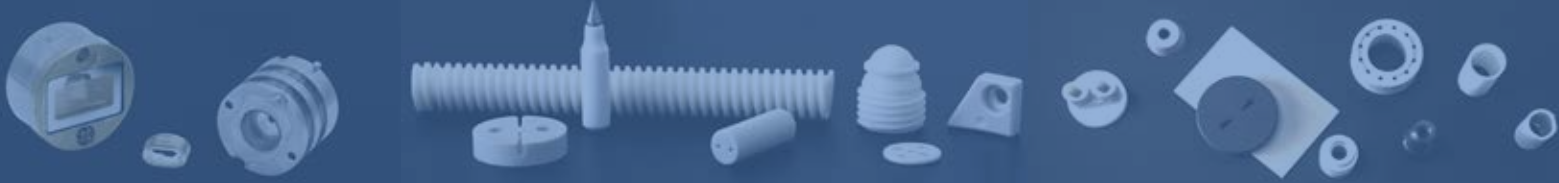




**Superior engineering. Trusted solutions. Customized materials.**



## Capabilities Statement

### Company Data

STC Materials Solutions is a U.S. owned Small Business that is a market- leading supplier of extreme environment materials to many high tech industries.

Leveraging more than one hundred and twenty years of expertise, STC delivers unique technical ceramic and hermetic solutions to a wide range of industries, including aerospace, defense, analytical instrumentation, energy, oil and gas, semiconductor, and medical. STC provides its customers a combination of versatile technical ceramic materials and joining capabilities with a universal commitment to quality and customer success. For more information on STC Material Solutions, please visit: [www.ceramics.net](http://www.ceramics.net).

### Industrial Codes

DUNS: 002002210

CAGE: 8ACR2

NAICS: 327999, 327110, 327113, 327120

SAM Registered

### Contact STC Material Solutions:

STC Material Solutions  
600 Industrial Park Road.  
St. Albans, VT 05478

Phone: **(802) 527-7726**  
Fax: **(802) 527-1181**  
Email: [sales@ceramics.net](mailto:sales@ceramics.net)

Revised on 2/7/2024

### Materials & Processing Capabilities

- **Alumina:** Low to high purity (up to 99.9%), Zirconia Toughened (ZTA).
- **Zirconia:** Magnesia Stabilized (MSZ), Yttria Stabilized (YTZP).
- **Metallization, Brazing.**
- **Materials Testing** for bulk material formulation and fired product evaluation.
- **Large batch** powder milling and spray drying (up to 3000kg).
- **Forming:** 3.5" dia **Extrusion**; 12" dia **Mechanical Pressing**; 20" dia **Isostatic Pressing**.
- **Machining:** multi-axis machining centers (3, 4 and 5 axis, wet and dry); lathes (wet and dry); multiple custom machines.
- **Kilns:** gas fired and electric kilns; 6"-dia hydrogen tube furnaces; 8" dia.
- **Surface Grinding, Honing, Lapping, Glazing.**

### Differentiators

- **Full Product life-cycle support**, from material development, to rapid prototype orders, through high volume production.
- **Complete in-house capabilities** to assist with material selection, engineering, tooling, and manufacturing of technical ceramic and hermetic components.
- **Dedicated engineers and scientists** with experience in powder processing, forming, sintering and machining of in-house as well as customer supplied formulations.
- **Full metallization and brazing capabilities** for joining of dissimilar materials.

### Industry Experience:

- Aerospace & Defense
- Oil & Gas
- Semiconductor
- Medical
- Energy
- Instrumentation
- Industrial Equipment

