

# TECHNOLOGY IS REVOLUTIONIZING MANUFACTURING

## HOW DO YOU TRANSFORM YOUR RISK MANAGEMENT AND INSURANCE PROGRAMS TO KEEP UP WITH THESE ADVANCEMENTS?

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From product research and development, quality assurance and everything in between, technological advancements are changing the manufacturing process.

Blockchain technology is improving supply chain management. Artificial intelligence and The Internet of Things (IoT) is completely transforming quality control processes with automation and remote monitoring. Drones have the capability to help monitor manufacturing plant operations and maintenance activities. Robotic and Computer Controlled machinery have become ubiquitous and are now responsible for many of the tasks and operations previously handled by employees. According to the Brookings Institution, there are likely more than 1.9 million robots in use in manufacturing facilities and warehouses across the globe; with roughly 240,000 in North America.

Wearable technology for employees exists which can signal automated equipment to shut down when an employee gets too close to a process that could result in employee injury.

This technology reduces the risk of people getting injured in those situations where workers are operating machinery and equipment manually. In addition, technology applications are introducing new areas of risk that require manufacturers to conduct new and different hazard analyses on systems that are interconnected, impact the supply chain and could create a process disruption.

As a result of these significant changes and advances, risk management practices and insurance coverages must be reassessed and updated to keep up with the evolving risks that inevitably come with the continued adoption of new capabilities.

The implementation of technology into manufacturing is unlikely to slow and, in fact, it is expected that the pace will accelerate. Therefore, reassessing and updating insurance coverages and risk management means that manufacturers are strongly encouraged to evaluate and update their insurance programs and risk management processes on an ongoing basis. Three ways they can do this are:

## 1 AUGMENT PROPERTY INSURANCE WITH CYBER COVERAGE

Whenever a new piece of network-connected technology is brought online in a manufacturing plant, cyber security risks are inherently introduced. Today, many of the advancements reshaping assembly lines are remote controlled by an internet-connected piece of technology. Whenever any equipment is connected to a network, it gives cybercriminals a potential pathway to hack their way in.

Traditionally, cyber security concerns centered around data security and compromised sensitive personal information. But today, cyber criminals are also able to gain control of mission-critical equipment, sabotage production, damage machinery and even harm employees.

The financial implications of such a cybersecurity breach can be devastating. Most property insurance does not cover damages that result from a cybersecurity event.

While many manufacturers are beginning to purchase cyber coverage, many companies have not yet studied the potential implications of a cyber event and are exposed to significant financial loss and business interruption.

Company owners and operators should also assess the cybersecurity infrastructure at their third-party vendors. If vulnerabilities exist at these companies, it is critical that the manufacturer ensure their contracts are structured to protect them from liability in the event of a breach.

## 2 ADDRESS RAPIDLY RISING EQUIPMENT REPLACEMENT AND REPAIR COSTS

The technology being deployed in manufacturing facilities is far more expensive to repair and replace than traditional machinery. Advanced manufacturing equipment is often custom made for a particular facility and repairing or replacing such a piece of equipment can take months and introduce costly production interruptions and delays. Plant owners and operators must take this into account when developing their property values and business interruption estimates for property and equipment breakdown insurance purposes.

It is important that your policies include replacement cost valuation where appropriate, no coinsurance requirements (if available and at a reasonable premium), a sufficient period of indemnity for business interruption, extra expense coverage and blanket limits where possible.

## 3 UPDATE RISK MANAGEMENT PRACTICES TO MATCH CHANGING WORKER DYNAMICS

Technology is changing the way manufacturing workers do their jobs. Traditionally, manufacturing was very labor intensive, but technology advancements are increasingly taking these workers off the floor and out of harm's way. By reducing human interaction and worker fatigue, this should reduce the risk for injuries and accidents.

*With fewer workplace injuries, not only can the cost of workers compensation be reduced, but all of the hidden costs that accompany employee related injuries should also be reduced.*

It should also be noted that in many cases, the workers compensation class codes for an insured may not have been updated to address the changes in job descriptions and activities resulting from process advancements. It is a good practice to periodically review this with your broker and carrier as your manufacturing process continues to change and evolve.

On the other hand, new technology can introduce new risks that must be addressed. Manufacturers must refresh their risk management approach and risk assessment strategies to reflect this new operating environment. Standard Operating Procedures must be reviewed and updated on a frequent basis. In addition to hazard assessments on new equipment, it is important to understand how a piece of advanced manufacturing machinery can affect the entire process in the event of an unplanned shut down.

*Programming glitches, system failures and breaches of the cyber environment can all have a devastating impact on a company.*

Table top exercises and testing of a business continuity plan are useful and can prepare a company to better manage a disruption. In addition, property and cyber underwriters have come to expect their insureds to have risk mitigation and continuity programs in place in order to provide insurance coverage at a competitive premium.

## KEEPING UP WITH NEW TECHNOLOGY

As with many other industries, technology is rapidly transforming the manufacturing segment. As a result, insurance coverages and risk management strategies must be updated to reflect the rapid advancements and the new risks they present. Insurance brokers that have experience in this industry and knowledge of the nuances of these dynamics can help ensure that a manufacturer has the proper coverages and procedures in place. Investing some time and attention today can save plant owners and operators from incurring significant financial setbacks and production delays in the future.

To discuss technology in manufacturing:

Please contact a Conner Strong & Buckelew representative

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