Troxler Moisture Measurement System (MMS™)

(Model 3630)

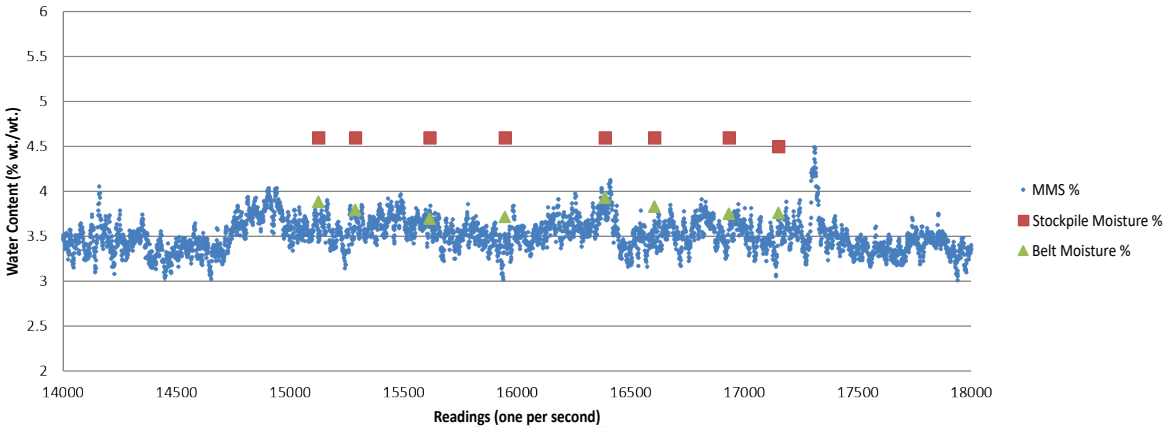
Measure Aggregate Moisture Content in Real Time

An Industry First from Troxler

Features	Benefits
Measures moisture accurately with less than ±0.5 percent weight precision for a five-second measurement	• Provides improved binder control and product quality/ pavement performance *(more like the mix design)* • Allows for better burner temperature control during drying, saving energy and reducing greenhouse gas emissions • Increases bonus potential
Measures the moisture content of any virgin aggregate	Allows an asphalt plant to measure the moisture content of all its mixes, regardless of their aggregate composition
Measures the moisture content of a large volume of aggregate at once *(85 percent of a conveyor belt)*	Presents a more holistic snapshot of the aggregate going into the drum
Measures moisture continuously in real time *(every second/4,000 data points per hour by default)*	• Depicts moisture fluctuations throughout the day • Shortens downtimes, especially after rain • Saves labor and technician time *(fewer stockpile measurements are required)*
Has no physical contact with the aggregate mix or the belt	Doesn't break or wear easily
Uses proven nuclear moisture and density measurement technology and is a generally licensed system	• Delivers a direct moisture measurement and eliminates potential mistakes in calculation/issues to do with rounding • Places minimal regulatory burden on a US plant
Is calibrated annually using materials on site *(a single calibration for all of a plant's mixes)*	Reduces calibration complexity significantly
Is compatible with most widely used control systems *(sends data directly to a system or displays it on a monitor in a control station)*	Provides full automation and traceable data

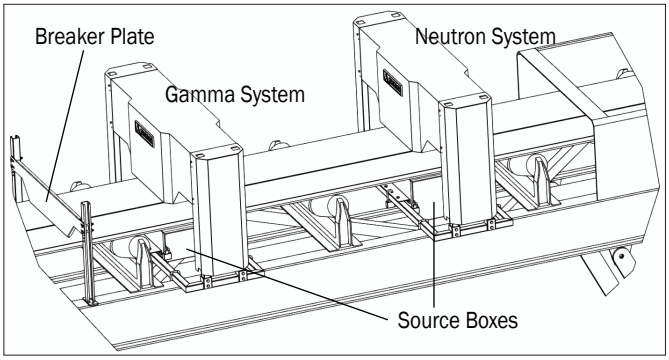
Measurement Sample

The following graph compares MMS data with belt samples and the percent moisture calculated by the plant (based on stockpile measurements) over a four-and-a-half-hour production period.



System Configuration

- The system is mounted on the virgin aggregate conveyor belt after the shaker.
- The two subsystems are six to ten feet apart.
- Within each subsystem, the detector is situated above the belt and the source below it. There is no physical contact with the belt.
- A breaker plate in front of the first subsystem levels off the aggregate, ensuring that there is no physical contact between it and the system.



Measurement Specifications		
Precision (Expressed As 1 Standard Deviation) @ 3% wt./wt. Moisture and 2.2 g/cm³ Density		
	5 Seconds	**10 Seconds**
3 in Thick Sample	±0.4% to ±0.5% wt./wt.	±0.3% to ±0.4% wt./wt.
4 in Thick Sample	±0.32% to ±0.4% wt./wt.	±0.25% to ±0.32% wt./wt.
5 in Thick Sample	±0.28% to ±0.35% wt./wt.	±0.22% to ±0.28% wt./wt.
Electrical Specifications		
Supply Voltage	120 VAC (±10%) 1 A 60 Hz	
Standard Signal Output for Automation	4 to 20 mA analog output	
User Interface	Laptop located in control tower	

Made in USA

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