



CONTI LoadSense

High-performance load monitoring
system for conveyor belts

CONTI LoadSense

Radar-based Volume Flow Measurement with belt monitoring.

Continental Industrial Solutions

Continental is the most comprehensive, high-performance conveyor belt systems provider in the world.

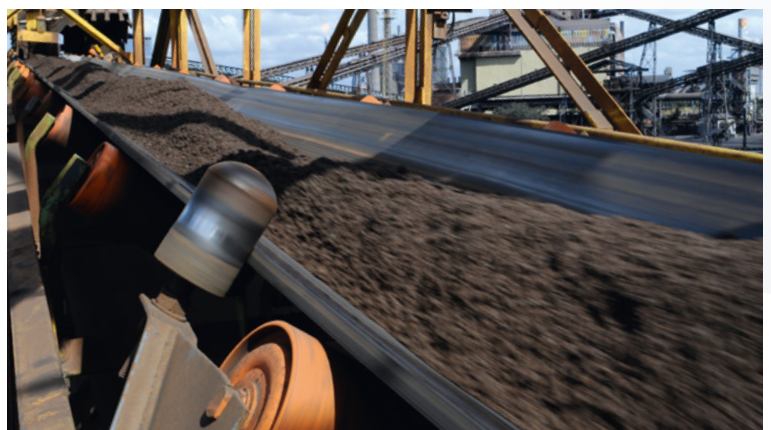
We offer a wide range of products, services and technologies for mining and industrial applications. Our full-service capabilities include planning and commissioning, technical advice, training, digital monitoring and on-site maintenance for the life of the conveyor operation.

As your global innovation and development partner, we strengthen mining, mineral processing and construction projects around the world. We do this by exceeding your specific needs and requirements. That's because we push the boundaries of what's possible by developing solutions for tomorrow's challenges.

Keep more material on your belts, reduce cleanup and boost your operational efficiency with CONTI LoadSense. This stationary system monitors material flow 24/7 by utilizing radar and ultrasonic technologies to measure the material profile on the belt and load on the entire belt as it moves.

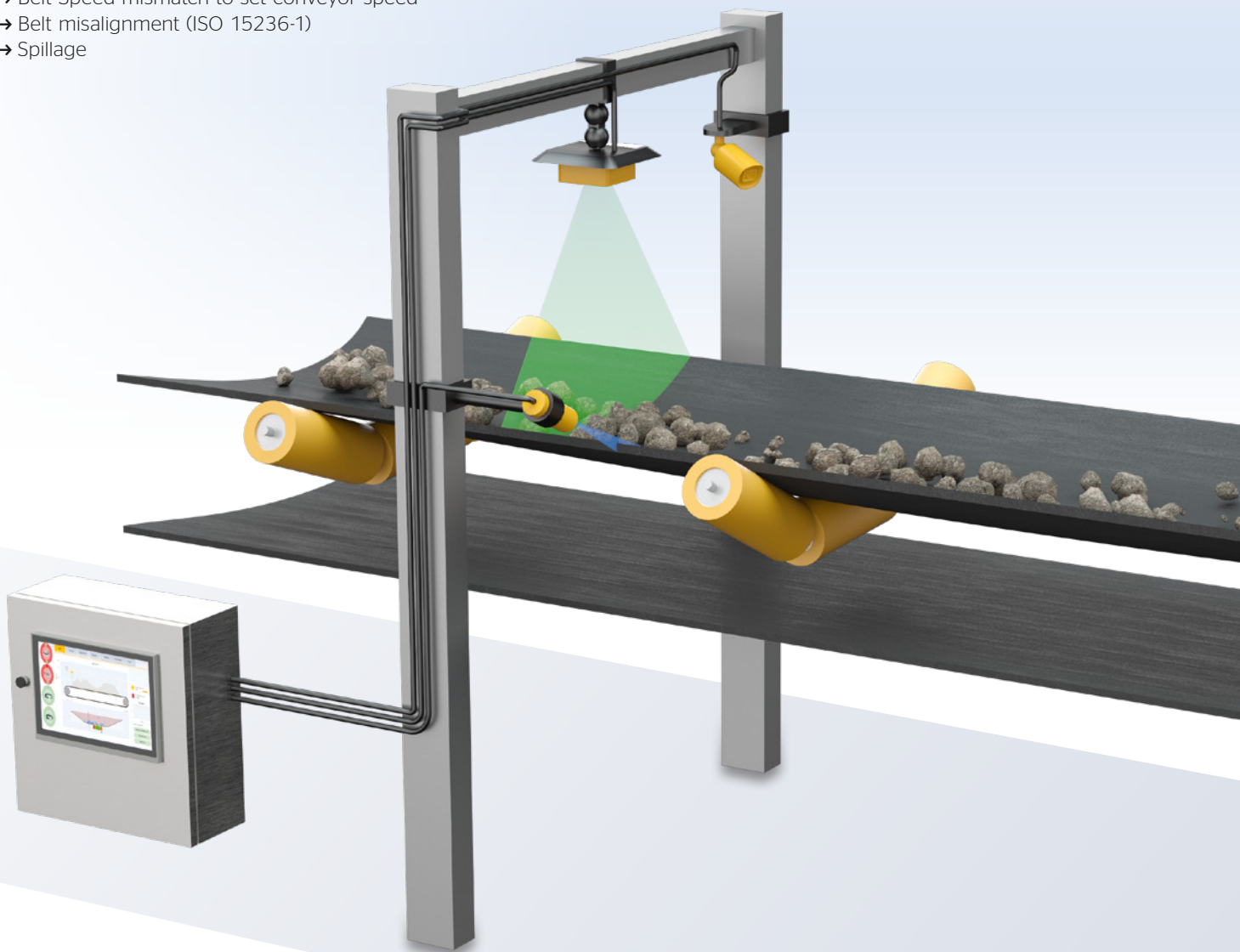
A smart combination and correlation of our sensors allows for the detection of material spillage and inconsistencies in the belt's alignment.

The advice of our industry-leading process monitoring algorithms can boost your profits in real time.



Key System Features

- › Volume flow measurement (live and historical data)
- › Spillage monitoring
- › Load tracking
- › Center of load on belt
- › Load distribution over complete conveyor length
- › Belt speed measurement
- › Belt alignment monitoring
- › Process performance tracking using flexible & industry standard thresholds
- › Various configurable alert outputs:
 - Empty belt
 - Total weight on belt overload
 - Cross-sectional overload (DIN 22101, CEMA)
 - Belt Speed mismatch to set conveyor speed
 - Belt misalignment (ISO 15236-1)
 - Spillage
- › Event-based image capture and live video stream
- › System self-diagnostics
- › Machine Communication Options:
 - MODBUS
 - HTTP API
 - OPC UA
 - ProfiBUS (on demand)
 - ProfiNET (on demand)



CONTI LoadSense Benefits

- › Quick and easy installation and commissioning
- › Conveyor Process Performance Tracking
- › Contact free measurement, without wear requires low maintenance
- › Reliable and precise measurement under all environmental conditions
- › Real-time and historical information and system alarms
- › Hardware extendable, PLC based System
- › Remote technical support and software updates



Works In A Variety of Applications & Materials

- › Delivers process, machine and inventory control parameters and signals
- › Replaces high maintenance belt scales
- › Volume based process control for crushers in open pit mining applications
- › Works with above ground and underground belt systems
- › Allows for optimal utilization of your belt by measuring the center of gravity
- › Mixing processes fully controlled by multiple material volume measurements on feeding conveyors
- › In-feed and out-feed material control of ports (for ship loading and piling)
- › Material flow measurement for tunneling machines and to control material discharge on different pits
- › Overload, spillage, belt misalignment detection on standard conveyors

Technical Key Data

Belt Speed	max. 16 m/s
Belt Width	800 mm (31.5") up to 3200 mm (126")
Temperature Range	-25 °C up to +70 °C
Radar Operation Frequency	76-77 GHz
IP Class	IP6K9K (Radar Sensor)
Input Voltage	115 VAC / 230 VAC
Current	1A / 0.5A
Relays	8
Digital Inputs	4
Analog Inputs	16

Materials



Stone



Gravel



Sand



Ore



More

Environment



Rain



Storm



Dust



Bad visibility



Heat



Cold



Snow



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