



## Ford Works With 3M, GE, UAW to Speed Production of Respirators for Healthcare Workers, Ventilators for Coronavirus Patients

- Ford is working with 3M to manufacture at scale Powered Air-Purifying Respirators (PAPRs). Ford and 3M are collaborating on the new design leveraging parts from both companies to meet urgent demand for first responders and health care workers; Ford is exploring production of the new PAPR in a Ford facility in addition to 3M production
- Ford and GE Healthcare are working together to expand production of a simplified version of GE Healthcare's existing ventilator design to support patients with respiratory failure or difficulty breathing
- Ford, in cooperation with the UAW, will assemble more than 100,000 critically needed plastic face shields per week at a Ford manufacturing site to help medical professionals, factory workers and store clerks; Ford also will leverage its in-house 3D printing capability to produce components for use in personal protective equipment

**DEARBORN, Mich., March 24, 2020** – Ford Motor Company, joining forces with firms including 3M and GE Healthcare, is lending its manufacturing and engineering expertise to quickly expand production of urgently needed medical equipment and supplies for healthcare workers, first responders and patients fighting coronavirus.

In addition, Ford plans to assemble more than 100,000 face shields per week and leverage its in-house 3D printing capability to produce components for use in personal protective equipment.

“This is such a critical time for America and the world. It is a time for action and cooperation. By coming together across multiple industries, we can make a real difference for people in need and for those on the front lines of this crisis,” said Bill Ford, Ford’s executive chairman. “At Ford, we feel a deep obligation to step up and contribute in times of need, just as we always have through the 117-year history of our company.”

### Powered Air-Purifying Respirators

Ford team members are working with 3M to increase the manufacturing capacity of their powered air-purifying respirator (PAPR) designs and working jointly to develop a new design leveraging parts from both companies to meet the surge demand for first responders and health care workers. This new respirator could be produced in a Ford facility by UAW workers.

To go as fast as possible, the Ford and 3M teams have been resourcefully locating off-the-shelf parts like fans from the Ford F-150’s cooled seats for airflow, 3M HEPA air filters to filter airborne contaminants such as droplets that carry virus particles and portable tool battery packs to power these respirators for up to eight hours.

Ford is looking at how it might produce these new-generation PAPRs in one of its Michigan manufacturing facilities, helping 3M boost production potentially tenfold.

“Working with 3M and GE, we have empowered our teams of engineers and designers to be scrappy and creative to quickly help scale up production of this vital equipment,” said Jim Hackett, Ford’s president and CEO. “We’ve been in regular dialogue with federal, state and local officials to understand the areas of greatest needs. We are focusing our efforts to help increase the supply of respirators, face shields and ventilators that can help assist health care workers, first responders, critical workers as well as those who have been infected by the virus.”

“We’re exploring all available opportunities to further expand 3M’s capacity and get healthcare supplies as quickly as possible to where they’re needed most – which includes partnering with other great companies like Ford,” said Mike Roman, 3M chairman of the board and chief executive officer. “It’s crucial that we mobilize all resources to protect lives and defeat this disease, and I’m incredibly grateful to Ford and their employees for this partnership.”

### **Ventilators**

In addition, Ford and GE Healthcare are working together to expand production of a simplified version of GE Healthcare’s existing ventilator design to support patients with respiratory failure or difficulty breathing caused by COVID-19. These ventilators could be produced at a Ford manufacturing site in addition to a GE location.

“We are encouraged by how quickly companies from across industries have mobilized to address the growing challenge we collectively face from COVID-19,” said GE Healthcare President & CEO Kieran Murphy. “We are proud to bring our clinical and technical expertise to this collaboration with Ford, working together to serve unprecedented demand for this life-saving technology and urgently support customers as they meet patient needs.”

Work on this initiative ties to a request for help from U.S. government officials.

### **Respirators and Face Shields**

Meanwhile, Ford’s U.S. design team also is quickly creating and starting to test transparent full-face shields for medical workers and first responders. The face shields fully block the face and eyes from accidental contact with liquids and when paired with N95 respirators can be a more effective way to limit potential exposure to coronavirus than N95 respirators alone.

The first 1,000 face shields will be tested this week at Detroit Mercy, Henry Ford Health Systems and Detroit Medical Center Sinai-Grace Hospitals. Roughly 75,000 of these shields are expected to be finished this week and more than 100,000 face shields per week will be produced at Ford subsidiary Troy Design and Manufacturing’s facilities in Plymouth, Mich.

Ford is leveraging its Advanced Manufacturing Center in Redford, Mich., and in-house 3D printing capabilities to manufacture components and subassemblies for use in personal protective equipment.

Ford is evaluating a separate effort not involving GE Healthcare with the U.K. government to produce additional ventilators.

In China, Ford of China joint venture partner Jiangling Motors also has donated 10 specially equipped Transit ambulance vans to hospitals in Wuhan, where the coronavirus outbreak began. Ford is also reacquiring 165,000 N95 respirators from China that were originally sent by Ford to China earlier this year to help combat coronavirus.

Ford has also kicked off a working team to help hospitals locate and secure urgently needed surgical and N95 respirators. Ford has so far committed sending Henry Ford Health Systems 40,000 surgical masks while it locates additional supplies.

Additional companies and individuals who are interested in contributing to this effort can submit their information here at [www.fordnewideas.com](http://www.fordnewideas.com).

Ford, along with the companies it is supporting, will provide additional updates as these special projects progress.

## About Ford Motor Company

Ford Motor Company is a global company based in Dearborn, Michigan. The company designs, manufactures, markets and services a full line of Ford cars, trucks, SUVs, electrified vehicles and Lincoln luxury vehicles, provides financial services through Ford Motor Credit Company and is pursuing leadership positions in electrification, autonomous vehicles and mobility solutions. Ford employs approximately 190,000 people worldwide. For more information regarding Ford, its products and Ford Motor Credit Company, please visit [corporate.ford.com](https://corporate.ford.com).

## About 3M

At 3M, we apply science in collaborative ways to improve lives daily. With \$32 billion in sales, our 96,000 employees connect with customers all around the world. Learn more about 3M's creative solutions to the world's problems at [www.3M.com](http://www.3M.com) or on Twitter @3M or @3MNews

## About GE

GE (NYSE:GE) rises to the challenge of building a world that works. For more than 125 years, GE has invented the future of industry, and today the company's dedicated team, leading technology, and global reach and capabilities help the world work more efficiently, reliably, and safely. GE's people are diverse and dedicated, operating with the highest level of integrity and focus to fulfill GE's mission and deliver for its customers. [www.ge.com](http://www.ge.com)