

BIOCHEM show case

To develop an “environment intelligent” range of textiles: specifically for high performance seating applications

Problem

Rohner Textil is a manufacturer of high end textiles in the Rhine Valley in Switzerland. In the 1980s the company was facing productivity and waste emission issues as well as local challenges of noise and environmental abatement. Increasing demands for effluent reduction were undermining the economic viability of the business.

Technical solution

Rohner Textil developed the Climatex Lifecycle range of products that embodied the following principles:

- A combination of ramie (a linen-like fibre) and wool could substitute for polyester in the product, replacing a non-renewable with a renewable material.
- A limited palette of 16 dyes and auxiliary chemicals were selected from a list of over 16,000 to avoid mutagens, carcinogens, persistent toxins, bioaccumulative materials, heavy metals or endocrine disruptors.
- As far as possible spinning weaving lubricants and additives were avoided.
- Fibres were obtained from traceable sources operating to sustainable agriculture standards.
- Waste material from the process was recycled into felt for upholstery interlines or used as a mulch/fertilizer for strawberries.
- The fabric is fully compostable when removed from the chair. It decomposes naturally.

Benefits

- **Product meets all aesthetic criteria – any design and most colours can be produced**
- **All customer and industry performance criteria are met**
- **Price is the same as other high performance textiles**
- **Meets customer demand for more sustainable products**
- **Factory waste, and therefore waste management costs, dramatically reduced**

Further information

Climatex website

<http://www.climatex.com/index.cfm?ID=4C48A819-9A4A-38E1-4EB9B92F6AE5C449>

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