MAXIMIZE KILN EFFICIENCY AND CUT DEGRADE COSTS DUE TO OVERDRYING
Why do you need the MC4000 Advanced In-Kiln Moisture Measurement System?

- Saves money by cutting the high costs of degrade due to overdrying
- Prevents unnecessary energy costs by reducing kiln time
- Minimizes or eliminates inefficient manual hot checks therefore reducing labor costs
- Improves grade to increase your bottom line

MC4000 Advanced In-Kiln Moisture Measurement System Features

- Automatic kiln shutdown and shut-down alarm based on the moisture content level within 1% MC
- Provides moisture content measurement for kiln temperature ranges of 70˚-300˚F
- Open architecture integrates with virtually any computerized kiln controller
- Large sensing zone to obtain average moisture content between sensors
- Displays moisture content of lumber above and below the fiber saturation point
- Provides precise and repeatable MC measurement for consistent results at end point

The Extreme Cost of Overdrying

"Experts have determined that the cost of degrade due to overdrying is about $3/MBF for each 1% reduction in moisture content below 17%; this cost in loss increases to about $7/MBF for each 1% reduction below 12% moisture content."  

Huber, Dean, Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory.

Example: A mill has an annual kiln dry production of 120 million board feet (120 MMBF). The target Moisture Content (MC) for the lumber is 17%. If this mill overdries its lumber by an average of only 1.5% moisture content, financial losses due to overdrying degrade would amount to $3.00 per thousand board feet (1 MBF) times 1.5%, or $4.50 per thousand board feet. This calculates out to a total of $540,000 annually in degrade losses due to overdrying.
MC4000 Software Included with Every System

The MC4000 Software provides you with instant information which enables a kiln operator to prevent overdrying and degrade. View real time on-screen trends of moisture content measured between the sensors so you can perform changes immediately before degrade occurs. The software allows you to study average drying performance by each individual kiln or kiln charge.

On-Line diagnostics and software upgrade capability. Every MC4000 In-Kiln system has a built-in modem that allows Wagner Meters to perform remote, on-line diagnostics, upgrades and troubleshooting providing you with superior customer support.

Complete Computer Package Included With Each System
- Average moisture content readings for each sensing area shown on computer screen
- Ability to view all kilns average moisture content, status, and current run time on screen
- Printable kiln tracking reports
- Separate sensor readings shown on computer screen to evaluate kiln drying operation over time
- The Charge Screen allows the user to start and stop each kiln charge
- Material lists can be established for different sizes and species of lumber
- Alarm screen shows current and past alarms for each kiln
- Get average moisture content, status and run time of kiln selected
- Monitor up to 12 Kilns with 1 PC

MC4000 Advanced In-Kiln Moisture Measurement System Components

The MC4000 is manufactured using superior industrial components and Wagner Meters’ PROVEN sensing technology. Static electrical charges that adversely affect other technologies have no effect on Wagner Meters’ MC4000 In-Kiln System. Wagner Meters has designed its technology for the real-world environment of wood products mills.

The MC4000 Advanced In-Kiln Moisture Measurement System monitors moisture content in the kiln drying environment from 70°- 300° F. The MC4000 can measure the moisture content in low temperature drying operations. It displays the moisture content of lumber above and below the fiber saturation point.

- The PKU features a rugged, industrial electronic design. This compact, design operates reliably in the most demanding environments.
- 1 PKU (Per Kiln Unit) can monitor up to 9 sending units.
- Each sending unit measures the average moisture content of the sensing area located between the sensor probes.
- Durable 16 Gauge stainless steel sending units mount to the kiln wall. The electronics can withstand temperatures up to 300° F.
- Up to 12 kilns can be monitored with 1 system
- Cables from the clamps to the sending units are industrial strength and non-corrosive to withstand the kiln environment.

- Industrial strength clamps easily break away from sensing probes in case of falling wood.
- Heavy duty stainless steel non-corrosive sensing probes
- 4ft. and 8ft. Long sensing probes are available to meet your specific needs.
- Easy time efficient system calibration
### Technical Details

#### Power Requirements
- 100-120 VAC or 200-240 VAC
- 7amp, Single Phase 50-60HZ

#### Operating Environment
- Ambient Temperature Range
  - Sensors: In-Kiln 70˚ F to 300˚F
  - Console: 50˚ F - 110˚F

#### Operator Interface
- Personal Computer
- Monitors up to 12 PKU Consoles

#### PKU (Per Kiln Unit)
- Operates up to 9 sensors
- Solid State Shutdown Relay
- NEMA 4-Rated

#### Sensor Clamps
- Heavy Duty Industrial Strength Clamps
- Stainless Steel Probe Wires

#### Sensor Probes
- 4’ and 8’ Lengths
- Heavy Duty Stainless Steel

#### Sensor Cables
- Non-Corrosive stainless steel cables rated to withstand up to 300˚F

#### Sending Units
- 16 Gauge Stainless Steel
- Rated to withstand up to 300˚F

#### Certifications for Compliance
- FCC Certification:
  - MC4000 Advanced In-Kiln System is certified to comply with FCC Rules and Regulations Part 15 for operation in industrial settings.

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### Wagner Meters’ Superior Customer Service & Technical Support

Wagner Meters is dedicated to providing superior customer service and technical support. The MC4000 Advanced In-Kiln System includes an on-site start up and training visit as a standard feature. Wagner Meters also offers technical support via e-mail, phone, or modem. On-site service after the initial start up is also available for training and service issues. All parts and workmanship are covered by Wagner Meters’ standard one year warranty. Our customer service department has detailed knowledge of each customer and their particular application that is tracked in a shared database for consistent service and technical assistance. Wagner Meters strives to provide customers with the best service and support available.

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**For your free return on investment analysis call: 1.800.634.9961**

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