ROCTEC® Abrasive Waterjet Nozzles

Leading abrasive waterjet systems manufacturers have been incorporating ROCTEC nozzles for nearly 30 years.

Made from a unique tungsten carbide material produced using Kennametal’s patented Rapid Omnidirectional Compaction process, ROCTEC composite nozzles are prized for:

• Consistent and long service life
• Superior wear resistant
• High hardness Vickers 25.5-27.7 kg/mm²
• Longer service life than ordinary tungsten carbide

Superior Wear Resistance & Greater Accuracy

Superior wear resistance reduces the number of waterjet nozzles purchased over time. Longer nozzle life also results in a better jet pattern and increased velocity. That means faster average cutting speeds and significantly less downtime for nozzle replacement and system calibration.

ROCTEC nozzles also provide greater dimensional accuracy and the ability to perform longer, uninterrupted cuts. These enhancements ensure a more cost-effective cutting process.

Comparative testing proves how ROCTEC nozzles provide extended service life versus nozzles made from tungsten carbide/cobalt.

ROCTEC nozzles are made in the USA and distributed by BARTON International.
ROCTEC® APX extends abrasive waterjet nozzle life as much as 20% over current industry-leader ROCTEC® 500. APX nozzles provide a longer period of precision cutting while increasing operational efficiency, with long life and consistent wear setting a new standard for high-performance cutting.

- Longer uninterrupted cuts
- Precision cutting performance
- Fewer nozzle changes for greater uptime

With faster production speeds and longer production periods, ROCTEC® APX outperforms all other abrasive waterjet nozzles and integrates easily into the latest technological advancements in waterjet pumps and cutting heads.

**PERFORMANCE ADVANTAGES**

**Consistent** – Uniform bore growth maintains identical cutting accuracy and tolerance.
**Reliable** – Eliminate premature nozzle failures and scrap parts due to nozzle performance.
**Predictable** – Nozzles maintain the same accuracy throughout repeated cut cycles.
**Efficient** – 20% longer life compared to ROCTEC 500.

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**ROCTEC 500**

The most trusted nozzle for consistent, long-duration precision cutting.

**PERFORMANCE ADVANTAGES**

**Wear resistance** – 2.4 times greater than conventional tungsten carbide/cobalt nozzles in ASTM B-611 Abrasion Slurry Test, and 2.35 times greater than tungsten carbide/cobalt in ASTM G-65 Wheel Abrasion Test.
**Consistency** – Superior bore growth compared to ROCTEC 100 improves cutting accuracy and tolerance levels.
**Superior performance** – Faster cutting speed and greater dimensional accuracy compared to ROCTEC 100.
**Operational efficiency** – Less machine downtime and longer nozzle lifespan compared to ROCTEC 100.

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**ROCTEC 100**

The workhorse waterjet nozzle for everyday cutting.

**PERFORMANCE ADVANTAGES**

**Wear resistance** – 1.9 times greater than conventional tungsten carbide/cobalt nozzles in ASTM B-611 Abrasion Slurry Test, and 2 times greater than tungsten carbide/cobalt in ASTM G-65 Wheel Abrasion Test.
**Consistency** – Better jet stream patterns and increased cutting speed velocity.
**Superior performance** – Greater dimensional cut accuracy and precision.
**Operational efficiency** – Longer nozzle life and less downtime.

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**DON’T SETTLE FOR LESS.**

We are just a phone call away if you need help determining which ROCTEC nozzle is best for your waterjet machine and cutting operation. Call 800-741-7756 or write to us at info@barton.com.