



## **Dow develops simplified, lightweight design for face shields to help protect healthcare professionals, shares open-source design to encourage additional production**

- *Vastly simplified, two-piece design helps accelerate production rates*
- *Dow will produce and donate 100,000 face shields to support Michigan hospitals*
- *Dow looking for fabricators to accelerate production to address PPE shortages – interested parties should email Dow at [facshld@dow.com](mailto:facshld@dow.com)*

**MIDLAND, Mich. – April 17, 2020** – To help address the urgent need for personal protective equipment (PPE) among healthcare professionals battling the COVID-19 pandemic, Dow (NYSE: DOW) has developed a simplified face shield design and is sharing its design through an **open-source file** to help accelerate production rates of this critically-needed PPE. In addition, the Company is collaborating to produce 100,000 face shields for donation to the state of Michigan for distribution to hospitals.

Dow, a leading manufacturer of polyethylene resins, does not typically fabricate plastic products for consumer end-use. However, the Company quickly developed the resin film technology for these face shields through its prototyping and fabricating capabilities at its **Pack Studios** application development facility in Freeport, Texas. Dow also worked with other value chain partners to identify a fabricator for the foam comfort strip that enables the shield to be worn comfortably.

“Our goal in offering an open-source, simplified design is to provide a way for others to increase additional production of much needed face shields,” said Diego Donoso, president of Dow Packaging & Specialty Plastics. “This is another example of how our materials, technical service personnel, and our Pack Studios collaborative development capabilities are enabling solutions that can be used to help protect those on the frontlines of the pandemic.”

The face-shield design is very flexible, allowing for the shields to be produced from a variety of readily available polymers, and can be cut using several high throughput technologies, such as water, laser and die cutting techniques. It is also simple and lightweight, comprised of just two pieces – a shield and forehead cushion – which eliminates multi-component assembly that can slow production, allowing for faster distribution.

In addition to sharing the open-source design, Dow is producing 100,000 face shields to be donated to the state of Michigan for distribution to hospitals. Michigan-based tinkrLAB is serving as a key development partner providing laser-cutting and assembly and has already completed an initial allotment of production.

“COVID-19 has shaken our communities. Being a small business, we see firsthand the need from those on the frontline and even though we are small, we still wanted to have an impact and offer a solution,” said Melissa Rabideau, founder and president of tinkrLAB. “As a small business, we are able to mobilize volunteers quickly to do our part, but the tangible impact of a small/large business collaboration allows us to combine resources and the impact can be much more substantial. Being hands-on is in our DNA, so it’s only appropriate that we have a hands-on approach to helping.”

Several prototypes were field tested, and feedback from healthcare professionals including doctors and nurses was used to develop the final design. Face shields are often a one-time use item, however when utilizing certain film formulations, shields can be disinfected and reused. The face shield was developed and is being distributed consistent with the limitations described in U.S. Food and Drug Administration’s guidance and Emergency Use Authorization issued for face shields for the duration of the public health emergency.

Companies and individuals interested in producing face shields can access the [design file online](#). Dow is also seeking to partner with other companies

with film manufacturing and cutting capabilities to continue to develop this critical PPE. Please contact us at [facshld@dow.com](mailto:facshld@dow.com) if you are interested. The Michigan State Police State Emergency Operations Center (SEOC) is managing distribution of supplies. Organizations that want to request face shields need to contact their county emergency management office. Multi-county or state wide organizations can submit a consolidated request to [MSP-SEOCPSL@michigan.gov](mailto:MSP-SEOCPSL@michigan.gov).

Dow's face shield project is the latest action the Company has undertaken to address the COVID-19 global pandemic crisis.

- **On March 23**, Dow committed \$3 million to aid COVID-19 relief efforts, with donations going towards global relief organizations, as well as non-profits in communities where Dow operates.
- **On March 30**, Dow announced that sites across North America, Europe and Latin America were set to produce more than 200 metric tons of hand sanitizer, equivalent to more than 880,000 eight-ounce bottles, to be donated to local health systems and government agencies. Manufacturing sites in Auburn, Michigan; South Charleston, West Virginia; Seneffe, Belgium and Horolandia, Brazil and Stade, Germany have all produced hand sanitizer for donation.
- And **on April 9**, Dow announced an additional \$500,000 donation to the Great Lakes Bay Region in Michigan, to aid COVID-19 relief efforts in Dow's global headquarters community.

Dow's material science expertise and production capabilities are used to develop some of the most vital hygiene medical products and technologies to fight the **COVID-19 pandemic**, such as disinfectants, sanitizers, cleansers, plastics used in the production of disposable PPE for medical professionals, and memory foams for hospital beds.

### **About Dow:**

Dow (NYSE: DOW) combines global breadth, asset integration and scale, focused innovation and leading business positions to achieve profitable growth. The Company's ambition is to become the most innovative, customer centric, inclusive and sustainable materials science company. Dow's portfolio of plastics, industrial intermediates, coatings and silicones businesses

delivers a broad range of differentiated science-based products and solutions for its customers in high-growth market segments, such as packaging, infrastructure and consumer care. Dow operates 109 manufacturing sites in 31 countries and employs approximately 36,500 people. Dow delivered sales of approximately \$43 billion in 2019. References to Dow or the Company mean Dow Inc. and its subsidiaries. For more information, please visit [www.dow.com](http://www.dow.com) or follow [@DowNewsroom](https://twitter.com/DowNewsroom) on Twitter.

**Kyle Bandlow**

989.638.2417

[kbandlow@dow.com](mailto:kbandlow@dow.com)