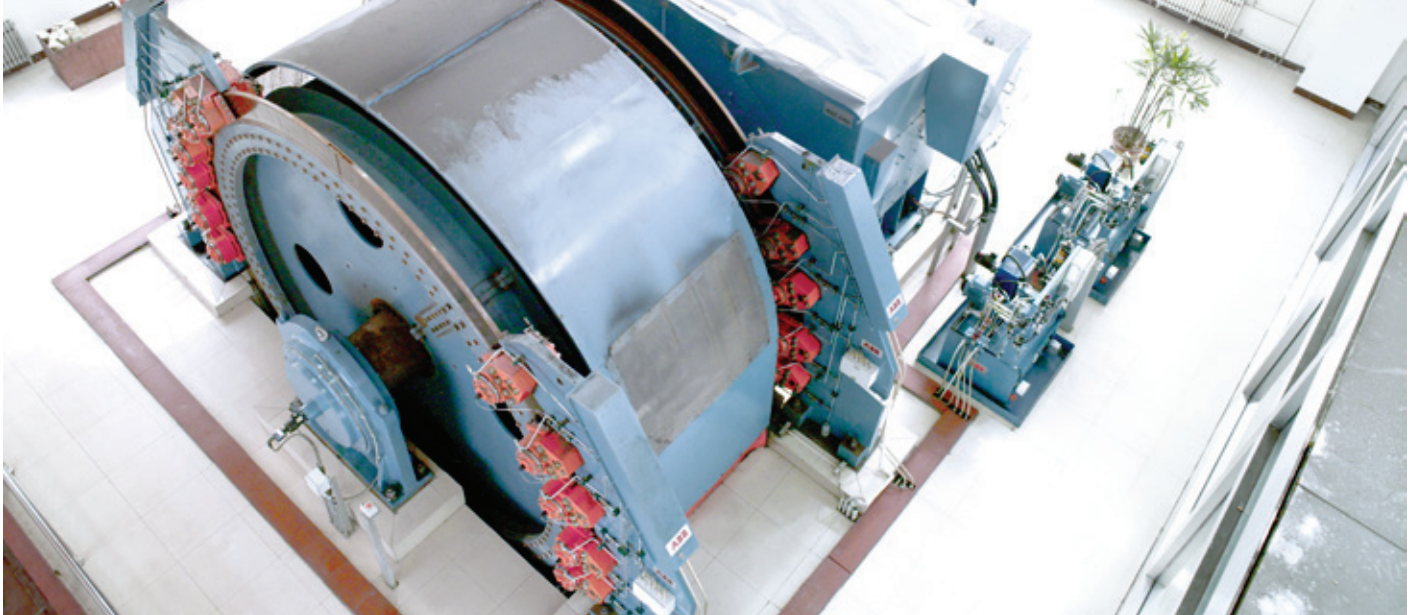


Hoist Fingerprint

Condition and performance control



Hoist Fingerprint is a condition and performance control system for the ABB mine hoist system and for other makers as well. This service gives our customers rapid access to ABB mine hoist expertise since it works directly with our local ABB units or with our customers.

ABB delivered its first complete mine hoist in 1937. Since then, more than 600 units have been installed all over the world. High speed and heavy loads with high safety and performance demands require advanced technology for drive, control and brake systems. Qualified maintenance personnel and fast access to competence are necessary to maintain high safety, high performance and availability. ABB offers mine hoist services for condition and performance control to maintain the equipment in “as commissioned” condition. ABB has a unique capability to engineer, deliver, install and provide after sales service for entire mechanical and electrical mine hoist systems of all types. Our global presence means that ABB is always close to its customers.

Features

- Secure, fast access to competence
- Identification of needs for improvements and upgrades
- Prioritization of contracted customer

Benefits

- Fast detection of abnormal conditions which may impact health and safety
- Consistently high level of safety
- Consistently high level of availability

Description of service

The Hoist Fingerprint consists of high resolution data collected from over 20 predefined points in the hoist system. This data forms the basis for further analysis and a comprehensive report. The data will provide the necessary information for the Center of Excellence Underground Mining, CoE UGM, in Sweden. to analyze the hoist regarding both electrical and mechanical safety issues.

The analysis will detect problems that could, if they are not corrected, cause future problems in production, such as safety issues, loss in production or damage to equipment.

It might also be useful to order the service whenever a problem occurs. Our experts will use the same equipment and methodology to analyze the problem and give recommendations.

Workflow

Local ABB or customer records:

- Revolution/Hoist speed
- Performance check on hoist cycle
- Hoist weight balance measurement
- Retardation curves
- Brake curves Start/Stop
- Motor current/Normal operation
- PG/TG Control
- Brake test/Emergency stop

The CoE UGM in Sweden will analyze the recordings made above. The analysis of the recordings performed will be reported in a protocol in a preferred format.

The protocol will also include recommendations on measures to be taken to address any faults that have been found.

ABB Argus Measuring System will be used for the recordings.

Training

ABB Mine Hoist Service can offer training and certification on:

- Argus Measuring System
- Brake System
- Hoist Control System

Technical data

Analogue channels

Measuring range:	± 1 V till ± 1.5 kV DC / 1 kV AC CAT III
Resolution:	12 bit
Sampling speed:	5 μ s per channel
Input impedance:	1 MW 47 pF
Anti-aliasing filter:	Automatically set depending on sampling time in HW and SW

Measurement memory size

Limited only by the PC hard drive.

E.g. 240 GB stores six channels with 30 μ s sampling time once a week.

Communication with PC

Standard Ethernet 10–100 Mbit full duplex.

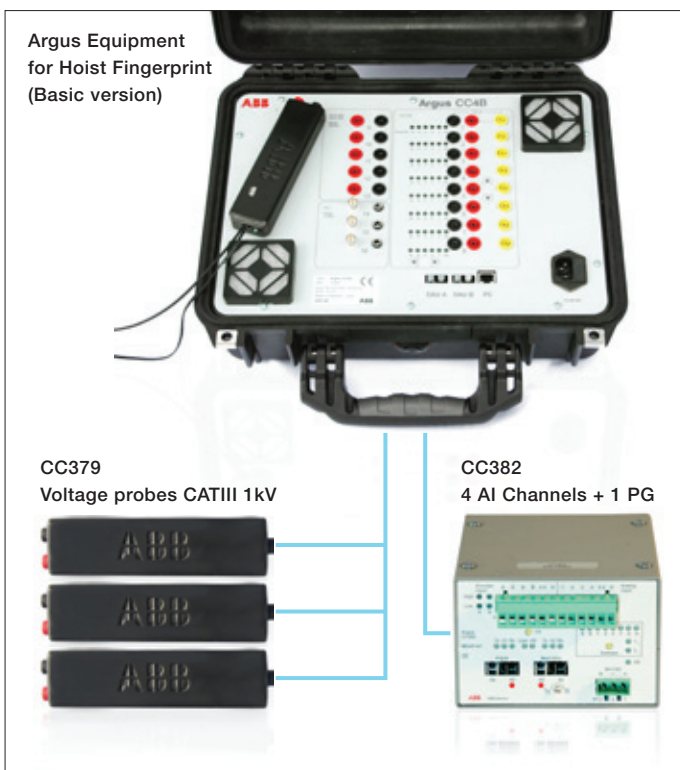


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Mine Hoist Service

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ABB's Business Unit Minerals is represented in the following countries:

Australia, Brazil, Canada, Chile, China, Egypt, Estonia, Germany, Greece, India, Indonesia, Latvia, Lithuania, Malaysia, Mexico, Norway, Oman, Peru, Poland, Saudi Arabia, South Africa, Spain, Sweden, Switzerland, Thailand, USA and Vietnam.

For contact details, please visit our website:

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