INDUSTRIAL CRANES
NUCLEAR CRANES
PORT CRANES
HEAVY DUTY LIFT TRUCKS
CRANE SERVICE
MACHINE TOOL SERVICE



Konecranes Machine Tool Service PREVENTIVE MAINTENANCE



TOTAL SERVICE COMMITMENT

We serve our customers by helping them enhance the safety and productivity of their operations through innovative technologies, customized maintenance programs and dedicated people. We seek to first understand our customer's business before applying our industry-wide experience and expertise. We then prove value through periodic performance reviews of mutually agreed upon goals. In essence, we are "Lifting Businesses™."

Konecranes Machine Tool Service

began in the U.S. with the strategic acquisition of three well-established companies in the Ohio Valley. This original group of three forms a solid core of customer service excellence, expertise and critical mass from where a full range of service is offered to machine tool users.

Machine Tool Solutions Unlimited, Cincinnati, Ohio

Founded in 2003 and acquired by Konecranes in October 2009, specializing in CNC control retro-fits, field service, calibration, on-site repairs and preventive maintenance.

Ohio Hi-Speed, Cleveland, Ohio

In business since 1992 and a Konecranes company since August 2010, specializing in rebuilds, redesign, preventive maintenance and field service.

King Tool, Erlanger, Ky,

Started in 1978, joined the group in October 2010, adding a 30-year history of performing top class rebuilds and redesign on a variety of machines. Complex rebuilds are carried out in the Erlanger facility, which is equipped with specialty tools and staffed by skilled machinists.

Our growing MTS business allows us to broaden our offering to new and existing customers in a variety of industrial segments. The business is a strategic fit with our traditional core competency in overhead crane maintenance services.



An extensive service network
 Thousands of customers
 Dozens of full-service customers

PREVENTIVE MAINTENANCE PROGRAMS

For all types and all brands of machine tools.

A comprehensive **Preventive Maintenance** program by Konecranes Machine Tool Service utilizes ongoing evaluations, planned repairs and regular maintenance in order to improve safety, reliability and accuracy of machine tools. Our program analyzes and assesses the current condition of the vital components of your machine and puts that information into a detailed report where together we can prioritize next actions.

Our unique QLA (Quality - Lifetime - Availability/ **Accessory)** Preventive Maintenance Program is designed to help you meet your production needs by assessing aspects of your machine that affect the **Quality** of your production, items that could reduce its **Lifetime**, and the **Availability/Accessories** that impact your machine's performance.

The **Q** or **Quality program** focuses on the accuracy of your machine. This program includes an evaluation of the machine's level & geometry/ alignment and ball bar analysis. Positioning and repeatability accuracy are checked using our stateof-the-art interferometer laser system.

The **L** or **Lifetime program** is designed to <u>extend</u> the life of your machine. Our highly qualified Service Engineers are trained to perform a thorough visual inspection of the operational safety of the machine as well as ball screws, spindle, transmission and gearbox, inspect, clean or replace filters, check oil level and top off as needed, inspect machine hydraulic and pneumatic systems and set pressures, visually inspect electrical devices and components, inspect electrical enclosure and panel wiring and provide a general cleaning. Work performed may vary depending on site conditions and agreed scope of work. All findings are submitted in a comprehensive report.

The A or Availability/Accessory program is tailored to assess the availability of your machine and its peripheral equipment or accessories such as probing, bar feeder, robot, tool changer, rotary tables, pallet changers and head changer. Our inspection is customized to your unique equipment arrangement.

We can tailor a preventive maintenance plan that can include a combination of these programs at intervals that fit your production needs.

Long-term and comprehensive maintenance care, delivered by trained and qualified Service Engineers, is essential in today's demanding machine tool environment. You CAN have both increased productivity and controlled costs.

We offer various levels of maintenance programs:

- > from preventive maintenance services to full on-site maintenance agreements
- > programs for single machines to the maintenance of the whole production plant
- > we can take responsibility for the machine being available for production based on agreed KPIs

By applying systematic preventive maintenance, you can minimize unplanned repairs and interruptions to your production.

DELIVERING ADDED VALUE TO OUR CUSTOMERS

- > Measurable performance and maintenance development
- > Expert care designed to extend the lifetime of your equipment and accessories
- > Maintenance history recorded in our maintenance management system
- Maintenance transparency and accurate information of your maintenance status and costs
- > One international service partner for all your machine tool maintenance needs

A thorough preventive maintenance program must include expert handling of on-call or emergency service, parts and repairs.

On-Call Service: Despite your very best efforts, your machines may experience breakdowns or crashes. With our broad experience in the machine tool industry and extensive knowledge of a wide variety of machine tools, our highly skilled maintenance professionals can respond to your emergency calls 24/7.

Parts: We are there for you, with reliable parts supply for all types and brands of machine tools through our global supply chain network. Obsolete parts, or those that are difficult to locate, can be reverse engineered and manufactured in our U.S.-based component machining center.

Repairs: in mechanical, electrical or electronic components can be quoted separately or included in a comprehensive maintenance agreement, depending upon the complexity of the needed repair and the type of maintenance agreement in place.







ADDITIONAL SERVICES

Whether you are satisfied with occasional purchases or one-off transactions, or you are engaged with us in a full-service maintenance agreement, we can offer a range of additional advanced services. We hope you will understand that when time is short and demands are high we give priority attention to our customers who have elected to collaborate with us through mutual long-term agreement.

If your machines are approaching the end of their design life, or you are experiencing a history of frequent repairs, or your production demands have changed, consider our rebuild, retrofit, and remanufacture services. Your aged machine can be modernized to perform like new or better than new. The work can be performed in your facility or the machine can be transported to one of our specially staffed and equipped shops.

Rebuild – to return your machine to likenew condition in order to perform to the manufacturer's specification and extend the working life of the equipment.

Control retrofit – enhance the productivity of your machine by upgrading with the latest control technology and features, from PLC integration to full control retrofit. Increase performance and throughput.

Remanufacture – fundamental modifications to the machine's design and performance in order to meet new productivity demands. Your machine can perform better than new.

Ask your Konecranes representative about **TRUEFFICIENCY**, the next generation of remote service for your production machinery that will soon be available as it emerges from R&D and field testing. It is designed to help you optimize your production efficiency, enabling you to:

- > Record the utilization of a machine
- > Measure OEE (overall equipment effectiveness)
- > Collect data in real time
- > Access reports online

And more ...

- > Measurement, calibration and alignment





> Training and consulting > Machine relocation and installations



We have proven preventive maintenance methods utilized in thousands of machines globally generating a consistent

measurable reduction in overall maintenance costs.











INDUSTRIAL **NUCLEAR** PORT **CRANES CRANES**

HEAVY-DUTY **CRANES**

CRANE LIFT TRUCKS SERVICE

MACHINE TOOL SERVICE



Konecranes is a world-leading group of Lifting Businesses™ offering lifting equipment and services that improve productivity in a wide variety of industries. The company is listed on NASDAQ OMX Helsinki Ltd (symbol: KCR1V). With over 10,000 employees at more than 570 locations in almost 50 countries we have the resources, technology and determination to deliver on the promise of Lifting Businesses™.

This publication is for general informational purposes only. Konecranes reserves the right at any time, without notice, to alter or discontinue the products and/or specifications referenced herein. This publication creates no warranty on the part of Konecranes, express or implied, including but not limited to any implied warranty or merchantability or fitness for a particular purpose. © 2011 Konecranes. All rights reserved. 'Konecranes', 'Lifting Businesses' and ζ are registered trademarks of Konecranes.



King Tool 1338 Cox Avenue, Erlanger, KY 41018 | 859.525.1799 Machine Tool Solutions Unlimited 8711 Reading Road Cincinnati, OH 45215 513.761.0709 | www.mtsunlimited.com

Ohio Hi-Speed Machine 10325 Brecksville Road, Brecksville, OH 44141 440.546.7553 | www.ohiohispeedmachine.com

www.konecranesamericas.com