

# **DIAMOND WHEELS for the OIL INDUSTRY**

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!



### **RESIN and VITRIFIED DIAMOND WHEELS**

Diamond wheels for grinding hard materials like tungsten carbide, polycrystalline diamond, HVOF coatings are a specialty at SuperAbrasives. We have developed numerous bond systems designed for these aggressive high stock removal applications. Ask about our experience with these applications...

- Fixed Cutter core and Pilot Hole Drilling Bits
- Centerless Grinding on PDC and TC Cutters
- Chamfer and Size Grinding PDC and TC Cutters
- Gauge Grinding
- Hard Facing, Steel, Chrome and Alloy Materials
- Surface Grinding Gate Valves

# TECHNICAL SUPPORT AND CUSTOM SERVICES

**Application Support for Oil Industry 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.

# **GRINDING of PILOT HOLE DRILL BITS CASE STUDY**

A large global manufacturer of Fixed Cutter core and Pilot Hole Drilling Bits was looking for a solution to improve tool life and productivity throughout their multiple locations. We worked with them to understand exactly where and how they wanted to yield these improvements and developed a resin bond diamond wheel that delivered the exact results they were looking for.

This case study represents the results for one particular wheel test we have successfully completed and implemented for this customer.

### CYCLINDRICAL GRINDING APPLICATION: Conversion form competitor to SA Resin Diamond

Machine: Landis

Material: PDC DRILL BITS

Stock: Up to 1 Inch over diameter

Wheel Size: 24 x 2 x 12 1A1

Wheel Cutting Speed: 42 - 50 m/s

Coolant: Synthetic

#### **Tool Life of Incumbent Wheel:**

Bits per Wheel: 188 Bits

Wheel Changes: 12 per month

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

Bits per Wheel: 300 Bits

Wheel Changes: 6 - 7 per month

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

- Tool life Increased by over 30%
- Increased Daily Production over 40% by reducing the required number of wheel changes
- Improved Part Quality



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