

MCMspares

Accessory Packages

MCM provides a range of standard Accessory Packages, which are designed to complement your hygrometer and help ensure the highest quality of sample data collection.

Although each moisture measurement process presents unique challenges, there are some key factors that are consistent to each application. Consideration of these factors can make the difference between collecting good and bad data.

Is the sample system made from the best materials? Are there any “dead spaces”? Are sample lines and regulators heated? Is the sample flow set correctly? Does the sample vent at atmospheric pressure? What types of connector fittings are used? Are the environmental conditions controlled?

Depending on the answers to the above, it is possible that the delivery of the sample to the hygrometer could influence the measurement – put simply, the hygrometer may be measuring the condition of the sample system, rather than the condition of the process. If the measurement values fluctuate, or the data appears out of specification, then the operation of the hygrometer may be questioned. With an MCM analyser, the excellent response speed and sensitivity mean that even minor changes in the condition of the sample system can be quantifiably measured, and improvements quickly and easily made.

To help optimise your process, and hence reinforce the confidence in your analysis, MCM provides a full range of Accessory Packages. We provide both standard solutions and options for customisation.

All components are made from the highest quality components, selected to suit the demanding nature of moisture analysis and to help address the common problems that can occur (see table below).

Common Sampling Problems	And Their Effect on The Measurement
Using rubber or PTFE sample tube	This material is permeable and introduces moisture to the measurement, producing false high readings.
Use of quick connect couplings	These couplings can allow moisture to migrate to the measurement or may act as a “trap” for residual moisture. Hence the measurement value could be elevated, or the components simply take a long time to dry down.
Long sample tubes	Take longer to dry down than short tube lengths, hence there is more pre-purging, wasted product, fugitive emissions and wait time before data can be collected.
Temperature effect on valves and sample lines	The pressure drop in gas regulation can lead to cooling of regulators, valves, and sample lines. Moisture from the process can be absorbed into cooler materials, resulting in false low readings. Equally, high ambient temperatures (e.g. sunshine on cylinders) can release moisture in to the sample.

MCM comprises a compact and cohesive team, who place a premium on rapid response and adaptability. Should you have distinctive requirements, kindly reach out to us, and we will endeavour to provide optimal assistance.



MCMspares Package

Adopt a standard measurement methodology with MCM's recommended setup.

- High quality stainless steel components help mitigate moisture ingress
- Helps minimise the effect of hysteresis and increases the speed of sample system drydown

Includes:

- 1x Flow Meter, scale 60-600 cc/minute in Air
- 1x Stainless Steel Needle Valve
- 3 x 0.5m Length of 1/8" Stainless Steel Pipe
- 1/8" Stainless Steel Nuts and Olives

Order Code: MCM_SP1

MCMspares Dry Gas Sampling

Validate your sample data by cross-referencing the hygrometer against a known "dry" gas condition, as produced by the MCM Bottled Gas Dryer.

- Use the "dry" gas to test the zero value of the hygrometer, before and after sampling
- Quantify the effect of potential gas-borne contamination and ensure reproducibility of results

Includes all of MCMspares Package, plus:

- 1x Bottled Gas Dryer with 1/4" - 1/8" Reducer Fittings
- 1x Additional Stainless Steel Needle Valve; 1x "T" Piece
- 2x Additional Lengths of 1/8" Stainless Steel Pipe
- 1/8" Stainless Steel Nuts and Olives

Order Code: MCM_SP2

MCMspares Desiccant Renewal

Correct storage and preservation of your hygrometer will extend the service interval and help ensure optimum operation. When the analyser is not in use (in stores or disconnected from process) then the sensor should always be protected by fitting the supplied desiccant seals to the gas inlet/outlet connections.

MCM supplies spare packs of replacement desiccant seals, freshly regenerated and ready for use. Packs are available in multiples of 5x pairs of seals and often for next-day delivery (UK delivery only).

Order Code: MCM_SP3

MCMspares Tailored Choices

MCM can tailor any Accessory Package to your individual requirements

Additional options and services include:

- Providing pressure regulators, solenoid valves, and spare parts
- Delivery of bespoke tubing combinations
- Crafting of customised environmental enclosures

Please speak to MCM's Service Department to discuss any bespoke requirements.

Solutions Tailored to You

The standard Accessory Packages are offered as "off the shelf" solutions that will address most applications. However, if you have unique circumstances or would like a particular set-up, then we are happy to accommodate requests for bespoke solutions.

To order any of the standard packages or to discuss customised options, please contact MCM's Service Department.



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