Your Start Up Checklist

We're here to help you navigate the critical and complex as you start your plant floor operations back up. This checklist can aid Maintenance Managers, EH&S Managers, and Engineers as your operations ramp up to meet growing post-COVID-19 demands.

Want to learn more? Join our industry experts as they dicuss these checklist items in detail during our <u>Starting Your Manufacturing</u> <u>Operations Back Up</u> Webinar.

COVID-19 Checklist	
Safety Considerations	
Workplace zoning	
Evaluate building readiness	
Create space guidelines (washrooms, eating areas, visitors, public)	
Increased cleaning and disinfectant routines	
Prepare for high risk populations	
Ensure physical distancing	
Point of entry screening and program management (wellness and temperature checks)	
Contractors, shipping & receiving, and delivery policy	
Communication	
Educate and communicate with your organization on how to reduce transmission	
COVID-19 protocols	
Sick leave policy	
Return to work plan	
Prepare employee Q&A	
Cross-train teams to prepare for absenteeism to maintain business continuity	
Plant, Machine, and Automation Checklist	
Facility Preparation	
Facility risk assessment	
Ensure you have the correct safety equipment on hand (PPE)	
Prepare inventory (PPE, cleaning supplies, etc.)	
Identify Lockout/Tagout locations	
Verify current prints, drawings, IO schedule	
Prepare inventory (PPE, cleaning supplies, etc.)	
Verify files (PLC, drives, HMI, SCADA)	

Have the right software, hardware, and cables available

Visual Safety Inspection	lfz
Update all panel legends	
Document disconnect locations	
Check out airlines, hoses, and hydraulic systems	
Inspect for loose or frayed wiring, moisture in enclosure, etc.	
Verify all plug-in connectors are tight and secured	
Make sure all safety guards are installed	
Visual inspection of equipment and devices (HMI, PLC, sensors, light curtains, e-stops, robot)	
Component Test	
Check and record voltages at circuits	
Perform and record calibrations where applicable	
Test all alarm systems, horns, sirens, etc.	
Verify HMI operation - correct time and date if applicable	
Verify PLC operation (faults, run status, battery status)	
I/O schedule and verification (sensors, switches, PB's, cylinders, motors, etc.)	
Robot function, servo motors/drives, light curtains/safety scanners vision inspection systems, UPS Sy	stems, etc.
Start Up/Commissioning	
Switch gear: systematic approach to bringing equipment online	
Power up hydraulics and pneumatics: pressures within range	
Review any diagnostic history, including events and alarms	
Cycle equipment/run dry cycle on machines where possible	
Verifying run times	
Verify there are parts for production	
Verify network connection to OT or IT network is working properly	
Sustainable Operations	
Regularly scheduled infrared scans	
Regularly scheduled oils samples for transformers	
Arc flash studies/IR reports	
Parts inventory up to date	

_____ Develop preventative maintenance checklist and schedule

____ Data collection and predictive maintenance

_____ Dashboards and line display (key metrics)

____OT network reliability

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