

cableworld

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Customer Magazine of the Lapp Group



Glittering display of innovations from Lapp

House of the future with Lapp

Member of the Board Siegbert Lapp celebrates his 60th birthday

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“Sporty” applications for Lapp products



Member of the Board Siegbert Lapp celebrates his 60th birthday together with 900 guests

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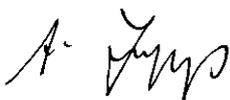
Ladies and Gentlemen,

Much has been written on the subject, so you may already be aware that our ÖLFLEX® brand has undergone some exciting new developments. Our engineers have been tinkering away for a long time to bring us these innovations; after all, a true legend cannot simply be pulled out of a hat. But now, finally, the day has come: we will be introducing the new ÖLFLEX® at the SPS/IPC/DRIVES exhibition in Nuremberg. Here at Lapp we are all very proud that we will soon have the opportunity to present an innovation to you that will deliver you lasting competitive advantages on the international stage.

I cannot tell you all the details, because we don't want to spoil the surprise. However, I am certain that you will be very excited by what you hear. The new ÖLFLEX® is geared exactly to your needs. With this new innovation, we can offer you exactly what you need to succeed internationally: brand quality made by Lapp – without having to pay for things you don't need. What's more, with us you know that you can count on over 50 years of expertise in connections.

I hope that I have sparked your interest and I very much look forward to presenting our new ÖLFLEX® at our stand at the exhibition in Nuremberg.

With best regards,



Andreas Lapp



Innovation offensive to improve competitiveness

Better, faster, more cost-effective – the industry is continually working towards more efficient solutions for successfully meeting the challenges posed by international competition. The Lapp Group supports its customers in this process and over the next few months will be presenting a wealth of innovations that can help to further increase that competitiveness.

For instance, at the 2012 Hanover Fair, the Lapp Group presented its new all-round programme for automation. “The customers get all cable and wiring solutions from us – for the machinery, the sensors and the control unit. No other company boasts such a variety,” explains Carsten Stein, Product Manager for Automation & Network. The portfolio has been significantly extended and improved in the area of HITRONIC® fibre optic cables. Mechanical stability and price-performance ratios are now much improved. There are also new products being launched for industrial outdoor applications. The HITRONIC® HQN 1500 Outdoor Cable and HITRONIC® HVN 5000 Outdoor Cable have been updated for remote data transmission.

There are also new products for industrial ethernet cabling. For example, the field-configurable EPIC® DATA CAT.6_A 10G connector, designed for the higher bandwidth requirements of 10 gigabit ethernet and for transmission frequencies of up to 500 MHz in industrial and building networks. Thanks to its zinc die-casting, the connector is particularly robust and fully screened.

Another new product is the UNITRONIC® LAN 1500 CAT.7_A LAN cable with improved output of up to

1,500 MHz for structured building cabling on horizontal surfaces. It also complies with the EN 50173 and ISO/IEC 11801 standards. Furthermore, Lapp is offering LAN cables for outdoor installation for the first time ever.

Lapp has also come up with a comprehensive product range for fieldbus technology. The new UNITRONIC® AS-Interface Long Distance (2.5 mm²) for communication on a sensor/actuator level is the perfect solution to get you started with economically attractive fieldbus technology. Also new is an EPIC® Data PROFIBUS fully metal industrial connector, suitable for the assembled PROFIBUS M12 cables, as well as 8-pole M12 sensor actuator cables and adjustable panel feed-throughs.

Keen interest has also been aroused by a cable gland made from plastic with 360 degree EMC shielding. Its name: SKINTOP® BRUSH ADD-ON. Instead of a brass cable gland, only a brass counter nut with active screen contact is required. You can use a perfectly normal plastic cable gland for cable entries in the control cabinet. The trick: the highly flexible brass braids for the shielding are now integrated into the considerably smaller counter nut instead of the brass cable glands as has previously been the case.

Lapp has also set new standards in photovoltaics. At the Intersolar Europe exhibition in Munich, Lapp and cooperation partner FPE Fischer presented prototypes for a new connection system that helps both module manufacturers and operators of PV systems to significantly increase efficiency and to reduce costs for parts as well as operating ex-



penses. The new technology, EPIC® SOLAR MAP SET consists of several components, all made of high-quality weather-resistant and impact-resistant plastic, which can be individually combined as required to connect PV modules. Junction boxes, as used in standard layouts, are now unnecessary thanks to the new technology. The standardised components can be mounted on the module and welded fully automatically, and customised solutions for different numbers of strings and different cable lengths can be produced with no problems on a single production line. Leaning heavily on the principle of flexible production platforms used in the automotive industry, the EPIC® SOLAR MAP SET is based on existing technologies and modular components.

The injection moulded and stamped parts allow modular production, making it extremely easy to extend the product range. Michael Collet, Executive Vice President Innovation: “The battle for the photovoltaics market is becoming ever more intense. The market demands intelligent functionality at low costs along the entire value chain. Against this backdrop, we are setting new standards for connection technology with the EPIC® SOLAR MAP SET.” The EPIC® SOLAR MAP SET is suitable for the connection of crystalline, thin-film and organic photo-voltaic modules and all components comply with the IP68 protection class.

The next beat of the innovation drum came a few weeks ago at the Husum Wind Energy Fair. The Lapp Group presented 20 torsion-proof connecting and

control cables, data network cables and fibre optic cables, which already meet the UL 6141 standard due to come into force soon. Lapp is therefore taking on a pioneering role across Europe in this regard too, and Lapp’s innovation offensive is proceeding smoothly.

At the SPS/IPC/Drives exhibition in Nuremberg (hall 6/stand 451), LAPP will be presenting more innovations that enhance efficiency. For example, there are three new cables for highly dynamic applications that deliver increased productivity while also being lightweight with minimal space requirements and offering extremely long service lives: the new rotary encoder cable ÖLFLEX® SERVO FD 798 CP is suitable as a signal cable for the wiring of rotary encoders for servo drives, while the ÖLFLEX® SERVO FD 796 P and the ÖLFLEX® CHAIN 896 P 4- and 5-core connecting cables can be used as supply lines for servo motors. The three new cable types deliver an impressive performance when it comes to quick changes of position in power chains with acceleration of up to 50 m/s², speeds of up to 5 m/s and travel lengths of up to 100 metres.

A few days ago, Lapp Systems – a Lapp Group company – released a new spiral cable configurator for customers requiring spiralised cables for their applications. This means that every customer can now configure their spiral cables to meet their particular requirements in just four steps and then order them directly from Lapp Systems. ■

Lapp Kabel – very sporty

Lapp branded products are also particularly in demand in many public facilities. For example, in large sport facilities such as the Fenerbahçe Ülker Sports Arena (13,500 seats) in Istanbul. At the start of the year, the largest display system in Europe (8 x 8 x 10 metres) was turned on for the first time.

The “floating” display cube offers a total of 280 square metres of screen surface area. Depending on the event, the 32 tonne system can be lifted and lowered and presents up-to-date information. Lapp Kablo Turkey, working together with U.I. Lapp GmbH and Brevetti, planned a 28.5 metre long SILVYN CHAIN® power chain weighing 415 kilograms. The basic model for this was the robust heavy-duty (SR 309B) power chain, with triple connecting pins. For the stadium, a special basket was constructed,

in which the chain was “embedded” after being lifted. In the power chain itself, screened ÖLFLEX® FD CLASSIC 810 CP, ÖLFLEX® FD 855 CP and ÖLFLEX® FD 90 CY connecting and control cables ensure reliable connections between the three control panels in the scoreboard and the central console under the roof.

Lapp is also an important player in football. In the stadium of the current German champions Borussia Dortmund (Signal Iduna Park), a total of 8,800 thin-film solar modules were installed on the roof with a total power of 924 kWp. To provide a reliable connection for the modules, Lapp Systems produced 4-way Y array harnesses, which were fitted with separate, integral and pluggable overload current fuses at the request of the customer.

Europe's largest display system also uses cable systems from Lapp

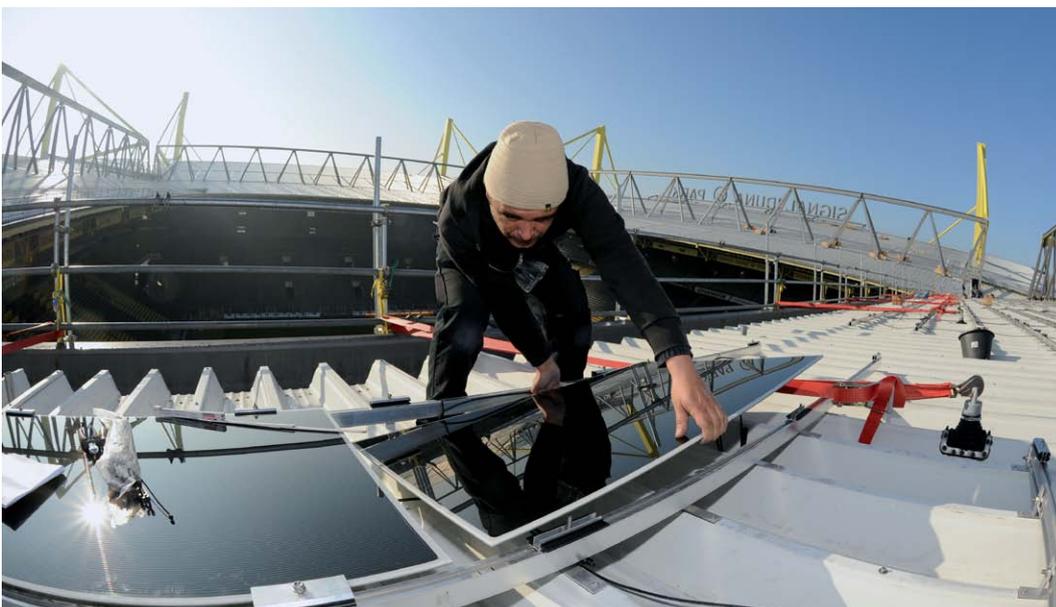


On the 4-way array harnesses, the distance between the coupling points is 10.6 metres. The branch is just 20 centimetres long. The extruded overload current fuse is simply attached to the string and thus connected to the panel series. In the BVB stadium, a total of 160 array harnesses and 640 extruded fuses were installed with six kilometres of ÖLFLEX® SOLAR XLR.

At the new Erdgas Sportpark, home of Hallesche FC (German Regional League North), 5,094 SE thin-film modules with an output of 535 kWp were installed. For this project, Lapp Systems produced 3-way double-Y array harnesses with integrated overload current fuses.

In general, the array harnesses can be produced in a T, Y or double-Y design. The number of strings can be increased depending on the cable cross-section. The electron beam cross-linked ÖLFLEX® SOLAR XLR is used as the cable. It benefits from particularly high thermal and mechanical resistance and is TÜV type approved. Weather and UV-resistant polyamide resin is used for the extrusion.

The Lapp cabling solutions bring tangible benefits: thanks to the use of array harnesses, up to 60 percent fewer solar cables are required between the modules and the inverters – which means material costs are significantly reduced. Furthermore, the plugged-in, separate fuses facilitate maintenance and repair. ■



Environmentally friendly power for the Signal Iduna Park stadium – with wiring solutions from Lapp

Solar Decathlon Europe: Lapp cables in the house of the future



*Students from
HTWG build
the house
of the future*

The Lapp Group supported two different teams at the international student competition “Solar Decathlon Europe 2012”, which took place in Madrid in September and both teams performed exceedingly well. The team Ecolar from the Hochschule Konstanz University of Applied Sciences (HTWG) made it to an impressive fourth place and the Hungarian “Odooproject” was awarded sixth place in the overall evaluation.

In the Spanish capital, around 40 students from each of the universities, from all faculties, presented their designs for what sustainable and energy-efficient living might look like in the future. Team Ecolar

won first place in the individual discipline “Industrialization & Market Viability”, Odooproject landed second place in the “Comfort Conditions” discipline and there was even a double victory in the “Engineering & Construction” category for the two teams using Lapp wiring.

The students had been building and tinkering away with their houses for as long as two years. Thanks to the intelligent energy concepts used, the buildings met the standard required for a zero-energy building. The complete cabling for the house designed by the HTWG team was provided by Lapp – from ÖLFLEX® SOLAR for the photovoltaic system,

to ÖLFLEX® control cables for the electrics in the house, to UNITRONIC® data network cables for the complex ventilation control system and other intelligent systems. “The students have shown what form energy-efficient construction may take in the future with their many smart ideas. We are proud that we were able to support the young house builders with our products”, explains Reinhard Probst, Program Manager of Renewable Energy at U.I. Lapp GmbH.

The single-storey wooden house measuring 70 m² created by Team Ecolar consists of six variable modules. All the furniture, bathrooms and technology are integrated into a “super cabinet” and can be “pulled out” at any time. The roof is the house’s power station – the entire area is covered with thin-film photovoltaic modules. Solar cells are even used over the unused areas and on sections of the walls. The wiring is provided in the form of the

particularly robust electron beam cross-linked ÖLFLEX® SOLAR XLR cables from Lapp. In order to keep the energy consumption levels of the building as low as possible, the air conditioning is passive. Special façade elements and enriched clay plates on the ceiling regulate the heat and humidity. Optimum comfort can even be ensured through the use of an external control system via the Internet.

UNITRONIC® BUS cables are used to connect all the actuators, switches and weather stations as well as the temperature probes in the hydraulic system and the Internet connection. Sensor values are transmitted via UNITRONIC® LiHCH cables. H07 cables were used for the wiring in the control cabinet. ÖLFLEX® cables were also used for the house service connection in Madrid and the networking of all sockets and household devices. ■

Trade fairs in 2012/2013

ELO SYS

Trencin, Slovakia 09 – 12/11/2012

Euro Expo

Kiruna, Sweden 14 – 15/11/2012

International Petroleum Exhibition

Abu Dhabi, United Arab Emirates
11 – 14/11/2012

China Wind Power

Shanghai, China 15 – 17/11/2012

Electrotechnics, Energetics, Automation,

Lightning Engineering

Krasnoyarsk, Russia 20 – 23/11/2012

Oil & Gas

Nizhnevartovsk, Russia 21 – 23/11/2012

SPS IPC DRIVES

Nuremberg, Germany 27 – 29/11/2012

Bauma China

Peking, China 27 – 30/11/2012

ATX West

Anaheim, USA 12 – 14/02/2013

Maquitec

Barcelona, Spain 12 – 16/03/2013

AMPER

Brno, Czech Republic 19 – 22/03/2013

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



Fireworks for Siegbert Lapp

Siegbert Lapp, Member of the Board of the Lapp Group recently celebrated his 60th birthday in Stuttgart's Carl Benz Arena. At the end of the event there were standing ovations and the guests, who included many employees as well as associates from the world of politics and economy, enjoyed some scintillating exchanges.

Siegbert E. Lapp inherited his passion for research and technology from his father Oskar Lapp (1921–1987). Siegbert Lapp learned how to be a tool and die maker first before studying industrial machinery at the University of Applied Sciences in Esslingen after completing his national service. Following several industrial placements abroad at cable companies and after successfully graduating as an industrial engineer, he assumed responsibility for the family company in 1980. Since then he has been a key driver in the Lapp Group's successful evolution. His first important step was to establish what is now Lapp Systems GmbH, a specialist for industrial high-tech system assemblies.

The Lapp Group's first major production facilities abroad were established under the aegis of Siegbert Lapp in Forbach, France. Siegbert Lapp continued to systematically promote development abroad to ensure that the focus remained on the customers.

More plants were opened around the globe, including in India, South Korea and the USA.

Siegbert Lapp is responsible within the Lapp Group for the areas of technology and production along with research and development. One of his major concerns is also the development and protection of the Lapp Group's intellectual property. For this reason, he founded the company Lapp Engineering in Cham (Switzerland) in 2005, thereby making a significant contribution to safeguarding the position of the family company as a competitive and innovative player in the world market. With many of his own patents and inventions he has also ensured that the Lapp Group has gained an international reputation as an innovative company.

Siegbert Lapp upholds the principles of corporate social responsibility and this approach is born out of conviction. In the umbrella association 'Kind e.V.', of which he has been chairman since it was founded, he is committed to providing what has become an extremely successful child care facility for working mothers and fathers. As Member of the Board for the Business and Industrial Association Stuttgart (WIV), he has also made a major contribution to boosting the competitiveness of companies based in the Stuttgart region. Siegbert Lapp has also made a name for himself as a patron of the arts. ■

Global news



Stan French

New director

The position of Director of Global Marketing and Sales was newly created within the Lapp Holding management level. This role was assumed by the American Stan French (55) on 1 August. He has spent a lot of time in Asia, as well as in Europe. After studying economics, marketing and computer science, he spent

nearly 30 years working for two Swiss industrial companies. In doing so he was active in leading positions in the USA, Asia and Europe. "I have spent so long working for European companies that my philosophy is probably more European than American", French says.

A global passion

Lapp is always close to its customers – wherever they may be in the world: 41 sales companies and around 100 local branches across all continents make sure of this. At the 2012 international export meeting near Stuttgart, partners and experts from the headquarters in Stuttgart exchanged ideas about the latest products and sales strategies of the Lapp Group. The slogan was: "Passion makes all the difference". The programme also included a visit to Lapp's largest production plant, Câbleries Lapp in Forbach (France).

Two festivals

The cultural exchange between Germany and India is very close to Chairman of the Board Andreas Lapp's heart, and as honorary Consul for India he supported two major festivals this year. At the Indian Film Festival in Stuttgart, over 50 contemporary film productions from all over India were shown. In an attractive programme of further events, there were exhibitions (including in the Lapp Center), seminars, tea talks and dance workshops. At the International Festival of Animated Film in Stuttgart, the Lapp Group presented the science fiction film "Ra. One" with Bollywood superstar Shah Rukh Khan. The film was shown on a large open-air screen in the centre of Stuttgart. An Indian fashion show from designer Poonam Choudry was another event which attracted great interest.



Oskar Lapp Foundation helps research

The Oskar Lapp Foundation, set up in 1992 in the honour of Oskar Lapp (1921–1987), is expanding its charitable activities. In addition to the Oskar Lapp Research Prize, worth €12,000, this year the foundation has also awarded the Oskar Lapp Grant for the first time. This grant gives its recipient up to €20,000 to help purchase resources and materials. Ursula Ida Lapp, chair of the foundation's board of trustees:

"We want to give young scientists more incentive to get involved in the specific area of cardiovascular research." The Oskar Lapp Research Prize 2012 was awarded to Dr Christian Besler at the University Hospital Zurich. He conducted investigations into therapeutic strategies aimed at increasing HDL cholesterol levels in patients with coronary heart disease. Dr Gilbert Weidinger from Dresden University of Technology was the recipient of the Oskar Lapp Grant 2012. He concentrates on zebra fish that can build new heart muscle cells if the heart is damaged.



After the award ceremony: Prof. Dr. Anton Both, Prof. Dr. Ellen Hoffmann, Volker Lapp, Dr. Christian Besler, Ursula Ida Lapp, Prof. Dr. Georg Ertl and Dr. Gilbert Weidinger

Fun times at the Lake Constance Megathlon

This year, once again, the Lapp Group was the main sponsor of the Bodensee Megathlon in Radolfzell on Lake Constance, this time with 16 Lapp teams and 69 participants taking part. Many Lapp customers who are also sporting enthusiasts took part. The race included 1.5 km swimming, 48 km cycling, 22.7 km inline skating, 35.8 km on a mountain bike and 10 km running. The UNITRONIC® team repeated the success of the previous year and was once again the fastest team. The participants also enjoyed fun times together the day before the event, at the "Lapp venture" at the Lochmühle Amusement Park. The participants had the opportunity to take part in various competitions to get to know each other better, such as quad biking, abseiling down cliffs and a milking competition.

Having fun at the „Lapp-Venture“



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