

SUSTAINABLE DESIGN FOR HIGH VALUE TEXTILES – A PASSING TREND OR A BUSINESS CONCEPT?

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Can sustainability for a company imply a holistic approach without limitations?

Do sustainability and high-value design contradict each other?

High-value, comfort and quality– this is the motto at Strähle-Hess since 80 years, to which we adjust our fine-tuning. Our emphasis lies on the so-called “profiling ideas”, which exist as sustainable and highly innovative products and therefore allow our customers to have an individual profile.

Distinguished with a large number of patent, design and innovation awards, the development and production of our internationally existing business (Germany/USA) takes place, in the meanwhile, not only for renowned manufacturers in furniture and trade fair construction, but also for construction and filtration industry.

Circular/flat knitting, weft knitting (swishing) and coarsing are only three of our optimal core technologies, where the processing or manufacturing takes place among other things using precision cutting, injection moulding and extrusion.

The business divisions currently substantiating the success at Strähle-Hess are Texspiration (Textile + Inspiration) and Texperience (Textile + Experience). Here, Strähle-Hess Designlösungen performs as full service partner in the division Texspiration. In the division Texperience, our range in the textile-based solution is available throughout the complete process chain.



Coming back to the initial questions regarding the sustainable design in connection with high value textiles, first, we need to state the following:

“Sustainable development is a development which fulfils the requirements of the present without endangering the capability of future generations to fulfil their own requirements.”¹

Even at Strähle-Hess, we pursue a job targeted at sustainability: For us, innovation is the basis of our every action. In this way, we also have created the most fuel-efficient vehicle interior in the world, the “Nios”, which was already a leader during the 10th International CTI Forum.

Even in terms of the constantly increasing importance of sustainability, we align our company since many years to a harmonised relationship between ecology and aesthetics, in which our requirement always implies the implementation of this principle at an enormously high level and design.

Joie de vivre without environmental damage – this is our purpose.

Thus, the revolutionary components of “Nios” exist to a lesser extent in the innovation of an aesthetically and ecologically equivalent, maximum fuel saving automotive interior, rather more in the method of realisation of this vision.



The beginnings to development of “Nios” were created by the team “Hydro-Kultur”, a group of students from three different universities (Halle, Merseburg and Chemnitz). In spite of the challenge of a job extending across universities/companies, the success of this rather rare co-operation was already visible within six months.

Corresponding to its category as Urban Concept, the “Nios” exists, unlike the remaining show cars (prototypes), as a vehicle fully operational in road traffic, with which our student team competed in this year’s Shell Eco Marathon among altogether 200 other groups originating from Europe and Africa. The Shell Eco Marathon itself is deemed a competition for energy efficiency, in which an innovatively created and implemented vehicle should achieve the longest possible stretch within one race with only one litre of fuel. With the help of this competition, Shell emphasizes its efforts for sustainable mobility and thus a striving for our future generation.

Beginning with the first competition in the year 1939, the current record is of a French team at a distance of 4,896 kilometres with only one litre of fuel. Recalculated, that is a sensational 0.02 litre for 100 kilometres!

Thus, 2008 was an year of challenges for Strähle-Hess, which once again leads us to the realisation that fresh enthusiasm of the younger generation and decades of experience are in no way mutually exclusive on our part, rather it can build a fertile “multigeneration project”.

In summary, the “Nios”, which uses renewable energy sources and is powered by a fuel cell, combines both the significant spheres of fuel economy and resource conservation and thus, represents a “green luxury for the automobile world”². Moreover, the only 160 kg light vehicle offers two passengers the safe, ergonomic and comfortable locomotion in the urban area. For the entire period, not only the production process but also the vehicle service life, which stretches beyond utilisation, is essential components of the ecological master plan. Pushed into innovative designer worlds, the “Nios” stands out within the total energy balance with around 70 percent regenerative materials and around 90 percent recyclability.

An additional intention of our project consisted of resolution of the avoidable contradiction between technology, sustainability and innovative design, where our company always tries to fulfil the requirement of high value within all its new themes.



We have succeeded even in this target: within the scope of Shell Eco Marathon 2010, our “Nios” won the highest recognition of design award for our company in the Urban Concept Class.

Literature

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