IMR
MEASUREMENT
SOLUTIONS

MagModule II

Industrial process IMR analyzer

The MagModule™ II Industrial Magnetic Resonance (IMR) process analyzer automatically measures multiple chemical and physical properties of polymer materials. Typical applications include XS, C2, FM, and Charpy (PP), as well as density (PE).

This proven technology is available for installation in both hazardous and non-hazardous locations. Rapid, non-destructive analyses of powders, pellets, or slurries are provided continuously with results directly communicated to the plant Distributed Control System (DCS). High performance data analysis methodology provides reliable measurement of process parameters for Advanced Process Control (APC).

The MagModule II is a complete solution designed for harsh industrial conditions, and includes fully automated sample extraction, sample handling, data analysis, software control, and plant interface. Domestic and international hazardous area safety certifications provide customers with the confidence for commercial implementation and long-term operational safety of LexMar Global IMR products.

BENEFITS

- Increased plant efficiency
- Lower off-spec production
- Substantial HSE improvement
- Improved plant reliability
- Reduced inventory requirement
- Empowered plant operators
- Short-term return on investment

ADVANTAGES

- Fully automated operation
- Real-time continuous measurements
- Non-destructive analysis
- Operator independent
- Compatible with laboratory MagStation™ II products
- Worldwide support

LexMar Global
Analyze with Integrity®

TECHNICAL SPECIFICATIONS

MECHANICAL

- Cabinet: 60"W x 32"D x 73"H (152 cm x 81 cm x 185 cm), 1150 lbs (520 kg)
- Extraction system: 45"W x 35"D x 58"H (114 cm x 89 cm x 147 cm), 500 lbs (225 kg)
- Piping and tubing is 304/316 stainless steel. Swagelok® fittings are used on all external tubing connections.
- Instrument air supply (1/2" 150# RF flange)
- Nitrogen supply (1" 150# RF flange)
- Sample inlet/outlet 1" Swagelok® VCO®
- Vent outlet (1" 150# RF flange)
- Sample/gas return to process (1.5" 150# RF flange)

ENVIRONMENTAL

- ATEX: II 3 G | IECEx: Ex db ec ib op pr pxb IIB+H2 T4 Gc
- Designed for Class I Division 2 Groups C&D
- Certified for use in –20°C (–4°F) to +50°C (122°F)
- Cabinet is NEMA 4X and IP55

UTILITIES

- Electrical: 230 VAC, 50/60 Hz, Single Phase, 12 A max. or 120 VAC, 60 Hz, Single Phase, two circuits: 12 A max. and 17 A max.
- Instrument air: 80–100 psig (5.5–6.9 barg)
- Nitrogen: 80–100 psig (5.5–6.9 barg)

COMMUNICATION/OUTPUT

- Fiberoptic cable (four fibers) to field cabinet (wire connection optional for nonhazardous areas)
- Purge alarm contact to DCS (optional)
- Integrated System Controller
- Direct link to plant DCS
- LexMar Global's proprietary A/Ztec™ control and viewer database software suite
- Secure password protected remote access software

ASSET OPTIMIZATION

Leading polymer manufacturing companies require process control automation technologies to optimize plant performance. The MagModule™ II system has proven to be an essential part of optimization strategies. A rapid return on investment is evident for virtually all process technologies and plant capacities.