

## M/s Rustam Towel – Saving Environment and Reducing Cost



New Condensate Return System

*“This was a very good experience for our company. Reduced water consumption and increased productivity have brought us enormous savings. We are committed to invest more on green productivity in near future”*

Mr. Zaka Ullah Dogar

Director, Rustam Towels Pvt. Ltd.

ESPIRE is a partnership project between bfz gGmbH, Business associations, and SMEDA.

By partnering with ESPIREgreen, industries are taking responsibility to reduce environmental impact of operations and improving resource efficiency cost effectively by adopting the following four services:

- **Cleaner Production (CP) Assessment** to identify Water, Chemical & Steam Consumption and recommendations for Wastage Reduction
- **Productivity Enhancement Audit** to analyze Process and Material Flows, identify Production Wastes and recommendations for improving Productivity
- **Occupational Health & Safety (OHS) Assessment** for status quo analysis of Hazards and associated Risk and determine cost effective control measures
- **Implementation of OHS Management System** in the factories for continuous control of Health & Safety parameters with own staff.

www.espire.com.pk

### Background

M/s Rustam Towel Pvt. Ltd. is a premier manufacturer and exporter of high quality Towels. Major operations of the company are Towel Weaving, Yarn Dyeing, Towel Dyeing and Stitching. The company already has an operational waste water treatment plant.

### ESPIRE Intervention

In January 2013, Mr. Zaka Ullah Dogar, Director, showed interest in the Green Productivity (GP) Assessment to bfz through services offered by ESPIREgreen (see description on the left).

The services of 02 GP experts from CITEVE Portugal; Ms. Maria Carvalho and Mr. Renato Dias; were hired for the purpose by bfz in February 2013. The experts along with a group of local consultant of ESPIREgreen conducted GP Assessment (CP Assessment and Productivity Enhancement) at Rustam Towels which was completed by the assigned local consultants after the experts departed.

25 improvement measures were suggested in the GP Assessment (16 CP & 09 Productivity) with an annual saving potential of 13000 Tons Water and 30% reduction in Dyeing Process Time resulting in annual saving of 74.93 Million PKR

For 6 months the consultant assigned by ESPIREgreen monitored and supported implementation, documented the progress and quantified the realized cost savings.

### Achievements

Rustam Towels implemented 09 improvement measures (05 CP, 04 Productivity) identified during GP Assessment within 6 months which resulted in annual savings of 3185 Tons of Water and 30% reduction in Dyeing Process Time resulting in annual saving of 10.2 Million PKR with an investment of only 1.45 Million PKR at a 2 months payback time.

GP MEASURES [implemented within first 6 months]	ANNUAL SAVING [M-PKR]	INVESTMENT [M-PKR]
Productivity Improvement in Towel Stitching	0.84	0.0
Steam Pipeline Insulation	1.8	0.4
Condensate Recovery	6.48	0.25
Improve heat exchange by Increasing Steam Pressure	Process time 30% reduced	0.0
Repair Steam Leakages	1.08	0.05
Installation of Steam Flow Meter	0.0	0.75
<b>TOTAL</b>	<b>10.2</b>	<b>1.45</b>