COVID-19 Crisis:

3D Printing to Fill Shortages, Accelerate Conventional Manufacturing, and De-risk Production

March 20, 2020
Solution: PPE Mask Shortages

Solve the Problems of Covid19 Today

✓ Bring production online today for existing plastic designs and designs created by others.
✓ Bring design and manufacturing guidelines to others who will be 3D printing masks.

Prevent the Problems of Tomorrow

✓ Clinician customized, reusable, better fitting (leak-proof) n95 masks.
✓ Distributed manufacturing in secured supply chains.
Solution: Ventilators

Solve the Problems of Covid19 Today

✓ Conventional manufacturing takes too long, employ additive to save lives today.

✓ 3D printing of molds and tools to shorten ramp up of manufacturing lines.

Prevent the Problems of Tomorrow

✓ Help companies implement additive enabled supply chains.

✓ Secured, flexible supply chains will be more robust in a crisis.

✓ Design and guidelines for developing equipment to work both in additive (emergency need) and traditional (low cost long term supply).
What does the additive industry need?

Solve the Problems of Covid19 Today

- Fast track FDA clearance of additively made components.
- Enable and encourage large manufacturing companies under the DPA to work with additive supply chains.

Prevent the Problems of the Future

- Fund and require parallel path manufacturing of medical supply components (traditional and additively).
- Fund and enable development of additive manufacturing for secure, flexible, and stable supply chains of the future.
Implement and Deploy

EOS is a world leader in industrial 3D Printing solutions.

✓ 30 year technical heritage and know how in this industry
✓ Essential FDA and manufacturing alliances
✓ End to end understanding of design, materials, and quality advanced manufacturing

EOS can create “Digital Kits” that can easily be distributed to its 800+ customers with 1,000’s of industrial-scale 3D printers
We’ve done this before … and done it fast

Two days – now a sustained process

Complex assemblies reduced - centrifuge

Custom fit – scan to print scaled with partners

We work with many medical manufacturers
Where do we go from here?

1. **Face the Facts** – Supply chain disruptions are a trend
2. **Don’t Stop Initiatives** – Lessons learned will enable future stability
3. **Digital Value Chain** – Knowing how and when to use AM is key