Etihad Engineering prints 3D face shields

By **Jane Hobson** on May, 12 2020 | Aviation Trends

Etihad Engineering has announced the development of face shields to protect against COVID-19, made from 3D-printing technology

Etihad Engineering, the MRO division of Etihad Aviation Group, has announced today a collaboration with Etihad Airways Medical Centre (EAMC), the airline's medical division, to produce 3D-printed face shields. The shields will be provided to medical institutions across the United Arab Emirates (UAE) as part of the airline's corporate social responsibility program.

Using 3D-printing technology, the engineering organization has designed and developed a face shield

to protect medical professionals from COVID-19. The Etihad team carried out an extensive review of the functional requirements of the face mask to produce a final design that provides the safety, comfort and durability required by medical professionals. The research and development resulted in a non-disposable headpiece which rests on the forehead and is combined with a detachable transparent shield that can be easily removed for sanitation or replacement purposes.

Created at Etihad Engineering's 3D-printing lab, the face shields are produced by an aviation certified printer that uses the latest selective laser sintering (SLS) technology which normal produces aircraft parts. The shields are made entirely from recyclable material making it a sustainable product, and the printed can produce approximately 42 masks per day.

"We are committed to supporting the community and at a time when medical professionals are risking their lives every day to combat COVID-19, we are proud to be able to use Etihad Engineering's technological capability to support our community in the UAE," said Bernhard Randerath, Vice President Design, Engineering & Innovation, Etihad Engineering. "It is in these challenging times that we must rely heavily on innovation to provide sustainable solutions that can help in the drive to overcome the challenges faced by the coronavirus."

Etihad Airways Medical Centre will be working with medical institutions across the UAE to provide the reusable face masks to practitioners on the front line.

Dr. Nadia Al Bastaki, Vice President Medical Services at Etihad Aviation Group said: "On behalf of the entire Etihad Aviation Group, we would like to send out a gesture of solidarity and support to all medical institutions and their teams in our community, by providing them with face shields developed especially for them."

He added: "We are very fortunate to have access to innovative technology within the Etihad Group and when it came to testing the prototypes by EAMC doctors, they confirmed the shields were fit for medical use. Our ultimate objective is to provide medical professionals with an additional layer of protection when working hard to combat COVID-19."