FOR THE DETECTION OF ENTRAPPED MOISTURE

MCM-2 HYDROTector®

Neutron Backscatter Moisture Detection for Corrosion Under Insulation (CUI)

For more information about MCM-2 HYDROTector® and other products contact:
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Other Locations: Las Vegas, NV phone: 702.270.3885 • Concord, CA phone: 925.363.9770
Grand Rapids, MI phone: 616.726.5850

InstroTek® Inc.
Innovators in Instrumentation Technology
The MCM-2 Hydrotector® non-destructive, moisture measurement gauge is designed for quick determination of water content in the thermal insulation of pipes and vessels at chemical and petrochemical plants.

Designed as a screening tool to rapidly locate areas of trapped moisture, the MCM-2 works well in conjunction with corrosion detection equipment to quickly detect areas where corrosion under insulation is highly probable.

**FEATURES**
- Fast and easy to use; allows thousands of feet of insulated pipe to be tested in a day.
- Designed for maximum accessibility in hard-to-reach areas.
- Telescopic pole allows for testing from a distance of 10+ ft.
- Microprocessor based. Direct readout in engineering units. All tests can be stored and identified as to pipe or vessel and location. Using the RS-232C serial interface, the data can be quickly uploaded onto a computer or printer.
- "Quick Test Mode" for automatic readings and comparisons with a dry standard. User entered tolerance levels for very fast moisture detection.
- Up to 24K storage capacity for moisture readings and other key data.

**APPLICATIONS**
- Evaluate insulated tanks and vessels quickly for potential corrosion problems.
- Investigate insulated pipe for high concentrations of moisture to identify areas for corrosion inspection.
- Quickly detects levels in containment vessels.

**SIMPPLICITY OF OPERATION**
This state-of-the-art instrument offers two easy-to-use operating modes. The manual mode allows individual tests to be taken at the push of a button, then recorded in memory. The Quick Test mode takes continuous readings, one every second.

**LICENSING AND TRAINING**
InstrTek® offers the necessary radiation safety and application training to ensure proper use of this device on a continuous basis.

**RUGGED AND RELIABLE**
The MCM-2 detector assembly is enclosed in a strong, light weight aluminum housing. The LCD readout is sealed in a dust-proof and water resistant enclosure. The padded shoulder bag offers additional protection and convenience.

**DATA LOGGING**
Data logging capabilities allow storage of thousands of readings. The operator can format the memory to identify location, date and time of measurements using a 5-digit ID number. Data can be transferred to a computer or printer and is compatible with most spreadsheet programs.

**SPECIFICATIONS**

**DIRECT READOUT FEATURES**
- **LCD DISPLAY**
  - 8 character display reads in direct count or % volume.
- **CALIBRATION**
  - 16 selectable calibrations allow for varying conditions.
- **DIRECT SELECTION**
  - Keyboard selection of gauge functions for counting, self-calibration, unit selection, data definition, storage format, and computer serial dump.
- **DATA STORAGE**
  - 24,000 cells of counts and key data entry. Operator programmable format.
- **DATA OUTPUT**
  - Connection allows user to upload data directly to computer for data processing and report printout.
- **FUNCTION**
  - NDT measurement of insulation materials by manual counts or "quick test" automatic counts.
- **RANGE**
  - 0 to 70% moisture.

**DATA LOGGING**
- Built-in data logger allows entry of numerical identifiers and time and date stamping for each test.
- Telescopic pole allows easy access to hard-to-reach areas and eliminates the need for scaffolding.

**RADIOLOGICAL**
- **NEUTRON SOURCE**
  - Maximum 50 mCiAmericium-241/Be (1.85 GBq).
- **ENCAPSULATION**
  - Double Sealed, Stainless Steel Capsule, CPN-131
- **SHIPPING**
  - Radioactive Material, Special Form 7, UN3332, R.Q. Transport Index 0.2, Yellow II Label, USA DOT 7A, Type A Package.

**DIMENSIONS/SHIPPING WEIGHTS**

<table>
<thead>
<tr>
<th>Component</th>
<th>Width</th>
<th>Depth</th>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detector Assembly</td>
<td>7.0 in (178 mm)</td>
<td>9.0 in (229 mm)</td>
<td>2.0 in (51 mm)</td>
<td>7.0 lbs (3.17 kg)</td>
</tr>
<tr>
<td>Detector Assembly In Shipping Container</td>
<td>27.0 in (686 mm)</td>
<td>12.0 in (305 mm)</td>
<td>12.0 in (305 mm)</td>
<td>24.0 lbs (10.88 kg)</td>
</tr>
<tr>
<td>Adjustable Pole In Shipping Container</td>
<td>5.5 in (140 mm)</td>
<td>5.5 in (140 mm)</td>
<td>5.5 ft (1.67 m)</td>
<td>11.0 lbs (5.0 kg)</td>
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