

RISK CONSULTING FOR AUTOMOBILE AND ITS ANCILLARY INDUSTRY

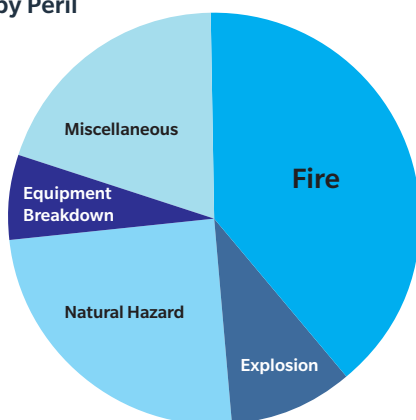


RISK OUTLOOK

As uncertainties on the global economy still haunt the world, the automotive industry continues to face a range of business-critical risks. Although the focus continues to be on product recall and supply chain risk, property losses, including fire, explosion, and natural catastrophic losses, such as floods and earthquakes and the consequent business interruptions, cannot be overlooked.

Major property risks for the automobile industries, include fire, explosion, supply chain, contingency, and equipment breakdown.

Losses by Peril



Note: The data has been disguised for confidentiality purposes, but is representative of results.

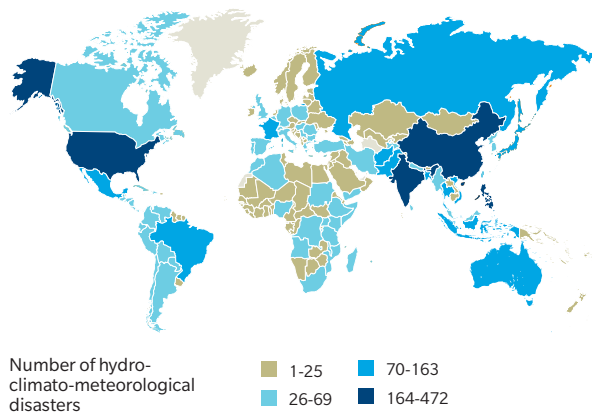
Fire: The automobile and automobile supply industries have helped manufacture sophisticated vehicles that meet the increasing demand. However, the numerous production steps in these industries pose many risks. Automotive manufacturing plants, like many other factories in the manufacturing industry are prone to diverse fire risks, which can occur in the production line and the materials, including liquid, and the equipment used, as well as different chemicals and paint used, storage facility, rooms and offices.

Fires, such as the one in 2012 at BMW's Tiexi (China) plant and the automotive parts plant in Revesby near Sydney (Australia) demonstrate the consequences of a major conflagration.

Natural Hazard: Natural hazards are one of the most severe disrupters of business and supply chain continuity, and also threaten economic output and growth in some of the world's key cities, especially those located in the emerging markets. Natural disasters strike with little warning. However, the risk of such occurrences is predictable. Knowing the likelihood of such scenarios allows companies to mitigate the natural disaster risks (see figure 1).

In addition to the loss due to direct damage, natural disasters may cause business interruption and thus pose a threat to the finances of a company.

Figure 1 Number of weather-related disasters reported per country (1995-2015)



UN office for disaster risk reduction (UNISDR) revealed that 20-year review (1995-2015) shows 90% of disasters are weathered-related; United states (472), China (441), India (288), Philippines (274), and Indonesia (163) record the most

Explosion: Explosions are usually less discussed losses in automotive industries. However, there are several critical areas where explosion hazard followed by fire persists. Be it the paint oven for drying the finished component, paint shop, engine test chamber or boiler, all face hazards from explosion that need to be carefully addressed.

Equipment breakdown: Many automobile manufacturing companies rely on plant and machinery as a key part of their operational infrastructure. Whether it is the reliance on robots, presses, cranes, reliable power supply or a bottleneck/critical production equipment that can lead to stoppage of production, the breakdown of either could have a detrimental effect on the business. Lack of an effective maintenance system gives rise to several undesirable consequences, some of which are:

- Excessive machine breakdowns.
- Frequent emergency maintenance work.
- Shortened life-span of the facility.
- Poor utilization of maintenance staff.

- Lower quality of products.
- Delay in delivery.
- Fast operating changes, without adequate due diligence.
- Disproportionate investment in spare parts and maintenance materials.
- Excessive overtime costs (both maintenance and production staff).

All these contribute to high costs of production and loss of profits.

Supply chain and contingency plan: Automobile manufacturers operate in often volatile markets, under increasing pressure to deliver products offering advanced technology, performance, and efficiency without passing costs on to the customer. Heightened expectations have driven the need for globalized production. Companies of all sizes are constantly reviewing market strategies.

Most of the top manufacturers follow just in time methodology with little or no production inventory placing greater emphasis on the transportation network for efficiency. Similarly, reliable and consistent parts supply for vehicle production is critical to maintain efficient operations at all assembly plants.

Risk management and business continuation planning are critical components of a competitive strategy. Organizations need a business contingency plan for protection of market share and brand reputation, regulatory compliance, maintenance of cash flow, protection of vital records, protection of assets and employees, and the survival of the company.

Companies do not plan to fail, they fail to plan

Most organizations do not have a fully tested contingency plan, jeopardizing their assets and their employees' lives. The business contingency plan is the survival document that determines what needs to be done and who is responsible for implementation.

LOSS EXAMPLES

- Many manufacturing plants in Chennai suffered water damage and some business interruption in the recent Chennai floods. Of the US\$38 billion annual production of auto components in India, almost 25% or \$9.5 billion comes from Chennai and its surrounding automotive belt, leading to a daily loss of Rs 172 crore. (Source: Economic Times)
- A fire broke out at auto component maker Subros' factory in Manesar in Haryana. Subros is one of the biggest suppliers of air-conditioners for Maruti Suzuki, meeting about 60% of the carmaker's requirement (Source: Economic Times)
- In December 2004, a fire occurred on the paint shop at one of the automobile manufacturing site in Japan. The plant fire brigade responded immediately, followed shortly by the local fire department, and the fire was completely extinguished in nine hours.

INDUSTRY FOCUS

MRC experts work with the clients and provide an independent inspection platform of the existing status of the fire and life safety arrangements in the existing premises. They provide reports to highlight the gaps as well as recommendations to bridge the gaps along with the priority level to address each of the non-compliance in the industry -specific categories.

With a range of risk management spectrum, the MRC practice offers its customers a broader understanding of their risk profiles. These services give added insight to help protect the business and revenue.

- Flammable liquids: Storage and handling evaluation.
- Evaluation of paint shops.
- Booths: Construction, occupancy, protection, and ignition source control.
- Paint curing ovens: Construction, occupancy, and protection.
- Review of vapor and dust explosion hazards.
- Review of ignition source control.
- Natural hazards risk assessment, including wind, flood, and earthquake exposure.
- Review of installed fire protection systems to local/ international standards.
- Logistic risk management, including cargo loss minimization, journey risk management, vehicle, and driver safety program.
- Evaluate the company's business continuity plans.
- Pre-acquisition property risk assessments.
- Annual pump tests as per NFPA 25.
- Training on loss prevention program and preparation of loss prevention manual.
- Property risk engineering: Loss control visits.
- Code compliance visits.
- Fire and life safety audits.
- Project risk engineering :
 - Adequacy of fire protection system for green field and brown field projects.
 - Evaluation of construction materials for fire stability.
 - Evaluation of natural hazard exposures: flood/ earthquake/ storms / hail etc.

MARSH RISK CONSULTING

SUCCESS STORIES

MRC professionals have helped audit large automobile manufacturing and auto ancillary companies to help prevent loss. These audits provide comprehensive risk reviews and reports that the management can use to make decisions about resources required to improve fire protection systems in their properties.

For one of the auto ancillary companies, property loss prevention training was provided in five of their sites in India.

MRC experts are also helping a large premium car manufacturer evaluate their existing sprinkler system and understand how the different safety systems can be used to prevent losses.

THE MARSH DIFFERENCE

As the world's leading insurance broker and risk advisor, Marsh offers the experience, knowledge, and insight required to identify and manage property exposures in the current risk environment. We were the first in our field to establish specialized industry practices for property risk consulting.

Our risk professionals are knowledgeable about the regulatory, technical, and business challenges of all major industries. We continually monitor research development, building codes, and local regulations to ensure that our risk solutions reflect the current local codes and best practices. We can help establish your risk profile and recommend cost-effective strategies for mitigating property related risks.

For more information about Marsh Risk Consulting and other solutions from Marsh, visit <http://marsh.co.in/service/riskconsulting/> or contact riskconsulting.india@marsh.com or contact your local MRC representative.

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