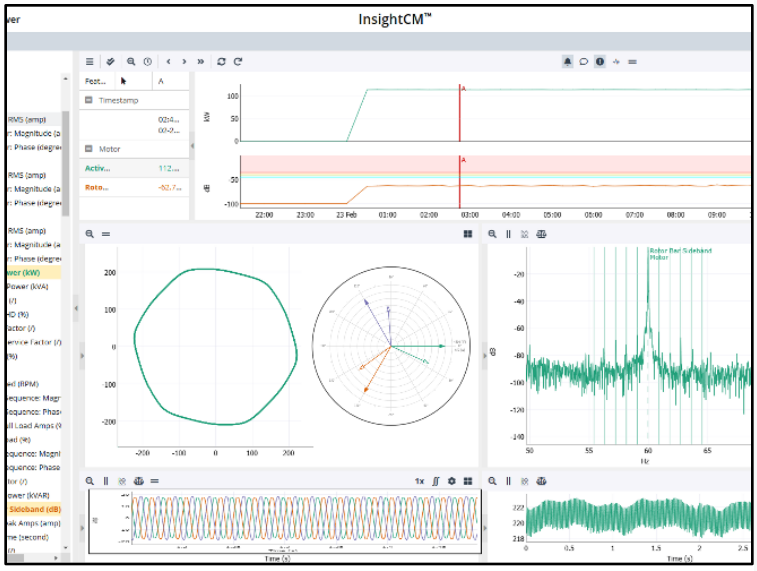

AT A GLANCE

- **Remote commissioning:** Performed by our Reliability Services team, typically within 30 days after installation
- **Configured to your plant:** Your asset tree, naming conventions, user accounts, roles, and permissions
- **Verified data and initial alarms:** We confirm data is successfully flowing before hand-off
- **Documented sign-off:** A completed commissioning record that you approve
- **Multi-Physics technologies:** Vibration, ESA, EMI, infrared, shaft ground, rotor flux, generator field, and BCM

The road to a managed reliability program

Strategy | Assessment | Planning | **Implementation** | Improvement

InsightCM Commissioning Configures your new monitoring system in InsightCM and verifies the data

A monitoring system delivers value only when its data reaches your team. After a Cutsforth monitoring system is installed, we configure it in your new or existing InsightCM condition monitoring software, confirm the data is flowing, and set up the alarms, so your team can start using the system with confidence.

When do you need commissioning?

It fits whenever a new Cutsforth monitoring system is installed.

- Have you installed, or are you about to install, a new Cutsforth monitoring system?
- Are you installing InsightCM for the first time, or adding a system to an existing installation?
- Do you want your asset tree to follow your own naming conventions and hierarchy?
- Do you want data verified and initial alarms set before the system goes into service?
- Does your team need a walkthrough of the InsightCM web client?
- Are you trying to stand up a new monitoring system fast and want to ensure the data is flowing correctly?

How commissioning works

We commission remotely, with a contact on your team who has access to the InsightCM server. Every technology follows the same four steps, with tuning specific to the technology.

STEP 1
Connect
We help install InsightCM, validate network connectivity, and add your monitoring system.
REMOTE

STEP 2
Configure
We set up user accounts, roles, and permissions, build your asset tree, map sensors, and push the device configuration.
REMOTE

STEP 3
Validate
We confirm data is successfully flowing, then set initial alarms and thresholds or tune to your unit.
REMOTE

STEP 4
Hand off
We walk you through the web client, review support contacts, and complete the commissioning record.
SIGN-OFF

Technologies we commission

Technology	What we set up
Wired and wireless vibration	We add devices, gateways, and sensors; map channels and set operating states and initial alarm thresholds.
Electrical signature analysis (ESA)	We map sensors and channels and create baseline alarms for rotor bar sidebands, current unbalance, voltage unbalance, and torque ripple.
Electromagnetic interference (EMI)	We map sensors and channels, then meet with you after 30–45 days of operation to run a final system check and set initial alarms.
Infrared (IR) thermography	We discover connected cameras, verify aim, focus, and field of view, and define regions of interest (ROIs) and temperature deltas.
Shaft ground	We map shaft voltage, ground current, and rope wear indicator signals, collect baseline waveforms across startup and load, and set the operating state. A final system check follows 30–45 days later.
Rotor flux	We use the Cutsforth rotor flux asset template, map the flux probe and speed signals, collect baseline waveforms across startup and load, and tune signal processing to your unit. A final system check and initial alarms follow after 30–45 days of operation.
Generator field	One system that combines shaft grounding and rotor flux monitoring. We map its sensors and channels and set initial alarms and thresholds.
Brush condition monitoring (BCM)	We deliver a loop-checked, tested Modbus register mapping file for each BCM system, build the asset tree with your data source, and test with you that each system reports correctly.

What is not included

You can do these yourself with the documentation at Cutsforth.com/Support, or buy them as additional services.

- Analysis of the data acquired. Our M&D services can review it for you.
- Historian, distributed control system (DCS), or other system integration.
- Importing data sources, such as PI, Modbus, or OPC UA.
- For BCM, connecting the system to your control network.

What you receive

- **A commissioned system:** devices added, sensors mapped, configuration validated, and data collection verified
- **Your InsightCM set-up:** asset tree following your naming conventions and hierarchy, plus user accounts, roles, and permissions
- **Initial alarms and thresholds,** or baselines and tuning, depending on the technology
- **A web client walkthrough** and your support and escalation contacts
- **A commissioning record** (the InsightCM Commissioning Workbook) with your sign-off
- Commissioning is sold and performed per system

What we need from you

- Provide a server that meets Cutsforth minimum specifications, with the latest InsightCM installer and device image files from our licensing team.
- Tell us when hardware installation is complete, so we can schedule commissioning.
- Give us remote control of the InsightCM server through a Microsoft Teams screen share, secure remote desktop software, or remote desktop (RDP) access.
- Assign static IP addresses to the server and monitoring devices and open the firewall ports they need.
- If you installed the equipment, verify that the correct image is on the monitoring controller. We will do this if Cutsforth installed it.

Some technologies add requirements:

- **Infrared:** mount cameras with a clear line of sight to the target, with power and data cabling complete.
- **Wireless vibration:** power the gateways and place them with adequate signal coverage.
- **Rotor flux:** provide the generator's number of poles, slots per pole, windings per coil, and MW capability.
- **BCM:** provide the network IP address for each BCM system.

The Cutsforth Reliability Services Team

Consulting Services	System Implementation	Monitoring & Diagnostic Services

Cutsforth is one of the few companies that combines deep reliability consulting experience with multi-physics condition monitoring system expertise. Our reliability services team has decades of hands-on, plant-floor experience in equipment reliability and asset performance management.

We help industrial organizations define, plan, and implement ER and AM programs, establish M&D Centers, and apply continuous online monitoring. Our approach is consistent with ISO 55000 and with the good-practice ER process in INPO AP-913 and EPRI guidance.

CONSULTING AND PROGRAM SERVICES

- ER and AM program definition, planning, and implementation
- Asset criticality analysis (ACA), sensor gap analysis, and master equipment list foundational data services
- M&D Center assessment, set-up, and deployment

TECHNOLOGY AND MONITORING

- InsightCM condition monitoring software
- Multi-physics monitoring systems, including vibration, electrical signature analysis, electromagnetic interference monitoring, thermography, and more
- Monitoring and Diagnostic services with industry-veteran subject-matter experts in condition monitoring

Schedule your commissioning

Tell us when installation is complete and we will set a date.

Request an InsightCM Commissioning scoping conversation

Contact your Cutsforth representative or visit cutsforth.com.