Lessons for the Automotive Industry from Formlabs’ Response to COVID-19


Dan Recht, Global Business Development Lead
1. Introduction to Formlabs
2. Formlabs’ COVID-19 response
3. Recommendations for the automotive industry
Formlabs is expanding access to digital fabrication, so anyone can make anything.
25,000+ printers

60,000 PRINTERS
50,000,000
PARTS
The Agile Future of Digital Manufacturing

Just as mainframes gave way to blade servers, additive manufacturing will transition to modular production.
Formlabs Ohio in March: 5k samples/week

250 Form 2s
11 FTEs
Pick a material from the menu below. Samples of all materials printed on the Form 3 are coming soon. Sample parts printed on the Form 2 may be used for comparing some basic material properties of each of our resins, though you can expect variation in surface finish and other properties when printed on the Form 3.
Formlabs Ohio in April: COVID-19 Test Swabs

- Retool to Ramp: 2 weeks
- Capacity: 100K Test Swabs/day
- Test Swab - FDA Exempt Class
- 1 Medical Device
Partnered with Northwell Health and USF

- Prototype & optimize design
- Validation Testing
- Rapid Clinical Testing

Results: Performed equally to standard swabs used in COVID-19 Testing

Faculty across USF Health are prepared to produce 3,000 swabs per day.
Formlabs’ customers now combine for more swab production capacity than we have ourselves.
BiPAP ADAPTERS

Repurposing bi-level ventilators for use with intubated patients while minimizing risk to health care works during insufficient supply of conventional ventilation for patients with COVID-19

Northwell converts BiPAP machines into ventilators for hospitalized COVID-19 patients, uses 3D printed adapter

March 31st, 2020 | Matthew Libansi

Formlabs gets FDA emergency use authorization for a 3D-printed ventilator conversion part
Formlabs Covid Community Library

bit.ly/3b92ghG
Formlabs Support Network for COVID-19

Formlabs is drawing on our community to connect those in need with those who have engineering, clinical and 3D printing resources. Please reach out to us if:

- You or your organization is working on COVID-19 related projects and need access to 3D printed parts, or
- You or your team have access to Formlabs manufactured 3D printers and are willing to volunteer your time and equipment in the fight against COVID-19.

3,000+ volunteers and counting
STL Library on Formlabs Website

Formlabs curated library of non-medical device COVID-19 solutions

Ready for our user community to print and source to first responders in urgent need of PPE

Contributors from

- Bellus3D
- Yale School of Medicine
- Materialise
- Formlabs Community
Our designers and engineers are maintaining productivity by bringing printers home.
Lessons for the automotive industry

- **Redundancy**: High uptime by hot-swapping units
- **Scalability**: Adding printers as demand increases
- **Flexibility**: Changing products as situation evolves
- **Lean Enablement**: Printers across the globe producing for local demand
- **Ease & Convenience**: Printers in homes and hospitals

It is possible to go from zero to a *global digital factory* in weeks.