

Technology Labs

Parkinson Technologies houses and operates two state-of-the-art technology labs at its corporate headquarters in Woonsocket, Rhode Island. Customers use these facilities to evaluate equipment, conduct product/process development trials, produce samples for test marketing, and provide training on a broad variety of materials, including plastic film and sheet, nonwovens, and others.



The Marshall and Williams Plastics Extrusion and Orientation Pilot Lab Facility is the most versatile plastic film and sheet extrusion and orientation laboratory commercially available for customer use. It provides a unique opportunity to develop products, optimize processes, generate samples for pre-marketing evaluation, and even produce low volume quantities of commercial materials.

Typical Products

- Cast film and sheet, monolayer and multilayer
- Uniaxial and biaxial oriented substrates
- Barrier films
- Shrink labels and sleeves
- Capacitor dielectric films
- Battery separator membranes
- Breathable membranes
- Optical films
- Opaque cavitated films
- Other specialty films

Typical Materials

- Polypropylene
- Polystyrene
- Polyethylene
- PET/PETG
- PLA
- PHA
- PEEK
- PVDF
- PTFE
- Other fluoropolymers
- PA (Nylons)
- EVA
- EVOH



PARKINSON TECHNOLOGIES INC

DUSENBERY® CONVERTING SYSTEMS
MARSHALL AND WILLIAMS PLASTICS
PARKINSON WINDERS
KEY FILTERS

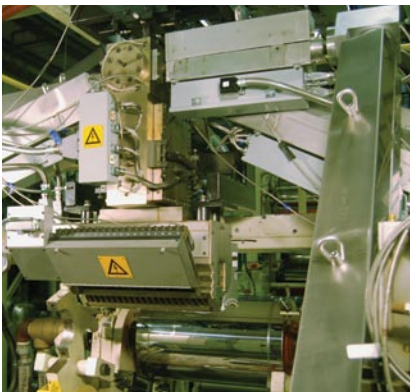


Marshall and Williams Plastics Extrusion and Orientation Pilot Lab

- Up to seven layer co-extrusion and 350 lb/hr
 - Optional twin screw extruder for in-line compounding
 - Dies
 - 12" Cloeren™ monolayer
 - 12" EDI™ triple manifold multilayer with "naked edge" skin layers and optional tie layer feedblock for four-layer and five-layer structures
 - 20" Cloeren with seven-layer variable geometry feedblock
 - 24" EDI monolayer
- Casting machine - two or three roll design with air knife, electrostatic wire, or polishing nip pinning devices
 - MDO - single stage, two-stage, patented Compression Roll Drawing (CRD), and temperatures up to 550°F
 - TDO - 90 inch maximum width, three heated zones plus one cooling zone, temperatures up to 650°F
 - Corona treating
 - Precision winding
 - Beta gauge thickness measurement - post casting and post TDO
 - Resin drying
 - Gravimetric blending
 - Analysis lab



MDO Shown here between the casting machine and intermediate winder. The machine direction orienter was designed with an emphasis on process flexibility and features the patented CRD technology.



Casting Machine Shown with seven-layer Cloeren variable geometry co-extrusion feedblock with 20" die, vacuum box pinning, selector plug configuration flexibility, and autogauge thickness control.

Key Filters' advanced melt filtration lab offers the opportunity to test different polymers with a variety of screen changers. The Key Filters lab has a complete 2 1/2" single screw pelletizing extrusion line for testing material and filter combinations with continuous screen filtration capabilities.



Key Filters products offer a complete range of melt filter solutions

- KCN Continuous Belt technology provides a constant and uniform extrusion pressure
- Applications in all extrusion processes including pipe and profile, film, sheet, compounding and blow molding
- KSP Hydraulic Slide Plates for applications that allow a brief process interruption
- MSC/CSC Manual Slide Plates offer an economical choice for frequently and required process shut downs
- Custom engineered solutions for your most difficult applications



We welcome you to our Woonsocket, RI facility, where engineering, manufacturing and assembly also takes place. Refer to our **Lab Pricing** sheet for current lab usage rates.