



**Press release**

## **Nexans wins Energy Master Award 2010 for its Superconducting Current Limiter**

*The world's first superconducting short-circuit current limiter for use in power plants convinced the jury in the category "Use of innovative technology"*

**Paris, April 1, 2010** – Nexans has won the Energy Master Award 2010 for its superconducting current limiter. The prize was awarded on March 15, on the eve of the three-day Energy Masters conference as part of a function held in the Berlin TV tower. The organizer, Econique Business Masters GmbH & Co. KG, which had already made energy efficiency and active climate protection the main topics of the conference, awarded the prize for the first time this year. Prizes were awarded for projects in four categories: "Use of renewable energies", "Use of innovative technology", "Energy efficiency in small and medium-sized companies" and "Overall energy management concept". The current limiter won first prize in the "Use of innovative technology" category, in which its first worldwide use in the internal power supply of a power plant was presented. Since a few months, the system has been protecting the medium-voltage supply of coal crushers in a 900 MW unit at the Vattenfall power plant in Boxberg, Germany.

### **Verdict of the jurors: Important for Smart Grids and CO<sub>2</sub> separation**

Nexans' world's first superconducting short-circuit current limiter for use in power plants has been preselected by three expert jurors, namely Dr. Karlhorst Klotz, Editor in chief of the *Energy 2.0* magazine, Franz Lamprecht, acting Editor in chief of the *Energiewirtschaftliche Tagesfragen* magazine, and Rembert Liebsch, Technical Manager at Hüttenes-Albertus Chemische Werke GmbH. Among the three nominated projects, what spoke in favour of the current limiter, according to the jury, is that it is an important component for realizing improvements in the Smart Grid and CO<sub>2</sub> separation innovation fields. The public then made the final decision since the nominated projects were described and could be voted for online. Dr. Joachim Bock, Managing Director of Nexans Superconductors, said after the award ceremony *"I am delighted that the use of our current limiter has generated so much interest and that so many people decided in favour of our product."*

### **Usually an ideal conductor – and sometimes, when required, a limiting resistor**

While superconductors are primarily used in many applications owing to their very high electrical conductivity, the superconducting current limiter is also in demand thanks to its ability to instantaneously become a resistor. Up to the nominal power, the limiter offers virtually no resistance to the current. In the case of a power plant, for example, it even lets the high inrush currents of the coal crushers pass through. If the

critical current level is however exceeded, the superconducting material suddenly acts as a resistor and thus limits the current - within milliseconds! The system automatically returns to standard operation after the elimination of the problem, without the need for any external intervention. This all happens fully wear-free.

### **Increased safety creates cost-saving potentials**

The limitation effect results in increased safety, which pays off in terms of cost savings: without the current limiter, switchgear systems have, for example, to be designed so that no damage is incurred even in the case of high short-circuit currents. This typically means that many components must have an oversized design, which in some cases is already at the limit in terms of what is feasible. Effective limitation of the maximum currents thus offers a large saving potential while at the same time ensuring improved operator and system protection. Physics ensures the required reliability: the current limiter does not require a trigger or regulation; it limits the current on its own due to its material properties. Thanks to its modular design, it can be adapted to the respective requirements.

### **About Nexans**

With energy as the basis of its development, Nexans, the worldwide leader in the cable industry, offers an extensive range of cables and cabling systems. The Group is a global player in the infrastructure, industry, building and Local Area Network markets. Nexans addresses a series of market segments: from energy, transport and telecom networks to shipbuilding, oil and gas, nuclear power, automotives, electronics, aeronautics, material handling and automation. With an industrial presence in 39 countries and commercial activities worldwide, Nexans employs 22,700 people and had sales in 2009 of 5 billion euros. Nexans is listed on NYSE Euronext Paris, compartment A. For more information, please consult [www.nexans.com](http://www.nexans.com)

### **Contacts:**

#### **Press**

Sabrina Bouvier

Tel. : +33 (0)1 73 23 84 12

[sabrina.bouvier@nexans.com](mailto:sabrina.bouvier@nexans.com)

#### **Investor Relations**

Michel Gédéon

Tel.: +33 (0)1 73 23 85 31

[michel.gedeon@nexans.com](mailto:michel.gedeon@nexans.com)