

TRUCONNECT® REMOTE SERVICE

# TRUCONNECT Brake Monitoring





# Continuous knowledge of brake condition

The hoist brake is one of the most critical wearing components in a crane. In heavily-used cranes the service lifetime of brake wearing parts may end sooner than expected. Additional inspections also require crane shutdown and provide only a snapshot of the current condition of the brake.

TRUCONNECT Brake Monitoring uses a condition monitoring device to collect the status of brake air gap, mechanical and electrical faults from the electromagnetic disc brakes. The service provides visibility into current brake condition, estimates remaining service life and indicates brake faults.

## Data security

TRUCONNECT and yourKONECRANES have been awarded ISO/IEC 27001:2013 certification for information security management. The ISO/IEC 27001 certificate demonstrates a commitment to proactively manage the information security of Konecranes digital services and ensure compliance with legal and customer requirements.

## Your brake data, online – any time

Brake Monitoring data is visible on the yourKONECRANES.com customer portal. Brake Monitoring information is used in predictive maintenance and can also be used for brake maintenance planning.

Data can indicate brake maintenance needs in advance and shows if air gap adjustment is proper after installation. The data also provides a clear picture of brake overhaul intervals and replacement history, especially with unexpected brake problems. Brake fault alerts can be sent by text message or email, so maintenance planning can be done in advance.

## A complement to Remote Monitoring

Brake Monitoring is designed to supplement TRUCONNECT Remote Monitoring – which collects condition, usage and operating data from control systems and sensors on an asset and provides alerts of certain anomalies.

## Brake Monitoring for new cranes or as a retrofit

TRUCONNECT Brake Monitoring is delivered with new Konecranes SMARTON and UNITON cranes. Retrofits are also available for most Konecranes hoist models and other existing cranes if equipped with electromagnetic disc brakes.



## Brake data on yourKONECRANES

- 1 The hoist brake design working period is estimated using the number of hoist motor starts and number of emergency stops issued during lifting/lowering motion. A brake replacement should be scheduled when the remaining brake life is at 30% or below.
- 2 The estimated service life of the hoist brake is shown in this graph. Replacements are noted and the trends in the service life of the brake can help with maintenance planning.
- 3 This graph shows opening current value. Brakes need special attention and maintenance planning when the value is below 30% or when the value is dropping rapidly. When the value is below 15%, brake air gap and friction material must be inspected.

## BENEFITS

- Provides visibility to brake condition between normal inspection visits
- Helps minimize the risk of load drop with the detection of brake faults
- Helps you avoid unnecessary brake disassembly for inspection
- Enables predictive brake maintenance
- Assists in further optimization of maintenance activities to reduce unplanned downtime and to improve equipment safety, productivity and lifecycle value

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