Reliable Monitoring of Cartoning Machines

VOC Industrial Event Camera Identifies Recurring Machine Downtime

At a Glance

- Event-driven video recordings up to 900 s before and after the trigger signal for simple remote diagnosis or automatic documentation
- Fast analysis: recording of relevant situations with timestamp and individual additional text
- Flexible use due to large field of view, high operating temperature range, and IP65 degree of protection
- Access via web browser or individually programmed user interface

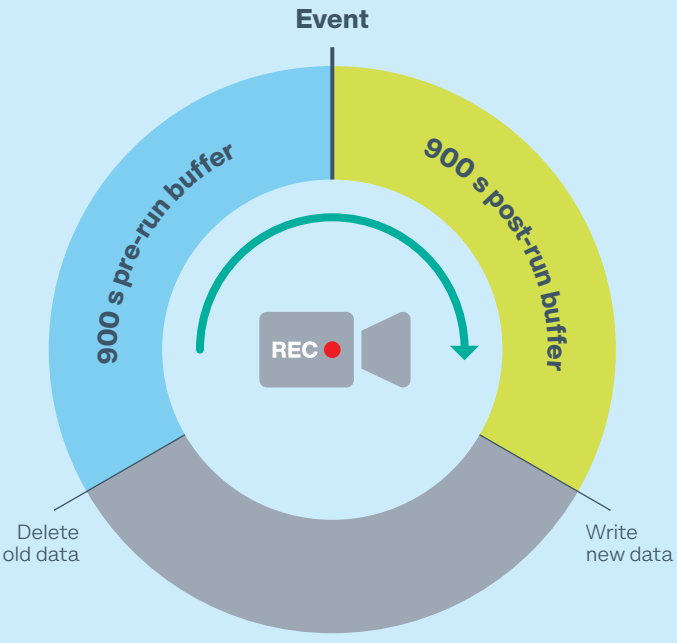


The Application

Cartoning machines in the packaging industry may experience jams during operation. Such jamming occurs when there is a blockage or obstruction in the system that prevents the smooth movement of cartons or packaging materials through the machine. There are many causes of jams, including misaligned or improperly folded cartons, problems with the packaging material, foreign objects, or mechanical failures.

The Goal

While regular maintenance can ensure a cartoning machine is in its optimal operating condition, in the event of a fault, the focus of troubleshooting should be on identifying the root cause of the problem. This allows shutdown measures to be taken and downtimes to be minimized. The ability to monitor machine operation in real time provides a solution approach for continuous improvement.





The Solution

The VOC industrial event camera monitors cartoning machines at distances of 0.05 meters to more than 10 meters, allowing reliable detection of recurring failures. The industrial event camera has an integrated circular buffer to record up to 900 seconds before and after a triggered event. The VOC can be easily integrated into existing machines and provides the ability to trigger video/image capture via UDP, web interface, REST API, or a digital hardware input.

The Benefits

With the VOC industrial event camera, processes in cartoning machines can be monitored and the current situation displayed via livestream—allowing a view into the machine in real time around the clock. In addition, the industrial event camera provides image and video sequences for analysis and documentation up to 900 seconds before and after the trigger signal. Causes are therefore reliably identified and downtimes minimized.

Technical Features

- Full HD video livestream via WebRTC stream or real-time streaming protocol (RTSP)
- Digital hardware input for trigger sensor or trigger signal
- Internal circular buffer for video sequences 900 s before and after each event
- Integrated 8 GB memory stores up to 10,000 sequences
- Quick and easy classification of the relevant recording
- REST API for comprehensive integration into IT systems
- Temperature range of –30 °C to +50 °C
- IP65 degree of protection
- Encrypted data transmission through HTTPS protocol



For more information, visit: **pepperl-fuchs.com/px-voc**