

R & D PROJECTS – 2015-16

1. GOVERNMENT SPONSORED PROJECTS

1.1 Completed projects

(i) **Project title** : Designing a compressed air monitoring system to optimize energy consumption in a textile mills (Sponsored by Ministry of Textiles, Govt. of India)

Objectives :

- To quantify the losses occurred due to compressed air leakage
- To assess the real-time performance of the compressors
- Development of the software for identification of compressed air losses

Research outcome:

- Compressed air monitoring system has been designed and as a pilot trial, it has been installed at NITRA for further studies. Designed system installed at NITRA pilot plant.

Features of Central Compressed Air Monitoring System :

- Collects data from all the stations, where it is installed. • The data is logged into a database at regular intervals • Provision to set alarm limits of each parameter.
- Every alarm event is logged into database.
- Report generation.

Software Features :

- Datalogging interval – 1 ~ 99mins
- Real time data of all the stations shall be displayed on computer screen.
- Reports can be generated date wise for all the stations or for individual station.
- Reports can be generated in excel data sheet which can be utilized for further analysis.

(ii) **Project title** : Development of specialty embroidery yarn for application in stretchable fabrics, like knitted fabrics (Sponsored by Ministry of Textiles, Govt. of India)

Objectives :

- To develop multi-component embroidery thread for stretch fabric.