

PETROCHEMICAL NMR SOLUTIONS



BENEFITS

- **Lowers cost** by eliminating costly chemical use
- **Saves time** with results in seconds
- **Reduces risk** with proven method and simple implementation
- **Improves consistency** due to an operator independent technique
- **Safer** with no hazardous chemical handling

ADVANTAGES

- Accurate rapid results
- Minimal sample preparation
- Reliable with low maintenance
- Easy to calibrate
- Nondestructive analysis
- LIMS compatible
- Fully integrated analysis software
- Remote operation for fast customer support response



MagStation™ Lite

World class petrochemical NMR with benchtop economy

The MagStation Lite is a compact benchtop Nuclear Magnetic Resonance (NMR) analyzer typically used for quality assurance and quality control. This system provides superior industrial NMR efficiency in an affordable package resulting in the highest performance capable from a benchtop NMR system. Like the MagStation II, the MagStation Lite is scalable to on-line manufacturing applications utilizing our MagModule™ II technology. NMR is well suited for use in the petroleum industry including quality assurance applications for hydrogen content in fuel,

oil content in waxes and wax content in petroleum products. It is also proven for polymer industry quality assurance applications including xylene solubles in polypropylene, plasticizer in PVC, rubber content in polystyrene and oil in crystal polystyrene. The MagStation Lite NMR analyzer replaces wet chemical analyses, which use expensive, hazardous chemicals. Unlike wet chemical methods, the MagStation Lite doesn't destroy the sample being measured, and provides accurate results in seconds.

LexMar Global
Analyze with Integrity®

SIMPLIFY & SAVE MONEY

The MagStation™ Lite is easy to use and operator independent; lab technicians will be quickly productive with minimal training. The integrated software provides step-by-step operator guidance with clear on-screen prompts while the multi-color LEDs provide a visual indication of the sample status. MagStation Lite calibrations are always linear so only a handful of samples are required. Once established, the calibrations are robust and rarely need to be updated. Eliminate slow, expensive, hazardous, wet chemical analysis in your lab by choosing LexMar and the MagStation Lite.

PETROCHEMICAL APPLICATIONS

- Tacticity of polypropylene
- Plasticizer in PVC
- Rubber in High Impact Polystyrene (HIPS)
- Oil in crystal polystyrene
- Hydrogen content in fuel
- Oil content in waxes*
- Wax content in petroleum products*

TECHNICAL SPECIFICATIONS

MECHANICAL

- The permanent magnet system is housed in a fully insulated, temperature-controlled enclosure.
- Magnet dimensions: 14.2"W x 11.9"L x 14.2"H
- Electronics dimensions: 11.9"W x 12.6"L x 16.2"H
- NMR frequency: 23 MHz nominal
- Standard sample tube diameter 0.710" (18 mm) (other sizes available)
- Typical sample volume 14 ml
- Measurement temperature 40°C standard (wider ranges available)
- Ambient temperature 15 - 30°C
- Ambient humidity from 20 - 80%
- Sample heat time is adjustable in one second intervals
- Variable Temperature (VT) probe (optional)

UTILITIES

- Voltage 100 - 240 V (50 - 60 Hz)
- Power 500 VA maximum
- Current up to 40A inrush current
- The following are required for VT probe only:
 - Refrigerated/heating recirculating bath -30 to 150°C
 - Water-bath or electrical oven with thermo regulation for 90°C
 - Instrument air

*Variable temperature probe required