

## Maintenance Guidelines for Centrifugal Fans and Blowers

Centrifugal fans and blowers are generally simple and reliable, which can make it easy to overlook regular preventive maintenance. Neglecting routine preventative maintenance, however, can increase the risk of breakdowns, unscheduled outages and subsequent business interruptions. An effective preventive and predictive maintenance program is important to help ensure this equipment operates at optimum levels and to reduce the risk of unexpected and costly shutdowns.

## **Recommended Safeguards and Controls**

Some fans and blowers may have safety features and monitoring equipment designed to prevent damage. Although these devices may not be crucial on smaller equipment or in non-critical applications, the following safeguards and controls are recommended for equipment that is vital to your operation or is rated 500 HP or greater:

- · Low lubrication oil pressure trip, if installed with a forced lubrication system
- High bearing temperature alarm
- Vibration monitors or monitoring system with alarm.

## **Recommended Preventive and Predictive Maintenance**

The interval between preventative and predictive maintenance activities should be determined by the manufacturer's recommendations along with conditions such as the environment, run time, age and importance. The following maintenance activities should be performed by a qualified technician at least annually:

- Inspect foundation, bolts and shims
- Grease anti-friction bearings according to the manufacturer's instructions
- Replace, sample and test lubricating oil
- Inspect alignment, couplings and bearing clearances
- Inspect and clean the rotating element
- Test and calibrate installed controls
- Perform vibration monitoring and diagnostics
- Conduct a non-destructive examination of the rotating element

In addition to having a preventative and predictive maintenance program, develop a contingency plan that identifies the availability of spare parts, the lead time required to order replacements and the expected time needed to restore service in the event of an outage.



## boilerre.com

The Travelers Indemnity Company and its property casualty affiliates. One Tower Square, Hartford, CT 06183

The information provided in this document is intended for use as a guideline and is not intended as, nor does it constitute, legal or professional advice. Travelers does not warrant that adherence to, or compliance with, any recommendations, best practices, checklists, or guidelines will result in a particular outcome. In no event will Travelers or any of its subsidiaries or affiliates be liable in tort or in contract to anyone who has access to or uses this information. Travelers does not warrant that the information in this document constitutes a complete and finite list of each and every item or procedure related to the topics or issues referenced herein. Furthermore, federal, state or local laws, regulations, standards or codes may change from time to time and the reader should always refer to the most current requirements. This material does not amend, or otherwise affect, the provisions or coverages of any insurance policy or bond issued by Travelers, nor is it a representation that coverage does or does not exist for any particular claim or loss under any such policy or bond. Coverage depends on the facts and circumstances involved in the claim or loss, all applicable policy or bond provisions, and any applicable law.