

# cableworld 2|<sup>20</sup><sub>12</sub>



Customer Magazine of the Lapp Group

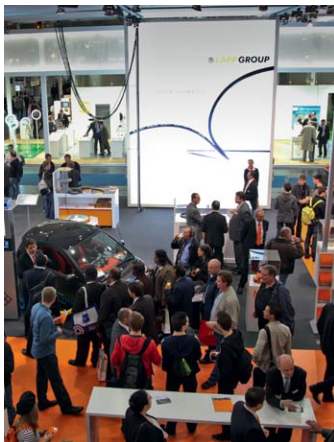
The Lapp Group  
to present a number  
of new products at  
the Hanover Fair

New Lapp production  
plant in Bhopal ready  
for operation

Patented technology  
in the new Logistics  
and Service Centre in  
Ludwigsburg



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ÖLFLEX® SOLAR for Coca-Cola in South Africa

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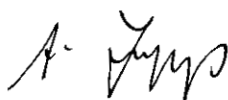
Ladies and Gentlemen,

The Hanover Fair is traditionally considered the window to the international industrial sector. For our company, too, this exhibition is extremely important and we will be returning again this year to present a number of new products and ideas. Such as our comprehensive automation programme, our innovative motor and drag chain cables, as well as plenty of highlights for the renewable energy markets and electromobility.

A visit to our stand in Hall 11 (C03) will be well worth it! With our superb brand products and system solutions, we are here to help you gain a significant advantage over the competition. Come and talk to us at our stand, where our experienced team of Lapp experts will gladly advise you. Even if your requirements are far from the norm, we are confident we can help you find the perfect connection!

As China is this year's partner country at the Hanover Fair, our stand will heavily reference the current Year of the Dragon. Be prepared for some pleasant surprises!

Looking forward to your visit,  
With best regards,



Andreas Lapp



# Hanover Fair: New ideas in the Year of the Dragon

**There will be a real explosion of innovation at the Lapp stand during this year's Hanover Fair. The focus will be on new ideas for the core Lapp markets, mechanical and plant engineering, as well as device and apparatus construction. Furthermore, Lapp will also be turning the spotlight on China, partner country of the Hanover Fair 2012. The entire stand in Hall 11 C03 will reference the Year of the Dragon and visitors can look forward to plenty of surprises.**

*Grabbing attention  
at the Lapp stand:  
A race track,  
controlled using  
UNITRONIC®  
fieldbus technology*

Certainly set to garner attention is the slot car race track, an imitation of the Shanghai Formula 1 course. The course stretches over 24 metres and the eight racing Porsches will be controlled using

UNITRONIC® AS-Interface fieldbus technology from Lapp. Power for the transport slide is supplied using a miniature drag chain (SILVYN® CHAIN energy supply system), together with the particularly hard-wearing ÖLFLEX® FD 855 P and two extra-fine wire UNITRONIC® AS Interface Bus FD cables. Once the model Porsche is positioned on the race track, an IP camera connected via the AS-Interface module monitors its progress. Another special feature are the two manual controllers for the driver: solar cells determine the speed of the vehicle with the driver holding the controller up to the light to accelerate. An intelligent control system, in turn, monitors the race using eight sensors per lane which are set up along the route. They determine the number of



rounds completed and the duration. Sensors are mounted to bridges and are read using the AS Interface fieldbus system. Executive Vice President Michael Collet explains: "With the Formula 1 race track, we are demonstrating our expertise as a system supplier for the automation sector. Everything comes from one source with us – and we have plenty of fun in the process!"

There have also been many new developments for the HITRONIC® fibre optic cables, with mechanical load capacity and price-performance ratio now much improved. There are also new products being launched for outdoor applications. The HITRONIC® HQN 1500 Outdoor Cable and HITRONIC® HVN 5000 Outdoor Cable have been redefined for remote data transmission. They can now be laid directly in the ground and are particularly hard-wearing. There is also a mechanically strengthened version recently available with additional armour for harsh applications and protection against rodents (HITRONIC® HQW Armoured Outdoor Cable). For the direct tertiary connection in buildings, as well as the connection to terminal devices, the HITRONIC® Breakout Cable is used.

The most important new product for mechanical and plant engineering is certainly the ÖLFLEX® SERVO FD 796 CP motor cable, which was already presented at the SPS/IPC/Drives 2011 trade fair in Nuremberg. This premium cable replaces seven existing servo motor cables and is the perfect solution for ultra-modern machines and plants with high traversing rates and acceleration. Added to this are four new power chain series: the ÖLFLEX® CHAIN 808 and ÖLFLEX® CHAIN 809, as well as their shielded ver-

sions. All four models are particularly suited for low to medium stress in mechanical engineering and conveyor technology applications and impress with their extremely good price/performance ratio in this segment.

The renewable energy and e-mobility sectors are also represented. The Lapp Group, in cooperation with Konarka Technologies, will be presenting organic solar cells for building integration, for which Lapp has developed the new EPIC® SOLAR MAP junction box. The connection socket is welded, enabling fully automated mounting on the organic modules from





Konarka. An electric car featuring Lapp cables will also certainly draw the attention of visitors.

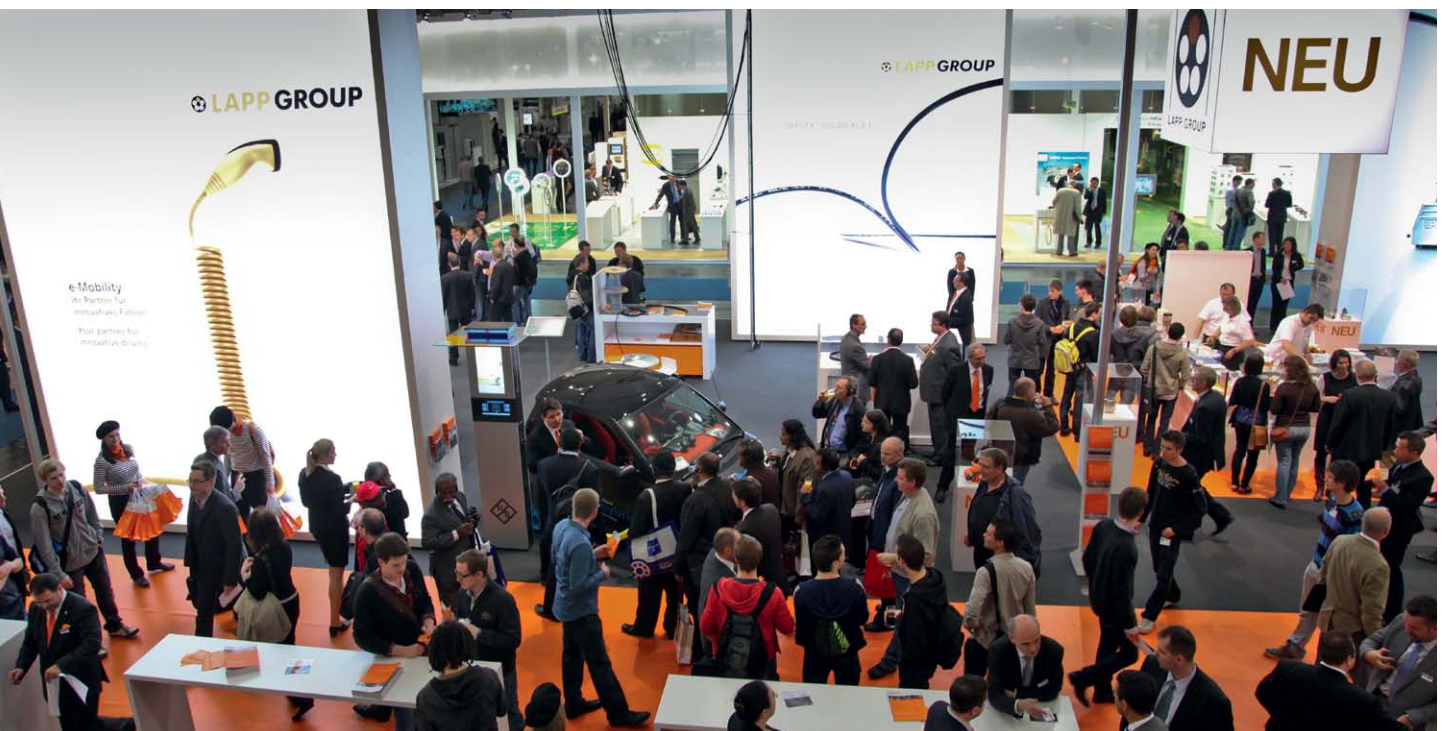
“The World of Lapp”, the company’s new main catalogue, will also be appearing right in time for Hanover Fair. On around 1,000 pages, all branded products for the perfect connection, along with plenty of technical tips and service offers, will be presented. The new edition is somewhat leaner, making it more convenient and customer-friendly. Even so, the comprehensive range of products remains unrivalled. The product portfolio includes standard and highly-flexible cables, industrial connectors and screw technology, bespoke assembly and system solutions, automation

technology and technical accessories. It has everything from mechanical and plant engineering to device and apparatus construction, or for growth sectors such as renewable energy, mobility and life sciences. As you would expect, all the new products are already included in the latest edition. And, for the first time, “The World of Lapp” will be appearing simultaneously and with identical content in German, English, Chinese, Italian, Polish and Spanish.

In short, there will be a lot going on. Come and see it all for yourself at our stand C03 in Hall 11. ■

*Always busy:  
the Lapp stand  
at the  
Hanover Fair*

[www.hannovermesse.de](http://www.hannovermesse.de)



# The Lapp Group is growing

There was major interest shown in the Lapp Group press conference held in Stuttgart in early March. Andreas Lapp and Dr. Uwe Schwellbach, Head of Finance and Controlling, presented the impressive figures for the 2010/2011 fiscal year: The consolidated turnover rose by 34% to reach approximately €847 million (previous year €633 million). Actual turnover growth was 27%, with 7% of this attributed to the sharp rise in copper prices. The number of employees increased from 2,800 to 3,000 worldwide, while pre-tax profits rose from €45.7 million to €68.2 million. As Andreas Lapp explains: "That was a very successful year for us. We were able to close the gaps left by the record figures before the crisis years."

With 73% of the group turnover, Europe continues to be the core market for the Lapp Group. Percentage growth here was almost 30%. Asia saw particularly promising development, with turnover at €153 million, an increase of 61%. In North America, there was €73 million on the books, representing a plus of 27%. Dr. Uwe Schwellbach added: "With an equity ratio of 50 percent, the Lapp Group is also well protected against any uncertainties which may arise from the global economic situation."

Despite the shaky development of the global economy, Lapp also recorded slight growth at the start of this new 2011/2012 fiscal year. In the first four



Andreas Lapp and  
Dr. Uwe Schwell-  
bach present the  
figures for the  
2010/2011  
fiscal year

months, there was a 4% increase in turnover in comparison to the strong previous months. This was partially due to the reduced price of copper, currently around €100 lower (per 100 kg) than last year. Andreas Lapp: "Despite the Euro currency crisis, we are still expecting a steady development of sales." The company sees particularly large growth opportunities continuing in Asia. Andreas Lapp: "There will always be markets with strong growth, where we will also be represented in the future. This will secure jobs with us here in Germany." Overall around 200 new jobs have been created around the world in the current financial year. ■

# The new logistics world in Ludwigsburg

**Construction of the new logistics and service centre for the Lapp Group in Ludwigsburg near Stuttgart, Germany is making superb progress. It is set to be the most modern facility the cable industry has ever seen. The technology is currently being fitted to the three halls. Operations will then get underway during the summer.**

*The new logistics and service centre for the Lapp Group will boast state-of-the-art facilities, the most modern site ever seen in the cable industry.*

In Hall 2, capable of housing up to 74,000 cable drums with 400 to 800 mm of flange diameter, almost everything will run automatically. The cable drums that arrive from the plants will be transported to four transfer stations by truck. There, so-called manipulators will lift drums weighing up to 400 kg from the pallets and place them on an approximately 700-metre-long conveyor belt with special plastic system pallets patented by Lapp. In this way, each drum will be brought to its place on the storage rack. Every manipulator will transport at least 60

drums per hour. Because they lift the drums from the centre and not the outside, there is no risk of the damage sometimes seen when using forklift trucks.

Once the drums reach the belt, everything runs automatically: First the barcode on the drum is scanned and written on the RFID chip, then every cable drum is assigned to a place in the warehouse. Storage and retrieval machines that reach to the very top of the building are used in the 18 rack aisles. Guided on rails, they pack away the system pallets, delivering or retrieving the cable drums to the right level just like an elevator. Light beams and RFID scanning points make sure the pallets are in the correct order.

In Hall 1, everything is cut to length and commissioned. Here, too, almost everything will be automated. Two belts will bring the cable drums on the system pallets to the 24 cutting machines. Here, up to 150 cable drums can be processed per hour.

Once all cable coils for an order have reached the automatic small-parts warehouse, these are removed at the touch of a button and brought to one of the five packing stations. In this way, 334 drums and 165 coils can be prepared for delivery every hour. The advantage for the customer: They are presented with one complete package, and no longer several packages from different locations.

Hall 3 is intended for the storage of standard pallets. It will house around 17,000 drums with diameters ranging from 900 to 1,200 mm. Assembly will soon get underway. ■





# New plant in Bhopal, India

**The Lapp Group is building a new production plant in Bhopal (India). In March, a good six months after the foundation stone was laid, both the flooring and roof of the first building, covering almost 6,000 square metres, were completed. Altogether, there are three production buildings planned for the approximately 12 hectares of land. The machines were set up and tested in April, during which time the side walls were also installed.**

The production machinery is coming from the world's leading machine manufacturers, such as Rosendahl and Niehoff, and is particularly fast and efficient. Project Manager Mukesh Bishnoi: "This will enable us to increase production and provide better quality, as well as guarantee our customers a punctual delivery."

The new plant in Bhopal is the second production site in India after Bangalore and will be the largest production site for the entire Lapp Group once it is finished. In a move towards protecting the environment, there will be trees planted on more than a quarter of the grounds. A rainwater tank, ground water regeneration and a photovoltaic plant are also planned. As Siegbert Lapp explains: "India is a huge growth market, and we want to benefit from this growth with our connection solutions." According to Frank Imkamp, President and CEO of Lapp Holding Asia, an annual growth of 30 percent is expected in India. Srinivas P. Kamisetty, Managing Director of Lapp India, explains why Bhopal was chosen as a lo-



*3D representation of  
the new production  
site in Bhopal*

cation: "To date, most of our customers have come from the South and West of India. Bhopal is located right at the heart of the country, the government guarantees a reliable energy supply and the transport connections are superb. We will thus be in a position to provide our customers with an even better service and will enjoy better access to the markets in the North and East of India." Around 100 employees will be initially working in Bhopal, rising to 400 at a later date. The total investment will amount to around €16 million over a two-year period. ■

# ÖLFLEX® SOLAR for Coca-Cola in Africa



*Coca-Cola relies  
on solar power  
in South Africa*

**Coca-Cola uses environmentally friendly solar power in South Africa. During the previous summer, a new water bottling plant was set up for the Coca-Cola brand Valpré in South Africa's Heidelberg. Lapp Group Southern Africa, a company within the Lapp Group, together with its partner IBC SOLAR, designed and installed a customised solar system, fitting it with ÖLFLEX® SOLAR cables and EPIC® SOLAR 4 Thin connectors. The system has a nominal output of 3 kWp and generates around 50,000 kilowatt hours per annum. It was designed in such a way that capacity can be increased to 90 kWp. The system saves 29.5 tons of CO<sub>2</sub> annually.**

The supply of power in South Africa is still under de-

velopment in some parts. In order to avoid production downtimes during power failures, company management decided to build their own solar system. To set this in motion, the beverage experts called upon the photovoltaic specialists at Lapp Kabel and IBC SOLAR.

IBC SOLAR took responsibility for delivery of the modules, components and monitoring systems, and getting the system up and running. Altogether, 132 IBC PolySol modules and two inverters were installed. For the connection of the modules, the cross-linked ÖLFLEX® SOLAR XLS standard solar cables were used. Both types of cable are normally mounted on flat and pitched roofs and field systems for wiring solar modules together, as well as con-



necting the individual rows of modules and the inverter.

The low-resistance solar connector EPIC® SOLAR 4 Thin will guarantee greater efficiency, boasting a particularly low electrical resistance. "On average, the contact resistance in other connectors is about 10 times higher. With 0.2 mOhms, we're leading the field by some distance," explains Stefan Koch, Product Manager at Lapp Kabel. Not only does this make photovoltaic systems more efficient, but it also slows down the ageing process of the connector. Dieter Dilchert, Managing Director of Lapp Southern Africa: "Through our collaboration with IBC SOLAR, we have been able to contribute towards the overall green strategy of Coca Cola." This is confirmed by Alexan-

der Müller, responsible for Off-Grid Power Supply at IBC SOLAR: "With the construction of a solar system, the company is setting a good example. As an international photovoltaic systems house, we want to use our expertise to further promote the use of renewable energies in South Africa."

Lapp Southern Africa is also offering its customers an all-round support service. In order to ensure the system generates high returns over the long term, Lapp will be assuming monitoring and regular maintenance duties. With automatic remote surveillance, it will be possible to quickly detect and rectify any technical problems that arise. ■

[www.ibc-solar.de](http://www.ibc-solar.de)

### About IBC SOLAR

IBC SOLAR is a leading international specialist for photovoltaic systems, offering complete solutions for generating power from sunlight. The company covers the entire spectrum, from the planning of solar power plants to their final hand-over. To date, IBC SOLAR has supplied more than 1.4 GW for over 100,000 individual systems across the world. These systems range from large photovoltaic power plants and solar parks which feed electricity into the grid to systems for network-independent energy supply. IBC SOLAR distributes its photovoltaic components and systems via a dense network of specialist partners.

As a general contractor, the photovoltaic experts plan and implement large-scale solar projects. Through maintenance and monitoring, IBC SOLAR guarantees an optimum performance of the photovoltaic parks.

IBC SOLAR was founded in 1982 in Bad Staffelstein. The photovoltaic specialist is represented the world over with several subsidiaries and currently employs around 400 people, approximately 290 of which are in Germany. The internationally active IBC SOLAR group is managed from its headquarters in Bad Staffelstein.

# Saving time and money with EDI

**EDI stands for Electronic Data Interchange. It is an electronic ordering service that allows for the exchange of business processes, fully automated and in electronic form, between business partners in order to accelerate processes on both sides. Lapp Kabel uses EDI. And more than 120 large customers from the mechanical engineering and electrical wholesale sectors are already connected to Lapp via this system. For example, EDI has been very successfully introduced at the electrical wholesaler groups FEGIME Deutschland GmbH, Hagemeyer Deutschland GmbH, Mitegro GmbH, DEHA Elektrohandelsgesellschaft, Würth Industrie Service GmbH and Conrad Electronic SE, as well as renowned production companies such as Grenzebach Maschinenbau GmbH or Rohde & Schwarz GmbH (specialist for measurement technology, broadcasting and secure communication). Using EDI, it has been possible to simplify many purchasing processes for both Lapp and its customers. This saves both time and money – for everyone involved.**

Earlier, ordering processes were pretty complicated. First, the customer had to enter the item to be ordered into his system. Then the order was faxed or emailed. At Lapp, the order also needed to be entered and then forwarded on to Processing. The disadvantages? Too much time required, delivery delays, risk of transmission errors due to manual entry. With EDI, in contrast, the processes are ac-

celerated considerably and savings made on process costs thanks to lower error rates. In short, the flow of information and material has been optimised. Furthermore, the processes are standardised while remaining flexible. It is thus possible to automate the most important business processes with maximum utilisation and minimum, transparent costs. Michael Hammer, responsible for e-Procurement at U.I. Lapp GmbH: “The aim is to make significant savings on process costs and accelerate the processes together with the customer. It needs to be win-win situation in the long-term for both parties.”

EDI is thus introduced as follows: Generally, the first step is to define the basic requirements for the new system together with the customer and determine an implementation schedule. The ordering process and then the order confirmations and invoices are first automated.

A basic requirement here for successful implementation is to ensure both sides are speaking the same language. There needs to be clear and reliable master data, as well as a shared standard format. For every standard cable length, there needs to be a definite EAN number. This approach chosen by Lapp is based on the suggestion from the ZVEI Association regarding the industry-specific EDILEK-TRO2007 standard.

During a test phase, the company processes and workflows that have resulted over the years are electronically checked. In this way, any problems can be quickly detected and eliminated, without in-



terfering with the ongoing processes. Only then does EDI officially start. At Lapp, the employees only get involved in the order processing when problems arise. The customer benefits from the accelerated process and increase in quality. Delivery times are more reliable and errors eliminated. And through the commissioning of electronic order confirmations and invoices, the added value of an EDI connection is further established for the customer, because here too time-consuming manual entries are omitted. Mi-

chael Hammer: "The time and effort required for the individual introduction of EDI is certainly considerable at the start. However, at the end of the day, we all stand to benefit."

First introduced on the German market, EDI is now available for Lapp customers in many countries and is continuously being rolled out in more markets around the world. Contact us at [www.lappgroup.com](http://www.lappgroup.com) for more details. ■

*The electronic  
ordering service  
EDI accelerates the  
business processes  
at Lapp and  
its customers*



## New Managing Director



Gerald Lawrenz,  
Managing Director of  
U.I. Lapp GmbH

New member of the Board of Management at the European U.I. Lapp GmbH: On 1 March, Gerald Lawrenz (52) took over as Managing Director Sales in Germany. Mr. Lawrenz grew up in both Germany and the USA. As a qualified electrical engineer, he worked at both Boeing and Texas Instruments, specialising primarily in Sales. He spent more than 17 years at a supplier for electromechanical components, before eventually becoming Director of Sales, Marketing and Product Management for the entire European region. He then moved on to head a company which specialised in the sale of special cables. In short, Gerald Lawrenz is a real expert when it comes to the sale of electromechanical and technical products. With the sales region of Germany, he is in charge of the single most important market for the Lapp Group.

### Trade fairs 2012

#### 5th EDICAO DA FEEAI

Joinville, Brazil 17. - 20.4.2012

#### ELCOM UKRAINE

Kiev, Ukraine 17. - 20.4.2012

#### EXHIBITION ON PLASTICS AND RUBBER INDUSTRIES

Shanghai, China 18. - 21.4.2012

#### HANOVER FAIR

Hanover, Germany 23. - 27.4.2012

#### EMEX

Auckland, New Zealand 1. - 3.5.2012

#### ATX South

Charlotte, USA 2. - 3.5.2012

#### EXPOPOWER

Poznan, Poland 8. - 10.5.2012

#### ELECTRICAL ENGINEERING

St. Petersburg, Russia 15. - 18.5.2012

#### BIEMH

Bilbao, Spain 28.5. - 2.6.2012

#### ELIADEN

Oslo, Norway 4. - 7.6.2012

#### EXPOELECTRICA INTERNATIONAL

Mexico City, Mexico 6. - 8.6.2012

#### ELEKTRO

Moscow, Russia 8. - 11.6.2012

#### INTERSOLAR EUROPE

Munich, Germany 13. - 15.6.2012

All trade fairs of the  
Lapp Group  
can be found at  
[www.lappkabel.com/  
fairs](http://www.lappkabel.com/fairs)



## Global news

### Music connects Germany and India

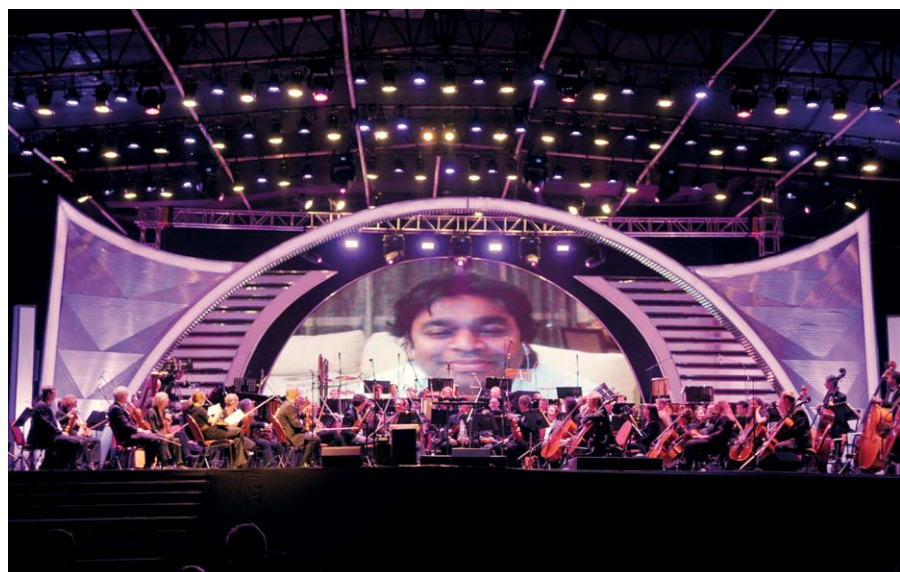
An Indian superstar, a German orchestra – and the Lapp Group. A successful mix, as confirmed by millions of enthusiastic music fans. The Babelsberg Film Orchestra held concerts at the start of 2012 in Mumbai, Delhi, Kolkata, Chennai and Bangalore, playing the hits of A. R. Rahman (winner of two Oscars, two Grammys and a Golden Globe among others) to celebrate 60 years of diplomatic relations between Germany and India. This unique series of concerts was exclusively presented by Lapp India. The response was enormous: More than 15,000 guests came to the concerts and 14 million people followed “Classic Incantations: The German Film Orchestra Babelsberg performs A. R. Rahman” online. Andreas Lapp, Chairman of Lapp Holding AG: “Music is understood by people everywhere in the world, and just like ÖLFLEX® is the ideal connection for our customers, ‘Classic Incantations’ connects Germany and India. I am very proud of the role Lapp India has played here.”

[www.facebook.com/lappindia](http://www.facebook.com/lappindia)

[www.germany-and-india.com](http://www.germany-and-india.com)

### Brush up on Lapp! 100 years ago: The fastest water turbine

The Austrian engineer Viktor Kaplan developed the “fastest water turbine”. It is primarily suitable for use in water with slight or fluctuating gradients and for generating power when used in connection with generators. Its turbine has a rotor resembling a



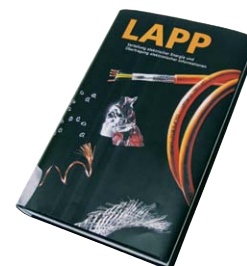
*The German Film Orchestra Babelsberg played the hits of superstar A. R. Rahman in five Indian cities*

ship’s propeller and adjustable blades. The first Kaplan turbine in the world, with a diameter of 60 cm and an output of 26 kW, was built in 1918 in Brno and put into operation in 1919 in Lower Austria. The first turbine was used in 1955, on display today in the Technical Museum in Vienna. There are thousands of Kaplan turbines currently in use around the world and they contribute to almost ten percent of the world’s hydraulic power generation.

From the book: “Lapp – Distribution of electrical power and transmission of electronic information.”

From an idea by Oskar Lapp. The third extended edition can now be ordered in German, English and Russian (each 649 pages) from: [www.lappkabel.de](http://www.lappkabel.de).

Price: €16.90 per book, plus postage and packaging.



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