

CORDSTRAP INSIGHTS

ON CARGO SECURING **FOR THE CHEMICAL INDUSTRY**

A full-page background image showing a worker from behind, wearing a blue uniform with reflective yellow stripes and a yellow hard hat. The worker is walking on a yellow industrial walkway or platform. The background is filled with yellow industrial structures, pipes, and valves, suggesting a chemical or petrochemical plant. The lighting is bright, creating a high-contrast, almost ethereal effect.

**Is your supply chain resilient
enough to ensure your business
recovers from Covid-19 fitter
and faster?**

cordstrap



Exploiting new markets, increasing loading efficiency, competing in a fast-changing global market and building sustainability into your supply chain are all key challenges for businesses as we emerge from the COVID-19 crisis. In this edition we will examine all of these factors and look at what you can do to ensure your business has the resilience to emerge stronger after the pandemic.

Economists agree that the crisis will fuel a significant recession with some predicting that it will rival that of the 1930s. As with every recession, there are abundant opportunities for those dynamic enough to capitalize on the forces at play. It is interesting to note that despite daunting predictions about the effects of the 2008 financial crisis, the most resilient elements of the global economy recovered far more quickly than anticipated.

Many thought leaders are talking about a “new normal” however the future already looks more complex and uncertain than anything that could be described as normal. MIT’s Michael Davies, a global thought leader in technology, innovation, and leadership, suggests that we should get used to a “new abnormal” in which businesses must develop greater resilience, empowering them to bounce back from this and future crises rather than simply survive.*

Resilience is about having the skill, the will and the grit to succeed under any circumstances. In this report, we will look at some of the opportunities the crisis has created and examine how Cordstrap can enhance the skills of your logistics team to deploy solutions that are stronger, more efficient and safer. This will not only enable you to bring operations back to pre-covid levels, but will reinforce your resilience when faced by shocks into the future.

The importance of new markets and developing the resilience to exploit them.

There is no doubt that the chemical industry has been hit hard by the first waves of the pandemic. In their analysis of the situation, Price Waterhouse Coopers (PWC) estimate** that it is the fifth hardest hit of all global industries. This should come as no surprise as the chemical industry largely tracks the wider economy due to the fact that it supplies many of the key materials needed by other industries and lies at the heart of most products. As a result, the industry is more accustomed than most to dealing with wild fluctuations in order levels.

This culture of adaptability has led several of Cordstrap’s chemical industry customers to react quickly to demand spikes for things like hand sanitizer and PPE. INEOS managed to set up hand sanitizer manufacturing plants across Europe from scratch in little more than a week. It generated positive coverage by supplying products to frontline healthcare departments for free. This demonstrated their resilience and built brand equity at a time when confidence is under extreme threat. Similarly, Dow repurposed existing facilities to start producing antiviral hand gels.

“It is critical to work with cargo protection experts who fully understand the full range of risks and regulations facing shipments on any given route”

* Post pandemic resilience” BBC Radio 4, The Bottom Line June 25 2020

** Preparing the chemicals industry for ‘the day after’ the COVID-19 pandemic” Strategy& PWC April 24 2020

The chemical industry has a critical role to play in tackling the pandemic. Chemical companies across the globe provide emergency relief by supplying vital products such as active ingredients for pharmaceuticals, technically advanced materials for protective and medical equipment and, of course, chemicals for the hygiene and cleaning products that will prevent the spread of the virus.

Chemical companies are well aware of the vital role they play. By doing everything they can to foster resilience in their communities, they will help lead the way in restoring the economy and reviving consumer demand. Braskem, one of Cordstrap's Latin American clients, has stepped up to this task with a number of initiatives including donating sufficient thermoplastic resins to produce 60 million hospital masks or 1 million aprons. They've also supplied of basic food baskets for three months to more than 1,200 families working in recycling and are supplying 50,000 families living round their Brazilian plants with hygiene and cleaning products. They are actively supporting the government of Alagoas in creating a field hospital and supplying the raw materials needed to 3D print PPE in 8 research centers.

While large, diversified, cash-rich players are more capable of making large investments to adapt their activities, this is more of a challenge for smaller, specialty, producers. In many manufacturing sectors they have struggled due to factory shut-downs and the slump in demand for consumer goods. For example, suppliers to the automotive industry have been particularly hard hit with PWC reporting* factory closures reducing demand in the US by as much as 30% in this sector. For them, the need to be innovative is even greater.

The most resilient are rapidly adapting to the "new abnormal" and switching supply to meet emerging demands around the world. Demand for disinfectants, pharmaceuticals and food additives is booming. Companies switching to making PPE and healthcare products are creating new markets for the chemical industry. 3D printing is playing an important role in supplying PPE quickly and locally and supplying the chemical components is another opportunity.

Another benefit emerging from the crisis is the collapse in the price of oil - the single most important raw material for chemical industrial activities. This cut to input costs will help boost margins putting you in a strong position to lead the way out of recession.

Exploiting these new markets and opportunities will depend on your ability to mobilize new supply chain routes quickly and efficiently and it is important to be able prepare and load shipments to address the risks and meet the required standards and regulatory requirements at every step along those routes.

Adapting supply chain is a complex and multi-faceted process involving many players. The smart supply chain and operational teams will ensure that initial planning includes cargo protection systems that will ensure the goods arrive safely. They need to be tailored to match precise load and packaging types.

Dynamic companies have avoided COVID-related shipping delays by turning to transcontinental rail routes. While this seems like a straightforward switch, it is more complex than that. The stresses of rail transportation are significantly different from those of ship-board cargo and the Association of American Railroads (AAR) has determined that rail cargo can be subject to forces of up to 4G during the course of their journey.

This is why it is critical to work with cargo protection experts who fully understand the full range of risks and regulations facing shipments on any given route. Cordstrap have unparalleled experience of securing rail cargo and have worked closely with the AAR to engineer a suite of approved solutions for all rail cargo types.

Another significant issue faced by cargo travelling along the new transcontinental rail routes, between Europe and Asia, is condensation. While ship-board cargo are protected from extreme temperature shifts by the more temperate maritime climate and the way containers are stacked, cargo travelling overland is subject to much greater fluctuations. These are much more likely to cause "container rain" and lead to moisture damage. This can cause powders to cake, lead to corrosion of drums and peeling labels which represents a particular risk which for hazardous cargo carrying important safety information. Exposure to moisture can cause certain materials to emit stench and compromise their scent.

This sort of information is vital in building a truly resilient supply chain and, once again, having a global cargo protection partner fully versed in these areas is essential for businesses wishing to take advantage of emerging global markets and build resilience into the future.

* Preparing the chemicals industry for 'the day after' the COVID-19 pandemic" Strategy& PWC April 24 2020

What social distancing can teach us about increasing efficiency.

A key challenge facing many businesses, during the outbreak, was the need to keep their personnel safely distanced while performing their duties and maintaining productivity levels. This proved difficult for people in roles involving close working performing physical tasks.

Businesses that had already enhanced the resilience of their business through digitization, automation and developing solo ways of working to drive efficiency found that they were at an immediate operational advantage when the crisis struck.

Among the many efficiencies we had facilitated for our customers were systems of loading and cargo securing solutions that had been specially engineered to safely be applied by a single person. This greatly increased flexibility of supply chain and helped reduce labor costs prior to the crisis and meant that our customers could adjust to social distancing in their cargo loading activities with absolutely minimal disruption when the crisis struck.

It also facilitated single operator unloading solutions reducing costs and risk at both ends of the supply chain.

This learning is a beautifully simple demonstration of the importance of investing in operational efficiency to enhance resilience in your business. It also reinforces the importance of rolling out investments that enhance efficiency throughout your global supply chain. By operating at optimal efficiency in "normal" times, you will be ready for shocks as and when they happen.



Building a stronger more resilient supply chain is key to making the most of your recovery.

The APAC region has survived the crisis considerably better than other parts of the world due, in no small part, to the fact that those countries had already experienced two coronavirus outbreaks – SARS and MERS – over the past two decades. Hong Kong proved especially resilient, reporting just seven COVID deaths by the end of June 2020 and South Korea has seen less than 1,000 deaths from a population of over 50 million.

Even before the COVID19 outbreak, China's output accounted for around 39% of the global chemical sector and that was set to expand at a compound annual growth rate (CAGR) of around 5 percent until 2025, involving total sales of US\$4.85 trillion.*

This growth compares with around 2.7 percent CAGR in the U.S., 1.3 percent in Germany, and less than 1 percent in Japan over the same period. Given their resilience in containing the virus, and the fact that their chemical industry out-performed every other in recovering from the 2008 financial crisis, it seems likely that contrasts in growth projections figures are likely to be even more marked.

“We can reliably forecast there will be considerable changes to supply chain routes as markets rebuild”

The one threat to that, is the pre-existing trend towards deglobalization by governments that view China's activities as a threat. Whether that trend continues or abates, post-COVID, remains to be seen.

The blockages to supply chain during the pandemic flagged individual countries' dependence on a very small number of suppliers for many key chemicals which has generated concern and may cause a further backlash against globalization. However, the global nature of the virus is a reminder that it is impossible to disconnect from the rest of the world and protectionism will inevitably drive up prices. Consequently, the pressure from business to maintain integrated global free markets is also huge.

* Inflation adjusted global chemical industry sales," IHS Markit, Jan. 17, 2019.

Whichever way global markets turn, we can reliably forecast there will be considerable changes to supply chain routes as markets rebuild. Logistics are a key aspect of the chemical industry with production and consumption locations that are often widely separated. Highly efficient, competitive and sustainable logistics are therefore critical to the industry's future development.

By ensuring your logistics are agile, flexible and adjustable you will create opportunities to respond to market changes more quickly and effectively. Finding the expert advice and precise solutions required to protect your cargo across global supply lines must form a key part of your resilience strategy.



Could one global crisis help prevent another?

The global pandemic has had a huge effect on the environment. The canals of Venice are reported to have cleared, the Himalayas are more visible than they have been for a generation and emissions are reported to have fallen by as much as 60%.

While these changes may be short-lived as economies restart and businesses bounce back, many individuals and campaign groups are suggesting the slowdown is a unique chance to take stock. Governments around the world are looking to build green initiatives into the stimulus packages they are implementing to drive the recovery and fend off the risk of further crises.

“*The commercial advantages for resilient chemical companies to step up to environmental challenges are widespread*”

The chemical industry has a huge role to play. Not only by taking measures to address the fact it is one of the greatest emitters of greenhouse gases but also as the supplier of the key materials required to tackle climate change. Chemicals lie at the heart of the manufacture of solar panels and can help in the development of longer more dynamic blades for wind turbines. Chemicals also have a massive role to play in light-weighting transportation vehicles to make them more energy efficient. A study by the International Transport forum estimated that Reducing the average weight of passenger cars from 1,380kg currently to 1,000kg by 2050 could lower emissions by 40%.

Once again, the commercial advantages for resilient chemical companies to step up to environmental challenges are widespread and far-reaching. Exploiting these opportunities will depend on your ability to get chemicals to the right place quickly and safely and ensuring the security of these new elements of your supply chain should be a key part of your resilience strategy. Damaged and spoilt cargo is a hugely significant waste of resources and the chemical industry is particularly vulnerable to failures here, as spillages can lead to fires and pollution incidents.



Investing in supply chain resilience is not a cost, it's a necessity.

Renowned economist, Professor Dennis Snower, of the Hertie School of Governance in Berlin, suggests that, in the post COVID world, businesses will have to worry less about efficiency and getting costs down and worry more about increasing the security of supply chains. As a company that has devoted its existence to creating stronger solutions to make global supply chain operations safer and more efficient, we are uniquely placed to help you achieve that resilience in a host of ways.

- We engineer innovative, cargo protection solutions designed to protect any load type on any modality across the world.
- These can all be tailored to match specific cargo and packaging types.
- Our strapping systems and dunnage bags have been designed to be simpler and faster to apply saving time and labor while delivering unparalleled strength and security.
- As the world's only truly global cargo protection specialist, we are in a unique position to support you as you deploy new supply chain routes.
- Our cargo protection solutions are all CTU code compliant and have won the approval of the world's leading regulators and insurers including: Germanischer Lloyd, the IMO, Maritimer AB, Eurosafe and the Association of American Railroads (AAR).
- Our market-leading moisture control solutions deliver the most effective absorption rates currently available.



MariTerm AB



At first glance, building resilience might appear to represent a cost at a time when your natural instinct might be to be cutting costs. However, when you factor in the competitive advantage, increased efficiency and profit margins the returns outweigh the initial expenditure. Add to that the additional decision-making capability and agility greater resilience will deliver in the long term and the payback is potentially enormous.

To discuss how we can bring greater resilience to your supply chain and create the confidence and agility your business needs to thrive in the post COVID world, get in touch.

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