# HARDINGE®



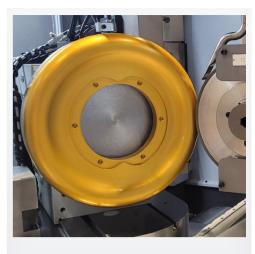
### THE MACHINE: USACH 100 T4

#### **MACHINE SPECIFICATION**

- Siemens 840D sl or SINUMERIK ONE CNC
- X, Y, Z, B, BI, and C Axes configuration
- Multi-spindle configuration
- Blum Laser Tool Measurement System
- Vision System
- 20 Position Automatic Tool Changer
- · Made in the USA

Automatic tool change spindle (ATC) for speeds up to 30,000 rpm mounted on vertical Y axis ideally suited for:

- Rough and finish ID grinding
- Off-center holes
- Core drilling
- Sizing of blind holes
- · Thread milling of blind holes
- Face contouring of complex shapes
- Integrated 20 position tool changer for ATC spindle



## THE APPLICATION: ADVANCED CERAMIC GRINDING

#### **FEATURES BEING MACHINED**

The Usach 100-T4 ID/OD grinder platforms are customized to meet the needs of advanced material manufacturers. Usach machine platforms are ideally suited for highprecision grinding applications that require a high level of flexibility. With their consolidated functionality these machines are able to extend the typical standard range of grinding machines thus allowing for complex automated processes from raw blanks in single setups combining roughing and finishing of ID, OD, bevel, face, radius, and small feature grinding to achieve higher surface finishes and consistent part quality.

### THE INDUSTRY:

### **ADVANCED CERAMIC GRINDING**

Advance ceramics are utilized heavily within the semiconductor, aerospace, medical, defense, and other industries globally. Due to these materials' impressive characteristics, they are becoming more prevalent, replacing products that were traditionally made from more conventional materials. With demand for advanced ceramics increasing worldwide, manufactures are looking for more efficient and capable processing solutions





