

On-Line Moisture Measurement Systems

Virtually any product capable of retaining moisture can be measured using a DRYCOM Moisture Meter.

These systems continuously monitor the moisture content of the product and provide immediate and accurate moisture information, both on the meter display and through outputs connected to Chart Recorders, Dataloggers, PLC and SCADA systems etc.

Applications

Some of the applications that DRYCOM can be used for include:

- ◆ Loose fibre
- ◆ Sliver
- ◆ Yarn
- ◆ Fabric
- ◆ Non-wovens
- ◆ HealthCare & Sanitary Products
- ◆ Carpet
- ◆ Toweling
- ◆ Food Products
- ◆ Wood Fibre
- ◆ Bale Moisture



Typical DRYCOM On-Line Moisture Measurement Applications

Benefits

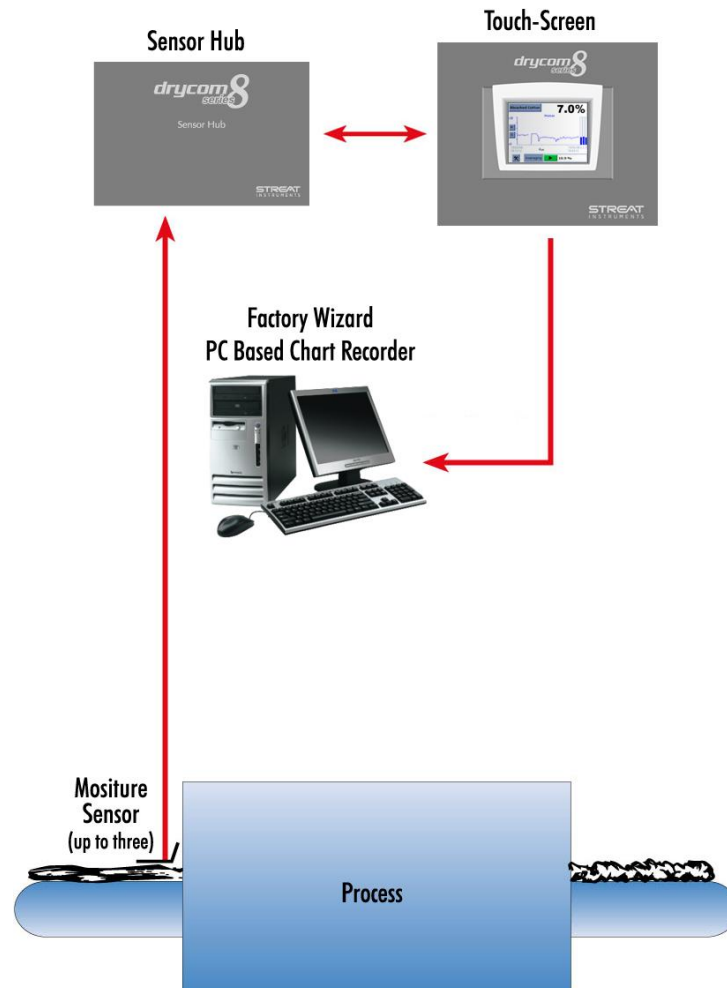
DRYCOM customers benefit from our vast experience (over 20 years) in the area of moisture measurement and control and receive an appropriate moisture solution that is engineered to suit their requirements. Benefits include:

- ◆ Increased profits
- ◆ Increased productivity (20 to 30% in some cases)
- ◆ Reduced energy usage per kg of product processed
- ◆ Improved downstream processing
- ◆ Avoiding over-drying
- ◆ Improved and consistent product quality
- ◆ Increased average moisture content (resulting in higher sales value)
- ◆ Elimination of re-processing
- ◆ Elimination of claims from customers.
- ◆ Reduced shade variations

Configuration

Moisture is a critical factor in many application areas and processes. By measuring the moisture significant benefits can be obtained. DRYCOM Moisture Systems are designed to assist our customers to optimise production processes and maximise productivity, quality, operating efficiencies and profitability.

The DRYCOM system has been applied to processes from Breakfast Cereals, to HealthCare & Sanitary Processes, to conventional Textiles and Non-Woven processing.



DRYCOM Moisture Measurement systems are precision instruments that use a unique adaptation of the conductivity principle. They are designed to operate in hostile industrial environments and provide our customers with:

- ◆ Simple Operation
- ◆ Immediate, continuous and accurate on-line moisture measurement
- ◆ Up to three independent moisture sensors
- ◆ Sensors that measure the entire thickness of product – not just the surface
- ◆ Readings not affected by the effects of surface presentation, colour, temperature, normal variations in thickness or density of the product under test
- ◆ Readings that take into account the moisture profile in the product.
- ◆ Measurement from 0% to approximately 2x the equilibrium moisture for the product under test.
- ◆ Storage of multiple 'recipes' enabling accurate measurement of different products.

Technical Specifications

DRYCOM Moisture Measurement Systems are precision instruments that have been designed to assist Textile, Food and Related Industry Processors optimise their production processes and maximise productivity, quality, operating efficiencies and profitability.

Measuring Ranges – Textile fibres, sliver, yarn, fabric etc

| Fibre | Regain % Range | Moisture Content % Range |
|-------------------------|-----------------------|---------------------------------|
| Acetate | 0 to 13 | 0 to 12 |
| Acrylic | 0 to 4.0 | 0 to 4.0 |
| Cotton | 0 to 25 | 0 to 20 |
| Cotton/polyester 50/50 | 0 to 12 | 0 to 11 |
| Cotton/viscose 50/50 | 0 to 27 | 0 to 22 |
| Flax | 0 to 25 | 0 to 20 |
| Jute | 0 to 30 | 0 to 23 |
| Nylon 6 | 0 to 10 | 0 to 9 |
| Nylon 66 | 0 to 10 | 0 to 9 |
| Polyester | 0 to 1 | 0 to 1 |
| Polypropylene | 0 to 0.9 | 0 to 0.9 |
| Silk | 0 to 25 | 0 to 20 |
| Viscose | 0 to 30 | 0 to 23 |
| Viscose/polyester 50/50 | 0 to 15 | 0 to 13 |
| Wool | 0 to 35 | 0 to 26 |
| Wool/nylon 50/50 | 0 to 25 | 0 to 20 |
| Wool/polyester 50/50 | 0 to 17 | 0 to 15 |
| Wool/viscose 50/50 | 0 to 30 | 0 to 23 |

Measuring Ranges – Non-Textiles(examples only, contact us for a complete list)

| Product | Regain % Range | Moisture Content % Range |
|----------------|-------------------|--------------------------|
| Dried Biscuit | 0 to 20 | 0 to 18 |
| Flaked Wheat | 0 to 25 | 0 to 20 |
| Malt | 0 to 20 | 0 to 18 |
| Meat Meal | 0 to 12 | 0 to 10 |
| Soya Bean Meal | 0 to 18 | 0 to 16 |
| Sunflower Meal | 0 to 20 | 0 to 18 |
| Tobacco | Typically 0 to 30 | Typically 0 to 25 |
| Wheat | 0 to 25 | 0 to 20 |

Specifications

| | |
|---------------------------|---|
| Power Supply | Sensor Hub 24v DC (supplied from Touch-Screen) Touch-Screen Universal Power Supply for 100 to 260 volt, 50 or 60 Hz operation, Power consumption: 30 watts |
| Dimensions (mm) | Sensor Hub 280 (W) x 170 (H) x 90 (D) 2.5kg Touch-Screen 330 (W) x 280 (H) x 130 (D) 4.4kg |
| Operator Interface | Full Colour Touch-Screen |
| Interface | Industrial standard interfaces for connection to other devices (SCADA systems etc) |
| Moisture Sensors | Wide range available depending on application – contact us for details |
| Enclosure | Hose-proof and Dust-proof with IP65 rating |
| Environmental | 0°C to 45°C, maximum humidity 90% RH |

Streat Instruments are committed to supplying the Textile Industry with quality instruments to improve profitability, production and quality.

Streat Instruments have over 500 installations in more than 40 countries and have a comprehensive international support network.



Streat Drycom Limited
 6 Great Russell Court
 Fieldhead Business Centre
 Bradford
 BD7 1JZ
 UK

Ph: +44 1274 733145

mail@streatdrycom.com
 www.streatdrycom.com