



SUPERABRASIVES

CBN AND DIAMOND PRODUCTS



SuperAbrasives.com 248.348.7670

VITRIFIED CBN for CAMSHAFT and CRANKSHAFT 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 VITRIFIED PRODUCTS

High Concentration CBN wheels for Camshaft and Crankshaft Grinding

Vitrified CBN wheels for camshaft and crankshaft grinding are a specialty at SuperAbrasives. We have developed numerous bond systems designed for these high precision applications and have options to fit you're cam or crank application. Ask about our newest bond technology - it produces superior results!

- Produce Surface Finish as low as 0.25Ra
- Increase parts per dress
- High In-Feed Rates up to 1.25 Q Prime
- Grind both Steel and Cast Iron with the same spec
- Both Rough and Finish Grind
- Adaptable in Wheel Sets and Multi-Layer Depths

Ask about our experience with these cam and crank applications...

- Lobe
- Journal
- Bearings
- Fuel Pump Drives
- Pin Bearing
- Main Bearing
- Thrust Face
- Post Wall
- Flange End

TECHNICAL SUPPORT AND CUSTOM SERVICES

Application Support for Camshaft and Crankshaft 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

If you would like to learn more please call our Application Specialists at 248-348-7670 or email us at sales@superabrasives.com.

CRANKSHAFT PIN GRINDING CASE STUDY

Our Experience with all aspects of Crankshaft grinding is extensive and our product performance and technical support are superior. Contact us to get more details on our product offerings and support programs.

CRANKSHAFT PIN GRINDING APPLICATION:

Machine: Fives Landis

Part: Pin – 4 Pins per Shaft

Material: Nodular Iron

Stock: 0.75mm per Side

Finish Requirement: 0.9 Ra Maximum

Wheel Size: 660mm x 19mm Style 1A1

Wheel Cutting Speed: 77 m/s

Coolant: Synthetic

Tool Life of Incumbent Wheel: Ceramic Aluminum Oxide Wheel

Parts per Dress: 500 ppd x 4 pins = 2,000 plunges

Truing /Dressing Process: Total In-Feed per Dress = 0.012mm

Total Parts per Wheel: 100,000 – 125,000 parts

CPU: \$0.19

Tool Life of SuperAbrasives Wheel:

Parts per Dress: 1,000 ppd x 4 pins = 4,000 plunges

Truing /Dressing Process: Total In-Feed per Dress = 0.008mm

Total Parts per Wheel: 200,000 – 250,000 parts

CPU: \$0.06

Summary and Added Application Benefits:

- Reduced CPU 69%
- Annual Savings of \$54,755.00



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