



We PACKAGE SOLUTIONS[®]
...through innovation, technology and service

MATERIAL DEVELOPMENT



Plastic Technologies, Inc. (PTI) offers comprehensive plastic materials development and plastic package design, prototyping and evaluation services. With a proven track record for innovation and confidentiality, PTI utilizes its state-of-the-art laboratories to test, evaluate, develop and engineer new or existing material options and combinations.

Our extensive experience developing and prototyping new packages made from PLA as well as traditional materials gives us a unique background in **evaluating new biopolymers**.

Proven technologies such as material blend compositions, overmolding, coinjection multilayer structures and performance enhancing additives that are now used for traditional packaging materials can afford biopolymers the opportunity for enhanced performance as well.

PTI's ability to support **new material commercialization programs** is unmatched in the industry, primarily because we are a comprehensive plastics technology development company that exclusively services the plastic packaging industry. With broad and extensive experience in the plastics industry, PTI professionals are capable of identifying opportunities for new bio-based materials, particularly when it comes to packaging.

We also offer a variety of test specimen molds as well as an extensive array of tooling options for both injection and blow molding which allows customers to **prototype new materials and additives** without the expense of new tooling investment.

PTI's full service analytical laboratory offers

- Standard physical and chemical materials and package laboratory tests
- Specialized test methods to determine rheology, drying, melting, crystallization behavior and reheat performance.

In addition, PTI offers expertise in determining whether **a new biopolymer** used alone or in conjunction with a new barrier resin, additive, colorant, or coating material will **impact current recycle streams**.

PTI's most recent capability combines our proprietary **Virtual Prototyping™ software with FEA** to allow the optimization of preform and bottle designs in advance of **prototyping materials such as PLA**. This software helps determine which preform designs are optimal, how the final package will perform, and is even capable of designing a functional preform that can go straight to production without prototyping.

Most importantly, PTI's 20 year reputation of integrity while working with many of the industry's largest suppliers, manufacturers and brand owners is your guarantee that all information shared with PTI will be held in strict confidence. **Our reputation is unparalleled and uncompromised.**

If you would like to discuss any aspects of our business or a potential project, please feel free to contact us at 419.867.5400 and ask to speak to one of our Biopolymer Team Members or email us at info@plastictechnologies.com.

