

Waste Minimisation Makes Good Business Sense at Berg River Textiles



Berg River Textiles is a medium-sized textile factory situated in Paarl, Cape Town. The company is part of the Frame Textile Group, and has been in operation since 1948. Berg River Textiles first became involved in waste minimisation initiatives, when two staff members participated in a waste minimisation auditor-training course in 2002 funded by the Danida Cleaner Textile Production Project. During this course, the participants were given the necessary tools to make changes within their companies to reduce water, energy and chemical use; to reduce emissions to the environment; and to save their company money.

"It is all about becoming aware", says Juan Laubscher, Total Quality Manufacturing Manager of Berg River Textiles. "We have made significant savings just through raising awareness in our company. To date, we have saved 1%

of our annual turnover, with a pay-back period of days!"

Prior to 2003, Juan Laubscher was the Factory Manager at Berg River Textiles. Once the company started to realise the benefits of implementing and maintaining a waste minimisation programme, a new position was created for him as a Total Quality Manufacture Manager.

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This new responsibility put him in charge of managing and monitoring all waste minimisation programmes at Berg River Textiles, and savings

that are made are used to fund new projects. "We started by looking at our operation on a global level, then per department, then per process. The more we looked, the more we realised how little we know about our operation and realised the need for measurement", comments Juan. "Changes that have been made are not rocket science – we just question the current operations".

WATER AND STEAM

The company has focused their projects on reducing water and steam use in the factory. Information boards have been placed at each machine in the factory showing the volume of water and steam used per metre of fabric processed each week, so that everyone can see

how they are performing. Targets are set each month and all operators strive towards this improvement. Measurement and monitoring

TABLE 1
Waste minimisation options implemented and resultant savings at Berg River Textiles

Project	Type of change	Resource saved	Quantity/year
Jet cooling water	Re-use	Water Steam	1 020 k/ 7 ton
Bleaching rinse water flow rate	Optimisation	Water Steam	13 464 k/ 3 699 ton
Caustic recovery cooling water	Re-use	Water Steam	16 152 k/ 3 177 ton
Caustic recovery condensate	Optimisation	Water Steam	8 508 k/ 1 248 ton
Bleaching rinse water pH control	Elimination	Water Steam	13 464 k/ 3 699 ton
Merceriser rinse water	Re-use	Water Steam	24 235 k/ 2 040 ton
Bleaching & merceriser integration	Re-use	Water Steam	~40 000k/ ~5 200 ton
Padsteam range flow rates	Optimisation	Water Steam	~22 500 k/ ~4 245 ton



Juan Laubscher (left) receiving the Cotton SA Merit Award for Cleaner Production in 2002 on behalf of Berg River Textiles, from Karen Lundbo, Chief Technical Advisor for the Danida Project, and Mr Leonard Venter, Chairperson of Cotton SA

have played a key role in the success, as it is a well-known fact that you can't manage what you can't measure.

Changes that have been made to achieve these savings are shown in Table 1. As can be seen, most have involved the reuse of water. Since

this water is quite often hot, there is an additional saving in energy. Effective use of counter-current washing in one process has reduced water use from 26 500 litres per hour to 9 000 litres per hour! A further 37 projects have already been identified.

The company was recognised for their hard work and progress in reducing wasteful behavior by being awarded the Cotton SA Merit Award for Cleaner Production in 2002.

Juan sums up their success as follows: "What has been done so far is just addressing the obvious. We have optimised our business and put money straight on bottom line. Waste minimisation means a total commitment – from the sweeper to the CEO".

Based on the results achieved to date, and the projects planned for the coming year, it is evident that this commitment exists at Berg River Textiles. The savings achieved indeed prove that waste minimisation makes good business sense!

