NavRakshak PPE kit

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With the increasing spread and threat of COVID-19, the safety of medical personnel has become very important. Indigenously developed PPE kits not only protect the frontline warriors, but also are an indicator of India's innovation capabilities.

NavRakshak PPE kit

The manufacturing know-how of the PPE has been developed at the **Innovation Cell of the Institute of Naval Medicine, INHS Asvini Hospital (Mumbai) of the Indian Navy** from where the name 'NavRakshak' is derived. The PPE has been tested and certified at the **INMAS, DRDO which is one of the nine NABL accredited labs** authorised by the Ministry of Textile for PPE prototype sample testing as per the prevailing ISO standards and Ministry of Health & Family Welfare/Ministry of Textile guidelines.

It has been found to meet the **synthetic blood penetration resistance criteria** for both the fabric, suit, and seam. It is cost effective as it does not require any major capital investment and can be adopted even by gown manufacturing units using basic stitching expertise.

The PPE fabric even does not require any lamination with polymer or plastic-like film. This enables the PPE to permeate heat and moisture from the skin of the user. It gives protection but does not compromise on comfort. This uniqueness of the PPE makes it way different from the existing PPEs which are being used during the ongoing COVID pandemic. The **enhanced breathability factor** in the PPE suit makes it an attractive proposition to be used by the frontline health workers who are required to wear these suits for long hours and face extreme discomfort while working.

Intellectual Property Facilitation Cell of Directorate General

of Quality Assurance (DGQA), Department Of Defence Production, Ministry of Defence along with Indian Navy and NRDC partnered in protecting the IP and its commercialisation. Since the concept of using uncoated, unlaminated or untapped PPE has been provided for the first time, and using such PPE was not practised at all, there was a need to protect the IP rights of this innovation.