

# VITRIFIED and RESIN CBN for BROACH GRINDING

For over 30 years, SuperAbrasives has focused on providing our customers with top quality, high performance products all while delivering a high level of responsiveness and customer service. We pride ourselves on our Continuous Improvement Program and effectively providing our customers with the most cost-efficient solutions for the job.

What can we do for your business? Help bring your grinding processes to the next level while lowering your grinding costs!

### **CBN and DIAMOND VITRIFIED and RESIN BOND PRODUCTS**

Resin and Vitrified bond CBN Grinding Wheels for Broach Grinding

Broach grinding – both new and resharpening – use some of the same standard wheels as used for round tool fabrication but due to the sensitive nature of these cutting tools certain wheel characteristics are crucial. Whether your tool is made from standard material like M2, M32, M45 or applied hard coatings your concerns are the same – Part Finish, Part Profile and Surface Integrity.

Our resin and vitrified bond CBN and Diamond wheels designed specifically for hob and broaching applications are field tested to provide the exact requirements while producing faster cycle times and a free cutting experience.

# **TECHNICAL SUPPORT AND CUSTOM SERVICES**

**Application Support for Broach Grinding** 

At SuperAbrasives we also provide application support to our customers by working with you to optimize your grinding process. We use the following steps to walk through your applications to achieve the success you require

- Application Evaluation
- Application Analysis
- Application Recommendations
- Product Development
- Product Implementation



Ask us about the techniques we use for each step along the way

A global automotive manufacturer needed a solution to improve part integrity, increase production throughput and reduce cycle times. We worked with them on the overall process and implemented our specialty resin bond CBN wheel for increased performance.

#### **BROACH GRINDING APPLICATION:**

Machine: Star

Part: 1° R Broach

Material: T13/ M2

Stock: 0.002 per cut

Wheel Cutting Speed: 6,500 RPM

Coolant: Oil



#### **Tool Life of SuperAbrasives Wheel:**

Usable Life: 5mm CBN

Parts per Dress: 2 x per 1-body 1 - shell

Truing /Dressing Process: .0004 per pass; 20 passes

Total per Dress = 0.008

### **Summary and Added Application Benefits:**

- Reduced Cycle Time
- Increased Tool Life
- Increased Daily Production
- Improved Part Geometry and Finish

