



ASTM INTERNATIONAL
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100 Barr Harbor Drive
PO Box C700
West Conshohocken, PA
19428-2959 USA

service@astm.org
tel +1.610.832.9500
fax +1.610.832.9555
www.astm.org

Title: Role of Additive Manufacturing in PPE Shortage Mitigation

Date/Time: 23 February 2022 - 2:30 PM (EEST)/7:30 AM (EST)

Presenters:

Mahdi Jamshidinia, Senior Additive Manufacturing R&D Manager, ASTM International AM CoE

Kirstie Snodderly, Additive Manufacturing R&D Project Engineer, ASTM International AM CoE

Daniel Porter, Regulatory Scientist / Mechanical Engineer, U.S. FDA

About the Session

In response to COVID-19, many companies are working to create the equipment needed to treat patients and protect healthcare workers. Introducing additive manufacturing (3D Printing) into the supply chain may help organizations overcome some of these challenges.

The ASTM International Additive Manufacturing Center of Excellence (AM CoE) is a collaborative partnership among ASTM—and its 30,000 members—and representatives from government, academia, and industry that conducts strategic R&D to advance standards across all aspects of additive manufacturing (AM) which will accelerate the development and adoption of robust, game-changing technologies.

Experts from ASTM International's Additive Manufacturing Center of Excellence will cover ASTM's response to COVID-19 using Additive Manufacturing, including PPE considerations. A brief design guide developed by the AM CoE highlights AM standards to provide guidance for designers responding to the needs of healthcare workers and patients during the COVID-19 pandemic.

The U.S. Food and Drug Administration (FDA) continues to take creative and flexible approaches to address access to critical medical products in response to COVID-19. During the COVID-19 pandemic, the need for certain medical devices, including personal protective equipment (PPE), at times outpaced the supply available to health care organizations because of the high demand and overall interruptions to the global supply chain. As part of their effort to protect the public to the extent possible, the FDA has published a FAQ on 3D Printing Medical Devices, Accessories, Components, and Parts during the COVID-19 Pandemic. A guest speaker from the FDA will describe their efforts.

Important Documents

ASTM International Additive Manufacturing Center of Excellence [COVID Response Guide](#)

ASTM International Additive Manufacturing Center of Excellence [Roadmap and Strategic Guidance](#)

U.S. Food and Drug Administration [FAQ on 3D Printing](#)

Learning Objectives

- A basic understanding of the common design standards issues when using Additive Manufacturing for PPE
- How to communicate with AM process specialists to ensure the success of the final parts
- Use of AM to address COVID shortages Understand the test paradigm for AM face masks

Who Should Attend?

- Government authorities that regulate public health and the provision of protective products for both healthcare and the general public
- Manufacturers of personnel protective equipment (PPE)
- Individuals involved the development of standards for manufacture of PPE
- Professionals involved in research for disease transmission or individual protection