

Press Release

DRDO - 04042020

In the ongoing efforts against COVID-19 pandemic, DRDO has been using scientific endeavors to develop products in an accelerated manner. DRDO laboratories are working with industry partners for volume production.

Personnel Sanitization Enclosure

VRDE, Ahmednagar, a DRDO Laboratory has designed full body disinfection chamber called as Personnel Sanitization Enclosure. This walk through enclosure is designed for personnel decontamination, one person at a time. This is a portable system equipped with sanitizer and soap dispenser. The decontamination is started using a foot pedal at the entry. On entering the chamber, electrically operated pump creates a disinfectant mist of hypo sodium chloride for disinfecting. The mist spray is calibrated for an operation of 25 secs and stops automatically indicating completion of operation. As per procedure, personnel undergoing disinfection will need to keep their eyes closed while inside the chamber.

The system consists of roof mounted and bottom tanks with a total of 700 liters capacity. Approximately 650 personnel can pass through the chamber for disinfection until the refill is required.

The system has see through glass panels on side walls for monitoring purpose and is fitted with lights for illumination during night time operations. A separate operator cabin is provided to monitor overall operations.

The system has been manufactured with the help of M/s Dass Hitachi Ltd, Ghaziabad, within a time span of four days. This system can be used for disinfection of personnel at the areas of controlled ingress and egress such as entry and exit to hospitals, malls, office buildings and critical installations.



Full Face Mask

RCI, Hyderabad and TBRL, Chandigarh, have developed face protection mask for health care professionals handling COVID-19 patients. Its light weight construction makes it convenient for comfortable wear for long duration. This design uses commonly available A4 size Over-Head Projection (OHP) film for face protection.

The holding frame is manufactured using Fused Deposition Modeling (3D printing). Polylactic Acid filament is used for 3D printing of the frame. This thermoplastic is derived from renewable resources such as corn starch or sugarcane and is biodegradable. The face mask will be mass produced using injection moulding technique for volume production.

100 face shields are being produced daily in TBRL and provided to PGIMER, Chandigarh. Similarly 100 are produced at RCI and has been handed over to ESIC, Hyderabad. A demand of 10,000 Nos. has been received from PGIMER and ESIC Hospitals based on successful user trials.

