

Conveyor Volume Flow Control

Production control & optimization with real-time conveyor data



Our Conveyor Volume Flow Control measures belt load, speed and misalignment highly accurately and in real time for production control, machine optimization and belt wear reduction. This precise and reliable system has many advantages over existing technology. Its ease of installation and light weight mean it can be placed virtually anywhere, enabling new kinds of control loops for your machinery.

Three main functions

Belt volume flow measurement:

For 2D surface profile measurement of the load on a belt a robust indurad radar sensor is installed over the conveyor belt. The belt speed and volume flow are thus calculated. The volume flow is directly available in cubic meters, cubic yards or other formats via HMI or for PLC/SCADA integration.

Load speed measurement (optional):

For load speed measurement the velocity radar sensor is installed above the belt with a clear view of the material stream. The sensor captures both the low and high speed, and can distinguish between the speed of the load and the belt. This unique property is especially important for precise results on steep conveyors.

Belt misalignment and freeboard tracking (optional):

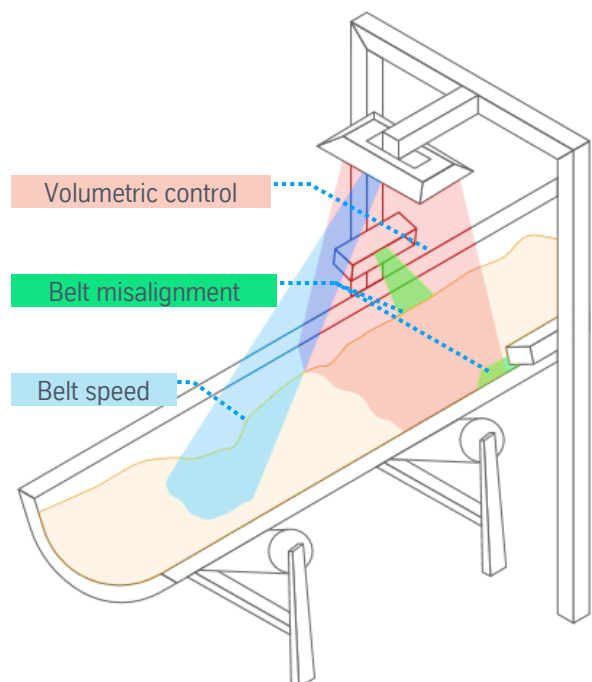
Two high-precision radar sensors on each side of the conveyor belt measure the distance to each belt edge with millimeter precision. The real-time offset between both values enables any emerging misalignments to be detected in split seconds. The measured distance between the belt edge and the belt load allows for continuous and reliable freeboard measurements.

Additional benefits:

In combination with material density the solution can also calculate the mass flow. In combination with a belt scale the solution can calculate the material density.

How you benefit

- Less error and calibration than belt scales
- Easy installation
- High reliability
- Low weight allows installation on moving machines or long booms , thus lowering machine stress



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engineering.tomorrow.together.

360° Service

Service solutions throughout the entire life cycle of your plant



thyssenkrupp



Parts & supply management

We are the experts when it comes to the supply of spare and wear parts for your plant – over the entire lifetime, at the right time and with the right quality.

Spare parts supply

- All spare parts and components for your asset in OEM quality
- Always state of the art technology with guaranteed functionality
- Attractive frame contracts and supply agreements

Wear parts solutions

- Development of wear parts according to your requirements
- Individual solutions in regards of quality and performance
- Innovative wear parts concepts

Advanced parts solutions

- Engineering and manufacturing of individual spare parts
- Continuous further development of spare parts and components in order to increase the performance of your plant
- Spare and wear parts for plants genuinely not developed by thyssenkrupp



Field & workshop services

We offer you local assistance when it comes to overhauling spare and wear parts, or when maintenance and servicing is needed.

Technical inspections

- Forward-looking inspections of machines and components

Repairs and field support

- Fulltime site support and advice after handover of equipment
- Fault identification and emergency repair of components
- Installation and dismantling
- Equipment adjustments and alignments

Workshop services

- Local fabrication of spare parts
- Refurbishment and supply of thyssenkrupp and third party components

Operator & maintenance training courses

- Customer training for all areas of thyssenkrupp portfolio
- Utilization of product experts within thyssenkrupp's global network



Revamps & outages

Over the course of time, demands change. In order to meet these changed demands, we offer you custom-tailored revamp solutions.

Analysis, engineering and manufacturing

- Plant status and environmental analysis and assessment
- Feasibility studies
- Basic, front-end and detail engineering
- Manufacturing of individual equipment

Plant improvements

- Custom-tailored revamps and retrofitting solutions
- Debottlenecking through capacity extensions
- Efficiency enhancement through modernization and upgrades
- Emission reduction
- Safety and integrity upgrades
- Reliability improvement

Revamps execution up to EPC

- Execution of complex revamp and outage projects
- Execution of EPC revamp projects
- Custom-tailored risk and profit sharing models

Turnaround management

- Management of plant turnarounds



Asset management

We offer you a holistic asset management approach in order to reduce the overall operating expenses of your plant.

Consulting & audits

- Evaluation and assessment of effectiveness and efficiency
- Process mapping and gap analysis
- Derivation and supervision of improvement measures

Technical guidance

- Implementation of improvement measures
- Technical improvement of existing machines and components
- Strategic analysis and future planning
- Improvement of processes and procedures

Operation & maintenance contracts

- Complete or partial take-over of maintenance and/or operation activities
- One-stop operation and maintenance solutions including parts and consumables
- Custom-tailored business models focusing on a win-win situation

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