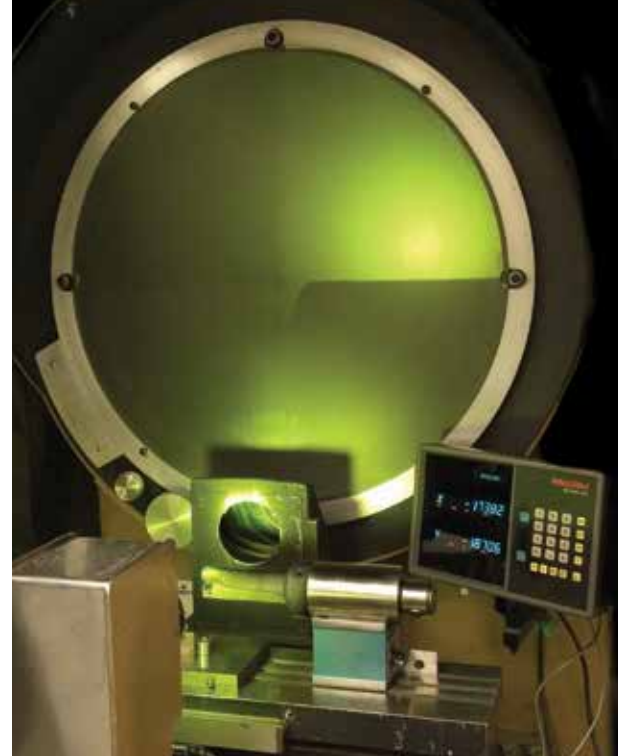
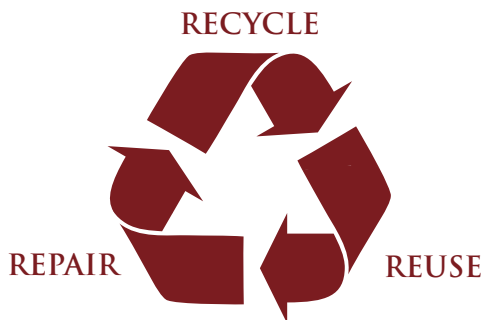
Repairing tool holders will generate tremendous cost savings!



Q3 QUALITY CONTROL

Carbide Tool Services, Inc. is the only indexable tool repair company in the country that has achieved ISO 9001:2015 certification. This achievement, along with our exclusive Q3 quality process, has separated us from others in the indexable tool repair market.

The ISO 9001:2015 standards fit cohesively with our exclusive Q3 process. The idea behind Q3 is to inspect and document specifications throughout the tool repair process, as well as integrate an independent inspection department. The synergy of the two programs insures that all tooling is repaired and inspected to the original specifications.

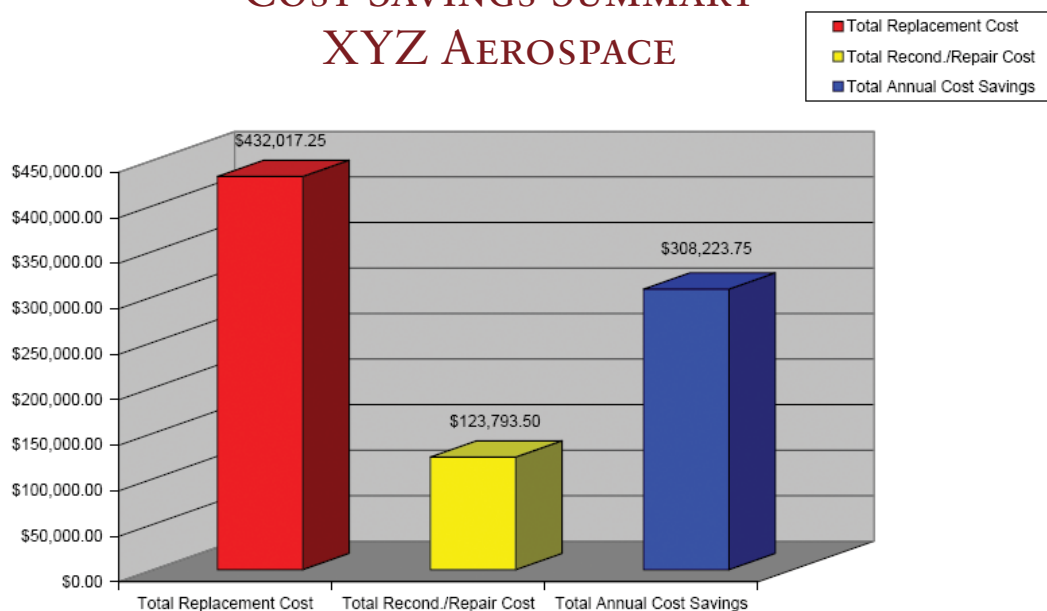


COST SAVINGS REPORTS

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Carbide Tool Services, Inc. offers all customers customized Cost Savings Reports illustrating the savings produced by our tool repair programs. These exclusive reports are simple to read and interpret. Reports are normally sent out quarterly and they compare the cost of repairing a tool versus new replacement cost. It is our goal to provide documentation that illustrates the cost saving value we add in a format that is flexible to meet our customers' needs.

COST SAVINGS SUMMARY XYZ AEROSPACE



AMERICAN EAGLE AWARD WINNER

In 2005, Carbide Tool Services, Inc. was honored by the Industrial Supply Association (ISA) with the American Eagle Award for documenting value added services in partnership with an ISA distributor. We implemented a repair program that reduced tooling costs by more than \$200,000 annually in one engine plant. These savings are typical of what an efficient repair program can deliver.



FREQUENTLY ASKED QUESTIONS

HOW MUCH DOES IT COST TO REPAIR A DAMAGED INDEXABLE TOOL?

The cost of repair is generally less than 50% of new replacement cost. Because pricing is based on the amount of damage, customers often save 70% or more versus buying new.

All orders are acknowledged upon receipt and firm prices are quoted via fax, phone or e-mail within two business days. Next-day air packages are quoted immediately upon receipt. We do not begin any work until you give authorization to proceed.

WHAT IS THE DELIVERY TIME?

Normal delivery time for repair, regrind and manufacturing is three to four weeks after receiving authorization to proceed.

ARE THERE EMERGENCY SERVICES AVAILABLE FOR RUSH ORDERS?

Yes. We offer several different services to meet your needs. Please contact us for details. We are available 24/7 via our website for emergency service. Please visit www.carbidetool.com/emergency.htm

WHOSE TOOLS DO YOU REPAIR?

We have the capability to repair any damaged indexable tool and rotating tool made by any manufacturer. This includes but is not limited to:

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|------------------------|-------------|--------------|
| • Kennametal | • Walter | • Kuroda |
| • Mitsubishi | • Ingersoll | • Fuji Seiko |
| • Seco/Carboloy | • Iscar | • Command |
| • Sandvik | • Lyndex | • Nikken |
| • Komet | • Lovejoy | • T.M. Smith |
| • Tapmatic | • Sumitomo | • Bilz |
| • Scully-Jones/Siebert | • Tungaloy | • LMT-Fette |

All other brands, domestic or foreign can also be repaired.
All materials: Steel, Aluminum, Heavy Metal



WHAT COMPONENTS ARE REQUIRED?

We have a complete library of standard indexable inserts and hardware for use in our in-house quality center. Inserts and hardware are NOT required for standard tools. For repair of special tooling, a complete set of pocket hardware and a print should be sent with the tool to prevent delays.

HOW SHOULD I SHIP MY DAMAGED TOOLS?

You can ship the tools directly to:

Carbide Tool Services, Inc.,
1020 Lund Blvd., Anoka, MN 55303

Durable shipping containers and damaged tool collection bins are available upon request.

