TRIDENT-2

Integrated Diamond Cutting Head with Revolutionary Cartridge Technology

Exclusively from BARTON, an industry leader in high-performance waterjet cutting products, TRIDENT-2 is the most advanced integrated diamond cutting head available.

With expert cartridge engineering technology, TRIDENT-2 creates absolute alignment between the diamond orifice and nozzle and offers:

- Superior Accuracy
- Extended Nozzle Life
- Lower Operating Costs
- Reduced Abrasive Consumption
High-Performance Waterjet Products

Factory Aligned Cartridge – The TRIDENT-2 offers all the advantages of an integrated diamond design with the versatility of a replaceable orifice. A superior cutting head with revolutionary cartridge technology that assures perfect orifice to nozzle alignment.

TRIDENT-2 Diamond Cutting Head

Cartridge Technology for Superior Accuracy
- The cartridge is factory machined in perfect alignment resulting in zero stack up errors between the diamond orifice and the cutting head assembly.
- Each cartridge is precision machined around a simulated jet stream to ensure perfect orifice nozzle alignment.
- A diamond orifice ensures stream quality remains optimized over the life of the cartridge.

Extended Orifice and Nozzle Life
- Diamond wear resistance results in improved total system performance.
- More energy is directed to the target without bouncing internally in the nozzle.

Lower Operating Costs
- Superior accuracy, faster cutting with less consumed abrasive.
- The replaceable Diamond Orifice Cartridge can be swapped out for jobs requiring a different orifice size, extending the life and expanding the versatility of the cutting head.
- Diamond Orifice Cartridge is warrantied for 500 hours when used with a Short Stop Filter assembly.

Greater Productivity, Less Downtime
- Efficient design means less maintenance, increased production.
- More efficient abrasive particle acceleration yields maximum cutting power.
- Absolute alignment of jewel and nozzle optimizes cutting power and speed.

Short Stop Filter
The Short Stop Filter effectively prevents in-line contaminants from damaging orifice assemblies by blocking debris from the most common sources within any high-pressure waterjet system. Installing our exclusive filter will boost productivity and reduce orifice-related maintenance.

Use of the Short Stop Filter is a requirement of the TRIDENT-2 warranty.
- Easily retrofitted.
- Robust construction – will not disintegrate like screen filters.