

## **NRDC licenses manufacturing know-how of NavRakshak to MSMEs**

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New Delhi, Jun 19 (India Science Wire): The National Research Development Corporation (NRDC) has licensed the manufacturing know-how of NavRakshak, a Personal Protective Equipment (PPE) Suit, to five companies in the Ministry of Micro, Small and Medium Enterprises (MSME) sector. The move is expected to increase the production of the same to meet the ongoing country-wide demand of quality PPE kits.

NavRakshak 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 technology and quality of fabric is so superior that there is no need of sealing around the seam of the PPE suit, thus eliminating the need of importing costly sealing machines and tapes,” said Dr H Purushotham, Director, NRDC. The PPE fabric 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 being used.

NavRakshak has been designed by a Naval doctor incorporating personal experience in using the PPE for the comfort and protection of the doctors. The enhanced breathability factor in the PPE suit makes it an attractive proposition considering that frontline health workers use it for long hours.

The PPE suit is available in single-ply as well as double-ply versions as per the need of end-use conditions. It also comes with a head gear; face mask and shoe cover up to the mid-thigh level. A patent application has been filed for NavRakshak PPE by the inventors through NRDC.

The manufacturing know-how of NavRakshak 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 Institute of Nuclear Medicine and Allied Sciences (INMAS), Defence Research Development Organisation (DRDO). DRDO is one of the nine National Accreditation Board for testing and Calibration Laboratory (NABL) accredited labs authorised by the Ministry of Textiles for PPE prototype sample testing as per the prevailing ISO standards and guidelines of the Ministry of Health and Family Welfare/Ministry of Textile. NavRakshak has been found to meet the synthetic blood penetration resistance criteria for both the fabric, suit, and seam. (India Science Wire)

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