



**Opening Up America** – The White House, in conjunction with the CDC, released guidelines for a three-phased approach to reopen the economy. <https://www.whitehouse.gov/openingamerica/>

## Site Operations & Access

- More businesses are talking about planning for the re-entry into the workforce, including discussions on staff augmentation, increasing production, and shifting protocols
- Enhanced safety protocols the new normal, increasing PPE supply chain strain as questions arise around who needs masks, gloves, glasses and how many, considering shelf life
- Manufacturers that are designated as “essential” (food, pharma, paper products, chemicals, PPE) are continuing to experience extraordinary spikes in demand as business and consumers’ shift buying patterns
- Concerns over continuity of direct and indirect materials supply, including mission-critical spares and PPE

## Logistics & Last Yard Delivery

- Logistics capacity is growing more and more constrained as consumers and businesses (essential) shift to e-commerce
- UPS, designated among the government’s critical infrastructure, while continuing operations suspends service guarantee for all shipments from any origin to any destination
- Amazon allows sellers to start shipping nonessential items again
- Receiving at sites and proof of delivery (POD) not required during contactless delivery

- Items misplaced or lost at the dock, not making their way to the storeroom or to where they are needed

## Emerging Lessons Learned

- MRO supply chain status is quickly evolving to essential and, in many cases, mission critical
- Materials considered “commodities” 90 days ago now need to be viewed and managed as essential or “operations essential”
- Resulting recognition and emergence of “essential supplies” that includes critical machine spares, PPE, and other items that are essential to employee safety and plant operations (toilet paper, paper towels, etc...)
- Acceleration of Industry 4.0 technologies to mitigate risk of future pandemics on plant operations and production
- Most firms have no risk management plan related to MRO supply chain; it is often overlooked/ignored in enterprise-wide risk management
- Global (MRO) supply chains with lean/just-in-time inventories have proven to be a risk multiplier during this pandemic and subsequent quarantine
- Most organizations have not formally identified and managed their critical spares & essential supplies, many of which are manufactured in Asia



### Fulfillment – Storeroom & Inventory Management

- Organizations with enterprise visibility of inventory are able to share supplies, particularly critical spares which may not be available otherwise
- Interest in a central stores model will grow as awareness of expanding scope of essential supplies and materials impacts enterprise risk management plans
- Global supply chains coupled with Just-in-Time inventory delivery is proving challenging
- Unmanned, unsecured storerooms leading to disorganization, resulting in greater difficulty locating parts...more spot buys and expediting
- Inventory set levels (Min/Max) – replenishment misaligned with current demand and actual inventory levels
- Supplier-managed free stock and vending replenishment programs strained due to site access restrictions
- Value-added services such as kitting, delivery, and warranty/3rd-party repair management temporarily halted

### Supply Continuity – Sourcing & Procurement

- Supplier risk of insolvency is growing, particularly for smaller suppliers without investments in eCommerce and access to capital
- Systems limitations cloud visibility into critical supply chain information including storeroom/warehouse/free stock inventory levels
- The FDA has approved several technologies and organizations for mask sterilization and reuse – this will take on greater importance in the future

- Forward buying (3-6 months' supply now to ensure availability) further stresses already lean supply chain
- Inventory optimization difficult during a time of emergency buying, hoarding and P-Card purchasing
- Primary focus is continuity of supply, dealing with primary, secondary, and tertiary sources of supply including many non-traditional sources such as marketplaces, while corrupt (MRO) parts data severely limits Sourcing's ability to quickly identify functional equivalents from alternate suppliers
- Limited to no knowledge of "critical" spares, inventory levels in house and with suppliers, country of origin, and or lead times

### Suppliers – OEM, Distributors, Marketplaces

- Lead times are increasing, in some cases as much as 200% or more as many MRO products and components are sourced from Asia
- Pricing – remains steady, some categories spiking due to shortages, growing influence of marketplaces provides transparency and mitigates incidence of gouging
- Multiple categories where sources are located in Asia and Europe are being impacted today and will continue to be for months to come as many plants have been, and continue to be, shut down or are producing at less than 100%
- Smaller, local parts suppliers and machine/fabrication shops are struggling with limited staffing. Lead times for custom parts are extending and promise dates are being missed
- MRO supply chains are likely to experience bull whip effects in mid-summer once domestic inventories are depleted and usage returns to normal



- Suppliers are significantly reducing credit limits to force pre-payments or quick turn around payments
- Visibility into (OEM) supply chain and timing for delivery is limited as information is not readily available or reliable, particularly from international suppliers
- North American OEMs and distributors are also struggling to keep pace as shelter-in-place rules constrain resources at a time when they are inundated with customer orders and order status inquiries

## MRO Demand – Maintenance & Engineering

- Staggered shifts to ensure compliance with social distancing rules
- Production assets of essential industries are maxed out and fatigue stress is growing
- Limited visibility into future repair demand
- While some companies are scaling back and deferring maintenance, non-critical PMs, turnarounds and other capital projects, others are using this as an opportunity to perform these task as part of their asset protection strategy while production has been scaled back

## Mitigation Strategies

- Consider delegating purchase authority to additional employees, loosening controls and lengthy approval processes, and consider online marketplaces as a source for tail items and spot buys
- Keep supplies secure and reduce waste by staffing your storeroom at all times, installing cloud-based cameras/monitoring systems and locking away high-demand items. Vending and locker systems that track usage by department and individual employees have been shown to reduce consumption by as much as 30 percent.
- Re-defining critical, identify critical spares, on-hand inventory, and reconsider minimum set points
- RFI legacy suppliers to obtain manufacturer name and manufacturer part number for items purchased in past 12 months, emphasis on critical spares and high-turn items
- Consider capital projects to retrofit equipment and reduce reliance on customized critical parts (with long lead times). Use of interchangeable, off-the-shelf parts will mean less impact from supply disruption and ability to share limited inventories across facility locations
- Additive Manufacturing/3D Printing can be an alternative source for stocked out items with long lead times or where supply is no longer commercially available
- Procurement Leaders should continue to dialog with their leadership – as the news changes daily, to align teams to new and changing priorities

### About SDI

SDI is a Digital Supply Chain Solutions firm with a focused practice in Indirect Materials, MRO, and Industrial/Facilities Technology. They go to market through an innovative As-a-Service offering, delivering custom solutions and results designed to improve client MRO supply chain performance. To learn more visit: <http://www.sdi.com> or contact [sales@sdi.com](mailto:sales@sdi.com)