Diverter 360

SmartService - higher asset availability with data analytics



The challenge

Efficient, automatic diverting of singulated items is essential for maximizing overall performance. A diverter is a critical asset in this regard.

The K.Handle VarioRoute uses multiple intelligently controlled roller units to reliably divert items to right direction e.g., to the sorting loop.

Due to the criticality of the device in the processing chain, it is important to detect developing mechanical problems of the installed motors as early as possible.

Our solution

Diverter 360 provides transparency on the condition of drive units. During operation AI-based algorithms detect anomalies that indicate which roller units are not working as they should or may be about to fail.

With this information, it becomes possible to identify the component that requires maintenance and/or repair.

Predictive analytics with Diverter 360 let operators plan maintenance according to the actual system condition.

Customer benefits

- Increased system reliability and availability feasible due to predictive analytics and transparencs of asset condition
- Reduction of time-consuming preventive maintenance work
- Efficient workload coordination based on 24/7 monitoring and analysis
- Proactive maintenance through detailed and early localization of mechnical problems
- Fast, full diagnostics at a glance using modern dashboard visualization



Just-in-time maintenance

Condition monitoring as described here forms the basis for predictive analytics, which entails processing data with algorithms to provide end-of-life information on components. When predictive analytics are embedded in a maintenance plan, benefits include just-in-time equipment servicing, a balanced workload for the service team, as well as optimized spare parts utilization and stock management.

Above and beyond that, by streamlining maintenance higher levels of operational availability can be achieved while increasing efficiency, productivity operationally and in maintenance teams.

Analytics and visualization concept

The captured condition data – and additional statistics such as operating hours and asset start and stop times – is transferred to intelligent data hubs for advanced analytics.

This has two targets: to analyze the collected information and to visualize insights for the maintenance teams.

