Post-COVID-19: Prepping Your People for the "New Normal"

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The Post-COVID New Normal

Workforce: Management & Technology

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Megatrends: new normal will NOT be the old normal

Near term operating environment
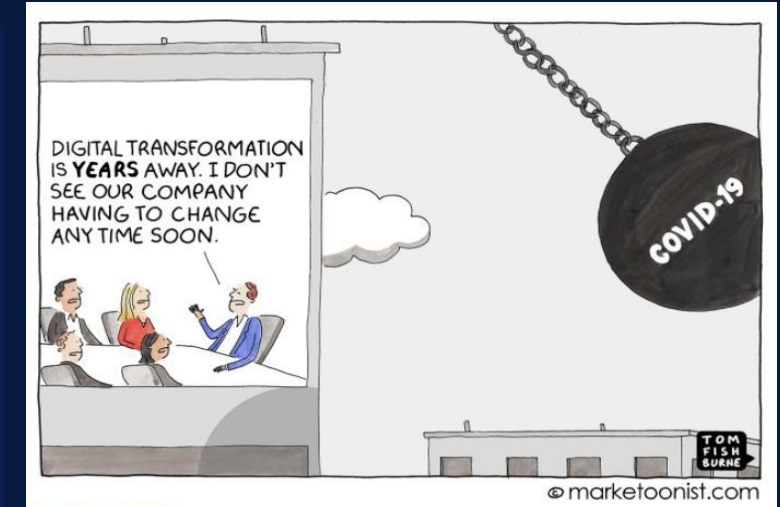- Continued social distancing
- rolling self-isolation
- Spikes in demand & supply

Near/mid-term responses
- Redesign of processes
- Remote is new standard
- Leveraging technology
- Renewed push for digital transformation

Mid/long-term ripple effects
- Retreat from lean, single-sourced supply chains
- Move towards Virtual everything
- Re-alignment to agility
- Gig-economy
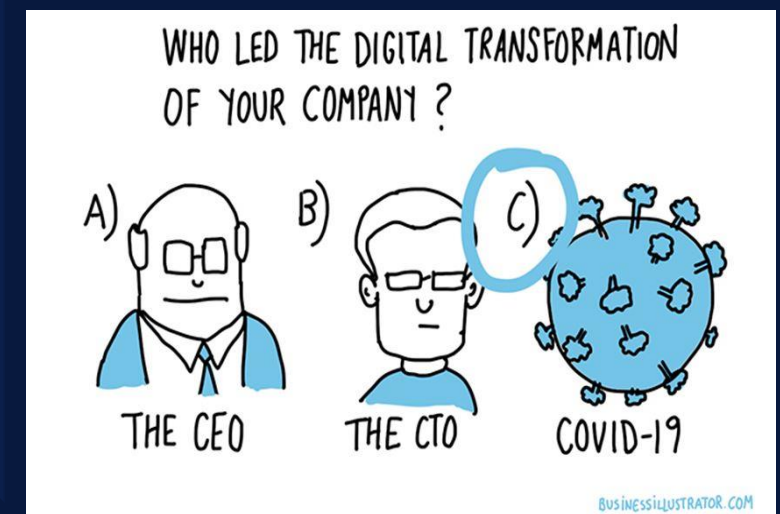
Safe practices where technology is helping

- Remote: factory back office, training
- Touchless access
  - Clock-in/out
  - Automated doors/panels
- Social distancing
  - Low-tech: makers on floors, plexiglass barriers
  - High-tech: computer vision alerting
- Cleaning
  - Scheduled cleaning & over supply of products
  - Touchless
  - Air filtration & UV lighting (night use)
- Materials
  - Copper fixtures
  - Virus-resistant fabrics
- Partial automation (e.g. cobots)

#TipOfTheDay

New normal: from continuity to organizational agility

Now: business continuity → **Future: ability to pivot**

Rapid adjustment for survival → Rapid adjustment for advantage
- New operating plan
- Communicate safe/new practices
- Teach safe/new practices

- Everchanging operating plans
- Communicating new, to dispersed
- Continuous reskilling/upskilling

Motivated by survival instinct → Engagement & culture are key

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Foundation: digital platforms enable *organizational agility*

New normal: from continuity to organizational agility

In the new world it is not the big fish which eats the small fish,

it's the fast fish which eats the slow fish

Klaus Schwab
Founder & Executive Chairman
World Economic Forum

Foundation: digital platforms enable *organizational agility*

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HCM digital platform example: enabling agility

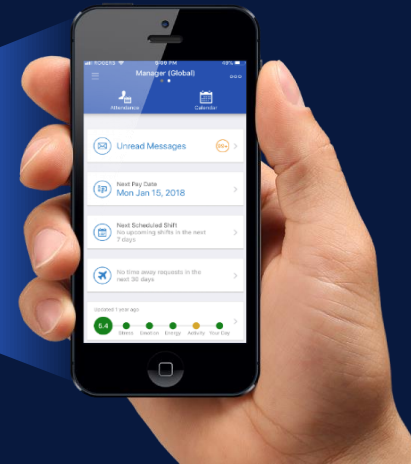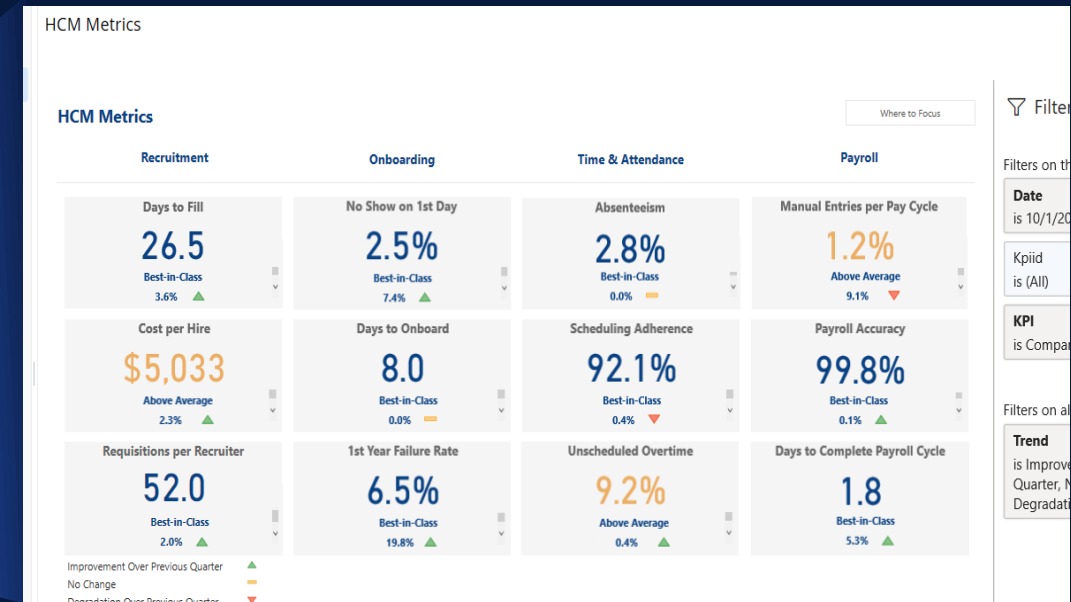**Platform agility is competitive advantage**
- Cloud
- Holistic & seamless
- Real-time
- Data-driven insights
- Mobile

Enables the profit-center
- Rapid acceleration to line-start
- Running the line
    - Automated (re)scheduling
    - Compliance-level costing
- Real-time visibility and control

Engages the next-gen worker
- Self-service
- Transparency
- Control

Ramping to the new normal: call to action recommendations

- Over-invest in communications & use video
- Build stepwise ramp-up plans & progress by step
- Continue to leverage technology for safety, efficiency
- Double-down on digital transformation
- Become more data-driven, follow to value
- Productionalize learning
- Leverage technology to propagate culture

Aim for organizational agility

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Speakers

Mark Jules

Global VP of Smart Spaces and Video Intelligence

Hitachi Vantara

Craig Ulrich

Vice President of Intralogistics Automation

Esys Automation, a JR Automation company and part of Hitachi, Ltd.

After COVID-19: Prepping Your People for the New Normal

Build trust and safety through systems and monitoring for COVID-19
Hitachi Vantara

Automation for essential manufacturing:
General Motors' COVID-19 response
JR Automation, a Hitachi, Ltd. company

Biography

Mark Jules

Hitachi Vantara
Global Vice President of Smart Spaces and Video Intelligence

Mark Jules is Global Vice President at Hitachi Vantara. He heads up Smart Spaces and Video Intelligence, which delivers software and hardware solutions that support safer, smarter and more efficient communities, businesses, and organizations through the internet of things (IoT), video innovations, and connected intelligence.

Mark joined Hitachi in 2014, following its acquisition of the Avrio RMS Group, a public safety solutions company, where he served as the company's CEO for more than a decade. Prior to Avrio, he was the President and Founder of Protean Solutions, a provider of mobile platforms for battlefield and emergency communications.

Building Trust and Safety
Responding to COVID-19

- Future outbreaks of COVID-19 is a real possibility due to social distancing measures.

- Solution assists in containing, tracking and preventing outbreaks through thermal sensing, 3D lidar and analytics.

- Help prevent the spread, minimize the impact to your business and provide transparency to employees and regulators.

Containment

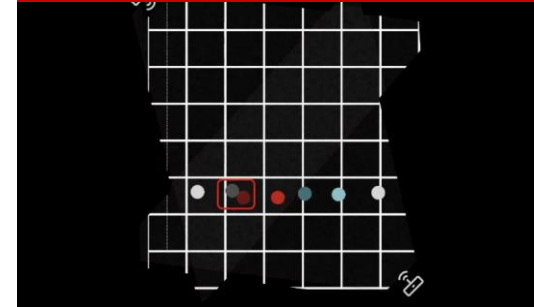Triggers an alarm when a person exceeds fixed temperature

- Elevated body-temperature detection
- Real-time alert in HVS at location of detection

Possible Customer Policy:

- Elevated individuals are sent to secondary testing with medical thermometers
- Person sent home and incident recorded

Prevention

- 3D lidar model trained to verify handwashing
- Statistical data can be stored for analytics and reporting
- Social distancing verification

Possible Customer Policy:

- Internal health education targeted to low compliance groups
- Public leaderboard of most compliant groups to encourage washing

Compliance

- Digital incident data of multiple types is aligned to case and stored
- Data tagged and associated to actions

Possible Customer Policy:

- Manage incident, compliance and reporting data elegantly
- Share relevant data with authorized third parties
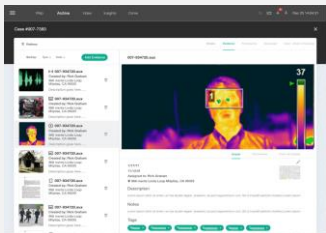
Three Pillars for Health and Safety

Containment

Elevated Temperature Detection
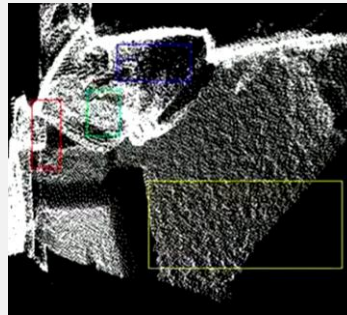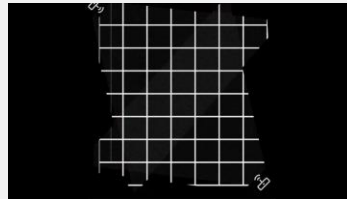3D lidar and thermal cameras

Alerts and Analysis
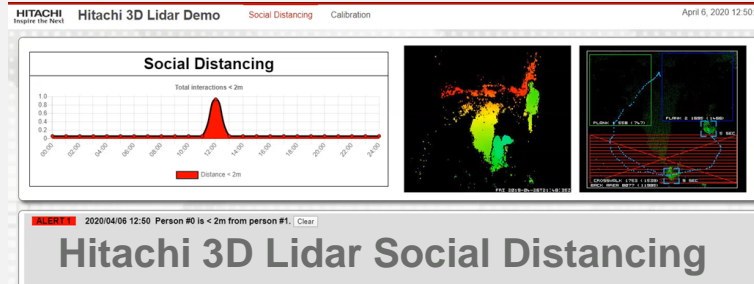Hitachi Visualization Suite

Secondary Testing and Incident Management Archive
Digital incident footage and documents

Prevention

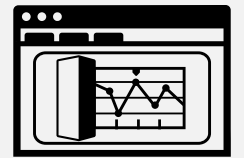**Handwashing Verification**
3D lidar AI solution

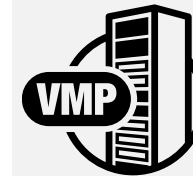**Hitachi 3D Lidar Social Distancing**

Compliance

Safety Equipment Detection

Data-Driven Analysis, Planning and Reporting
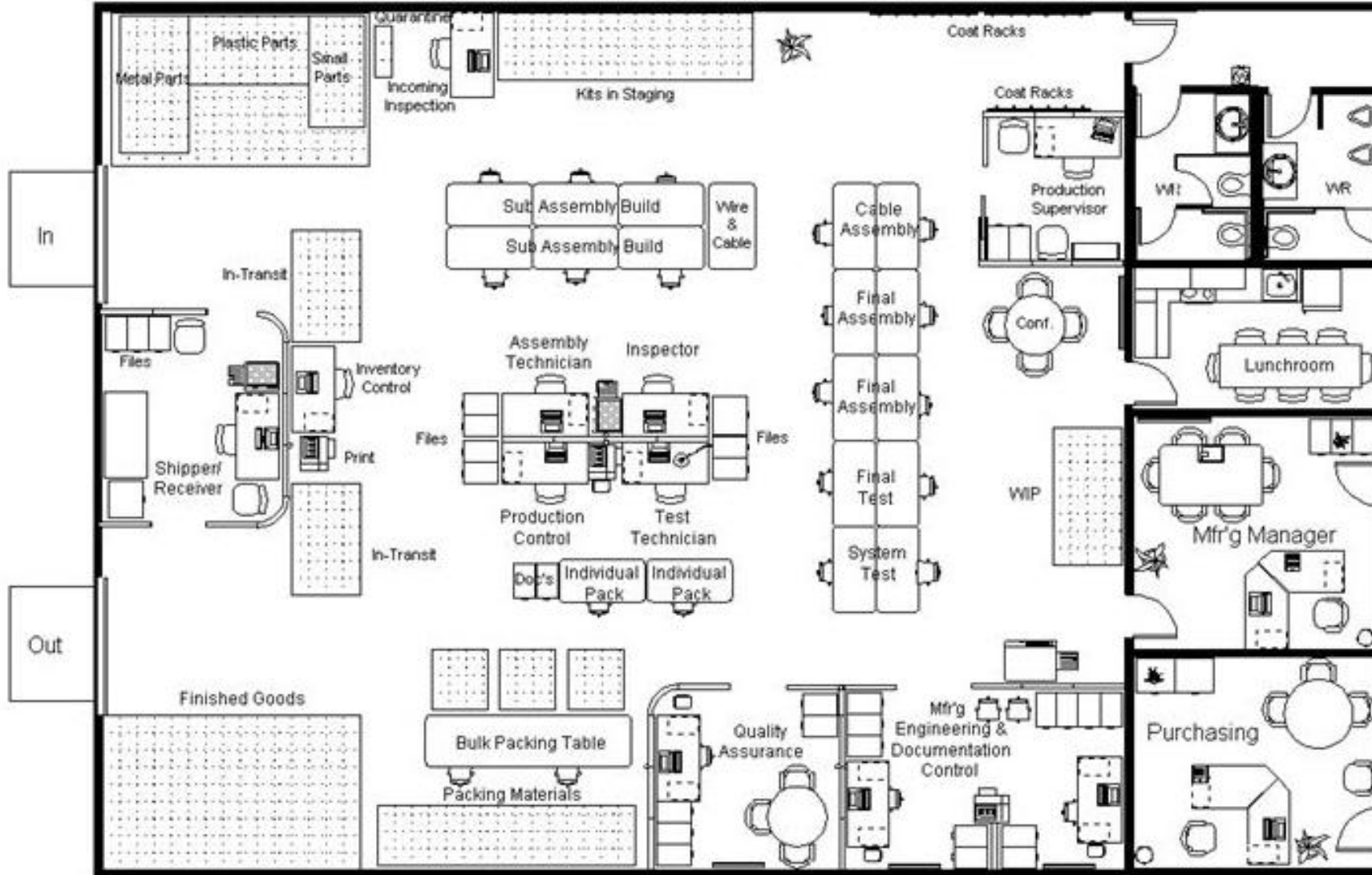
Factory Deployment Example

Thermal Monitoring and Alerts

3D Lidar Social Distance Monitoring

Direction Controller

3D Lidar Handwashing Monitoring

Incident Management

Workplace Safety Quality Control

Additional Resources

HITACHI
Inspire the Next

[Build Trust and Safety Through Systems and Monitoring for COVID-19](https://bit.ly/2XW8v4O)
https://bit.ly/2XW8v4O

Disclaimer:

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease. *Hitachi Vantara, LLC does not claim to be able to detect fever, infection, disease or any health or medical condition with these solutions, and none of the technology herein is, nor is claimed to be a medical device. This information is not intended to be medical advice and statements have not been evaluated by the Federal Drug Administration.*

Biography

Craig Ulrich

Esys Automation, a JR Automation company and part of Hitachi, Ltd.

Vice President of Intralogistics Automation, Esys Automation

Craig has over 30 years of experience in the automation industry. He began his career at General Motors, where he worked for 24 years, holding various positions including Director of Controls, Conveyors, Robotics, and Welding. Craig also worked for Amazon as their Director of Global Automation Deployment.

He now works at Esys Automation, JR Automation company, as the Vice President of Intralogistics Automation. With decades of experience in controls engineering, project management, and leadership, Craig has both technical and industry knowledge in intralogistics applications.

Automation for Essential Manufacturing

The Task:

1. Develop automation to make surgical masks in 6 days
2. Use prints from SGMW and build to print

DESIGN

- There are 3 main components.:
  - **Nose wire** – wire that forms over the nose. This helps the mask fit to the face, but more importantly it reduces the escape path for air flow. It also prevents airflow that can cause fogging of prescription glasses and PPE eyewear.
  - **Ear loops** - Holds the mask to the face. Too Long and the mask will not stay in position. Too short and the mask will be uncomfortable and can irritate the ears.
  - Mask Materials – three materials. Each layer is specified based on the weight in grams per square meter (GSM), chemistry and manufacturing technology.
    - **Outer layer** –Spunbond nonwoven polypropylene.
      - The outer layer is hydrophobic. This mask is not intended to be liquid proof, or even liquid resistant, but to prevent fast absorption of fluid to transfer through the mask. This layer primarily execute filter functions of inertial impact and Interception of particles
    - **Inner layer** – Spunbond nonwoven polypropylene.
      - This layer is intended also be hydrophobic but prevents the expulsion of liquids by the wearer. It also aids in the comfort of the user of the mask. This layer primarily execute filter functions of inertial impact and Interception of particles
    - **Middle Layer** –Melt blown nonwoven polypropylene
      - The construction of the melt blown layer has an additive that enables it to be negatively charged and to hold the charge. This layer executes the primary filter functions of diffusion and electrostatic attraction
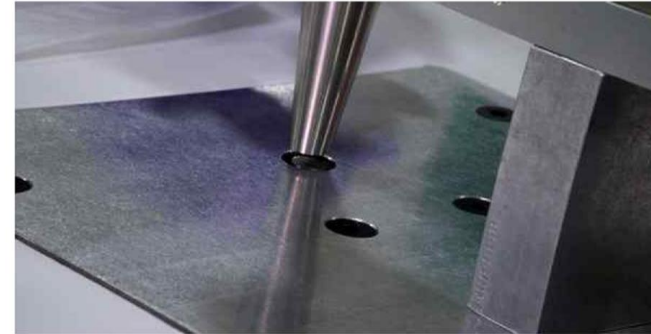
OUTER LAYER
Hydrophobic
non-woven layer

MIDDLE LAYER
Meltblown filter

INNER LAYER
Soft absorbent
non-woven layer

Detailed Process

WARREN MASK PRODUCTION OPERATION
https://www.gm.com/our-stories/commitment/face-masks-covid-production.html

Op10 - Mask Machine - Fold, Weld, Cut

Op20 - Ear Loop Assembly

Op30 - Sterilization

Op40 - Pack-out

Automation Approach

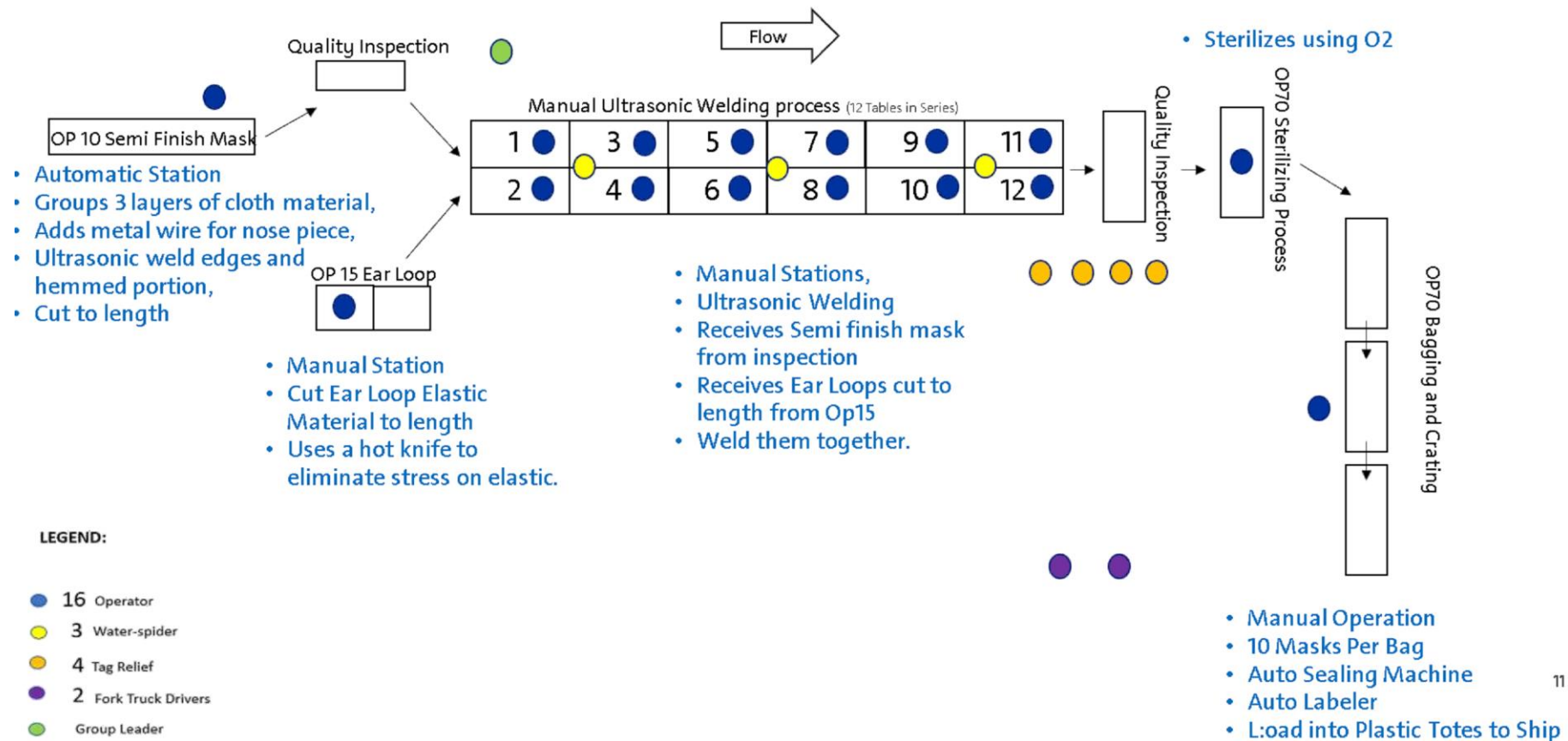SEMI COMPLETE AUTOMATIC MASK MACHINE

Detailed Process

GMNA Surgical Mask /Flat Mask Process Flow @ WTO

Q & A

Please use the chat function to submit your question.

Save the Date

Helping Keep Employees Productive & Secure: Cybersecurity During COVID-19

Wednesday, April 29, 12pm-1pm ET