You can't manage what you don't measure™
What is Sensortechnik?

Sensortechnik Optical Belt Scale is a contact free volumetric scanner. Using the latest laser technology, it effectively scans the material crossing the belt with a measurement accuracy of 1mm variance. Whether your conveyor is stationary or on tracked equipment, you can rely on the precise production data unaffected by external conditions. Beyond its practical measurement application, Sensortechnik is truly a management tool.

How does it scan?

To accurately measure the volume, Sensortechnik optical belt scale uses a volume data calculation to produce a 99.8% accurate result. First, the sensor measures the cross-profile of the material on the conveyor belt. Secondly, the sensor measures the feed rate of the conveyor belt by an inductive sensor. Finally, by combining the cross profile and feed rate measurements, the resulting material data is readily available in cubic meters, yards or tonnes, and stored in the Sensor for easy download.

How Sensortechnik Works

1. The sensor scans and measures the material on the conveyor, and in real-time, wirelessly transmits the data to your handheld device. From the handheld you can set Customer and Material profiles and configure scan settings. With a touch of a button you can download, print or email your measurement results directly to your office or main computer. Forget to email or print your data results? Have no fear, the Sensortechnik unit itself will store a full year of data. Simply download to your handheld device at anytime.

2. Receiving your data measurements in excel spreadsheets directly from the field allows you to review your site's production, see exactly when the equipment started, when it was down, and address operation performance issues as they happen. Your office team estimating costs for projects will receive specific data which allows for more accurate bidding, ensuring you turn a profit for all your hard work.
Understanding your Data:
Your Sensortechnik measurement data can be emailed easily to your computer as an Excel file (see diagram below). To understand your data, each of the columns is dedicated to a specific parameter:

- Start of Measurement (time and date)
- End of Measurement (time and date)
- Material Type
- Amount of material produced (yd³, m³, Tonne)
- Roll diameter (mm)
- Intervals, specific m² per 30 minute interval

How does this data improve my operation?
Your Sensortechnik measurement data provides you with an in-depth quantifiable performance metric which you can use to power business and operation decisions. Know exactly how much material your crew and equipment are processing daily.

By having the ability to monitor production, you can spot operational issues before they cost you money. Unexpected periods of downtime may be a sign of fundamental problems, such as, unsuitable machines for loading or preliminary work, non-matching capacities of the equipment, and possibly the inability to meet your customer demands. Paying workers during downtime or overtime can increase your operational expenses significantly. But with Sensortechnik, your production processes can be consistently analyzed to detect problems before they lead to costly downtime.

As you build your database of measurements over time, you will be able to spot performance trends in your data, and even potentially catch wear part replacements before they disrupt your operation. Your data spreadsheet shows daily, weekly and monthly viewing formats for easy reference. Data and metrics provide a solid operational foundation which empowers your decision making and business profitability.
Optical Belt Scale

Advantages

- Unaffected by wind, dust, temperature and vibration
- Unaffected by changing conveyor angle, particularly helpful on tracked equipment
- No moving parts
- Calibrate once!
- No contact areas

Smart Phone
- Weight: 172g (0.38lbs)
- Dimensions: 127 x 70 x 16 (6" x 2 3/4" x 1 1/2")

Printer
- Printer (Type H-55BT)
- Weight: 300g (0.67 lbs)
- Dimensions: 87 x 110 x 58 (3 3/4" x 4 3/8" x 2 7/8")

Adjustable Holding Frame
- Accommodates Scale size range from 24" up to 78" belt width
- Powder coated steel frame easy mount and demount (Fixed with only 4 bolts)

Volume Scanner
- Power: 24V DC +/- 20%, 5 A
- Operating Temperature: -40°C (-40°F) to +70°C (158°F)
- Dimensions: Standard sizes range from 24" up to 78" belt width
- Com-Port: Ver 1: RS-422 (1 line)
  Ver 2: Bluetooth (class 1)
  Ver 3: Analog output (0-20mA) *Optional
- Measuring rate: 200 frames / second
- Storage capacity: Production data over 1 year

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