



**SENSORS**  
INCORPORATED

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# Advanced Solutions for Plastics Extrusion

See What's  
*NEW* Inside!



SENSORS



INSTRUMENTATION



ANALYZERS

Innovative  
Product of  
The Year

**GOLD**  
STEVIE® WINNER



STEVIES  
2013

AMERICAN  
BUSINESS AWARDS

Innovative  
Company of  
The Year

**SILVER**  
STEVIE® WINNER



STEVIES  
2013

AMERICAN  
BUSINESS AWARDS



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# The Dynisco Difference: *Customer-driven.*

Dynisco's more than 6 decades of commitment to helping customers solve problems with leading-edge quality products and award-winning innovative solutions has never been greater. Our dedication and ability to collaborate with you to help you measure, analyze and outfit extrusion control systems that fit your exact needs are unmatched.

From breakthrough technology in the industry's most complete line of sensors to renowned quality and performance in indicators, controls, and analytical instruments, Dynisco is the proud holder of many industry patents and awards. We have demonstrated the skill, experience and know-how that not only deliver the right solution for your unique application, but also provide unparalleled customer support.

**Exclusive Dedication to the Plastics Industry:** Guarantees you will be working with people who understand your applications, your business, and your markets.



## Customer-first Commitment:

Our approach is customer-focused, and we surround you with a global network of sales, distribution, and service offices that can provide consultation, repair and equipment calibrations to maintain top operating efficiencies.



## Experienced, Expert Staff:

Technical personnel who average more than 20 years' experience and a wealth of expertise and knowledge that is unmatched in the industry.



**Global Reach:** Offers you an extensive worldwide network of experts and local sales contacts – close, single-source, knowledgeable, responsive liaisons to help you select the best options for your application.

# Comprehensive. Innovative. Cost-effective.



## SENSORS

Dynisco has developed some of the most innovative measurement solutions for plastics extrusion, molding, and process control applications offering hundreds of models of transducers and transmitters with the latest sensing technologies. Our award-winning sensors have been recognized not only for high-accuracy pressure measurement at high temperatures, but also for transducers that withstand the most corrosive production environments.



## INSTRUMENTATION

Dynisco is renowned for robust performance, precision accuracy, and user-friendly design. Dynisco indicators, controllers and signal conditioners for pressure or temperature monitoring are highly intuitive and easily configurable to meet specific processing needs. They offer quick setup, digital communications, and multiple output options, and all Dynisco instruments adhere to international DIN panel standards.



## ANALYZERS

Dynisco analyzers are recognized and used around the world for testing the physical, mechanical and thermal properties of polymers. Our processing instruments are used to prepare test specimens or evaluate the processability of materials. All Dynisco instruments conform to the strictest industry, national and international standard test methods.

## Recognized for Innovation and Industry Leadership

For decades, Dynisco has been a leading innovator in plastics extrusion process technology, starting with our pioneering development of the first transducer to measure melt pressure during the extrusion process.

Today, Dynisco offers one of the industry's most-complete line of sensors, controls, analytical instruments, and accessories

in the world – all manufactured to ISO 9001 standards and proven to deliver better control, reduced downtime, minimum scrap, unmatched reliability and working life.

Dynisco and its leading-edge products recently have been recognized by a number of prestigious organizations. The American Business "Stevie" Awards

presented Dynisco with Best New Product and Most Innovative Company.

Plus Dynisco also received this year's *Flow Control Innovation Award*

for the key innovations represented by its Vertex Mercury Free Pressure Sensor.





# A Revolution in Sensor Technology and Selection.



**The Dynisco line of sensors** is one of the most comprehensive in the industry, not only because of our breadth of line, but also because of our simpler method of matching Dynisco sensor features, performance, and price point to your application and business needs.

From our revolutionary Vertex™ sensors with their industry-first 4-Year Warranty, to the core product offering of BenchMark™, to the reliable yet economical Echo™ series, Dynisco is dedicated to ensuring your sensor solution is the most cost-effective possible for your operation.



**ECHO™**  
MELT PRESSURE SENSORS



**Echo™ Melt Pressure Sensors**

Trusted for quality, reliability, and accurate performance at an affordable price, Echo melt pressure sensors are the perfect choice for less demanding applications. With stainless-steel wetted parts, accuracy to within 0.5% and 1.5M to 10M psi pressure range capability, Echo sensors offer performance features other economically priced sensors can't match.



**BenchMark™**



**BenchMark™ Sensors: PTx, MDx, SPX, and Guardian Series**

Benchmark is our flagship sensor line, renowned for reliability, precision, and long life. Offering  $\pm 0.15\%$  to  $\pm 0.5\%$  combined error, simple installation, and repeatability, the Benchmark line includes SPX smart industrial transmitters for use in hazardous locations, and Guardian sensors with built-in relays that signal when the process becomes unsafe.



**Vertex™**  
MERCURY FREE SENSORS



**Vertex™ Mercury Free Sensors**

Vertex sensors are our most robust, advanced-performance sensors offering longer life, faster response, and mercury free operation. Their revolutionary, reinforced diaphragm design using DyMax® coated Inconel delivers significantly longer working life than traditional sensors, more corrosion resistance than stainless steel, with an operating temperature range from  $-40^{\circ}\text{C}$  to  $400^{\circ}\text{C}$ .

## Vertex™ Sensors: An advance in technology that changes everything.

**GOLD**  
STEVIE™ WINNER



AMERICAN  
BUSINESS AWARDS

Vertex garners **Top Honors** for Innovative Product of the Year in the 2013 Stevie Awards, thanks to a new diaphragm technology that revolutionizes sensor performance, speed, accuracy, and durability. Its thicker diaphragm and fortified sidewall structure dramatically extend the working life of Vertex compared to traditional diaphragm technology. With no mercury or fill material of any kind, it is friendlier to the environment and less likely to cause product contamination.



***We're so confident in its ability to outlast traditional sensors, we back Vertex with the industry's first and only 4-Year Warranty.***



***There's simply nothing else like it available today.***

Vertex sensors also offer several other important advances:

- Mercury free operation
- No fill material
- DyMax® coated Inconel diaphragm
- Temperature range from  $-40^{\circ}\text{C}$  to  $400^{\circ}\text{C}$
- Faster response
- Direct measurement
- RoHs compliant

*"Vertex offers us the ability to manufacture our product in an environmentally favorable manner."*

*"Many of our customers are choosing to go with Vertex sensors on new machine orders. They like the added toughness and the 4-Year Warranty is a nice selling point."*

*"The accuracy we experience as a result of using Vertex allows us greater confidence in knowing that our finished product meets the stringent demands of our customers."*

*"By far, our biggest transducer repair cost has been due to diaphragm damage and we now look for Vertex to outlast NaK sensors, reducing our total cost of ownership for pressure sensors."*



*The key to outstanding toughness is in the construction.*



**A new standard in durability, environmental safety, and reliability**

No fill of any type.

An elegant (simple) design. No moving internal parts that can introduce measurement error.

Fortified sidewalls provide additional diaphragm support from side stresses. Not found on any other sensor.

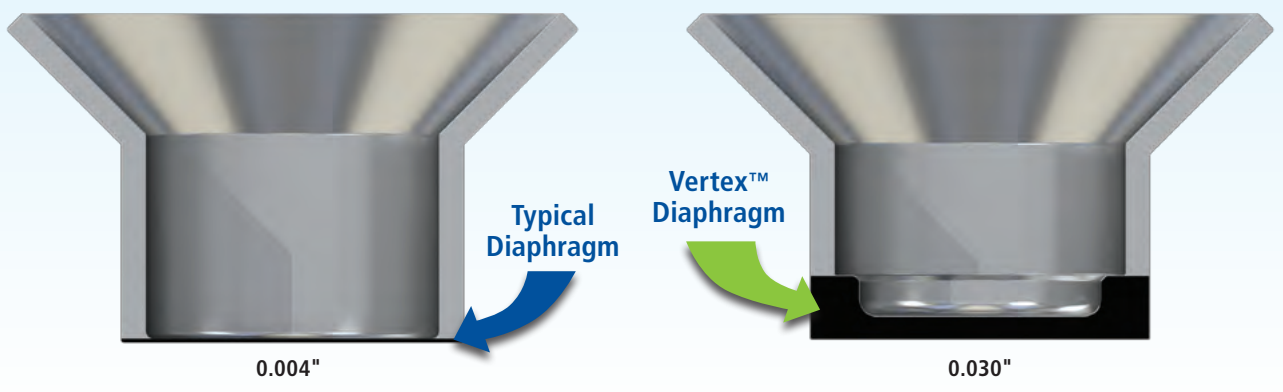
Hardened Inconel is standard. Inconel provides lasting protection, even in tough applications.

The tip-resident technology provides a primary or direct pressure measurement.

The diaphragm is several times thicker than in standard technology.

Standard DyMax® coated Inconel provides additional protection from abrasion and corrosion.

**Side-by-side comparison of a typical diaphragm and that of VerteX™**



**An easy cost of sensor ownership calculator is available online. See what your current sensors REALLY cost.**

**BenchMark™** *Our flagship sensor line renowned for reliability, precision, and long life.*



### PT460E/MDA460 Series



#### FEATURES & BENEFITS ( $\pm 0.5\%$ Combined Error)

- Outputs including 3.33mV/V, 4–20mA, 0–5Vdc and 0–10Vdc for user-defined compatibility
- 500 to 30,000 psi versions for range-specific extrusion processes
- Variety of rigid and flexible stem lengths allows for customer-defined configuration
- Several diaphragm materials for increased corrosion or abrasion protection
- Thermocouple and RTD configurations available for dual pressure and 4634/5/6 temperature measurement
- Available in Bar and kg/cm<sup>2</sup> (other ranges available)

### PT420A/MDA420 Series



#### FEATURES & BENEFITS ( $\pm 0.25\%$ Combined Error)

- 3.33mV/V output provides industry standard low-level output
- 500 to 30,000 psi versions for range-specific extrusion processes
- Variety of rigid and flexible stem lengths allows for customer-defined configuration
- Several diaphragm materials for increased corrosion or abrasion protection
- Thermocouple and RTD configurations available for dual pressure and temperature measurement
- Available in Bar and kg/cm<sup>2</sup> (other ranges available)

### PT46XX/MDT460 Series



#### FEATURES & BENEFITS ( $\pm 0.5\%$ Combined Error)

- Outputs including 4–20mA, 0–5Vdc, 1-6Vdc, 0–10Vdc and 1-11Vdc for user-defined compatibility
- 500 to 30,000 psi versions for range-specific extrusion processes
- Variety of rigid and flexible stem lengths allows for customer-defined configuration
- Several diaphragm materials for increased corrosion or abrasion protection
- Thermocouple and RTD configurations available for dual pressure temperature measurement
- Available in Bar and kg/cm<sup>2</sup> (other ranges available)

## SPX Series

The SPX family of sensors reliably withstands the rigors of process measurement, where higher accuracy and tighter control is required.

The SPX-L employs a unique algorithm technique to reduce the effects of non-linearity in a sensor measurement.

The SPX-T pressure sensor has an integral RTD temperature sensor to compensate for temperature variations, an important variable commonly affecting the performance of polymer melt control systems.

### SPX 2x, 4x Series



#### FEATURES & BENEFITS ( $\pm 0.25\%$ or $\pm 0.5\%$ Combined Error)

- 4–20mA output provides analog output for direct PLC and DCS connection
- HART™ protocol provides greater operator convenience, safety and maintenance
- 250 to 30,000 psi versions for range-specific extrusion processes
- Convenient zero and span buttons for easy setup
- Intrinsically safe and explosion-proof versions available for hazardous area installations

### SPX-L, 5x Series



#### FEATURES & BENEFITS ( $\pm 0.2\%$ Combined Error utilizing "DynaLarity™")

- 4–20mA output provides analog output for direct PLC and DCS connection
- Improved accuracy with DynaLarity™ to  $+ 0.20\%$  FSO
- HART™ digital communications
- ATEX Intrinsically Safe for hazardous environments
- FM & CSA approved Explosion Proof for hazardous environments
- Meets CE-PED requirements for European standards
- 0–250 to 0–30,000 psi customer-defined ranges

### SPX-T, 3x Series



#### FEATURES & BENEFITS ( $\pm 0.15\%$ or $\pm 0.25\%$ Combined Error)

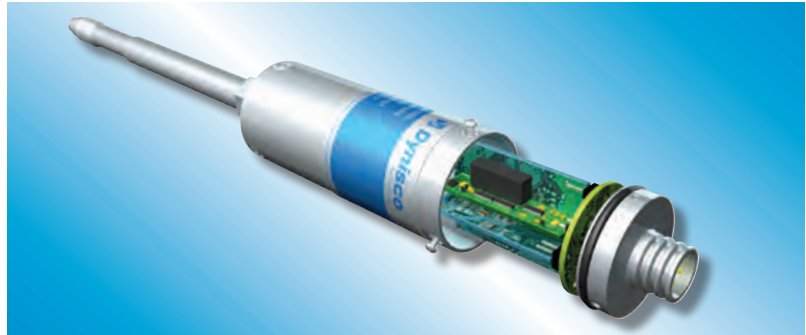
- 4–20mA output provides analog output for direct PLC and DCS connection
- Full snout temperature compensation
- HART™ digital communication
- 4–20mA loop output
- 0–250 to 0–10,000 psi
- 6:1 span turndown

## Guardian: PL'c' compliant pressure sensors for safety assurance applications



### Guardian Series

*Dynisco offers its popular pressure sensors with an internal relay switch that serves as a safety backup as well as being compliant to the directive through an extension of the line called Guardian Series.*



#### FEATURES & BENEFITS

- Integral relay switch for redundant safety and future compliance
- 3rd-party agency analysis (exida™) and self-certified based on FMEDA analysis and internal audit.
- Meets Performance Level 'c' as defined by the Machinery Directive (single sensor installed per Category 1)
- Meets Performance Level 'd' as defined by the Machinery Directive (two sensors installed per Category 3)
- Meets the following compliance directives, when properly installed and used:
  - Machinery Directive 2006/42/EC
  - NFPA 79 clauses A.9.2, A.9.4.1, A.9.4.3.2
  - EMC Directive 2004/108/EC
  - PED 97/23/EC
- Available on popular mV/V (PT, MDA, mA SPX Series) models

## Sensors for Food & Medical Applications

In applications where protection against chemical or particulate contamination is vital, Vertex sensors use no fill materials, offering critically acclaimed, mercury free sensing technology.

### Vertex sensors also offer several other important advances:

- Reinforced diaphragm sidewalls offer up to twice the working life of traditional sensor design
- Direct sensing technology provides faster response
- DyMax® coated Inconel diaphragm more corrosion resistant than stainless steel
- Temperature range from -40°C to 400°C
- Industry's first and only 4-Year Warranty



## Sensors for Injection Molding Applications

### PT100 Series

The Dynisco PT100 sensor series measures hydraulic pressure on injection molding machines. The PT100 series withstands cyclic pressure and provides outstanding performance under the severe demands of measuring the injection ram and clamp pressure of injection molding machines. Variations in the hydraulic pressure profile indicate irregularities during the injection and feeding stages of the molding operation and provide information about the stability of the injection ram system.



#### FEATURES & BENEFITS ( $\pm 0.15\%$ or $\pm 0.25\%$ Combined Error)

- Rugged, stainless steel construction
- Contoured diaphragm
- Greater accuracy, repeatability, fatigue strength
- Internal shunt calibration (PT130, PT150, PT160)
- Easy setup
- Potted hybrid electronics and flex-print wiring
- Resists shock and vibration
- 3mV/V, 5Vdc, 10Vdc or 4–20mA outputs
- Choice of outputs
- Fully temperature compensated
- Ideal for high temperature processes
- Ranges from 0–500 psi to 0–10,000 psi
- Choice of ranges

When non-filled Vertex is not suitable, Dynisco's PT410 Series of pressure transducers are another ideal choice for food and medical extrusion measurements requiring a fill material that meets FDA and USDA requirements. Model PT410 uses a special high-temperature fill (NaK, Potassium Sodium) and an Inconel diaphragm to allow accurate pressure measurements in processes with temperatures as high as 1,000°F.

### NaK Filled Series



#### FEATURES & BENEFITS ( $\pm 0.25\%$ or $\pm 0.5\%$ Combined Error, model specific)

- Special fill material for processes up to 1,000°F designed for high temperature applications.
- Meets FDA and USDA requirements for food and medical applications
- Inconel 718 diaphragm for rugged, long-lasting transducer life
- Excellent thermal stability and repeatability provide ideal high temperature measurement
- 500 to 10,000 psi versions for range-specific extrusion processes



# ECHO™

MELT PRESSURE SENSORS

*Reliable performers for less demanding applications.*

## Echo Series

Not every extrusion operation requires extreme temperatures and pressures. Not every production budget demands sensors with the tightest tolerances. Even in these less demanding operations, Dynisco can provide pressure sensors that you can trust for accuracy, reliability, and long life.



### Echo sensors deliver reliability and economy.

Like all Dynisco sensors, Echo sensors are designed first and foremost to deliver the reliable, accurate performance any application needs – but do so at a price that makes business sense. So while they are economical, Echo sensors offer a number of performance features often found on more expensive sensors, including:

- Consistent accuracy to within  $\pm 0.5\%$
- Four pressure options from 3M to 10M
- CE approval



### FEATURES & BENEFITS ( $\pm 0.5\%$ Combined Error)

- Outputs including 3.33mV/V, 4–20mA, 0–5Vdc and 0–10Vdc for user-defined compatibility
- Four pressure options from 3M to 10M psi versions for range-specific extrusion processes
- Defined 6", 9" or 12" stem length availability
- 18" or 30" flexible stem lengths allows for customer-defined configuration
- Thermocouple and RTD configurations available for dual pressure and temperature measurement
- Available in PSI, Bar, MPa and kg/cm<sup>2</sup>
- 2-Year Warranty

## Melt Pressure Gauges and Burst Plugs

Dynisco offers a variety of additional economical solutions that include mechanical and electrical pressure gauges as well as rupture disks (burst plugs). Our pressure gauges are designed to provide simple, maintenance-free pressure indication. Indication and alarms provide a warning for over-pressure situations. Dual pressure and temperature models are available. Burst plugs are designed to instantaneously rupture when excess pressure occurs in the extrusion process.

### Mechanical Gauges



#### FEATURES & BENEFITS

- Mechanical gauge requires no maintenance or electrical power
- Stem up and stem down versions available for quick and easy viewing and flexible mounting
- 5,000 and 10,000 psi versions provide added safety in the extrusion process
- Variety of rigid and flexible stem lengths allows for customer-defined configuration
- Thermocouple and RTD configurations available for dual pressure and temperature measurement
- Available in Bar and kg/cm<sup>2</sup> (other ranges available)

### Melt Monitor



#### FEATURES & BENEFITS

- Dual digital display can provide pressure and temperature measurement
- Customer-defined alarms with LCD display for critical pressure warning or machine shutdown
- Peak display and digital auto zero through easy-to-use push buttons
- Optional analog retransmission and Modbus communications
- Variety of rigid and flexible stem lengths allows for customer-defined configuration
- Available in Bar and kg/cm<sup>2</sup> (other ranges available)

### Burst Plugs



#### FEATURES & BENEFITS

- Burst pressure of 1,500 to 15,000 psig
- Simple, intrinsically safe design
- Leak-tight seal
- Low installation and maintenance costs
- Up to 750°F melt temperatures
- Accuracy of ± 5%
- Inconel disc

## Indicators and Controllers: *Advanced technology, robust performance, wide selection, user-friendly.*

Through the decades, Dynisco has earned a global reputation for technological innovation, robust product performance, and wide selection. Our line of analytical instruments is no exception. Dynisco indicators, controllers and signal conditioners for pressure or temperature monitoring offer you exceptional reliability, quick setups and user-friendly interfaces to suit virtually any need.

- Process controllers ideal for managing critical process parameters featuring exceptionally bright displays with large readouts for easy visibility.
- Process indicators capable of displaying a range of engineering units with the option of displaying pressure and temperature simultaneously.

Dynisco instruments adhere to international DIN panel standards and can be supplied with transmitter power supply, one or more alarms, auto retransmission and control capabilities, digital communications, process and instrumentation diagnostics and other advanced features.

### 1480 – 1/8 DIN Panel Indicator



**NEW!**

#### FEATURES & BENEFITS

- Universal input (strain gauge, voltage, current, thermocouple or RTD)
- Min/max value hold
- 2 alarm outputs
- Retransmission

### 1490 – 5 Digit 1/8 DIN Panel Indicator



**NEW!**

#### FEATURES & BENEFITS

- Universal input
- 2 alarm outputs
- Retransmission
- Min/max valuehold
- Modbus communications
- Transmitter power supply

## New Indicators and Controllers

### UPR900 – Process Indicator



**NEW!**

#### FEATURES & BENEFITS

- Display pressure, temperature, or even differential pressure
- Optional second input/output for cost-effective single instrument
- Analog retransmission of process variable allows signal to be sent to other devices
- USB port option for access to configuration and log files
- Modbus RS-485 and Modbus TCP Ethernet supported

#### UPR900 Enhancements

- Data logging option logs process values, set points and alarms to .csv file for use with spreadsheets
- Easy-to-use Setup Wizard
- Graphical/text LCD display with color change LED backlight on alarm (red/green)
- Graphical trend view of process, alarms and events as standard

### ATC990 – Process Controller



**NEW!**

#### FEATURES & BENEFITS

- Auto-tuning control in a discrete 1/4 DIN package
- Single loop control
- Display and control of differential pressure is available
- USB port option for access to configuration and log files
- Modbus RS-485 and Modbus TCP Ethernet supported
- BlueControl configuration and commissioning software option

#### ATC990 Enhancements

- Data logging option logs process values, set points and alarms to .csv file for use with spreadsheets
- Easy-to-use Setup Wizard
- Graphical/text LCD display with color change LED backlight on alarm (red/green)
- Graphical trend view of process, alarms and events as standard

## Melt Flow Indexer

### LMI 5000

The LMI is a cultivation of feedback from customers, incorporating a series of key features and options: color touch screen display incorporating a redesigned user-friendly menu structure, USB communications, pneumatic weight lift system with stackable weights, a force packer, higher accuracy digital encoder, redesigned auto cutter option and software improvements.

**NEW!**

#### ALL NEW FEATURES, BENEFITS & ENHANCEMENTS

- Performance meets international standards: ASTM D1238 & D3364, ISO 1133, BS2782, DIN 53735, JIS K7210
- Color touch screen with a simplified, user-friendly interface for setup and control
- Semi-automated pneumatic weight lift option for all weight loads
- Ergonomic, stackable weights from .325–31.6kg for all LMI applications
- Force packer option for consistent material packing
- USB connectivity for data storage, scale integration, networking and printing capabilities
- Melt flow rate to intrinsic viscosity correlation for PET
- 100 program storage capability when used with software option
- Modular options allow for easy field upgrades from a base model to a fully integrated analyzer vs. instrument
- Delivers a wider range of data

#### Lava Suite Software Enhancements

- Dramatically simplifies analysis, reporting and archiving
- Captures melt index values, as well as shear stress, shear rate, viscosity and apparent melt density, while also recording testing conditions
- Intuitive layout and menu navigation to lab personnel of every skill level
- Simplified programming structure

LaVA  
SUITE





# Capillary Rheometer

## LCR 7000

Designed to meet the demands of a 24-hour-a-day shop floor operation while maintaining the highest possible level of accuracy, repeatability and sensitivity. The LCR series rheometers are versatile and easy-to-use yet they offer the most sophisticated materials characterization, data analysis and reporting capabilities. The LCR 7001 can be used with a standard load cell or a barrel-mounted pressure transducer. Many years of service are ensured through the use of tungsten carbide dies and a hardened and honed tool steel barrel. LAB KARS advanced rheology software provides programming, control, analysis and data storage capability.

### FEATURES & BENEFITS

- Advanced microprocessor design
- ASTM D3835 and ISO 11433 standards
- Self-diagnostics capability
- Comprehensive statistical capability
- Simple push-button RTD calibration
- Smart keys for easy programming
- Bright, 4-line by 20-character vacuum fluorescent display
- Windows™ software for test database and analysis



## Online Rheometers

Dynisco's series of online Rheometers can be used to measure continuous, real-time ASTM D1238 melt flow rate (MFR), high/low load MFR and apparent viscosity.

### ViscoSensor – Online Rheometer

The world's smallest in-line polymer melt rheology instrument, measuring only 25 inches in length by 10 inches in width. The ViscoSensor is extremely easy to install, calibrate and operate making it the most cost-effective in-line sensor on the market. The ViscoSensor's zero discharge system returns the polymer back to the process, eliminating material waste. The ViscoSensor can be used to generate shear rate vs. viscosity data or as a continuous ASTM melt control tool that can be used for product quality and consistency.



#### FEATURES & BENEFITS

- Attaches to the process using a standard M18 port
- No waste stream
- Apparent viscosity and shear rate available
- Online viscosity or melt index monitoring
- Online ASTM D1238 melt flow rate
- Capillary is easy to replace

### CMR IV – Continuous Melt Rheometer

Specifically designed for the thermoplastics resin industry, provides continuous measurements of the melt flow rate or apparent viscosity directly on the manufacturing process. The CMR measures the flow of the molten resin through a single die. The CMR series can be configured to measure melt flow rate, high/low load MFR, apparent viscosity, or to perform other customer-defined tests. Communications to an external distributed control system are available.



#### FEATURES & BENEFITS

- Online ASTM D1238 melt flow rate
- Data exchange by analog and digital input/outputs
- Compact measuring head
- A range of metering pumps for specific applications
- Online apparent viscosity
- Systems for hazardous locations
- Rugged industrial designs

## Online Rheometers

### FCR – Flow Characterization Rheometer

The FCR measures the flow of molten resin through two separate dies. The FCR can be configured to measure dual melt flow rates, simultaneous MFR and apparent viscosity, a range of apparent shear viscosity, and extensional viscosity using the Cogswell Equations. Simple “in the field” calibration. Systems for hazardous locations available.

#### FEATURES & BENEFITS

---

- Online apparent viscosity over broad shear rate range
- Online measurements of polymer extensional properties
- Online ASTM D1238 melt flow rate at two load conditions
- Dual capillary designs
- Ideal for flow ratio measurements



## Laboratory Processing Equipment

### LME – Laboratory Mixing Extruder

The LME is a versatile laboratory tool for evaluating the processability of a variety of plastics, rubbers and additives prior to production. The unique Maxwell screwless design enables the LME to mix, compound and extrude materials that vary widely in both physical form and characteristics.



#### FEATURES & BENEFITS

- Able to process very small quantities of material (1 gram)
- Residence time less than a minute
- Variable speed rotor control 5–260 rpm
- Separate header and rotor heater for temperature controls
- Maximum temperature 400°C
- Various headers and orifices: ribbon, spinnerette, tube and wire coating

### TUS – Take Up System

The Take Up System is an important accessory to the LME. The dual purpose machine draws material from the LME into fibers. The fiber is wound onto the spindle with a variable speed drive to produce the desired fiber diameter. The two lower rollers of the TUS pull the extrudate from the LME to form a strand that can be cut into pellets with the LEC Pelletizing Chopper.



### LEC – Pelletizing Chopper

The Chopper pelletizes the extrudate from the LME. Pellet size is determined by the feed rate to the cutter from the Take Up System.



## A World of Service and Support

With five world class operations around the globe, dozens of factory sales personnel and an extensive network of representatives and distributors supported by hundreds of people, customers know they can count on Dynisco to provide support services that will have significant impact on their manufacturing process efficiencies.

Known for product innovation, Dynisco also offers a full range of global service and technical support services. Our highly skilled, technical support personnel are stationed internationally, ready to provide:

- Expert consultation
- Custom design solutions
- On-site equipment diagnostics and trouble-shooting
- Sensor repair and maintenance
- Installation service
- Operator training for equipment

### Our world-class facilities are located in:

Dynisco – Franklin, MA

Alpha Technologies – Akron, OH

Dynisco GmbH – Heilbronn, Germany

Dynisco Shanghai – Shanghai, China

Dynisco, Viatran Incorporated – Perak, Malaysia



Support & Manufacturing

Sales, Support & Manufacturing for our Polymer Testing Line

Sales & Support

Sales, Support & Manufacturing

Manufacturing

**To find your local Dynisco contact, visit [www.dynisco.com/sales-network](http://www.dynisco.com/sales-network)**



## For Sales, Service & Technical Support

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