

TBM 280

THROUGH BALE MOISTURE ANALYSER



What is the TBM 280?

TBM 280 installs on belt conveyor, rollers or sliders to accurately measure moisture content as the baled or packed material passes through. Measurement is performed horizontally through the material rather than vertically to avoid interference from the structures along which the material moves. For the best results, microwave technology measures moisture directly through the material and rapidly provides moisture data for quality control or process control.

Accurate moisture measurement can improve the consistency and quality of material, efficiency of the process, and provide significant cost savings through monitoring, control and reduction of energy losses. In the recycling industry, moisture content may affect material handling, or indicate contamination of the cardboard, paper, or other materials being processed.

TBM 280 Advantages

- Immediate cost savings by reducing energy consumption when used in the alternative fuels industry;
- Accurate moisture analysis of large material volume;
- Suitable for bulk bag moisture measurement, including scrap, e-waste, black mass;
- Removes the need for routine sample collection;
- Allows automatic batch control;
- Flexible plant interface options;
- Patented state-of-the-art digital microwave technology;
- Industrially proven;
- Extremely reliable and low maintenance;
- PC-based with remote access for prompt support.

TBM 280 Description

TBM 280 consists of a set of microwave antennae and an electronics cabinet. The antennae are attached to each side each side of a full adjustable gantry-style frame over the belt. A low frequency microwave beam is transmitted through ~1 metre of bulk material. An ultrasonic sensor is used to detect the presence of material for measurement.

Digital measurement of microwave group delay and attenuation allows precise moisture analysis every second.

The microwave beam interrogates a large volume of material which greatly reduces errors caused by moisture content heterogeneity.

An industrial PC calculates results, saves data and interfaces to the plant. A wide range of plant interface options are available using industry standard interface modules.

Scantech's Analysers

Scantech provides the recycling, energy, mining, coal, steel and cement sectors with analysers for a wide range of applications and environments. Scantech can deliver online solutions that suit your process, reduce your operating costs and minimise Health, Safety and Environmental risks for your operations. Whether you need to monitor moisture, ash, sulphur, mineral or energy content we have the right application for your needs and budget. Real time analysis during the various phases of production provides operators with significant opportunities for plant optimisation and quality control. Over the past three decades, Scantech analysers have become a standard process control tool in the resources and recycling sectors. Scantech analysers are a fundamental component of companies' digital technology strategies utilising real time measurement systems to enable core processes to become fully integrated, autonomous, remote and automated.

Scantech Products

- **GEOSCAN GOLD Premium On-belt Elemental Analyser for Minerals**
- **GEOSCAN-M On-belt Elemental Analyser for Minerals**
- **IRONSCAN 1500 On-belt Natural Gamma Iron Ore Analyser**
- **MINERALSCAN 1500 On-belt Natural Gamma Minerals Analyser**
- **MINERALSCAN 2100 On-belt Density Analyser**
- **CM 200 On-belt Conductive Material Moisture Analyser**
- **GEOSCAN-R On-belt Elemental Analyser for Recycling**
- **TBM 280 Through Bale Moisture Monitor**
- **CM 200-R On-belt Conductive Material Moisture Analyser for Recycling**
- **BALZSCAN 9500X On-belt Elemental Analyser for Alternative Fuels**
- **BALZSCAN 2100 On-belt Ash Analyser for Alternative Fuels**
- **TBM 280 BaleScan Through Bale Moisture Monitor for Alternative Fuels**
- **GEOSCAN-C On-belt Elemental Analyser for Cement**
- **BLENDSCAN Process Control for the Cement Industry**
- **TBM 260 ReadMoist Through Bin Moisture Analyser for Concrete**
- **GEOSCAN-S On-belt Elemental Analyser for Steel**
- **CM 200-S On-belt Conductive Material Moisture Analyser for Steel**
- **COALSCAN 9500X On-belt Elemental Analyser for Coal**
- **COALSCAN 1500 On-belt Natural Gamma Ash Analyser**
- **COALSCAN 2100 On-belt Ash Analyser**
- **CIFA 350 Carbon in Fly Ash Analyser**
- **TBM 210/220/230/240 Through Belt Moisture Analysers**
- **TBM 260 Through Bin Moisture Analyser**
- **SIZESCAN Particle Size Distribution Analyser**



Scantech Products have
Patented Technology &
Registered Trademarks

ADELAIDE OFFICE

PO Box 64 Unley
South Australia 5061
AUSTRALIA
Tel: +61 8 8350 0200
Fax: +61 8 8350 0188

BRISBANE OFFICE

PO Box 1485 Springwood
Queensland 4127
AUSTRALIA

Specifications

Dimensions & Weight

Length	0.60 m
Width	1.30 - 1.80m
Height	1.28 - 1.50m
Weight	70 kg

Specifications subject to
change without notice.