

Equipment Breakdown—More Than Just Boiler and Machinery

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"A man's got to know his limitations."

~Clint Eastwood as "Harry 'Dirty Harry' Callahan" in 1973 film "Magnum Force"

"What you don't see with your eyes, don't invent with your mouth."

~Jewish Proverb

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When the Insurance Library Association of Boston announced its fall 2011 course schedule, I saw that it included a 3-hour class on equipment breakdown insurance. When I joined the property and casualty insurance industry in 1979 (*Note: This author is a youthful 57.8 years young*), this coverage was known as boiler and machinery insurance. By either name, this insurance is a form of property insurance that seems to be an afterthought for many risk management professionals; everyone knows it is needed, but few people spend much time to learn about it. Since I live in Rhode Island, an hour south of Boston, I thought it was time put into practice my mantra from Harry Callahan: "A man must know his limitations." Insurance education is not just learning to fill in the knowledge gaps but also to learn if what one already knows is actually correct.

Many people in our industry rely on information garnered from quizzing others to learn about insurance coverage. Few take the time to read an insurance policy to understand coverage. When an insurance policy is not consulted directly for coverage questions, it's possible that misinformation will pass from one person to another, and for the misinformation to live on until a coverage issue arises—not an ideal time to learn that one did not understand the coverage or the lack thereof—thus, the importance of the Jewish proverb cited above in relation to how to understand what is covered in an insurance policy.

So, even though I read insurance policies for a living, I decided a class on equipment breakdown insurance would be a good way to determine whether I understood what I had read and learned. I was not disappointed; 3 hours later, I discovered I had learned much about "boiler and machinery" insurance over the years and that all of my knowledge was fact based. Harry Callahan would be proud of me. Would Harry be proud of you?

Equipment Breakdown Insurers and Policies

The course I attended was taught by an employee of Hartford Steam Boiler (HSB), a major insurer of equipment breakdown coverage as both a primary insurer when it issues a policy directly to its insured or as a reinsurer of a primary insurer when that insurer does not have the underwriting or claim expertise needed to provide direct coverage for equipment breakdown exposures. Let me share some facts with you.

Equipment breakdown insurance is provided in one of two ways. First is on a monoline policy basis, separate from a property insurance policy. The second is within a property insurance policy when coverage is imbedded into the policy form or added by endorsement to the overall policy.

It is easy to determine whether coverage exists on a monoline basis: Look for a separate policy titled "equipment breakdown insurance" or something similar, or even the archaic term "boiler and machinery." If coverage is embedded in a property policy, then you must look to the policy declarations page to see whether reference is made to "equipment breakdown" or "boiler and machinery" or whether sublimits are listed for this coverage. If the declarations page is not clear, then it is necessary to read the policy to see whether

coverage is within the policy form (i.e., embedded) or added by endorsement, which removes exclusions much in the same manner that flood and earthquake endorsements add back coverage that is otherwise excluded in the base property perils insured policy form. This article discusses equipment breakdown when provided on a monoline basis and not as coverage embedded in a property policy.

Equipment Breakdown Insurance Basics

Many risk management professionals think of equipment breakdown coverage solely in terms of "boiler and machinery"—an explosion from a boiler or other pressure vessel or the need for an insured to satisfy jurisdictional inspections required in most states by specific statute. The reality is that the exposure for many organizations is likely to be much greater than that created by use of pressure vessels. Equipment breakdown coverage is a form of property insurance and is based on the happening of an "accident" from which the perils insured are identified. Equipment breakdown insurance is a "named perils" policy, as the perils insured are specified to dovetail with certain coverage exclusions in property policies.

The policy used for reference in this article is HSB "Freestyle Policy" (form 6671 10/2002). While Insurance Services Office, Inc., has filed an "Equipment Breakdown Protection Coverage Form" (BM 0020 0701), the more commonly used monoline policy form is the HSB policy. The HSB coverage trigger begins with an "accident" to "covered equipment." The "accident" definition contains the "perils insured," and "covered equipment" defines the objects insured. Let's examine the definitions.

HSB Freestyle	
Perils Insured	"Accident" means a fortuitous event that causes direct physical damage to "covered equipment." The event must be one of the following: (1) mechanical breakdown, including rupture or bursting caused by centrifugal force; (2) artificially generated electrical current, including electrical arcing, that damages electrical devices, appliances or wires; (3) explosion, other than combustion explosion, of steam boilers, steam piping, steam engines or steam turbines; (4) an event inside steam boilers, steam pipes, steam engines, steam turbines that damages such equipment; (5) an event inside hot water boilers or other water heating equipment that damages such equipment or (6) bursting, cracking or splitting. "Accident" does not include any condition or event listed in Definition G. 1. B.
Insured Objects	"Covered Equipment" means the following: (1) Unless specified otherwise in the Declarations: (a) equipment that generates, transmits or utilizes energy, including electronic communications and data processing equipment; or (b) equipment which, during normal usage, operates under vacuum or pressure, other than the weight of its contents. (2) Except as specifically provided for under Off Premises Property Damage, Service Interruption, Contingent Business Income and paragraph (2) of Perishable Goods, such equipment must be at a location described in the Declarations and must be owned or leased by you or operated under your control.

After reading the definitions, you may wonder how "covered equipment" fits into typical property insurance. Isn't "covered equipment" also covered by a property insurance policy? The answer is yes; "covered equipment" may fall within the definition of "contents" ("personal property") or "building" ("real property") if the equipment is permanently installed in a building. What is actually being insured in an equipment breakdown policy? Let's look closely at the definition of "accident" and how this fits into a property insurance policy.

"Accident" Definition and Common Exclusions

The definition of "accident" deals with loss to the covered equipment that essentially begins *within* the equipment; coverage is not triggered by an external event. A property policy, whether insuring loss on a named perils basis (i.e., causes of loss—basic or broad) or on an all perils of risk of loss basis (i.e., causes of loss—special), covers loss to the covered equipment, either as contents or building, when loss is caused by an external event such as fire, vandalism, windstorm, and as otherwise stated in the causes of loss section of the policy. This coverage distinction is more apparent when we examine property insurance exclusions that eliminate equipment breakdown coverage and thereby create the need for equipment breakdown coverage.

For purposes of this article, we look at a conglomeration of common coverage exclusions found in standardized and independently filed property policies used by insurers that do not provide equipment breakdown coverage in the property policy. The table that follows lists common property insurance "equipment breakdown" exclusions in the left column, and in the right column, the equipment breakdown "perils" insured in the HSB policy definition of "accident." I changed the order of the actual exclusions as used by HSB in its definition for "accident" to make it easier to follow along in the order of similar exclusions as typically found in a property policy.

Common Property Insurance Exclusions	HSB Definition of "Accident": Perils Insured
This coverage does not apply to any loss or damage caused by or resulting from:	"Accident" means a fortuitous event that causes direct physical damage to "covered equipment." The event must be one of the following:
Artificially generated electrical, electromagnetic or magnetic energy that interferes in any manner with an electrical wire, device, appliance, system or network, including any of the above using satellite or cellular technology, including electrical current, arcing, magnetic or electromagnetic charges, pulses, waves, or microwaves. (Fire loss or damage resulting from the above will be covered.)	(2) artificially generated electrical current, including electrical arcing, that damages electrical devices, appliances or wires;
Mechanical breakdown, including rupture or bursting caused by centrifugal force. (Elevator collision loss or damage resulting from the above will be covered.)	(1) mechanical breakdown, including rupture or bursting caused by centrifugal force;
Explosion of owned or leased steam boilers, pipes, engines, or turbines. (Fire or combustion explosion loss or damage resulting from above will be covered, as well as loss or damage caused by or resulting from the explosion of gases or fuel in the furnace of a fired vessel or passageways through which the gases of combustion flow.)	(3) Explosion, other than combustion explosion, of steam boilers, steam piping, steam engines or steam turbines;
	(4) an event inside steam boilers, steam pipes, steam engines, steam turbines that damages such equipment;
	(5) an event inside hot water boilers or other water heating equipment that damages such equipment or
	(6) bursting, cracking or splitting.

The HSB definition of "accident" insures a number of equipment breakdown exposures that are more than a boiler explosion. The listing of equipment breakdown "perils" can serve as an exposure checklist for any risk management professional to begin an assessment of an organization's equipment breakdown exposure. Notice that I did not recommend using a checklist to determine *whether* an exposure exists but to determine *what* exposures exist. This is an important distinction since any organization may not have a "boiler and machinery" exposure but still will face insurable equipment breakdown exposures, whether electrical arcing or mechanical breakdown of HVAC or refrigeration equipment. Much like a property policy, the equipment breakdown policy not only provides direct physical damage coverage but can also provide coverage for loss of business income, increased (extra) expense, and expediting expense.

The intent of both types of insurance is to provide coverage for a fortuitous event, not to be a maintenance policy to keep covered equipment in good working order. There are exclusions in both property and equipment breakdown policies that eliminate coverage for lack of maintenance or expected wear and tear.

Common Wear/Tear Perils Excluded	HSB Definition of "Accident": Wear/Tear Perils Excluded
The following are excluded from coverage in this policy:	"None of the following is an 'accident' however caused and without regard to whether such conditions or event is normal and expected or unusual and unexpected:
(a) Wear and tear,	1. Depletion, deterioration, rust, corrosion, erosion, settling or wear and tear;
(b) Rust or other corrosion, decay, deterioration, latent or hidden defects resulting in damage or destruction to the property itself.	2. Any gradually developing condition;
(c) Faulty, inadequate, or defective maintenance.	3. Any defect, programming error, ... within or involving data or media of any kind.
	4. Contamination by a hazardous substance; or
	5. Misalignment, miscalibration, or by the performance of maintenance."

The perils of fire, explosion, earth movement, water (i.e., flood), lightning, windstorm/hail, collision with a vehicle, riot/civil commotion, sprinkler leakage, and volcanic action are specifically excluded in the HSB policy as coverage should be provided in the property policy. The "fire/explosion" exclusion used by HSB is to dovetail with coverage provided by a typical property policy as shown below. Similar intent is provided by HSB's policy for the other excluded perils.

Fire and Explosion: We will not pay for loss or damage or expense caused directly or indirectly by any of the following, whether or not caused by or resulting from an "accident." a. Fire and explosion: 1—fire, including smoke from a fire; 2—combustion explosion, this includes, but is not limited to, a combustion explosion or any steam boiler or other fired vessel; 3—any other explosion as specifically provided in A.1.a (3) (i.e., "Explosion, other than combustion explosion, of steam boilers, steam piping, steam engines or steam turbines").

Coverage Disputes

Even when policies are carefully crafted to dovetail coverage, loss disagreements may arise as to which policy an insurer believes should cover the loss. An equipment breakdown loss can be complicated with facts initially unclear as to whether the property policy or the equipment breakdown policy should apply. Coverage disagreements may inhibit an insured's ability to receive funds to timely repair damage and seek coverage for lost income and increased operating expenses. This situation, which is fairly common, is addressed by use of a joint loss agreement that is endorsed into the insured organization's property policy and equipment breakdown policy.

The HSB Freestyle policy includes "Joint or Disputed Loss Agreement" within the General Conditions that become attached to the policy form. Not all property insurance policies will include "Joint Loss" wording without specific request. A joint loss agreement should be requested to be part of any property policy when equipment breakdown coverage is provided by a monoline policy. The addition of this endorsement to a property policy will not require a premium charge.

Coverage and Sublimit Issues

Risk management professionals must conduct due diligence when arranging equipment breakdown insurance in the same manner as that provided for a property policy. This due diligence is needed whether the insured owns the building or is a tenant in a non-owned building. The "coverage and limit" due diligence is necessary and shares the same process whether coverage is on a monoline policy basis or imbedded in a property insurance policy.

Direct damage limit: One must assume a catastrophic loss from boiler or other pressure vessel explosion and possible complete destruction of a building. The overall limit must be sufficient to replace or repair any direct damage loss. The direct damage limit is not usually subject to a coinsurance clause.

Business income limit: Loss of income and increased operating expenses may be significant; it may be even greater than the direct damage if the equipment damaged or destroyed will require a long lead time for parts and/or repair. Business income coverage may be subject to a coinsurance clause, thus requiring additional due diligence that proper values have been submitted.

Loss settlement: It is preferred to have direct damage loss settled on a repair and replacement cost basis and loss of income on an actual loss sustained basis.

Sublimited coverage: Adequacy of limits for perishable items (i.e., food, chemicals, medical supplies, etc.), extra expense, expediting expense, demolition, ordinance or law, and hazardous substances.

Deductibles/retained loss: Direct damage loss is usually subject to a specified deductible per loss while business income coverage may be subject to an average daily value (ADV) deductible. An ADV deductible is a defined term for a deductible based on number of days that business income would have been earned during the period of interruption had no accident occurred. An ADV deductible can be significant and likely much greater in amount than the direct damage deductible. It is essential that the risk management professional determine what the ADV can be, especially prior to binding coverage. The magnitude of the ADV of business income loss should not be a surprise at time of loss.

Conclusion

Equipment breakdown insurance is more than simply coverage for loss by explosion from a boiler or other pressure vessel. It is a form of insurance that needs to be considered by any insured whether a building owner or a tenant in a leased building. Two insured perils often overlooked, maybe even underappreciated by risk management professionals, are electric arcing incidents and mechanical breakdown.

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