



Argos[®] systems

Level 3 straight tracks and curves

Measuring point for derailment safety

Prevention – statistical derailment safety –
identification of risk factors

Argos[®] systems is a Product of:



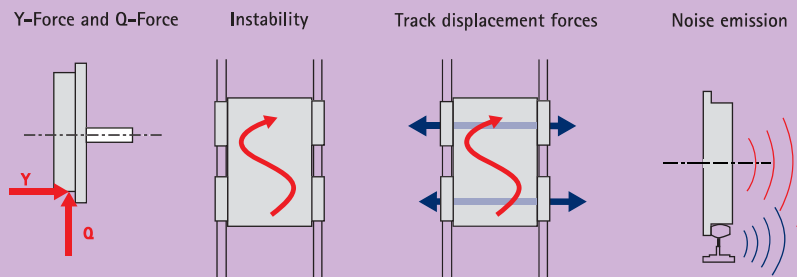
Level 3 straight tracks and curves

Measuring point for derailment safety

Prevention – Measuring point for derailment safety on straight tracks

Comprehensive solution on straight tracks for reliable detection of risk and cost factors of derailments and overload due to: Y- and Q-force, load status, train formation, instabilities and/or out-of-round wheels (singular, periodic and random deviations)

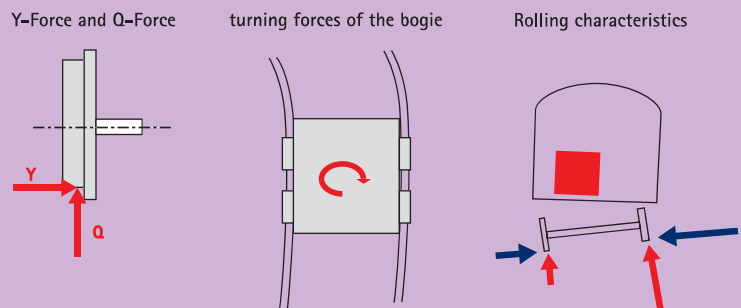
Argos® systems, Level 3 straight tracks, measuring point for derailment safety



Prevention – measuring point for derailment safety in curves

Comprehensive solution for curves- reliable detection of risk and cost factors of derailments and overload due to: Y- and Q-force, derailment factor, load distribution, train formation, compliance with curves, turning forces of the bogie, rolling properties, rail displacement

Argos® systems, Level 3 curves, measuring point for derailment safety



Positioning:

- straight tracks and curves respectively
- slab track or track with ballast superstructure

Properties Level 3, straight tracks and curves

- early detection of exceeded limiting values:
 - Q – wheel load
 - Y – lateral wheel force
 - Y/Q – derailment coefficient
 - ΣY – track displacement forces
- continuous dynamic monitoring of lateral wheel force (Y-force)
- continuous dynamic wheel load monitoring (Q-force)
- measuring results within 120 sec.
- measurements with long-term stability
- no foundation necessary
- maintenance not impeded
- basic data for calculation of infrastructure usage fees
- parameters for demand-driven maintenance of vehicles and tracks
- detection of vehicles prone to derailment

- prevention of damage to track

Specific properties Level 3, straight tracks

- continuous technical monitoring of traffic (wheel/axle loads, out-of-round wheels, etc.)
- early detection of exceeded limiting values:
 - unstable vehicle run
 - wheel shape irregularities (wheel running tread and tread of wheel)
- optional integration of monitoring of noise and vibration levels

Specific properties Level 3, curves

- continuous technical monitoring of curve traffic (load / forces, height of centre of gravity, yaw torque, etc.)
- early detection of exceeded limiting values:
 - angle of attack behaviour
 - turning forces of the bogie
 - rolling properties
 - height of centre of gravity