

## **Leisure Textiles (Pvt.) Ltd. - Role Model Company (case study)**

Leisure Textiles (Pvt.) Ltd. was established in 1990 at Lahore, Pakistan. It was one of the first vertically integrated knitwear manufacturing unit in Pakistan, which received ISO-9001 and ISO 14001 certifications. It had the distinguished honor of being first knitwear company in Pakistan to be awarded WRAP certificate.

The company owned and operated production facilities which include knitting, dyeing, finishing, cutting, embroidery and stitching. The product range was Polo, Rugby and Sweat Shirts and in Jersey; Pique, Fleece, Interlock & Other Structured Knitted Fabrics. The total production capacity was 18,000 dozens per month. They were into 100% export to USA, UK & Canada. The numbers of employees were more than 1000.

They were implementing Leisure Management System (LMS), an integrated management system that cover the requirements of ISO 9001, ISO 14001 and WRAP standards.

### **Why Leisure Textiles participated in the MCSP program? - Major Challenges**

The company was facing problems in many areas, which led the company to think of improving productivity as indispensable due to their export oriented product. Some of the major problems were as follows:

1. Low productivity – machine and labor
2. Production targets were not achieved
3. Problems in the production process (reworks, wastages, etc.)
4. Problems in the planning process
5. House keeping 5-S issues
6. No team work and lack of sense of responsibility among staff
7. Improper organizational structure
8. Lack of training and sense of TQM among all staff

### **How to cope? – muddling through the challenges**

Keeping in view the above challenges, Leisure Textiles availed the services of NPO–Pakistan under APO Member Country Support Program (MCSP).

Leisure embarked on the project as follows:

1. Conducted brainstorming sessions to find out causes of the above problems
2. Conducted in house training sessions on boosting the motivational level of the staff and on 5-S Kaizen.
3. Some managerial positions were streamlined and the organogram was simplified
4. Hired a foreign Japanese consultant; developed employee performance and employee competency criteria
5. Leisure Management System (Integrated Management System) was introduced
6. The philosophy of nation building was emphasized and all staff members were motivated to believe in individual contribution to national prosperity. Hence, the workers were put in a challenging environment where they themselves became responsible to work hard and contribute to the economy.
7. Suggestion System was introduced for idea generation and improvement;
8. Big Cleaning Day programs were initiated with participation of the senior management;
9. International color-coding/marketing scheme was introduced and carried out by the middle management and workers at shop level;

10. For identification and traceability were improved, and 99 second searching time rule was introduced;
11. Tagging of cables for easy identification
12. Quality and Productivity Improvement Teams (nine teams) were formed to implement TQM, KAIZEN philosophy at the plant. The main idea behind team development was to create an environment of participatory management and enhancing idea generation capabilities at the floor level.
13. To improve human resource at the factory, following initiatives were taken:
  - Human Resource Manual was developed
  - Appraisal system was introduced.
  - Recruitment procedure was refined and improved;
  - Orientation programs were started;
  - Determination of major roles/ responsibilities of each employee
  - Determination of challengeable goals/objectives
  - Readiness Level of employees
  - The required knowledge, attitude and skills to do the job is determined
  - The level of knowledge, attitude and skills is determined
  - Internal and external training programs with focus on multi-tasking were initiated;
  - notice board have been installed at the shop floor to recognize high performing workers
14. Leisure carried out successful in-house research and development activities to curtail its manufacturing costs using industrial engineering techniques. Some of the ideas that were implemented were as follows:
  - Air lifts installation at the WWTP
  - Electronic bench for stitching section
  - Model machine in the fabric division
15. The MIS department implemented the global gateway of Mobilink, which helped in the reduction of telephone bills.

### Results achieved:

1. Productivity increased between 20-40% in the last three years;
2. Teamwork is achieved - Nine Work Improvement Teams;
3. Regular trainings and skill development is emphasized;
4. Higher morale and changed mindset
5. Identification and traceability improved and standardized to 99 seconds
6. 12 Best Practices Identified
7. Reduction in overhead expenses for Commercial knitting: 45.74%
8. Reduction in Monthly expenses of poly bags: 73.44%
9. Reduction in overhead expenses of waste water treatment pump: 30%
10. Fixing limit switches with relay timer saves energy (under study)
11. Improved Product quality with manpower
12. Printing cost reduced Rs. 0.75 per page
13. Printing speed increased from 25 to 35 pages per minute
14. Minimize 14 desk jet printers
15. Alteration reduced from 26% to 14%
16. Financial results show saving of **Rs. 45.27 million / annum**



BEFORE

AFTER



Bench prepared with electronic sensors



The CEO is celebrating SEIRI Day (Big Cleaning)

### Productivity Improvement Plan – Leisure Textiles (Pvt.) Ltd.

Sr.	Process / Area	Actions Taken	Impact
1.	Procurement	<ul style="list-style-type: none"> <li>Vendor Reduction</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in overhead expenses for Commercial knitting: <b>45.74%</b></li> </ul>
2.	Inventory	<ul style="list-style-type: none"> <li>Minimize Poly Bag Usage</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in Monthly expenses of poly bags: <b>73.44%</b></li> </ul>
3.	Efficient Energy Utilization	<ul style="list-style-type: none"> <li>Airlift Pump system</li> <li>Bench fabrication</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in overhead expenses of waste water treatment pump: <b>30%</b></li> <li>Fixing limit switches with relay timer saves energy (under study)</li> </ul>
4.	Inspection	<ul style="list-style-type: none"> <li>Customer identification within the organization</li> </ul>	<ul style="list-style-type: none"> <li>Improved Product quality with manpower</li> </ul>
5.	Management Information System	<ul style="list-style-type: none"> <li>Centralization of Printers</li> <li>Cables Tagging</li> </ul>	<ul style="list-style-type: none"> <li>Printing cost reduced <b>Rs. 0.75 per page</b></li> <li>Printing speed increased from 25 to 35 pages per minute</li> <li>Minimize <b>14</b> desk jet printers</li> <li>Reduction of maintenance cost</li> <li>Tagging of cables for easy identification</li> </ul>
6.	Human Resource Management	<ul style="list-style-type: none"> <li>Employee Performance Criteria</li> <li>Employee Competency Criteria</li> </ul>	<ul style="list-style-type: none"> <li>Determination of major roles/responsibilities of each employee</li> <li>Determination of challengeable goals/objectives</li> <li>Readiness Level of employees</li> <li>The required knowledge, attitude and skills to do the job is determined</li> <li>The level of knowledge, attitude and skills is determined</li> </ul>
7.	Stitching Process	<ul style="list-style-type: none"> <li>Reduction in alteration</li> </ul>	<ul style="list-style-type: none"> <li>Alteration reduced from <b>26% to 14%</b></li> </ul>
9.	Maintenance <ul style="list-style-type: none"> <li>Model Machine setup</li> </ul>	Understanding of M/C specification <ul style="list-style-type: none"> <li>Study of instruction manual</li> <li>Study of operational manual</li> <li>Study of maintenance reports</li> </ul> M/C components <ul style="list-style-type: none"> <li>Study of components</li> <li>Identification &amp; classification of components</li> </ul> Comparison & Analysis	More than 30% enhancement in the productivity is expected

		<ul style="list-style-type: none"> <li>▪ Analysis of machine maintenance history</li> <li>▪ Present performance status, production time, loss time</li> </ul> <p>Work on MTBF (Mean Time Between Failure)</p> <ul style="list-style-type: none"> <li>▪ Calculation of mechanical parts</li> <li>▪ Calculation of electric parts</li> </ul> <p>Critical Points</p> <ul style="list-style-type: none"> <li>▪ Identification of the weakest point</li> <li>▪ Identification of the parts for preventive maintenance</li> <li>▪ Checklist for preventive maintenance</li> </ul> <p>Sharing &amp; Coordination of Experience And Finding With Production Staff</p> <ul style="list-style-type: none"> <li>▪ Data</li> <li>▪ Machine operation</li> <li>▪ History form</li> </ul> <p>Preparation of Documents</p> <ul style="list-style-type: none"> <li>▪ Documents of training</li> <li>▪ Documents of Operation</li> <li>▪ Documents of Maintenance</li> </ul>	
--	--	---	--