Innovating in a time of crisis

An inspiring look inside the creativity and ingenuity of engineers during the pandemic

Often times it takes a crisis to bring out the best in people and the current pandemic crisis is no different. As our society continues to struggle with hardship and uncertainty, the engineering community has stepped up to meet the challenges head-on and demonstrated how resiliency and resourcefulness can lead to creativity solutions.

Ingenuity and innovations aren't restricted to any specific industry; they span the entire gamut of businesses. Here are some of the few ways engineers across industries have risen to the occasion and undertaken a variety of projects to assist in combating the virus.

From designing cars to PPEs

From the outset of the pandemic, the automotive industry has seen companies come together and focus their efforts to manufacture personal protective equipment (PPEs), face shields and ventilators. Companies including Ford Motor Company, General Motors and Tesla Motors temporarily switched gears and used their platforms to lend a helping hand to the healthcare industries. Through collaborations with healthcare companies, several automotive engineers creatively used their car designs and technologies to implement new ways to assist hospitals.

Universities designing face shields

College students and professors across the world have banded together during these times to take their knowledge from the classroom to come up with innovative technologies to combat the virus. Several universities and engineering students, for instance, have developed unique and ergonomic face shield designs to be utilized by healthcare professionals. Not only do these designs provide comfort and security for healthcare workers, but they help save lives and minimize the spread of COVID-19 as well.

Robots and UV light

The robotics industry has seen an uptick in demand during the pandemic, one of which includes the use of robots with built-in ultraviolet light rays to potentially kill the virus on contaminated surfaces. The Massachusetts Institute of Technology (MIT) designed a unique robotic machine that utilizes UV light that kills bacteria and sanitizes large areas such as schools, factories and buildings.

Touchless Devices

With social distancing in place, many people understandably worry about the high risk of touching contaminated surfaces. Fortunately, many companies have designed innovative, touchless devices that enable users to go about their daily routine without fear of contamination. One such company is Techmax Solutions in India, that has designed a revolutionary, touchless elevator panel to reduce the spread of the virus. This simple, yet highly critical innovation is a small step in creating a safe environment and minimizing the spread of COVID-19.