



Reduce the risk of unplanned downtime in rotating equipment

EcoStruxure™ Service Plan for Rotating Equipment

Electric motors are a major prime-mover and an integral part of industrial operations. Motors account for up to 90% of the energy consumption in heavy process industries, making their availability and performance critical to operations profitability.

EcoStruxure™ Service Plan for Rotating Equipment addresses your needs on:

- High failure rates of rotating equipment leading to costly downtime and unwanted repairs during operating hours
- Central monitoring of complex motor fleets from diverse manufacturers with the highest level of detection accuracy
- Monitor rotating equipment located in hard-to-reach or areas of harsh conditions including ATEX zones, where other sensor technologies cannot be installed

Bringing innovative features for condition-based monitoring for critical rotating equipment, we help you to mitigate the risks of motor failure. Further, it integrates seamlessly with our EcoStruxure Service Plans for electrical equipment upstream to the motor.

Benefits

- **Predictive maintenance effectiveness**
 - » Reduce electrical motor maintenance costs and extend motor lifecycle with earlier issue diagnoses
- **Improve uptime and site capacity**
 - » Detect potential failures weeks in advance and avoid downtime during site operating hours
- **Improve total cost of ownership and ROI**
 - » Higher detection rates drive to better financial efficiency in the midterm, with average payback of less than one year
- **Expertise at your fingertips**
 - » Deploy innovative technology with seamless IoT integration from the field to the cloud, driven by machine learning modelling, to monitor the health of your entire electrical system

Up to
**30%
lower**

total cost of ownership
over 10 years, compared
to other options

>90%

of failures detected, for
higher reliability than
other technologies

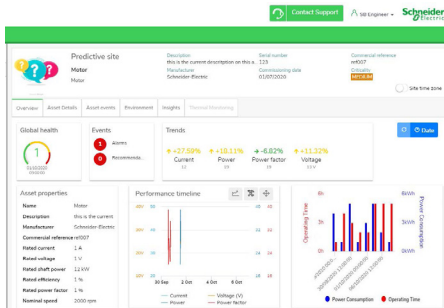
up to **4
months**

early detection of
subtle symptom
failures

How it works

EcoStruxure Service Plan for Rotating Equipment leverages a secure cloud connection from the Motor Control Center to the Connected Service Hub to enable advanced analytics and access to specialized expertise. Customers benefit from access to a comprehensive dashboard, support from CSH experts, prompt notifications and regular reporting.

Dashboard



Report



CSH Experts



Notifications from Connected Service Hub

Asset Details									
Asset events									
Environment									
Electrical data									
Thermal Monitoring									
Status									
Priority									
Apply filter									
Priority	ID	Ticket type	Ticket	Status	Ticket Owner	Creation date	Action	BFO Case	
High	6729	Recommendation	Control on Drive over voltage probability for Nuevo_Va...	Opened		2019-10-08 07:25:01			
High	6351	Recommendation	Control on Drive over temperature probability for Nuev...	In Progress	MURIOZ GODOFREDO	2019-09-20 07:07:54		To Case	
High	6937	Recommendation	Control on Drive over temperature probability for Nuev...	In Progress	MURIOZ GODOFREDO	2019-09-06 10:29:12		To Case	

Motor Current Signature Analysis (MCSA)

Conventional electric motors that drive loads act as transducers. The motor senses mechanical load variations and converts them into electric current variations, transmitted along power cables. These variations are processed by our solution, which analyzes waveform frequencies and indicates machine conditions, an early warning of deterioration or on-load process alteration.

Highest reliability for analysis

Rather than analyze vibrations, temperature or oil, our MCSA system analyzes AC current and voltage variations with machine learning models. This improves sensitivity and accuracy of failure mode identification and their causes, both mechanical and electrical. For example:

- Bearing, rotor, or coupling degradation
- Mechanical imbalance, pump cavitation, axis misalignments
- Winding degradation

For more information, contact your Schneider Electric Representative

Easy and scalable installation

Current transformers and voltage taps are installed in the MCC (Motor Control Center). Motor proximity is not required, which avoids exposure to the application environment. Once installed, a baseline learning phase creates normal operations models with machine learning.

Make data-driven decisions with our CSH

OT/IT convergence enables data transfer from sensors to Schneider Electric cloud via dedicated data acquisition device and gateway. Architecture-enabling services and operations strictly follow cybersecurity guidelines. Our experts at Connected Services Hub (CSH) are continuously monitoring your equipment's condition and ensuring the full architecture operate as planned.

Learn more about our
Connected Services Hub!

Stay informed about your equipment,
with 24/7 dashboard accessibility
and our remote experts.

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