PROVEN EXCELLENCE IN MISSION-CRITICAL MATERIALS TESTING

Where Great Ideas Take Shape

www.generalplastics.com
WHEN CERTAINTY IS IMPERATIVE, ENTRUST YOUR CRITICAL TESTS TO THE EXPERTS.

General Plastics has been a leading innovator in the plastics industry since 1941. Our extensive background in the formulation, processing, testing and application of rigid and flexible polyurethane foam materials gives us unique insight into their distinct properties and versatility.

General Plastics’ Testing Services offers a wide range of tests in our on-site testing laboratories, which include an FAA-approved burn-test facility. All tests are conducted using calibrated equipment that is traceable to NIST.

What makes our testing services exceptionally valuable to our clients is our ability to provide any level of service – from R&D testing, to pre-testing of a customer’s proposed design, to testing for final certification.

SOLID TRACK RECORD OF TESTING EXCELLENCE

General Plastics’ testing services are underpinned by decades of experience performing quality assurance testing to the most exacting standards for our own products. So it was logical that longtime clients, including dominant players in the aerospace, defense and nuclear containment industries, sought out our expertise to support their testing needs.

Over the years, consistent performance - coupled with our ability to navigate myriad test methods, specifications and customer requirements - has made General Plastics a recognized center of excellence for physical property, flammability and developmental testing.

TESTING CAPABILITIES

Our testing services span a wide spectrum of quality assurance and testing functions, offering you a convenient single source to fit any/all of your particular requirements. Whether you seek to confirm physical property or performance characteristics for strength, dynamic impact, flammability or other qualities, look to a recognized leader. At General Plastics, we:

• Build test samples to your design specifications or configuration
• Coordinate FAA conformity inspections
• Supply necessary testing reports and documentation
• Provide pre-test services (prior to expensive qualification testing activities)
Whether testing our own polyurethane foam products, advanced composite materials or sample designs provided by a client, reliable test results are essential. General Plastics consistently follows well-defined procedures that represent industry best practices.

Test specimens are prepared for conditioning as soon as they are received, and reports are frequently issued the same day tests are run.

**SPEED AND FLEXIBILITY TO YOUR ADVANTAGE**

General Plastics offers the expertise and facilities to accommodate your particular requirements efficiently, conveniently and cost-effectively. We know that time is critical when bringing products or new designs to market. You can't wait for your testing provider to take months to complete testing and provide test results. Count on us for rapid turnaround once we receive your sample or design specifications, even if we construct your samples. And, test reports can frequently be issued the same day we run your test. What's more, local access to FAA Designated Engineering Representatives (DERs) simplifies flammability certification, saving you time and money. Customers are welcome to witness testing of their products free of charge.

**PHYSICAL PROPERTY TESTING**

- Compression and Tensile Testing
- Flexural and Shear Testing
- Peel Strength
- Fastener Retention Strength
- 10-Meter Drop Test and Dynamic Impact
- Thermal Conductivity
- Glass Transition Temp. (Tg)
- Heat Capacity
- Softening Point/Melting Point
- Coefficient of Thermal Expansion (CTE)
- Izod Impact
- Thermoplastic Melt Flow Testing

**FLAMMABILITY TESTING**

- FAA Bunsen Burner FAR 25.853 APP.F, Part I
- Seat Cushion Oil Burner Test
  FAR 25.853 App.F, Part II
- Heat Release
  FAR 25.853 App.F, Part IV
- Smoke Density
  FAR 25.853 App.F, Part V
- Smoke Toxicity
  BSS 7239

**DEVELOPMENT TESTING**

- Accelerated Aging
- Hydrostatic Pressure Testing
- Energy Absorption
- Fire Safety
INDUSTRY CERTIFICATIONS AND APPROVALS

CERTIFICATIONS
General Plastics' extensive quality assurance program satisfies the demanding requirements of the aerospace industry, the Nuclear Regulatory Commission and the U.S. Department of Defense. The company meets such exacting quality systems as:

- ISO 9001:2015/AS9100D
- NQA-1
- MIL-I-45208A
- Boeing Company D6-82479
- NADCAP AC7130 Rev. C & AC7130/1 Rev. A

FAA-APPROVED FLAMMABILITY TESTING SERVICES
Validation of our flammability test protocols attested to the quality of the following:

- Setup procedures
- Specimen preparation
- Equipment calibration
- Performance of sample burn
- Collection of data

PUT OUR SERVICES TO THE TEST
Whether you have a project in the design stage or need to confirm material performance characteristics, General Plastics is ideally qualified to verify materials against requirements and issue a certified test report.

We welcome the opportunity to collaborate with you and your engineers on developing test plans or samples tailored to your particular needs. Discover why leaders in the aerospace, defense and nuclear containment industries rely on General Plastics for mission-critical testing.