



SUPERABRASIVES

CBN AND DIAMOND PRODUCTS



SuperAbrasives.com 248.348.7670

VITRIFIED CBN and DIAMOND for DOUBLE DISC 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!



VITRIFIED PRODUCTS

High Concentration CBN and Diamond wheels for Double Disc Grinding

SuperAbrasives has been developing and field testing vitrified bond systems designed specifically for Double Disc grinding applications for the past decade and we've created several that are ideal for both Coplanar and Non-coplanar applications.

Advantages of our systems are many...

- Free-Cutting Burn-Free Grind
- Reduced Cycle Times due to higher feeds and speeds capability
- Increased Parts per Dress
- Self-Dressing Bonds
- Rough & Finish Ops done in ONE operation
- Reduced weight by using Aluminum hub design

Ask about our experience with these Double Disc applications...

- Connecting Rods
- Piston Rings
- Brake Rotors
- Engine Valves
- Bearings
- Helical or Ring Gears
- Universal Joints

TECHNICAL SUPPORT AND CUSTOM SERVICES

Application Support for Double Disc 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

DOUBLE DISC GRINDING CASE STUDY - CON ROD

Double disc grinding presents multiple challenges and we've worked with customers and OEMs to develop bond systems and techniques that meet those challenges and provide optimal solutions. Contact us for more details about these product offerings.

DOUBLE DISC GRINDING APPLICATION: Conversion from conventional abrasive to **MAXIMIZER CBN**

Machine: C&B Machinery

Material: Steel

Stock: 1.05mm per side (rough grind)

Finish Requirement: N/A

Wheel Size: 762 x 66.675 x 3815mm (W=152.4) 6A2

Wheel Cutting Speed: 28m/s

Coolant: Synthetic (oil based)

Tool Life of Incumbent Wheel (conventional abrasive):

Parts per Dress: 20

Total Parts per Wheel: 2,000

CPU = \$0.35

Tool Life of SuperAbrasives Wheel: 6mm Depth

Parts per Dress: 300

Total Parts per Wheel: 200,000

CPU = \$0.10

Summary and Added Application Benefits:

- Reduced Cycle Time by over 30 seconds per part
- 30 times the Tool Life
- Increased Daily Production by 10 times
- Improved Part Finish and Form



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