

PRODUCT DESCRIPTION: Through Bore, 10mm Diameter x 350mm Long

INDUSTRY: Firearms & Defense

MATERIAL: CrMo Steel, HB 262-320

STOCK REMOVAL: 0.1mm

CHALLENGE: Customer was using conventional honing technology after the Reaming Operation. The process was inefficient and had many hidden costs due to:

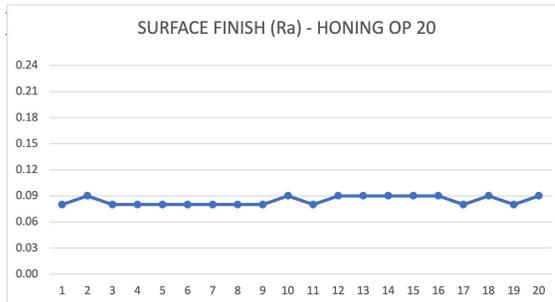
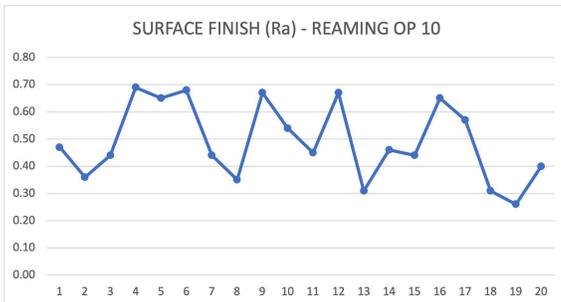
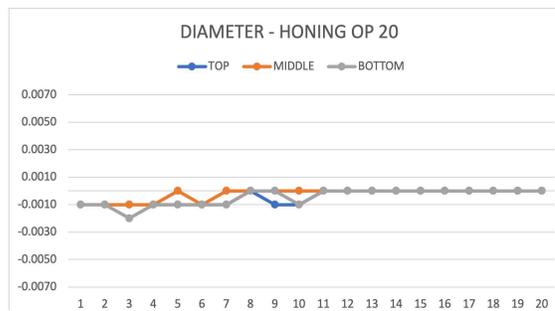
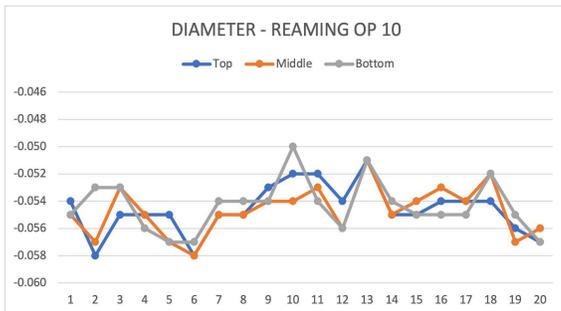
- **TOOL SETUP:** Time for Truing-In abrasives is unpredictable
- **GLAZED ABRASIVES:** Inconsistent cut time
- **CYCLE TIME:** loading and unloading parts after cut cycle adds time to process
- **SKILLED OPERATORS:** Difficult to find with knowledge to setup and maintain abrasives.

ENGIS ADVANTAGE (ENGIS SOLUTION):

- Bore Diameter - 0.002mm Range
- Roundness - < 0.001mm
- Surface Finish - <0.1 Ra with no visual tool marks.
- Production Rate - 20 Barrels per Hour
- Machine efficiency - 95% Uptime
- Tool Change-Over - Approximately 15 minutes every 20,000 Parts
- Machine Operator Skill Required - Load Parts and Push Button, Adjust Tool Diameter

BEFORE

AFTER





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.

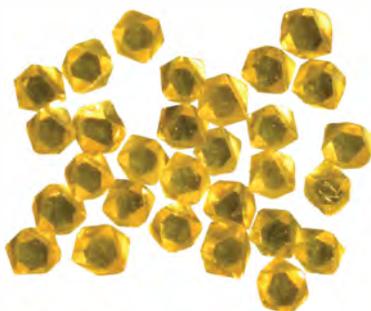


We offer a complete range of superabrasive electroplated products for precision applications.



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



Engis Asia Pacific Pte. Ltd.



Engis (UK) Ltd.
EUROPEAN OPERATIONS

Engis

ENGIS® CORPORATION
Leader in Superabrasive Finishing Systems
105 W. Hintz Road • Wheeling, IL 60090-6038
Phone: 847/808-9400
Fax: 847/808-9430
E-Mail: info@engis.com
Website: www.engis.com