

# PRODUCTION STONES

Diamond, CBN and Vitrified Technology

## The Legacy of Bates Technologies

PSS-Abrasives & Tool Division, a division of Lapmaster International, is built upon an 80+ year legacy of innovative honing and bore sizing technology and technical expertise. Included in this legacy are the world class manufacturing expertise of the Micromatic and Barnes companies which continue to produce state of the art honing machines, precision stroke and single-pass bore sizing tools, abrasives and air gage systems. PSS-Abrasives & Tool Division products are the preferred choice for forward-thinking companies — from specialized machine shops to the largest manufacturers in the precision metalworking industry, including automotive, aircraft, energy, compressor, and petroleum industries.

## Products

Our honing products represent a complete line of bore finishing solutions for all industries.

- Precision hone tooling engineered to fit and function on all styles of hone machines
- Advanced hone machinery from the Barnes Bore Honing and Finishing Systems group
- Agile and Flexible Honing and Air Gage Systems for use on CNC Machining Centers
- Single Pass Bore Size tooling using electroplated or sintered diamond abrasives
- PAG's Precision Air Gaging and Size Control Systems
- Honing stones: CBN and diamond (metal-bond) – SiC/AIO x (vitrified and resin bond)
- Microsize® and Micro-Mold® metal-bonded and jacketed abrasives

## Products are created for all honing machines:

- |              |            |              |
|--------------|------------|--------------|
| ■ Micromatic | ■ Engis    | ■ Kadia      |
| ■ Gehring    | ■ Toyo     | ■ Accu-Cut   |
| ■ Sunnen     | ■ Delepena | ■ Fuji       |
| ■ Barnes     | ■ Nagle    | ■ And Others |

## Services

- Hone-Tech Center
- Machine and Tooling Upgrades
- Hone Process Analysis
- Service Department

## Facilities

- Noblesville IN
- Mount Prospect, IL



## Superabrasives, Unique Bonding Process Yield Industry's Longest Life Products

Engineered to specification for all types of honing machines, PSS-Abrasives & Tool Division stroke and Microsize® honing stones and tooling have produced startling results machining production parts in cast iron, steel, alloys, ceramic, and nearly every other type of material.

Created of diamond or cubic boron nitride (CBN), superabrasive stones are regarded for their superior cutting action, fast stock removal, and more superior finishes. The result of a unique bonding process, stones and tooling yield tremendous accuracy and consistency, and are capable of finishing thousands of parts with few rejections.

PSS-Abrasives & Tool Division engineers and technicians assist customers on production processes from beginning to end, from planning the initial application to fine-tuning production. Technicians ensure consistency, quality control, and overall cost efficiency.



### Engine Block and Connecting Rod Stones

Stones of every size and variety are designed for both original engine manufacturers and remanufactured engine blocks. These include small gas engines, large diesel engines, large diesel truck engines, and car automotive engines.



### Tube Honing Stones

Tube hones are created by PSS-Abrasives & Tool Division for large production and remanufacturing operations. The tube hones are utilized for hundreds of parts, including hydraulic tubes, mud pump liners and petroleum tubes.



### Stones for Use in Sunnen Honing Machines

Stones for Sunnen honing machines are created in nearly every size for nearly every type of application. Many stones for Sunnen machines are available from stock in a matter of days.