

Getting the Most Value Out of Steam Boiler Insurance

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If you drive a car, you are well aware that a clean driving record, free of insurance claims, can help you secure lower car insurance premiums. Maintaining your car properly can reduce the risks of it malfunctioning and causing serious damage, thus reducing the need to submit an insurance claim.

The same situation applies to steam boilers. Operating a well-maintained steam facility can reduce the risks of a hazardous accident or poor operating conditions that would necessitate an insurance claim. Steam plant managers can actually take advantage of the services provided by their equipment breakdown insurance provider which, in turn, can help lower the chances of having to submit a claim. Equipment breakdown insurance also protects against unexpected losses from boiler defects which may not be discovered and resolved. For plant managers, the key to maximizing insurance value is to get involved with the decision-making process.

1. The Basics

Boiler insurance, known as “equipment breakdown insurance” or “boiler and machinery insurance,” can be purchased as a stand-alone policy or part of an insurance package policy (“business owners policy” or “commercial package policy”). It is important to note that commercial property policies exclude steam boiler explosions and machinery breakdowns, which makes equipment breakdown insurance necessary. According to the National Board of Boiler and Pressure Vessel Inspectors, a boiler is classified as high-pressure when it has a maximum allowable working pressure (MAWP) of more than 15 pounds per square inch (psi). Because a boiler with a MAWP of more than 15 psi can cause considerable damage, it is recommended that it be covered with equipment breakdown insurance. In some jurisdictions, low-pressure boilers (15 psi or less) do not have to meet the same inspection requirements as high-pressure boilers and are not required to be insured because the use of safety valves and other devices eliminate the possibility of an explosion. However, some facilities insure low-pressure boilers primarily to minimize loss exposure.

2. Get to Know the Inspector and Insurance Services

One of the most important services that your insurance provider performs is a routine jurisdictional inspection. In almost every state, laws require facilities that operate steam boilers and other pressure vessels to have third-party inspections performed at regular intervals, which vary by state. Depending upon your provider, the inspections may be included in the insurance premiums, which you may want to check.

Developing a good working relationship with inspectors can be very beneficial. While conducting a routine inspection, they may find other problem areas that need to be addressed before serious damage occurs or before employee safety is jeopardized. Consider them as a source of information support—they should be current on new laws and trends with equipment requirements and retrofits. Some inspectors go above and beyond the routine inspection. They can often provide feedback when you are planning to purchase new

equipment or make modifications to existing equipment. They also can recommend or sometimes provide tools or training to plant staff.

3. Provide Feedback to Management

It is important for your organization to maintain a good relationship with the insurance provider and inspector, since the relationship is easily susceptible to change. Typically, it is not plant personnel but a finance or risk manager who signs off on the contract with the equipment breakdown insurance provider. If this manager solely bases the decision on cost without any operational staff input, before you know it you have to acquaint yourself with a new inspector.

Providing feedback to the risk or finance manager in your organization will assist them in evaluating an insurance provider. Discuss with him/her the quality of the inspection and service performed at the facility, the quality of the inspector, and your interactions with the inspector. Is your organization getting the best “return on investment” from the inspection services provided? It may be worth the additional cost to contract out services of one insurance provider over another if the quality of the services is significantly better.

4. Properly Maintain and Monitor Your Facility

According to the *National Board 2002 Incident Report*, 49 percent of steam boiler accidents are attributed to low-water conditions, and 36 percent to operator error and poor maintenance. Avoiding these occurrences through proper maintenance, monitoring, and verification not only improves workplace safety, minimizes downtime, and improves energy efficiency, but also helps reduce equipment breakdown insurance premiums and prevent possible future claims. When an insurance provider evaluates a potential client, a number of factors are considered when pricing the premium and deductibles. Some of those factors include:

- Size and nature of your facility
- How well your equipment is managed
- Loss history

Proper boiler operation should include maintenance of accurate boiler logs and documentation of procedures. By tracking data kept in the logs, plant managers can distinguish trends and diagnose problems early. However, there are occasions where even a well-maintained facility needs to submit a claim. Some facilities assume that certain breakdowns, especially in cases of significant equipment failure, are maintenance issues when actually they may qualify for insurance

Resources for Steam Plant Managers

The Department of Energy *BestPractices Steam* program identifies, documents, and communicates best-in-class steam system management and technologies. The goal of the program is to boost industrial competitiveness through the optimization of steam systems. It provides plant managers with an overview of opportunities to reduce expenses, add new revenues, and control operating risks.

A typical industrial facility can improve steam system efficiency by 10-20%. Reference material developed by the program and made freely available to plant managers includes diagnostic software, reference documents, tip sheets, and case studies. The Alliance to Save Energy coordinates the outreach efforts for the program and develops a series of regional workshops that introduce audiences to program resources.

For reference material and other information about the program, please visit:

<http://www.oit.doe.gov/bestpractices/steam/>
or <http://www.steamingahead.org>

****Machinery Loss Examples**

PLASTICS MANUFACTURER

An extruder was shut down when it started shaking hard and vibrating. An inspection revealed broken bearings and couplings and twisted shafts inside the machine. Repairs took more than a month.

Total Paid Loss \$242,180

PRINTER

A stationery company's die cutting press was a third of the way through a 120,000-sheet run when a main shaft bearing split, causing serious damage inside the machine. The upper head was sent to Germany for repair and the main shaft to a U.S. shop.

Total Paid Loss \$376,124

FOOD COMPANY

A mechanic for a Mexican-style food company left a wrench inside a dough-dividing machine. When the assembly line was started, the wrench went through the machine and severely damaged its parts. Workers were paid overtime to make flour tortillas by hand until repairs were complete.

Total Paid Loss \$58,079

The good news for boiler claims is that the trends show these claims flat to slowly decreasing, whereas electrical losses claims are on the rise. This is due in part to the increased automation and use of electrical equipment in facilities.

To find out more about your existing equipment breakdown insurance coverage and services provided, check with your organization's risk or finance manager. Information for this article was provided courtesy of Hartford Steam Boiler Inspection and Insurance Company <http://www.hsb.com>, and the National Board of Boiler and Pressure Vessel Inspectors <http://www.nationalboard.org>.