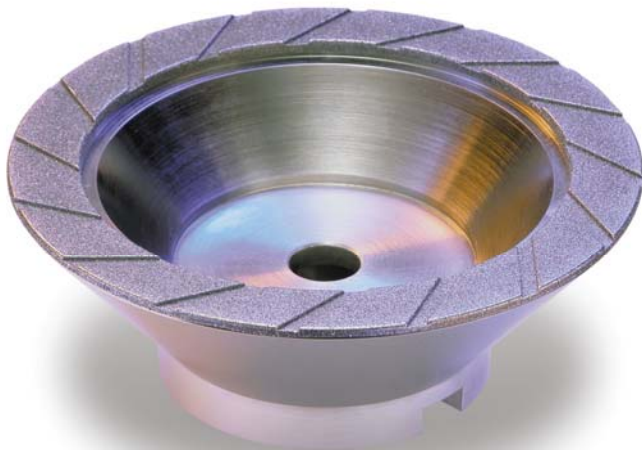




Leader in Superabrasive Finishing Systems

# ElectroMill™



Engis ElectroMill™ Diamond & cBN (cubic boron nitride) electroplated wheels are engineered to your exact application requirements and designed to deliver unsurpassed productivity with consistent quality that you can rely on.

Customers are offered technical assistance by our highly trained and experienced regional managers, who are further supported by Engis product managers and application engineers.

Another revolutionary concept from Engis is born!

The ElectroMill™ was designed to replace expensive, complex indexable carbide milling cutters in high volume production finishing applications.

Where extremely accurate flatness and part tolerances are required, the ElectroMill will outperform indexable milling applications every time, consistently.

With the right machine tool conditions and speed/feed parameters, throughput is significantly increased and tool costs, tool changeover and down time cycles are dramatically reduced.

ElectroMill can be successfully applied in marine, small-engine, automotive, off-road, agriculture, aerospace, defense and other industries - across a wide variety of components as well as ferrous, non-ferrous and exotic materials.

## ElectroMill™

### Features & Benefits

- High stock removal rates
- Stress free, cool cutting action
- Long, extended tool life vs. conventional milling cutters
- Industry standard adapter mountings
- Industry standard milling cutter dimensions
- Diamond / cBN crystals deliver longer tool life than conventional milling technology
- Each ElectroMill is balanced

### Superabrasive Technology

- Diamond formulations are designed for hard or abrasive materials such as ferrites, tungsten carbide, ceramics and aluminum oxide carbon composites.
- cBN is excellent for finishing materials with high carbon or chrome content. Other materials such as HSS, die steels, alloys harder than 50Rc, nickel- & cobalt- based alloys, titanium and cast irons are also excellent candidates.

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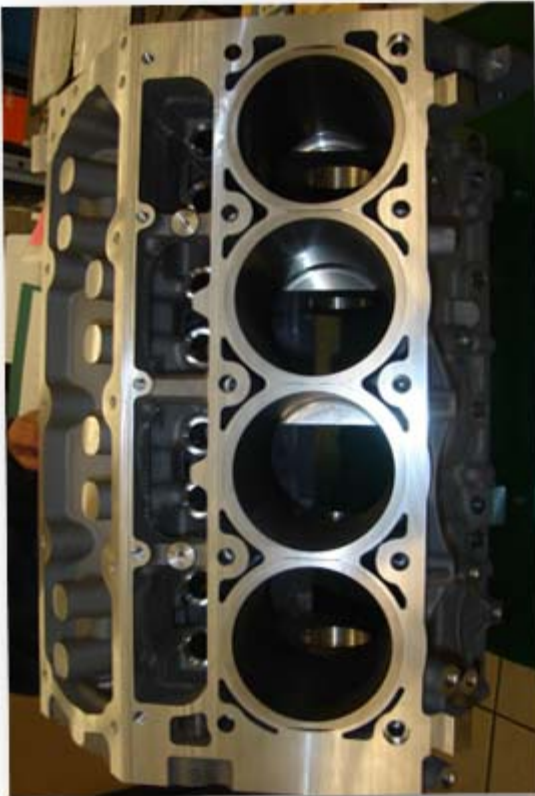
GRINDING PRODUCTS



Leader in Superabrasive Finishing Systems

# ElectroMill™

## Case Study: Bi-Metal Engine



Parameters	
Part:	Aluminum Block Cast Iron Liner
Application:	Top Deck
ElectroMill Diameter:	12 Inches
Superabrasive:	Synthetic Diamond
Grit Size:	80/100
Finish Achieved:	40 u" Ra
Flatness Achieved:	60 u" Ry
Machine:	5 Axis CNC
Horsepower:	30
RPM:	10,000
Feed Rate:	100 IPM
Coolant:	Water Soluble EP
Coolant Delivery:	High—thru spindle
Coolant Pressure:	800 Psi
Tool Life:	50,000 Pcs

CASE STUDY

- *Tool life of the ElectroMill has proven to be 50,000 pieces, consistently.*
- *The mills are then sent back to Engis for strip and replate.*
- *Tool quality, dimensional accuracy and life repeatability are the same as the original mill.*

### Superabrasive & ElectroMill Qualities

- *Environmentally friendly*
- *Water soluble / Synthetic fluids can be used*
- *Diamond starts sharp & stays sharp with constant, controlled micro fracturing*
- *No dressing cycles throughout the life cycle of the ElectroMill*

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