

# Online moisture monitoring and control in screwfeeder applications

Online moisture management specialist Callidan Instruments has developed an analyser which measures the moisture content in a material as it is conveyed within a screwfeeder or an auger.

The MoistScan MA600SF utilizes microwave technology to create an analysis zone within the screw that measures 100% of the material. It is particularly well suited to food and feed grains, wood products, manufactured foods, building materials and minerals.

Recently, Callidan installed and commissioned a MA600SF at a wood char factory in Kentucky in the USA where it measures the moisture in woodchip feeding a kiln.

The factory was losing hundreds of thousands of dollars annually from over-drying the woodchip and desperately needed to better control the dryer to bring down energy costs. According to the customer, every 1% that the woodchip is over-dried costs US\$320,000 per year in unnecessary energy. Big drying efficiency gains are achievable by knowing the moisture of the feed and adjusting drying parameters accordingly.

Another company in Australia recently installed a MoistScan MA600SF to measure moisture content in the manufacture of briquettes, the objective being to calculate the net dry weight of each ingredient to enable precise mix ratio control.

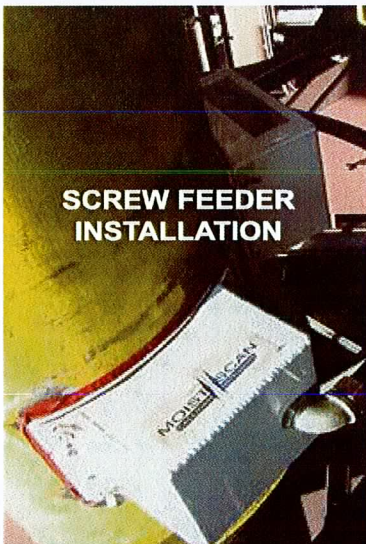
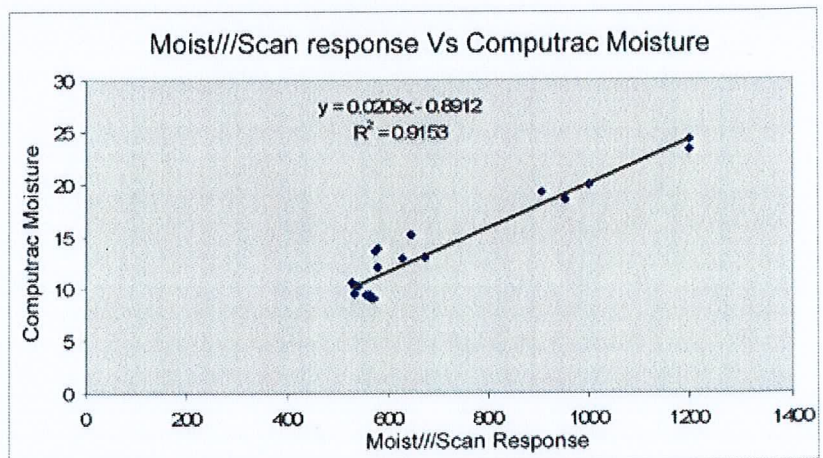
According to Callidan, the MA600SF is designed with the customer's goal in mind. Typically this is process optimization via automated control with moisture being a key control parameter. Callidan acknowledges that providing data in the form of an electrical signal to the plant, on its own, only

benefits the customer if this data is acted on. What is important is that the data is used by the customer to deliver a benefit.

The features of the MA600SF enable Callidan technicians to work closely with its customers to help them achieve their process optimization goals. These features include remote web access and control, continuous data logging and seamless plant integration.

Callidan's online moisture management service involves Callidan engineers, programmers and statisticians partnering with on-site engineers to develop control algorithms for full or partial equipment automation.

Contact: [bhr@callidan.com](mailto:bhr@callidan.com)



SCREW FEEDER  
INSTALLATION

## REAL TIME MOISTURE MONITORING & CONTROL

Moist//Scan® online microwave moisture meters improve performance, product quality & yield. Unlike most other instruments on the market, Moist//Scan® analyses the entire flow of material, from top to bottom, ensuring accurate, repeatable results.

### Models

- ◆ Augers & Screwfeeders
- ◆ Pipe Conveyors
- ◆ Chutes & Hoppers
- ◆ Belt Conveyors
- ◆ Cookers, Dryers
- ◆ Extruders

### Practical, Proven Process Technology

- ◆ Automate Plant & Equipment
- ◆ Alarm Critical Control Points
- ◆ Maximise Saleable Yield
- ◆ Eliminate Reject Product
- ◆ Improve Product Quality & Shelf Life
- ◆ Reduce Equipment Down-time

Food & Feed Grains, Mining & Mineral Processing, Building Materials, Food manufacturing, Power & Steel, Chemicals.



Callidan Instruments Pty Ltd

Tel: 0749 555966 ◆ Fax: 0749 557338  
email: [bhr@callidan.com](mailto:bhr@callidan.com) ◆ [www.callidan.com](http://www.callidan.com)