

PRESS RELEASE

NRDC LICENSES NAVRAKSHAK PPE SUIT MANUFACTURING KNOW-HOW TO FIVE MSMEs DEVELOPED BY INDIAN NAVY

Dr. H. Purushotham, CMD, NRDC informed that the National Research Development Corporation (NRDC), An enterprise under DSIR, Ministry of Science and Technology, Govt of India, has licensed the manufacturing know-how of a PPE Suit being named as NavRakshak to five MSME clients: M/s Greenfield Vintrade Pvt Ltd (Kolkata), M/s Vaishnavi Global Pvt Ltd (Mumbai), M/s Bharat Silks (Bangalore), M/s Sure Safety (India) Ltd (Vadodara) and M/s Swaps Couture (Mumbai) to meet the ongoing country wide demand of quality PPE kits. These five manufactures put together are planning to mass produce more than 10 million PPEs per year.

The manufacturing know-how of NavRakshak PPE has been developed at the Innovation Cell of the Institute of Naval Medicine, INHS Asvini hospital 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 authorized by Ministry of Textile currently in India for PPE prototype sample testing as per the prevailing ISO standards & Ministry of Health & Family Welfare/Ministry of Textile guidelines and 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 technology and quality of fabric is so superior that there is no requirement of sealing around the seam of the PPE suit, thus eliminating the need of importing costly sealing machines and tapes. The PPE fabric even does not require any lamination with polymer or plastic like film. This makes the PPE to permeate heat and moisture from the skin of the user. It gives protection but does not compromise on comfort and . This uniqueness of the PPE makes it way different from the existing PPEs which are being used during the ongoing COVID pandemic.



Breathable, cost effective and safe PPE Suit



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The PPE suit is available in single ply as well as double ply as per the need of the end use conditions. It also comes with a head gear; face mask and shoe cover up to the mid-thigh level.

With the country significantly ramping up the production of PPE suits to end its import dependence, there has been several news reports mentioning the flooding of market with dubious quality PPE kits. While there has been a clarion call to strictly implement the testing and certification standards for manufacturers, a quality product is also the need of the hour. NavRakshak has been designed by a Naval doctor incorporating personal experiences 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 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 DGQA, MoD; Indian Navy and NRDC partnered in protecting the IP and its commercialization. Since, the concept of using uncoated, unlaminated or untapped PPE has been first time provided, and using such PPE was not practiced at all, there was a need to protect the IP rights of this innovation. A patent application has been filed for the NavRakshak PPE by the inventors through NRDC-DGQA IPFC mechanism. This technology can resolve many issues at a go. It makes manufacturing easy without requiring big capital investment. It does not require coating and taping related equipment. Therefore, foreign import and costly machines are not required. It gives protection as well as comfort to the user. Above all, it gives self-sustainability to the country. In future, it may so happen that this simple yet highly effective PPE suit may become the benchmark standard of PPEs.