

## DUAL BORE DIAMOND FINISHING SYSTEMS

The Bore Finishing Division of Engis Corporation has developed advanced tooling and processes for precision finishing dual diameters (step bores) in parts.

Our advanced tooling and processes now enable step bores to be finished simultaneously and hold diametrical tolerances under 1 $\mu$ m (0.000040") in production.

Engis precision diamond tooling is manufactured to the highest quality standards which produce unsurpassed bore cylindricity, surface finish and concentricity between each bore.

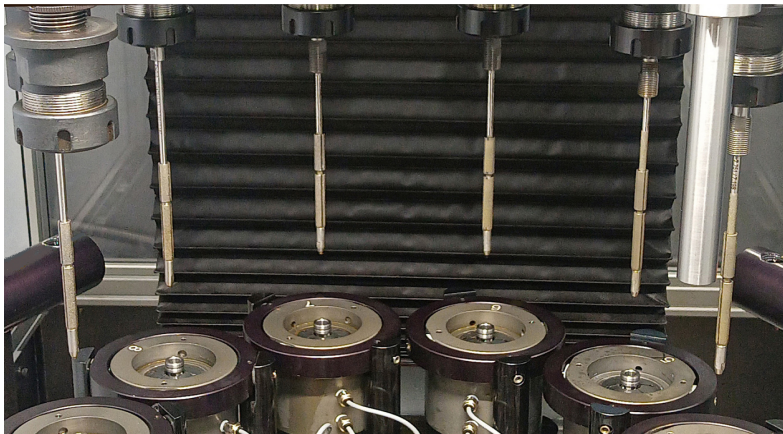
With the Engis design, separate size compensation for each diameter can easily be performed within seconds; the extremely long-lasting diamond tooling helps to produce the lowest cost per finishing piece.

### Advancements:

- Adjustable sizing of each bore to within 1 micron
- Improved coaxiality of bores down to 1 micron
- Cylindricity of each bore under 2 microns
- High production rates (typically 150 to 300 parts per hour)

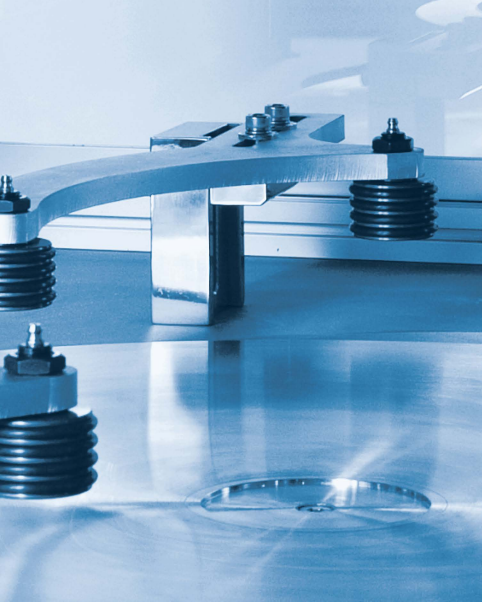
### Single-Pass Dual Diameter Bore Finishing Advantages:

- Split sleeve design allows for independent size adjustment
- Size control within 1 micron
- Separate adjusting nuts
- Two sleeves on the same mandrel
- Improve concentricity of the bores
- Reduces the number of spindles



Engis total bore finishing solutions include the specially designed diamond tooling, part holding fixtures, CNC machine tool and application expertise which guarantee optimal system performance.





## Lapping & Polishing



## Superabrasive Tools



## Bore Honing Systems



Engis® offers state-of-the-art technology in the design of flat lapping systems that meet the most demanding requirements.

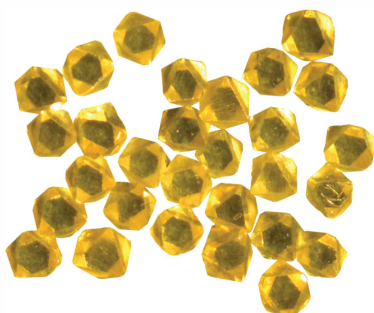


We offer a complete range of superabrasive electroplated products for precision applications.



Multi-Stroke Honing, Single-Pass Bore Finishing & Single-Pass Dual Bore Finishing Systems, Complete Machine Design, Tools & Process Development

## Superabrasive Powders



We manufacture high-quality micron diamond & CBN with properties that ensure consistent performance in each application

## Mold & Die Polishing



Engis® long trusted brands include Five-Star® diamond compound.

## Engis Global Presence



US Engis Corporation



Engis of Canada, Ltd.



Engis Japan Co., Ltd.



Engis (Hong Kong) Ltd.



Engis Lapping & Grinding Technology Co., Ltd.



Engis Korea Co., Ltd.



Engis Asia Pacific Pte. Ltd.



Engis UK Ltd.  
EUROPEAN OPERATIONS

# Engis

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