Five steps to establish a condition monitoring program

1. Choose an asset to track. Consider a “bad actor” or a machine that is difficult-to-access. Many manufacturing environments that use rotating equipment like pumps, fans or compressors often include finicky or hard-to-reach machines in physically remote or nearby — but dangerous — locations.

2. Choose the best sensor for the job. When an asset misbehaves or malfunctions, what indicators might have foretold the problems? Is it a matter of power fluctuation, vibration, and friction, or temperature? The right sensor will give you that information.

3. Download the recommended condition monitoring software to use with the sensor. Make sure to involve multiple team members so all stakeholders become familiar with the tracking interface and so they learn that alarm notifications will deliver push notifications to some or all of them.

4. Install the sensor. Sensor installation is simple because sensors live outside assets undergoing monitoring.

5. Assess and analyze data. With the condition monitoring data, teams can take a more strategic approach to plan repairs, noting patterns in the data or (eventually) developing historical records for reporting purposes, which could influence the future operation of the asset(s). Teams can aggregate data from multiple sensors for a single view of asset health. They can also incorporate non-sensor data such as hand-tool measurements taken during regular plant rounds into the data environment for a holistic understanding of performance.