

www.polymics.com



COMPETITIVE EDGE

COST

TIME

QUALITY

TRACEABILITY

EXPERIENCE

EXPERTISE INNOVATIONS

RESPONSIBILITY

COMMUNICATION

# CAPABILITY OVERVIEW

### **CONCEPT TO SOLUTION®**

Polymics, Ltd. is the world's premier developer and manufacturer of ultra-high performance engineering polymers for an infinite variety of engineered end uses. We are technology-focused company that offers a truly unique combination of expertise in product development, application engineering, and innovative polymer processing. Our products and services include the custom synthesis and polymerization of new materials (Arylmax® polymers), specialty compounding and formulation (Pyramid® compounds), material testing, compression, injection, extrusion and other proprietary molding as well as fabrication of custom prototype & production components.







### MATERIAL PLATFORM OFFERED BY POLYMICS

|  | Polybenzimidazole                                      | PBI(U)<br>PBI/PEEK(T)<br>PBI/PEKK(TK)<br>PBI/PAEK(TP)            | Polyphenlene           | PPS   |
|--|--|--|------------------------|---|
| MONOMER TO PART<br>Material Recommendation           |  |  | Flouropolymers         | ETFE<br>ECTFE<br>FEP<br>PFA<br>PVDF<br>PTFE                             |
| Polymer & Part Design<br>Compounding                 | Polyimides<br>Polyaryletherketones<br>Polyarylsulfones | PI<br>TPI<br>PAI<br>PEI<br>PEEK<br>PEEK<br>PEEKK<br>PEKK<br>PAEK |                        |   |
| CAM<br>Casting                                       |  |  | Specialty<br>Compounds | Statimax<br>Sealmax<br>Eduramax<br>Thermomax<br>Structomax<br>OrthoPEEK |
| Extrsion<br>Compression Molding<br>Injection Molding |  |  |                        |   |
| Fabrication  |  |  |                        |   |
| Assembly<br>Testing                                  |  | PES<br>PPSU  |                        |   |
| Inventory Shapes and Parts                           |  | PSU  |                        |   |

| CENTRIFUGALLY<br>ASSISTED MOLDING<br>(CAM™)         | CAM is a proprieta<br>produced econom   |  |
|---|---|--|
| COMPRESSION MOLDING<br>&<br>DIRECT FORMING<br>(HCM) | Compression mole<br>thermosets for a v<br>be molded with su                           |  |
| INJECTION MOLDING<br>(INJ)                          | Specialty injection<br>rods, plates and u<br>engineer to bridge<br>process that may i |  |
| EXTRUSION<br>(EXT)                                  | Polymics' extrusion<br>prototyping and co<br>in the high perform                      |  |



# **OTHER CAPABILITIES**



# CAPABILITY OVERVIEW

www.polymics.com

ary process developed by Polymics to provide stock shapes that cannot be otherwise nically and effectively.

lding by Polymics provides the best capability on almost any thermoplastics and wide range of tooling sizes. Extreme temperature Celazole® PBI materials can only uch a technique.

n molding offered by Polymics focuses on both standard stock shapes such as tubes, nique near nets for a wide range of industrial applications. This is a critical tool for e the gap between prototyping and production tools instead of using different not be representative once a part is commercialized.

on process offers stock shapes, such as tubes, rods, plates and thin sheets for both commercial applications. We cover a wide range of standard and specialty material mance polymers and compounds.