

Whitepaper

# Equipment breakdown: the true cost to organisations



A Munich Re company

# Foreword

Today's machinery and equipment for businesses and organisations is more high-tech and specialised than ever, but it can also be more unpredictable. As machinery has evolved, so too have the risks. Exposures have changed considerably in recent years due to a reliance on integral equipment which has become more complex and sophisticated, where it is potentially exposed to a greater possibility of damage.



Mechanical and electrical breakdowns can have a devastating impact on businesses and organisations, and they can happen at any time. For example, microelectronics have become the brains that drive equipment, with components so tiny that 100 million transistors could fit onto the head of a pin. However, microcircuits are fragile, and sensitive to many things like shock, vibration, condensation, humidity, foreign bodies, and heat to name a few. This combination of minute size and high sensitivity means equipment may suddenly stop working without showing any evidence of physical damage.

As technology continues to get smaller, the stakes could become larger for businesses and organisations who rely upon equipment as the backbone of their operations to compete in challenging market conditions.

Sudden and unforeseen damage to equipment is a commercial reality and can cause significant ramifications through downtime, disruption, and financial losses, in the blink of an eye. Businesses must contend with not only the unexpected cost pressure of repairing or replacing what is broken, but also protecting revenue streams from dissatisfied customers as a result of delays and longer lead times.

#### Navigating the future of equipment breakdown insurance

This whitepaper, supported by HSB's own research, will consider why equipment breakdown insurance could be essential in an unpredictable environment. In doing so, it will focus on equipment exposures that businesses and organisations may typically overlook, and why equipment breakdown cover is a commonly misunderstood but fundamental element of a comprehensive insurance plan.

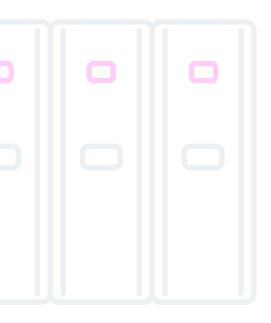
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## What is an equipment breakdown?

An equipment breakdown occurs when electrical or mechanical equipment stops working unexpectedly as a result of a catastrophic failure not associated with normal wear and tear. Many breakdowns are as a result of human error and could be prevented. Examples include operating equipment beyond its rated capacity, permitting dust or dirt to build up on electrical equipment, deliberately bypassing safety procedures, and relying too heavily on automatic devices.

#### Electrical system hazards

A building's electrical system is a significant source of risk to high-tech equipment. Many people presume that air conditioning units have a higher potential for failure because they have moving parts – pumps, belts, and fans – that wear down and break. Some also believe that stationary wires and electrical components do not have the same failure potential. In reality, after boiler and air conditioning breakdowns, electrical system failures are the most common.

Most electrical failures are not caused by a major weather event such as lightning, but loose connections, moisture, dirt, overloads, and other common causes. **35%** of all electrical system failure can be traced to human error – from carelessness and poorly-trained employees, to inadequate maintenance. Even modern buildings designed just 10 or 15 years ago are vulnerable to electrical system failures.

#### **Example loss 1**

Two interconnected pumps used to pump fresh water within a block of flats stopped working, leaving its residents without water. Although the building's pumps had been regularly serviced, the sudden equipment failure was due to an electrical breakdown.

The claim was £9,760

#### Mechanical equipment hazards

Compressors, pumps, blowers, fans, turbines, and similar mechanical equipment are subject to a variety of hazards. Among the more common causes of failure are: metal fatigue, loss of lubrication, over-speed, mechanical stress, and shock loads.

#### **Example loss 2**

During a heatwave, three air conditioning condenser units suffered an outage at a commercial property. It was determined that the units had suffered a mechanical failure due to the high temperatures and were unable to be repaired.

#### The claim was £18,300

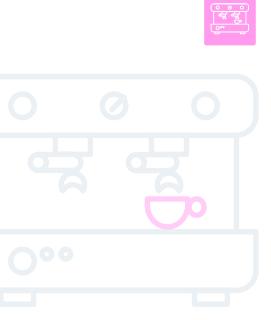
Every business and organisation eventually suffers some sort of unexpected equipment breakdown, but the impact hurts some industry sectors significantly more than others. Hotel, leisure, and hospitality venues are particularly susceptible to equipment risks due to many of their assets being used excessively every day, some of which are reliant on technology.

It is estimated that a 200-room hotel reports, on average, 1,500 equipment failures per month. The most commonly-affected assets relate to heating, ventilation and air conditioning units, electrical installations, and lifts. Commercial kitchens and restaurants are equally challenging environments to manage in the event of equipment breakdown. Kitchen equipment malfunctions and a loss of power to essential appliances, such as refrigerators, negatively impact both the productivity of employees and customer experience.

The implications of equipment breakdown may not always have a clear monetary value, but its influence on businesses' and organisations' reputations is undeniable. In the bustling and competitive world of the hospitality industry, unexpected equipment breakdowns can erode customer satisfaction unless issues are efficiently resolved.

# Top tip

When reviewing their customers' needs for coverage on their equipment, insurance brokers should bear in mind that limited protection may be offered under property insurance policies with respect to the most common equipment and machinery hazards.



### A growing need for equipment breakdown insurance

Commerce could be on the cusp of an equipment breakdown coverage market evolution. The rising costs of repair are underlining the importance of having appropriate insurance cover in place to offer peace of mind against the growing value of a business's or organisation's equipment.

According to analysts, the global equipment breakdown insurance market is on an upward trajectory, with projections indicating a compound annual growth rate of **11.7%** from 2023 to 2033. This growth is being driven by a heightened awareness amongst businesses in various industry sectors that ensuring equipment remains operational is fundamental to their success and survival<sup>1</sup>.

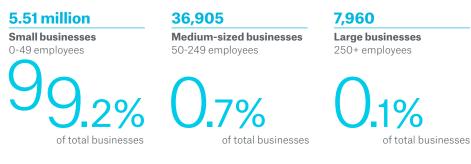
Industries such as manufacturing, warehousing, and logistics depend on intricate machinery and equipment that are undergoing rapid technological advancements. Sudden and unforeseen breakdowns can lead to costly repairs and replacements, disruption of operations and, in some cases, even temporary business closures.

Furthermore, stringent regulations and safety standards imposed by regulatory authorities are compelling businesses and organisations to be compliant in order to safeguard against potential liabilities from equipment failure. As a result, the need for comprehensive insurance coverage against breakdowns becomes clear.

#### Equipment breakdown: could UK SMEs survive a catastrophic event?

Small and medium-sized enterprises (SMEs) are considered to be the lifeblood of the UK economy, generating a significant portion of employment and economic output<sup>2</sup>.

#### UK business composition 2023



# Top tip

Businesses and organisations should compile a list of their essential equipment and estimate the potential costs involved for repairing or replacing it. Comparing the financial disparity they would incur through not having specialist cover in place, against the cost of an equipment breakdown insurance premium, will help to determine the viability for seeking separate, specialist cover.

The median profit made by SMEs in the UK in 2022 was £12,000, with SMEs in the property/business services, and wholesale and retail sectors having the highest average profit at £15,000. Based on these statistics, many businesses may struggle to absorb the unexpected cost of an equipment breakdown<sup>3</sup>.

Research conducted by HSB also highlights how vulnerable businesses could be to sudden and unforeseen equipment breakdowns. In a survey of 500 UK SMEs, two-thirds said their business would not survive for longer than three months if a catastrophic event, such as a critical piece of equipment breaking down, halted their ability to trade.

Less than half of the respondents stated their business could absorb the costs of essential equipment if it was to break down, with **60%** admitting they could only spend around a third (**30%**) of their monthly revenue on unexpected costs.



# The true cost of equipment failures

Every hour a business isn't operational due to equipment failure can translate to a loss of income. The impact of any financial loss can often be felt immediately, however the long-term impact is harder to quantify when assessing lost revenue opportunities due to strained relationships with customers, partners, and suppliers.

On average, manufacturers in the UK and Ireland spend almost 20 hours each week on unscheduled maintenance, in contrast to 18 hours on planned maintenance activities to increase the lifespan of equipment. In addition, **82%** of companies have experienced at least one unplanned downtime incident over the past three years, with many suffering two or more incidents<sup>4</sup>.

Determining the overall costs of equipment breakdown is based on several variables, but may comprise<sup>5</sup>:

- Production losses: wasted product or materials, reduced capacity, etc.
- Increased labour costs: overtime, hire of outside contractors.
- Financial losses: lost sales revenues, tighter profit margins.
- Equipment replacement and repair costs.
- Increased delivery/shipping costs to fulfil emergency orders.

Understanding and evaluating the true cost of equipment failures is difficult to determine. A report by Industry in Motion estimates that an hourly cost of downtime can range from **£1,700** to **£7,500**, but this can fluctuate depending on the size of the business and vary from one sector to another.

In the UK warehousing and logistics sector for example, each year **3,000** hours are reportedly wasted as a result of inefficient processes. Equipment breakdowns can severely restrict materials-handling professionals, bringing entire distribution lines to a halt which can lead to production delays and supply chain disruptions<sup>6</sup>.

#### Absorbing the costs

Equipment repair or replacement times can vary due to breakdown severity, parts availability and complexity. Businesses and organisations across all industries must factor in the risks of maintaining more technologically-advanced machinery in conjunction with unforeseen increases in equipment repair costs.

Analysis of HSB's claims and loss data has shown that the total value of claims for mechanical breakdown (machinery and technology only) has **increased year-on-year for the last five years.** 

# **Top tip**

Repair and replacement times are affected by factors such as spare parts availability. Delays in acquiring parts can significantly increase downtime. Keeping a spare parts inventory is advised to mitigate equipment breakdown impacts.

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## What is equipment breakdown insurance?

Equipment breakdown insurance offers protection from unexpected costs that may arise from mechanical, electrical, or electronic equipment failures. The types of equipment covered under a policy can range from (but are not limited to):

- Electronics equipment
- Heating, ventilation and air conditioning units
- A wide range of production machinery and processing equipment
- Mechanical equipment (motors, generators, compressors, pumps, engines, etc)
- Electrical equipment (distribution systems, transformers, switchgears, electronics, etc)
- Refrigeration equipment
- Boiler and pressure vessel equipment
- Security and alarm systems

# What differentiates equipment breakdown insurance from commercial property insurance policies?

Equipment breakdown insurance is a specialised form of insurance tailored to alleviate the financial burden on businesses and organisations when the unexpected strikes. Whereas standard commercial property insurance policies cover damages caused by external events like fire or weather-related disasters, an equipment breakdown policy specifically covers losses due to the sudden and unforeseen damage to, and accidental breakdown (including operator error) of, machinery and technology.

#### Equipment breakdown insurance: Typical coverage

#### Covered

- **Repair or replacement costs:** the cost to repair or replace the damaged equipment, including labour time
- Business interruption losses: lost income due to the equipment breakdown
- **Deterioration of stock:** if the breakdown causes inventory to spoil, for example in the case of a refrigeration system failure
- **Extra expenses:** necessary expenses incurred, such as renting temporary equipment, during the restoration period to maintain business operations

#### **Not covered**

- Wear and tear: breakdowns or malfunctions due to wear and tear, rust, decay, or faulty maintenance
- External events leading to equipment damage: fires, storms, natural disasters, nuclear hazards, and war
- Intentional damage or negligence
- Cyber events: losses resulting from hostile or illegal acts (virus, hacking, or denial of service) through electronic systems, or the failure of electronic equipment to correctly recognise, process, or store any date.

# Debunking equipment breakdown insurance myths

Although insurance brokers and businesses/organisations are becoming more informed, equipment breakdown cover is often misunderstood. Historically, equipment breakdown insurance was presented as providing coverage for mechanical machinery frequented by large manufacturers. This created an impression that equipment breakdown insurance only covers conventional equipment such as pressure vessels and mechanical machines, or that a risk has to include a boiler for the coverage to apply.

In reality, advancements in technology have greatly expanded the types of equipment that are covered by equipment breakdown insurance today. From refrigeration and air conditioning units, to high-tech electronic systems and robotics, virtually every business and organisation has some type of risk exposure.

Electrical and electronic equipment in particular has more exposure, and is susceptible to failures that could temporarily shut down a business or organisation's operations. As technology evolves so rapidly, the value of equipment breakdown continues to go up. No longer focused on just boilers and heavy-duty machinery, equipment breakdown insurance now provides cover for a multitude of machinery and equipment, and is designed to address gaps not covered by standard commercial property insurance policies.

#### Coverage: misconceptions vs. reality

Here are three of the most common misconceptions about equipment breakdown coverage which may be undermining its potential value to businesses and organisations.

#### **Misconception 1**

# Equipment breakdown insurance only covers repair costs.

**Reality:** As well as providing cover for equipment that needs to be repaired or replaced, equipment breakdown insurance also covers financial losses due to business interruption. This helps businesses and organisations to mitigate any loss of income and resume operations as quickly as possible.

#### **Misconception 2**

Businesses and organisations don't need equipment breakdown coverage if they have a commercial property policy.

Reality: There is a common misbelief that losses associated with damaged equipment would be covered under a traditional property policy, but this isn't always the case. Tailored equipment breakdown insurance policies can offer a more specialised form of protection due to sudden and unforeseen events, which are not typically included in property polices. By addressing both repair costs and lost income, equipment breakdown policies cover not just the physical damage, but also the financial impact of equipment breakdown; which goes beyond most typical commercial insurance covers.

# **Top tip**

#### **Misconception 3**

Equipment breakdown insurance can be restrictive when applied to physical damage.

Reality: Put simply, equipment breakdown insurance is intended to provide cover for accidental damage. and sudden and unforeseen damage, requiring the object to be repaired or replaced. Some occurrences such as wear and tear, corrosion or erosion of material, leakage or breakdown of any structure or foundation supporting the object, are not typically covered under an equipment breakdown policy. However, if an excluded occurrence or condition (such as wear and tear) caused a defined accident, the latter occurrence would be considered an accident and equipment breakdown cover would apply.

Equipment breakdown cover can be a fundamental part of risk management, protecting against equipment loss and contributing to business continuity. For insurance brokers, specialist equipment breakdown policies present an opportunity to increase coverages across all lines of business, and cover a larger portion of a customer's risk portfolio.



# Equipment breakdown insurance - five key benefits

Equipment breakdown insurance protects businesses and organisations from several consequences of equipment damage and failure. By mitigating against the unexpected, tailored equipment breakdown polices can provide a wide range of tangible and intangible benefits.

#### Financial protection against unexpected costs

- Financial reimbursement to replace critical equipment
- Cover for any expenses needed to speed up repairs to damaged equipment

#### Protection against business interruption

- Coverage for loss of income due to equipment breakdown
- Coverage for loss of perishable goods following the breakdown of a temperature-controlled chamber

#### Protects against gaps in other insurance coverage

- Robust protection for damage caused by internal events
- Coverage for losses due to the accidental damage or sudden and unforeseen damage to machinery and technology, not typically afforded by commercial property polices

#### Peace of mind

- Reduced anxiety towards equipment failures
- Even in the worst case scenario, businesses and organisations have a robust plan to fall back on to cope when critical equipment fails

#### **Business continuity**

- Reduced possibility of extended equipment downtimes
- Customer retention customers may be less likely to turn to competitors if they have confidence and trust that a business can quickly resume its operations following a breakdown

# Top tip

When considering equipment breakdown coverage, businesses and organisations should assess their specific equipment risks, the nature and intensity of their equipment use, and the potential impacts of a breakdown on their operations. Insurance brokers can help their customers by comparing equipment breakdown policy options to find coverage that is best suited to their specific needs.



# Conclusion

Industries have become dependent on new technologies and cutting-edge equipment which can be more prone and vulnerable to damage. An untimely equipment breakdown can bring businesses to a standstill, potentially causing severe consequences; from production downtime, to delays in delivering products or services to customers.

As the value of high-tech, complex equipment continues to rise, so too does the cost to fix or replace it. Without a plan in place to allow for unexpected setbacks, businesses and organisations could be walking a tightrope towards a financial crisis from which they may never recover.

In light of this, business owners and organisations should meticulously evaluate their insurance coverage needs and ensure that gaps are effectively filled with policies tailored to specific risks. Insurance brokers have an important role to play by staying up-to-date on equipment risks; to pass on critical information to their customers to ensure they are adequately protected from all uncertainties.

Equipment breakdown coverage can be a crucial component of a forward-thinking insurance strategy, offering peace of mind in modern times. By protecting against the financial impact of equipment failures, businesses and organisations can minimise operational disruptions, maintain customer satisfaction and safeguard their bottom line when confronted with unexpected hurdles.

#### Footnotes:

- 1 Equipment breakdown insurance | Market Statsville Group
- 2 UK business facts and statistics 2023 | Money.co.uk
- 3 Median profit made by small and medium enterprises (SMEs) in the United Kingdom in 2022, by sector | Statista.com
- 4 The true cost of downtime: a view from the engineer | themanufacturer.com
- 5 Unplanned downtime costs more than you think | forbes.com
- 6 Productivity. How downtime of forklift trucks impact businesses bottom-line | Warehouse & Logistics News

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