



moore tool

precision
manufacturing
solutions





*Precision
is the
integration of
measurement,
skill and focus*

The Company

At Moore Tool Company, we are dedicated to maintaining world leadership in precision engineering and applying measurement science to develop highly productive machine tools and related equipment. Our customers in a wide range of industries around the world know that they can rely on us to build the machines they need to solve their manufacturing challenges.

Moore Tool Company was founded by Richard F. Moore in 1924 in Bridgeport, Connecticut. While it started out as a tool and die company, Moore soon realized that the machinery he needed to work to close tolerances was not available. So he began developing the machines that would give him a degree of accuracy that had never before been achieved.

Moore understood and articulated many of the fundamental principles of precision design. As he combined these principles with exceptional craft skills, he defined the state-of-the-art in precision manufacturing. While we remain true to Moore's standards of mechanical excellence, our emphasis today is on engineering

science utilizing state-of-the-art CAD systems and engineering analysis software. While we are still dependent upon the craft skills of our employees, we also use modern design concepts such as hydrostatic guideways and polymer bases. And, we rely on modern electronics and software, including advanced control and servo systems. Our management team has the skills it takes to ensure that we satisfy customers when it comes to specifications, project schedules and budget demands.

The equipment we manufacture includes jig grinders, measuring machines, precision platforms and accessories. We also provide contract tool room capabilities. We design and build special-purpose, high-precision machine tools, rotary tables, hydrostatic spindles and accessories. In addition, we remanufacture and retrofit a variety of machine tools.

In order to serve the ultra-precision manufacturing needs of emerging and high-technology growth markets, we established Moore Nanotechnology

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Systems in Keene, New Hampshire, in 1997. This facility is dedicated to the development of standard machine tools and accessories for single-point diamond turning and deterministic micro-grinding.

In any given year, more than half of our revenue comes from exports to Europe and Asia. Moore Special Tool AG, our subsidiary in Zurich, Switzerland, is responsible for providing our customers in Europe with the same high-quality sales and service for which we are known in the rest of the world.



precision
accuracy
quality

the products

jig grinders

precision platforms

diamond turning
machines

diamond ruling
machines

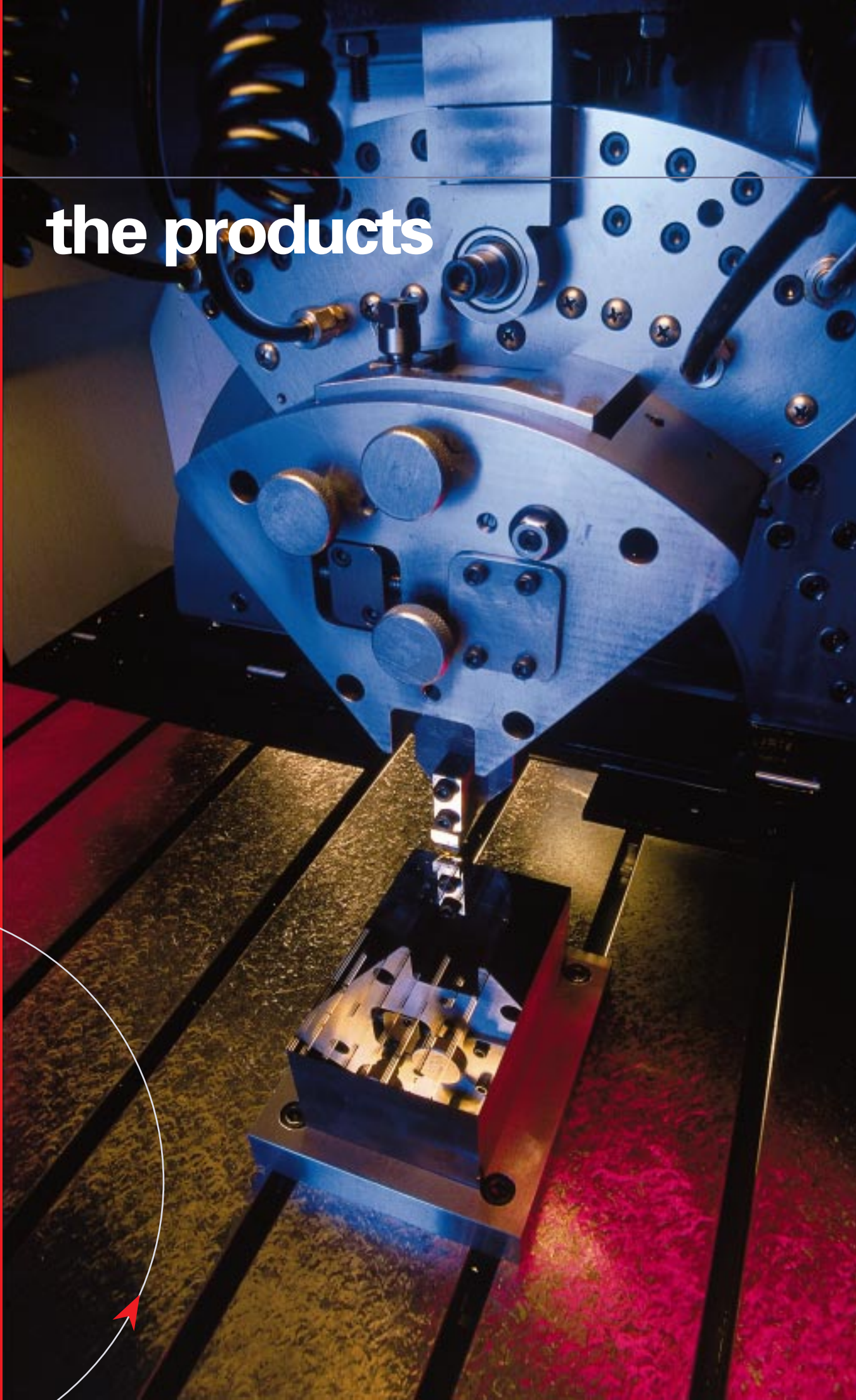
rotary tables

hydrostatic spindles

remanufacturing

other products

moore tool



Jig grinders

Moore Tool Company manufactures a complete line of jig grinding machines and accessories, ranging from basic manual machines to fully automated Computer Numerical Control (CNC) machines. In addition, we manufacture a complete line of accessories, including grinding spindles, rotary tables, flood coolant enclosures, setup tooling and fixturing, as well as advanced sensor-based systems such as the Moore Autogrind and the patented Autosize® systems.

Our jig grinding machines, which are available from 500 x 300 mm to 1600 x 1100 mm and in models with three levels of functionality, include:

- **CP** – a four-axis CNC-controlled machine with Continuous Path (CP) capability for contouring grinding operations such as holes, pockets, and complex two-dimensional shapes and cam surfaces.
- **CPW** – a five-axis CNC-controlled machine with full three-dimensional capabilities in addition to standard CP capabilities. The W-axis permits three-dimensional forms to be generated in addition to the traditional jig grinding operations.
- **CPZ** – a five-axis CNC-controlled machine with a controlled vertical Z-axis, which allows fine programmed depth control in addition to standard

CP capabilities. The accurate depth control simplifies shoulder and bottom grinding, taper grinding, wipe grinding with a formed wheel, as well as limited three-dimensional grinding operations.

Precision platforms

Moore Tool and Moore Nanotechnology Systems offer custom-engineered systems configured from modular application of existing Moore slide-ways, sub-assemblies and accessories, which we collectively call “precision platforms.” We use machine structures from jig grinders, measuring machines and diamond turning machines, or custom-designed precision platforms, as required. Our experience in a wide range of standard CNC and PC-based controllers, servo drives and feedback devices is available to meet customer requirements. Special-purpose applications include digital camera imaging systems and EDM machinery.

Combining proven technology with our extensive engineering experience base, project management expertise and core manufacturing skills allows us to provide short development and delivery cycles so that we can meet our customers’ requirements in the most efficient and cost-effective manner.



quality



Diamond turning machines

Moore Nanotechnology Systems offers diamond turning and deterministic micro-grinding equipment with up to five axes of motion in standard capacities ranging from 150 mm to 500 mm. Our two standard product models are the Nanotech® 350UPL (two- and three-axis ultra-precision lathes) and the Nanotech 500FG (four- and five-axis Freeform® Generator). Larger-size machines are available upon request.

Diamond ruling machines

Moore builds special purpose ruling engines with A-axis (tool orientation) capabilities up to 1200 mm. Way systems offered include self-compensated hydrostatic systems as well as our traditional double vee construction.

Rotary tables

Moore Tool manufactures a complete line of high-precision, CNC positioning and contouring rotary tables from 8 inches (200 mm) to 96 inches (2.4 m) in diameter.

Hydrostatic spindles

We manufacture oil hydrostatic bearing spindles for high-performance milling and grinding applications. Our standard spindles are available in a range of power up to 55 kW and 100,000 rpm. Special hydrostatic spindles are also available upon request.

Remanufacturing

We remanufacture and retrofit new CNC controls to older Moore jig grinding machines. Our remanufacturing and retrofitting services are tailored to our customers' requirements. We can provide a full mechanical rebuild of spindles, housing and way systems along with a recertification, to the guaranteed tolerances, of a new machine.

Other products

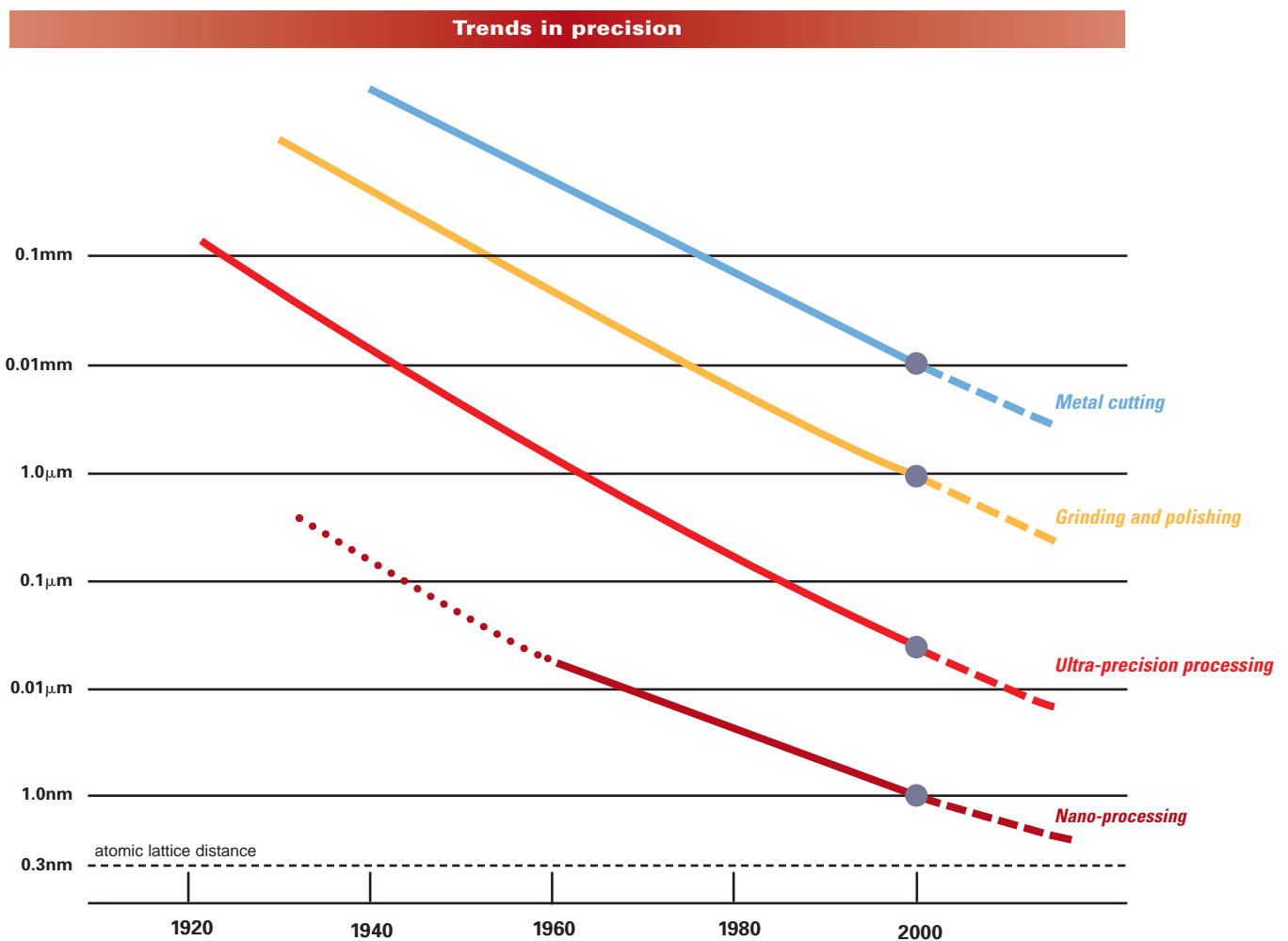
- Special-purpose measuring machines
- High-speed five-axis milling machines
- Superabrasive and grinding machines
- Slicing/dicing equipment for wafer and precision component processing
- Special-purpose, high-precision drilling and milling equipment
- Remanufacturing and retrofitting of OEM as well as Producto and Moore brand machine tools



*We are committed
to meeting our
customers' expectations
with flawless delivery
of products and services.*

Leadership in precision engineering

Moore Tool continues to meet the ongoing demand for accuracy in manufacturing with the latest in precision equipment. Our dedication to measurement science allows us to develop the highly productive machine tools and equipment that solve our customer's manufacturing challenges.



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