



Smart Textiles

Case study

WAACS (the Netherlands)

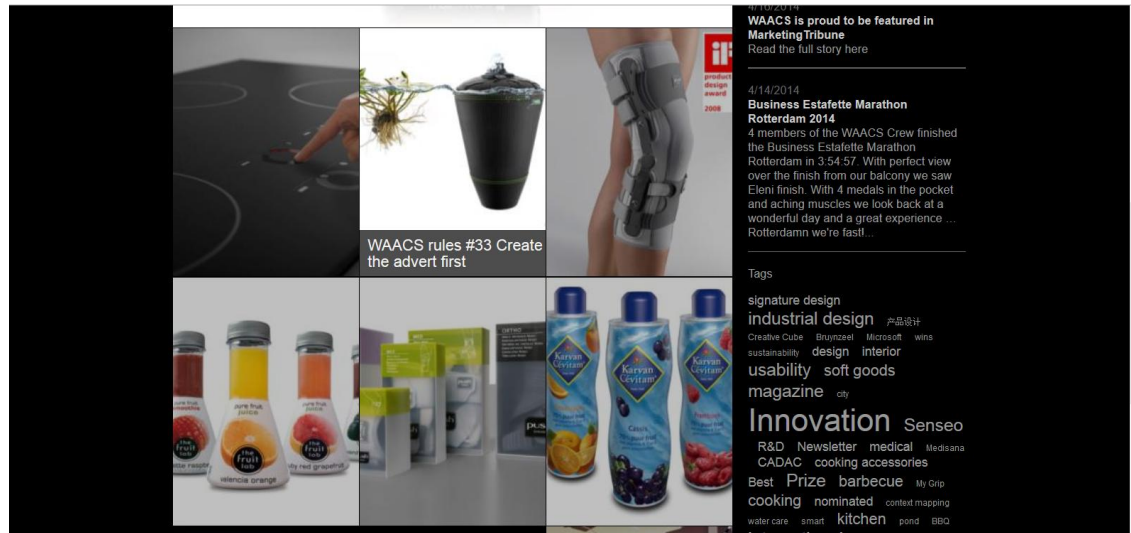


Fig. 1 Photos of Waacs designs from the website www.waacs.nl

Waacs is a design studio in Rotterdam (NL) and is best known for its design of the Philips Senseo coffee maker. The design team of Waacs cooperates on projects with leading brands and ambitious challengers, in which product innovation and user-experience play a major role. The studio's philosophy is simple: There's an exception to every rule and it's the exception that is worth pursuing. WAACS: international – clever – efficient – witty – self-possessed – exceptional.

Since Waacs is working on several projects which integrate textiles and product design, often combined with smart solutions, TUDelft approached this company for a LCA to go training with the Smart Textiles tool. Waacs employs mainly industrial designers with a technical background (educated at TUDelft or applied universities) who are interested in the life cycle thinking strategy and most of them already got acquainted with this subject during their educational period. In practice (at Waacs) they only apply this knowledge at the background and they do not actively involve this approach during their work, so they were interested in refreshing their knowledge and learn about the possibilities of the tool.

The training took place at the office of Waacs in Rotterdam in the afternoon of February 28 and was given by Natascha van der Velden of TUDelft to the director Marcel Jansen and the designers Judith and Eleni. With the tool, the Trendy Pond was assessed and compared with an alternative solution, mainly in terms of production technique. The outcome of the assessment (see Fig. 2 and 3) showed that another way of textile manufacturing could lower the total ecocosts of the product substantially, which is an interesting result in terms of eco-design.

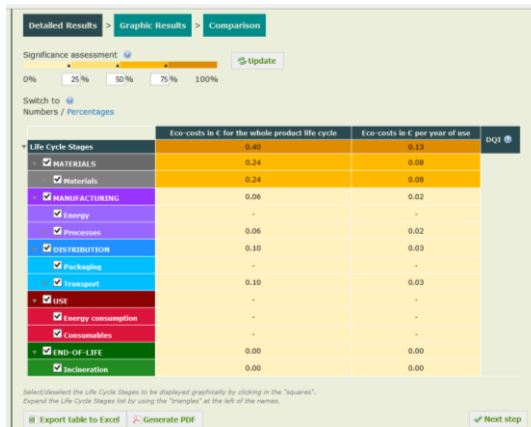


Fig. 2 Screenshot of the results of the base product (based on weaving technology)

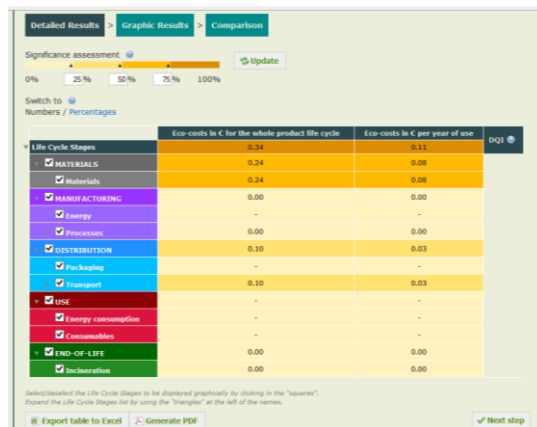


Fig. 2 Screenshot of the results of the alternative product (based on knitting technology)

Waacs was positive about the simplicity of the tool but realised that knowledge on behalf of material usage and production, transport, lifespan and end-of-life (while for this product the use phase was less important) was a prerequisite for the assessment and that a lot of accounting was necessary to insert the right data. Sometimes the required data could not easily be found in the database, but because of the industrial design background of the training group, it did not take much time to choose good alternatives from the existing database.