TOLL SERVICES FOR ADVANCED MATERIAL, PROCESS & PRODUCT DEVELOPMENT

STC offers our industry leading materials processing expertise and equipment to customers and partners to support development of advanced products.

Powder Processing

- Fully equipped in-house laboratory for powder process validation
- Binder System development
- Ball/Bead/ Vibro milling and spray drying
- Batch sizes from 10 to 3,000 Kg

Lab Services

- Thermogravimetric Analysis & Differential Thermal Analysis
- Porimeter
- Surface Area & Powder Size Distribution
- Scanning electron microscopy & energy dispersion spectrometry

Forming

STC offers a full range of forming methods:

- **Mechanical / Hydraulic Pressing:** From 2 Ton to 750 Ton
  - Fired sizes up to 12"Ø

- **Isostatic Pressing:** Pressures up to 40k psi
  - Fired sizes up to 22" Ø and 40" lengths

- Extrusion of complex geometries up to 2" OD
- Low Pressure Injection Molding

Have Questions?

Call us at:

(802) 527-7726
Green Machining
- Manual and CNC milling and turning
- 5 axis CNC machines for complex geometries
- Max sizes:
  - Diameters up to 25" and lengths up to 48"

Diamond Grinding
- Full CNC capabilities for:
  - Cylindrical Grinding (ID/OD)
  - Surface Grinding
  - Vertical Milling
- Reaming and Honing (manual + CNC), Lapping and Polishing
- 5 Axis CNC machines for complex geometries
- Max capacity 16" Dia to 40" length; tolerances <.0001"
- Fully integrated CAD/CAM and digital inspection

Sintering
- Gas and Electric Periodic Kilns (up to 1700°C)
- 300 cu ft. of natural gas fired kilns
- 7 electric kilns, 3 tube furnaces
- Full support of kiln cycle development and documentation

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