

# Got Motors? Centenelle knows motors.

Centenelle offers industrial motor operators three value streams:

- Utility cost savings
- Optimized maintenance, reduced repair cost
- Unscheduled Outage Avoidance

DOE estimates a potential for 11-18% energy savings in industrial motor energy consumption. These savings may come from

- unnecessary motor operation
- outdated, inefficient motors
- updates to electronic drives
- use optimization

How do you know where the inefficiencies are in your plant? Process Improvement starts with knowing what your process is doing.

## Centenelle Process Improvement Loop

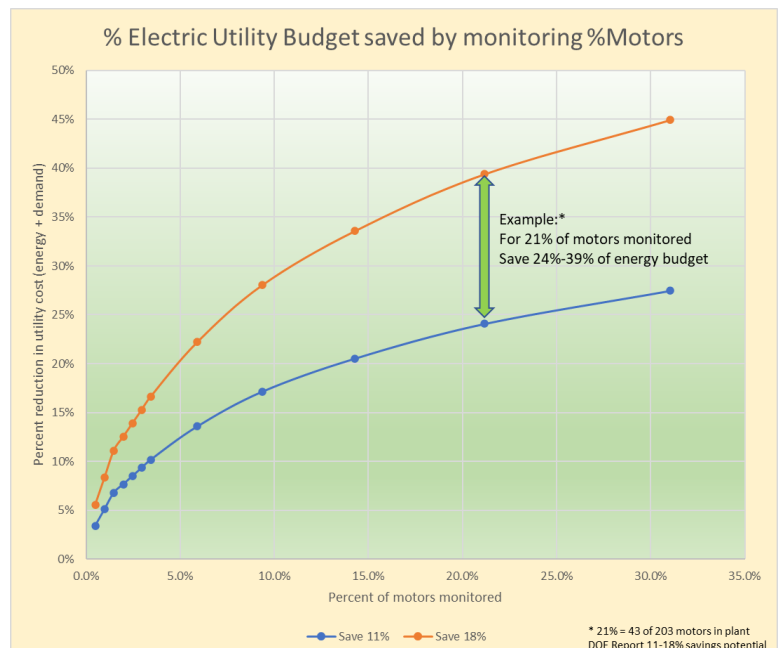
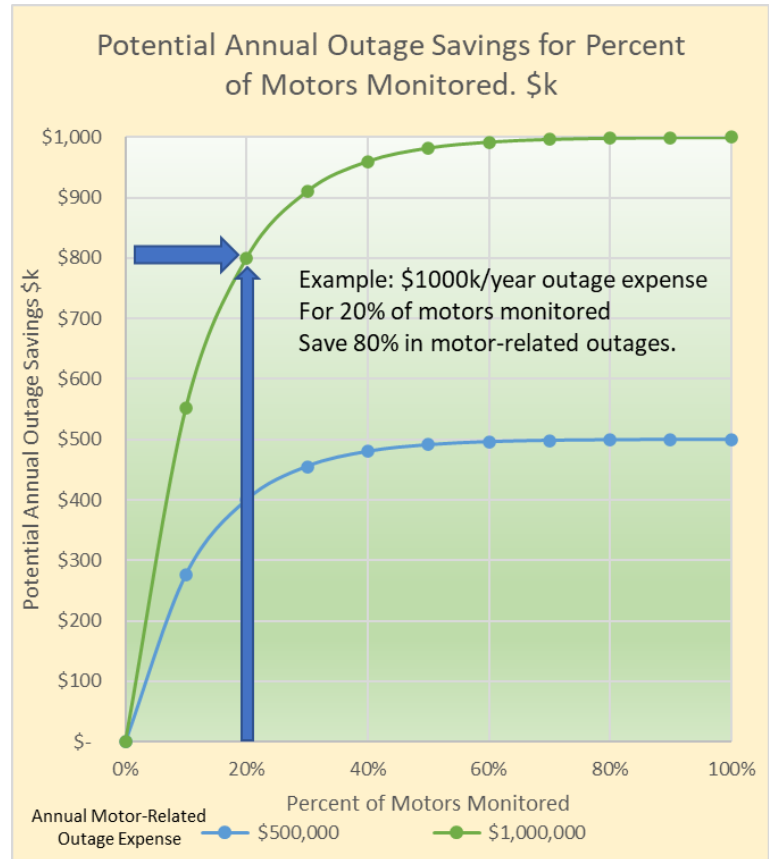
- Monitor to find issues
- Analyze & Design a Fix
- Implement the fix
- Monitor to verify the result

Centenelle is uniquely positioned to help at each stage of the Process Improvement Loop.

- Rugged embedded monitoring tools
- Technical specialists for analysis and design
- Certified contractors for implementation
- Verification and reporting of results

Charts to the right show potential savings in outage costs (top) and utility energy and demand charges (bottom) for a typical industrial plant with a distribution of motor criticality and size. Working with your plant staff, Centenelle will design an installation to optimize savings at your location.

Contact Centenelle Sales to see what we can do for you.

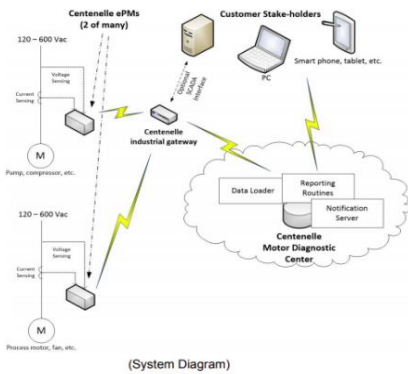


[www.Centenelle.com](http://www.Centenelle.com)

+1 866-CENTENELLE (236-8365)

**KNOW YOUR MOTORS**

2021-02-04



## Centenelle System

Centenelle offers a comprehensive view of the power demanded by your motor driven systems.

Electric Pattern Monitors (ePMs) continuously monitor and report motor operation.

The Internet Gateway provides an isolated WiFi network and secure cellular .

The CMDC cloud server is a secure, reliable repository and analysis engine evaluating your motor in real time.

Centenelle’s team of motor expert technicians are on staff as needed to address your needs.



## ePM

The Electric Pattern Monitor continuously monitors the voltages and currents feeding power to the motor, computing derived values like Watts and Power Factor.

The ePM sends information through the IGW to the CMDC, including alerts, real time values, and trending information.

The ePM collects energy consumption patterns specific to each motor, detecting variations from baselines indicating potential problems. Transients that deviate from known patterns are submitted to the CMDC for review by Centenelle technicians.



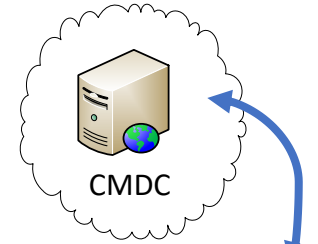
## (IGW)

## IGW

The Internet Gateway hosts a secure WiFi network for the transmission of ePM information to the CMDC.

IGW is also a gateway to a plant control system, supporting MODBUS as a standard protocol. Additional protocols may be available as needed.

IGW acts in a support role in getting your system commissioned. Working together, Centenelle and your installer will verify the installation and have information flowing in short order.



## CMDC

The Centenelle Motor Diagnostic Center is a cloud based repository of motor operating history. A Customer Dashboard allows on-demand inspection of trends and events.

CMDC hosts a powerful analysis engine to automatically classify events into known categories and auto-generate insights into your operation.

Centenelle works on a Prescriptive Diagnostic and Treatment Model – proven solutions are applied to correct well known problems.