

WARRINGTON, UK, JULY 16, 2019

UK coatings firm selects ABB Ability[™] Condition Monitoring to help reach zero downtime goal

Transcontinental Advanced Coatings extends successful pilot of ABB's smart sensor monitoring and predictive maintenance solution as it aims for zero downtime.

Industrial coatings producer Transcontinental Advanced Coatings has successfully piloted ABB Ability[™] Condition Monitoring on critical equipment at its UK facility. The manufacturer used the pilot project to enhance the existing predictive maintenance regime on a critical oxidizer process that cleans the air before it's released to the atmosphere.

ABB Ability™ Smart Sensors – fitted to the motors and mounted bearings that operate on the oxidizer's two fans – collect and analyze data to monitor performance. The system alarms if pre-defined limits for parameters such as temperature and vibration are exceeded. This enables preventive maintenance to be carried out before problems occur.

Transcontinental Advanced Coatings – based in Wrexham, North Wales, UK, and Matthews, North Carolina, United States – makes precision coated papers, films and specialty substrates for digital imaging, electronics, medical and optical technologies. Based on the success of the pilot project, the company will extend the remote condition monitoring solution to an entire production line in its Wrexham facility.

"Our overall goal is zero downtime. ABB Ability™ Condition Monitoring ensures we can identify equipment issues early on – before they happen – and take action to prevent breakdowns from occurring," says Dr. Keith Vidamour, Engineering Manager for the Transcontinental Advanced Coatings North Wales plant. "Conducting maintenance as needed rather than on a fixed schedule will help us improve reliability and process control."

Previously, the company relied on monthly manual monitoring of the fans' motors and bearings using thermal imaging, oil sampling, and vibration analysis. These tests were only a snapshot of the condition of the process rather than a continuous real-time picture. The results also relied on an individual engineer's interpretation.

"We are keen to move to a more objective, more data-based condition monitoring regime," says Dr. Vidamour. "We are now monitoring additional parameters and have access to far more objective information than ever."

The second phase of the project will use multiple smart sensors to remotely monitor the motors and bearings throughout a process, together with up to four Bluetooth gateways connecting with ABB's secure server. Ultimately, the company will roll out the solution across its global platform.

"Transcontinental Advanced Coatings wanted to prove that the condition of critical machinery could be remotely monitored," says Derek Robinson, ABB's Key Account Manager for High- and Low-Voltage motors. "The successful trial proved they could significantly improve overall maintenance efficiency. The company's decision to continue to add additional ABB Ability™ Smart Sensor technology will give it a real competitive edge."

ABB (ABBN: SIX Swiss Ex) is a pioneering technology leader with a comprehensive offering for digital industries. With a history of innovation spanning more than 130 years, ABB is today a leader in digital industries with four customer-focused, globally leading businesses: Electrification, Industrial Automation, Motion, and Robotics & Discrete Automation, supported by its common ABB Ability™ digital platform. ABB's market-leading Power Grids business will be divested to Hitachi in 2020. ABB operates in more than 100 countries with about 147,000 employees.

Transcontinental Advanced Coatings, part of TC Transcontinental, develops, creates and manufactures high-quality coatings for films, foils, and all other specialty substrates that enhance, strengthen, and protect the products that touch our everyday lives. From polyurethane films and foams used in wound care, ostomy and medical devices to conductive coated films and foils used in batteries and communications systems, Transcontinental Advanced Coatings partners with the most respected brands in the world to supply reliable and precise solutions that are tailor-made to its customers' design and application requirements. With a network of ISO-certified production facilities in the United States and the United Kingdom, and a converting and distribution center in China, the company serves its customers on a global scale, providing flexible, personal support in real time to respond to their needs swiftly. For more information, visit www.tc.tc/advancedcoatings.



Caption: Transcontinental Advanced Coatings is using ABB Ability[™] smart sensors on motors and mounted bearings to achieve zero downtime of critical equipment



Caption: Transcontinental Advanced Coatings is extending ABB's digital condition monitoring solution to an entire production line following a successful pilot study on a critical oxidizer (pictured)

For more information, please contact:

Layla Hewitt
Marketing Communications

Phone: 01925 741517 Email: layla.hewitt@gb.abb.com ABB Ltd.
Daresbury Park
Daresbury
Warrington WA4 4BT

Emma Jenkinson
Armitage Communications
Phone 020 8667 2218
Email: emma.jenkinson@armitage-comms.co.uk