

## Press release

business development

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### **TenCate and Kringlan Composites enter cooperation for automotive industry**

**TenCate Advanced Composites and Kringlan Composites AG (Otelfingen, Switzerland) have signed a cooperation agreement (MoU) in order to develop solutions for part manufacturing on the basis of thermoplastic composite technology.**

The current main development initiated by Kringlan Composites has been the design and production of a full carbon fibre-reinforced composite wheel for high performance cars. TenCate has been involved in the development of the thermoplastic composite material, which has been qualified for this purpose. This development now reaches the final phase in order to enter series production.

#### **Know-how built up in aerospace industry**

Close cooperation of a materials company and a parts manufacturer for the automotive industry is conditional for a successful implementation of fibre-reinforced thermoplastics technology. For this purpose TenCate used its know-how in thermoplastics, which development started over 25 years ago in the aerospace industry. It has resulted in a leading position based on the portfolio of TenCate Cetex® materials. TenCate is expecting to expand this technology into the automotive sector the coming years.

#### **Enhanced safety and reduced weight**

The focus will be on high performance parts that enhance safety and reduce weight. Composite wheels are highly effective to generate weight reduction and reduced fuel consumption. Acceleration of light weight wheel will cost less energy and lowers the CO<sub>2</sub> emission of the vehicle. The weight reduction per wheel is 30 to 40 per cent.

The use of thermoplastic composite enables series production, because of much shorter production time. A wheel is a complex and technical part, which also includes welding technology. The wheel should have a high impact resistance and is sometimes part of the safety structure, which calls for an advanced and high performance composites material. In recent years, Kringlan Composites has developed a patented technology which can be used in the future for the series production of composites wheels, which comply with the highest performance standards.

**TenCate Advanced Composites Europe  
Almelo, the Netherlands, Tuesday 17 September, 2013**

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**For further information:**

Digital pictures are available upon request via [media@tencate.com](mailto:media@tencate.com)

TenCate and Kringlan are present at the Composites Europe 2013 exhibition in Stuttgart, Germany, from 17 – 19 September on the TenCate Advanced Composites stand B34, in the Dutch pavilion, hall 4. Several examples of automotive and aerospace composites are displayed here.

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**TenCate Advanced Composites** (business unit automotive composites) is a leader in the development and production of thermoplastic and thermoset prepreg composites for the automotive industries. Its product portfolio is incorporated in automotive products, medical equipment and numerous other industrial applications. TenCate Advanced Composites has production facilities and operations in North America, Europe and Asia.

**Kringlan Composites AG** is a spin-off company of the Swiss Federal Institute of Technology (ETH) in Zürich. Using new technologies for manufacturing of fibre reinforced thermoplastics, Kringlan targets its goal to reduce weight, improve properties and at the same time dramatically reduce the manufacturing costs of composite parts for automotive applications, consumer goods and sporting equipment.

**Royal Ten Cate** (TenCate) is a multinational company that combines textile technology with chemical processes and material technology in the development and production of functional materials with distinctive characteristics. TenCate products are sold throughout the world. Systems and materials from TenCate come under four areas of application: safety and protection; space and aerospace; infrastructure and the environment; sport and recreation. TenCate occupies leading positions in protective fabrics, composites for space and aerospace, antiballistics, geosynthetics and synthetic turf. TenCate is listed on NYSE Euronext (AMX).