

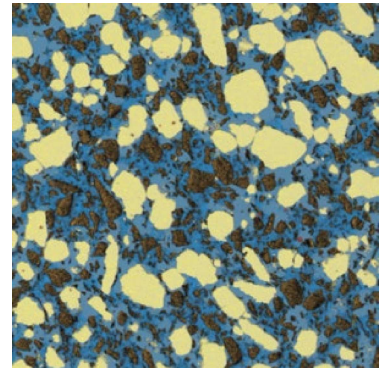
CPS Technologies

Research and Development

Next-generation problems require new materials. The CPS research and development team is hard at work developing these solutions to get your project off the ground.

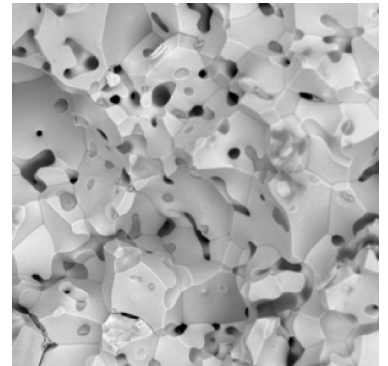
Material Solutions

- CPS' expertise is in metal matrix composites. Our team has a long history of developing both particle reinforced and fiber reinforced material solutions capable of surviving the most austere environments.
- CPS has extensive experience in powder injection molding, discontinuous and continuous fiber reinforced metals, and infiltration processes. Leveraging these proficiencies, we develop novel materials to solve customer challenges.
- Our in-house design and manufacturing teams are capable of producing new components for unique challenges in volumes from one unit to over one million units.



Processing Capabilities

- Our proprietary Quickset™ Injection Molding (QIM) is a low-pressure powder injection molding process that produces parts with fine surface features at very high solids, typically 60+%. This process allows our team to make precision metal and ceramic injection molded parts with minimal additional processing.
- For several years now, CPS has been leveraging Binderjet Additive Manufacturing to create ceramic and metallic preforms for subsequent infiltration to form composites or sintering to full density. This process enables our team to produce complex parts and unique material configurations.



Material Testing

- CPS Technologies has a full suite of metallographic sample preparation equipment, light optical microscopy, ultrasonic imaging, and scanning electron microscopy to characterize new materials and perform failure analysis.
- CPS utilizes energy dispersive x-ray spectroscopy and x-ray fluorescence to analyze our materials' chemical compositions, ensuring our novel composites will perform as advertised.
- When necessary, our team has an extensive network of ISO17025 certified testing facilities capable of additional testing to validate performance.

