

panorama

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FIRST PRIVATE 5G NETWORK IN SWITZERLAND

Interview with Tilo Nemuth:

DIGITAL TRANSFORMATION IN THE BUILDING SECTOR

Micro data centres:

MORE THAN A PRODUCT INNOVATION

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EDITORIAL

LEADERSHIP in troubled times

Dear Readers,

Many things are not the same as they used to be. Not that *everything* has got worse – on the contrary: for example, our IT infrastructure solutions are even more effective and useful to society than ever before. Today many of us also enjoy a substantially higher standard of living than previously. Unfortunately, however, there are also factors which have tended to produce a negative trend in recent years. From one day to the next, global supply chains have found themselves in considerable difficulty. Computer chips and wheat as well as gas, oil and various other important raw materials are still only available in limited quantities and at high prices. Suddenly some countries are not accessible, or only with difficulty; and – like us – established customers and suppliers find themselves in a transformation process with an outcome which is as yet unpredictable.

Such dramatic changes, hurriedly introduced in some cases, and the associated planning uncertainty have forced many of us to reflect on our type of business management and to adapt to the environment accordingly. Some time ago we at Datwyler IT Infra already began enabling individual regions to implement company strategy so that in practice they are able to act independently without operational intervention "from the top", from head office.

We accordingly delegate decisions to the lowest possible level, so that the local Datwyler teams can respond to the situation on the spot with speed and agility. While trust in local managers and their teams brings much dynamism, entrepreneurial spirit and motivation to the organisation, it also requires the very careful and diligent selection, guidance and training of the individual exponents.

This strategy has proved effective. For over two years the Swiss members of the management team were unable to visit the subsidiary in China to see the situation for themselves. But right now, when various cities and provinces are again in lockdown, it is clear that both the systematic digitisation in our company and the decentralised set-up is a major advantage in successful crisis management. Using



frequent team calls and workshops and via different functions – CEO, Finance, HR, Product Management, R&D, Quality und Global Operations – we can exchange views, ensure we have an insight into what is happening locally, and show all the staff that we have not abandoned them.

Agile thinking and acting are just as much a central component of our company philosophy as a quick and consistent decision-making culture. And, if mistakes do occur somewhere, we try to learn as much as possible from them. So that we can offer you, Dear Readers, as perfect and comprehensive a service as possible in troubled times. In fact the one from Datwyler IT Infra.

Enjoy the read!

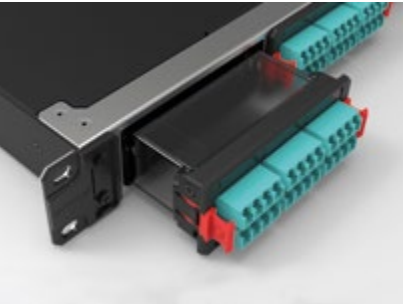
Johannes Müller
CEO Dätwyler IT Infra AG



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Stürmsfs AG in the municipality of Goldach is one of the highest-performing providers of end-to-end solutions in the steel, metal and alternative materials sector on the Swiss market.

Stürmsfs AG, Goldach:

FIRST PRIVATE 5G NETWORK operating in Switzerland

Stürmsfs AG is networking its production with strong partners like Nokia, Intel and Datwyler as well as the Swiss IndustryFusion Foundation.

Stürmsfs AG, one of Europe's most modern steel and metal service centres, has started operating the first private 5G network in Switzerland. In collaboration with Nokia, Intel and Datwyler as well as the

Federal IndustryFusion Foundation, the company in Goldach on Lake Constance plans to design its production processes even more efficiently in future with Industry 4.0 solutions.

To set up and operate the private 5G network Stürmsfs is working with the communications network equipment provider Nokia among others. Datwyler is responsible for implementing the entire technical infrastructure on site – from the cabling through to the installed antenna technology. Intel supports this development with key technologies for connectivity and IoT Edge Computing.

5G technology will smooth the path of Stürmsfs towards "smart manufacturing": In future all the relevant production assets will be interconnected via this particularly high-performance radio standard. The software used here is the IndustryFusion open source solution, an easy-to-implement multi-manufacturer networking solution which creates an interoperable link between machinery, factory and Cloud platforms.

plasma source. Mobile assets can also be easily incorporated in the "smart factory" via wireless technology.

"The networking of production technology, robotics and movable assets as part of campus mobile radio networks is an important precondition for a higher level of automation, productivity increases, and thus ultimately for Industry 4.0. The Nokia Digital Automation Cloud is an industry-

with high bandwidth and low latency for sensors, machinery, vehicles and other equipment. At the same time this ensures that all data stay in the company and are processed on site in real time, which means that Stürmsfs retains full control of its production know-how.

"Even today a high degree of automation in our production is a key factor in our company's success," says Marcel Mei-



The focus at Stürmsfs is on the networking of production facilities, including this CNC cutting system from MicroStep.

Networking production facilities and mobile assets

The industry-quality private 5G network currently comprises two production facilities on the main Stürmsfs production site in Goldach. In the next phase of the project a wide variety of production facilities will be interconnected via 5G technology and IndustryFusion software – including, for example, a CNC cutting system or a

compatible campus solution and platform for digitisation. Stürmsfs has therefore succeeded in taking an important step towards the smart factory," says Patrick Langelaan, Nokia's Vice President for the Enterprise Market in Southern Europe.

On-site data processing in real time

The provision of the Nokia Digital Automation Cloud provides reliable connectivity

er, Divisional Head of Procurement/Corporate Development and a member of the Management Board at Stürmsfs.

Meier is convinced that efficiency can be substantially boosted, particularly in the areas of production, logistics and working processes, on the basis of the data obtained via networking. The focus is on the integrated intelligent control and networking of machines, logistics and workers. AI-based improvements are on the agenda.

"In Nokia, Intel and Datwyler as well as the IndustryFusion Foundation we have strong partners and are happy to provide them with the opportunity of extensively testing technologies and use cases with us in a real production environment," says Meier.

Nokia's private 5G network hardware and the Stürmsfs end-to-end plant server are based on a broad range of Intel networking and edge technologies. (alf/raf)



2022 Asian Games, Hangzhou:

INTELLIGENT TECHNOLOGY for sports mega event



Corridor in the main stadium of the Olympic Sports Centre

With its high-performance product solutions Datwyler is making a small but important contribution to the success of the 19th Asian Games in Hangzhou.

On 16th September 2015 the President of the Olympic Council of Asia (OCA) announced that the 2022 Asian Games would be held in Hangzhou. Hangzhou will be the third Chinese city to host the Asian Games after Beijing and Guangzhou.

As the opening ceremony approaches Hangzhou has been stepping up the construction of infrastructure facilities and sports venues. Whether newly built or undergoing renovation, all the facilities and venues are not only being equipped with cutting-edge technology, but are also architectural masterpieces, constructed to the highest environmental standards. A sustainable low-carbon, energy-efficient design and appropriate IT solutions will ensure that the venues will be intelligent, multifunctional, open and beautiful.

The Olympic Sports Centre

The Hangzhou Olympic Sports Centre covers a total area of almost 400,000 square metres. The main stadium at the southern end, also called "The Butterfly Lovers' Stadium" to commemorate a local legend, can accommodate 18,000 spectators. It will be the venue for the World Basketball Championships. It can also be used for badminton,

volleyball, table tennis, handball, gymnastics, boxing, martial arts, indoor football and other contests.

The indoor swimming pool is at the northern end of the Sports Centre. It is a professional sports facility for swimming and diving competitions which can accommodate 6,000 spectators. This is where the swimming, diving and synchronised swimming competitions will be held during the 2022 Asian Games.

The "Jade Cong", the facade of which was inspired by a neolithic jade artefact from the excavations near Liangzhu, is a centre for ball games of every description. Its 184,500 square metres comprise a training and handball hall, five further competition centres, a newsroom and residential accommodation for athletes, as well as public infrastructures, car parks, underground logistics and a lot more. The Asian Games will stage basketball, volleyball, handball, fencing and taekwondo competitions.

The Canal Asian Games Park

The Canal Asian Games Park in the city centre is the only new build among the 53 arenas in Hangzhou available for the Asian Games. A business complex and parks as well as sports facilities were created on a total area of 467,000 square metres. The sports facilities include a table tennis arena seating 7,000 and a hockey arena, known as the "Hangzhou Umbrella", with 5,000 seats.

The new Park is equipped with state-of-the-art technology. It provides full 5G coverage and has a driverless shuttle system.



The basketball stadium is the largest indoor stadium of the Asian Games.

The appropriate IT infrastructure

For decades in China Datwyler has been synonymous with premium quality IT infrastructure solutions coupled with first class service.

As a supplier to the 2022 Asian Games Datwyler has delivered 500 kilometres of high-performance copper data cable, used to implement over 10,000 data connections in five of the most important venues: the Olympic Sports Centre, the Jade Cong ball game centre, the table tennis arena and the Hangzhou Umbrella hockey arena.

On top of this there are around 300 kilometres of single-mode fibre optic cable for indoor and outdoor use, each with between four and 288 fibres, depending on the requirement.

The cabling systems in copper and fibre optic technology form the basis for reliable interference-free transmission of all the data and applications during the coming Asian Games in Hangzhou. As well as communication technology in the narrow sense of the term, this also includes a conference system, camera surveillance, access control, the parking guidance system, intelligent lighting control and the information sharing system. (gas)

Buntweberei, Eislingen:

A HOLISTIC EXPERIENCE

Salvia Gebäudetechnik has set up the entire network infrastructure of the “Buntweberei” in Eislingen using products and solutions from Datwyler IT Infra.

The new headquarters of Salvia Gebäudetechnik on the “Buntweberei” site



Since October 2019 the “Buntweberei” has been taking shape on the former site of the Wurster weaving mill in Eislingen. By July 2022 Salvia Gebäudetechnik wants to create a new venue on this large site covering more than 10,000 square metres in the

greater Stuttgart area, a venue designed to combine fun and adventure, health and pleasure, business and networking. Among the enterprises offering visitors a holistic experience are the Industrial Design and Lifestyle Hotel “Loom” with a co-working

area and Sky Bar, the historic “Kesselhaus” – an event location –, a pop-up store with a café run by the fashion designer Karo Kauer as well as an exclusive fitness and spa club owned by handball player Michael “Mimi” Kraus.

The builder’s own new head office is also located on the site. With a workforce of 1500 on 25 sites and many years of project experience, Salvia Gebäudetechnik is one of the leading German companies for building projects of all sizes. Its range of services covers the entire technical life cycle of buildings – from the initial feasibility studies through all the planning phases and execution to the operation of buildings and sites.

Salvia has set up the entire network infrastructure of the “Buntweberei” with products and solutions from Datwyler IT Infra. A key element of this is the campus network,

a 10 gigabit backbone of Cat.7_A type CU 7702 4P copper cable and Cat.6_A connection technology, which covers all five buildings. Altogether 17 distribution cabinets and over 800 copper data ports were installed on the campus for this purpose.

Mini Data Centre for central server room

The network infrastructure of the Salvia administration building comprises a server room and six floor distributors which are networked via a fibre optic backbone. At the same time the server room is the central computing node of the “Buntweberei”. A four-rack Mini Data Centre from Datwyler was used here. Each cabinet is equipped with DIMS, the Datwyler Infrastructure Management System (see page 35). Salvia uses this to monitor access, vibration, temperature, atmospheric humidity and leakage. The system relays any malfunctions to the IT team’s service hotline.

Spaced throughout the workplace areas of the building are several consolidation points which are connected to the floor distributors by fibre optic breakout cables.

Here Datwyler met Salvia’s requirements for measured cut-to-length OM4 multi-mode trunk cables factory-fitted with connectors, enabling rapid installation.

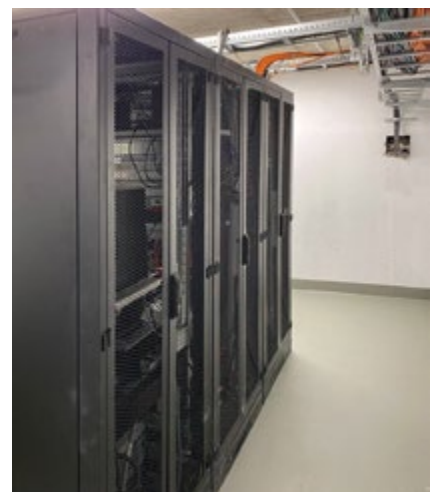
Great flexibility

The access switches are positioned centrally, directly at the consolidation points, which allows Salvia great flexibility with the workstation cabling. Moreover the entire administration building as well as individual outdoor areas are supplied with WLAN to ensure mobile working conditions.

“Our experience with Datwyler on this project has been nothing but positive,” reports Michael Tietz, Head of Information

and Communication Technologies at Salvia Gebäudetechnik. “I am talking about product quality, great flexibility, and especially reliability of supply, which is very important in challenging projects such as these.” (anw/dir/alk)

The Mini Data Centre at Salvia head office is the central computing node of the entire “Buntweberei”



PSA International Pte Ltd, Singapore:

FIBRE OPTIC NETWORK for mega container terminal

The largest automated terminal in the world is being created on the south western tip of Singapore. Specialist cables from Datwyler ensure control of the port cranes.

PSA is one of the leading global port operators with terminals at over 50 locations in 26 countries, their most important ports being in Singapore and Antwerp. PSA manages more than 60 deep-sea, rail and inland terminals as well as associated companies. These include freight distribution complexes with offices and warehouses as well as marine service providers whose core business includes pilotage and towage.

The next milestone in the evolution of the port of Singapore is the Tuas Mega Port, which PSA put out to tender in 2019. By

2027 the three existing ports in Tanjong Pagar, Keppel and Pulau Brani will be consolidated and moved to Tuas, on the south western tip of the island state. When the fourth and final construction phase is complete the Tuas Mega Port will be the largest fully automated container terminal in the world – with automated cranes, drones, driverless transport vehicles and just-in-time services.

Lucky Joint Construction Pte. Ltd., one of Singapore's major providers of management and installation services in the field

of communications networks, was awarded the contract for installing the fibre optic cables which ensure the secure data transfer and video surveillance (CCTV) of the port cranes.

Lucky Joint commissioned Datwyler to supply fibre optic cables for outdoor and in-

Termination of the cables in the server racks



door applications as well as 14 server racks in which the cables are terminated.

Datwyler was chosen because the company had already supplied reliable high quality product solutions for earlier PSA projects and is one of the port operator's approved quality brands.

Robust cables for harsh environments

In order to connect the cranes to the existing network, 150 kilometres of fibre optic cable were installed outdoors alone, some of them in cemented cable ducts which are filled with sea water at high tide.

To meet these particular requirements specialist "FO Outdoor" cables with a double PE sheath and steel armour were used here – robust products suitable for harsh environmental conditions, even for installation in water.

Lucky Joint completed the installation in January 2022. After successful tests it was handed over to the end customer in March. PSA International is very happy with the new IT infrastructure, particularly as regards

the reliability of the product solutions used and the excellent support from the Datwyler IT Infra team – both important factors for a project in such a challenging environment. (jic)



Cable run-in in ducts which are periodically filled with sea water



The new BIBF Training Centre in Bahrain Bay

Bahrain Institute of Banking and Finance:

Modern data network for 1200 TRAINEES



The Bahrain Institute of Banking and Finance relies on Datwyler to supply a high-performance communications network for its new headquarters.

The Bahrain Institute of Banking and Finance (BIBF) is the leading provider of training and further education courses in the Kingdom. The Institute, which is affiliated to the Central Bank of Bahrain, plays a central role in training qualified specialists for the country's banking and financial sector. Since it was established in 1981 the goal of the BIBF has been to improve specialist training in this field.

At the end of 2021 the BIBF moved into a new ultra-modern head office in Bahrain Bay. The new building can accommodate

1200 trainees on nine floors occupying around 25,000 square metres. It has a large auditorium, "smart classrooms", modern computer labs, and is the only place in the whole region where the trade in financial products can be simulated.

All the facilities on campus are equipped with state-of-the art technologies. These were introduced at the same time as improved educational opportunities and training schemes so as to give the students the skills and experience demanded by employers.

Secure high-performance cabling

Datwyler is supplying the 10 gigabit-compatible communications cabling installed in the new building. Among other things it comprises 100 kilometres of Category 6_A shielded copper data cable and 3000 Category 6_A RJ45 modules. In addition, for the backbone Datwyler supplied OM4 multi-mode fibre optic cable with the appropriate connection technology together with network cabinets of various heights.

The project was successfully completed using the professional support of AMPS W.L.L., a local Datwyler Solution Partner. The AMPS team has been working with Datwyler for four years, and this positive experience has reinforced its confidence in the IT infrastructure provider's high-quality product solutions. In the project AMPS also cooperated closely with telecommunications company Batelco, which installed the complete package of electrical and low voltage systems and ensured that all the project requirements were met in full, from the specification phase through to acceptance.

The IT infrastructure was successfully handed over to the Institute in October 2021 – in time for the start of teaching. (suk)



Mandalika Int. Street Circuit: IN POLE POSITION

Speed and technology: the factors in motor sport which determine racing success. It is much the same in data networks – as demonstrated by this project from Indonesia.

The "Pertamina Mandalika International Street Circuit" is a motor sports race track on the Indonesian island of Lombok. The 4.3 kilometre circuit is on the coast of Mandalika in the midst of tropical scenery. Here the "Asia Talent Cup", a motorcycle road race, is held. In 2021 the "Superbike World Championship" also took place here, and the "MotoGP" in March 2022. The "GT World Challenge Asia" is to follow.

Hotels and various other single-purpose buildings will be erected on the extensive site, which occupies around 120 hectares. Originally built as a race track with ample

>>

Glimpse into an IT cabinet
during installation



“discharge areas”, consideration is being given to also using part of it as link roads to the new resorts, i.e. for normal traffic.

Datwyler partners make the running

Naturally an international motorsport circuit needs a modern IT infrastructure, for the internet connection and camera surveillance (CCTV) for example. So last year the general contractor, PT. Mandalika Sesuatu, planned a new installation which includes both the paddock and the race track itself.

Entrusted with this installation was PT. Benhil Raya Internasional – PT. Brain for short – a system integrator and at the same time a certified Datwyler Solution Partner. Pujiyono Wahyuhadi, the company's CEO,

brought the Datwyler solutions into play. The general contractor approved these because Datwyler has a market reputation for supplying technically high-quality cabling products at competitive prices.

The installation took place between December 2021 and February 2022. Datwyler's Indonesian distributor, PT. Gunung Sawo, provided PT. Brain with the requisite system components, including high-speed copper and fibre optic cables as well as connection technology and accessories – from a single source and all from Datwyler.

The new IT infrastructure was handed over in March 2022, in time for the “MotoGP”. (frs) ■

HDB modernisation projects, Singapore: 28TH, 29TH AND 30TH TERM

Datwyler's elevator travelling cables do their job unobtrusively around the world – including in much of Singapore's public housing.

The Housing & Development Board (HDB), a statutory board under the Ministry of National Development, is responsible for public housing in Singapore. The great majority of the country's housing development projects are under public ownership and are managed by the HDB. Around 80 percent of Singapore's inhabitants live in buildings which mainly were and are being built to create enough affordable housing for the country's growing population.

Since the 1990s the HDB has increasingly been concentrating on modernising existing flats in older properties and installing new facilities, for example elevators which stop at each floor. The agency awards the contracts for this to various lift manufacturers.

Supplier for three projects in succession

Some of these elevator companies have entrusted Datwyler with producing and delivering the travelling cables for their current 29th and 30th term HDB projects. There are altogether around 300 elevators per term. The Datwyler team having worked with Hitachi Elevator in Singapore for the last 15 months, the 28th term is gradually nearing its end.

For the 29th term project HDB is working with Mitsubishi Elevator, and is back with Hitachi Elevator for the 30th. Both have already started and will be completed at the end of 2022. Both Mitsubishi Elevator and Hitachi Elevator have ordered the travelling cables for these term projects from Datwyler.

The Datwyler team in Singapore is thus making an important contribution to the modernisation of the country's public



housing stock – with product solutions which are seldom seen but which can be relied upon to do their everyday job, transmitting power and data between the cabins and controls and ensuring perfect round-the-clock operation under great mechanical stresses. (ivt) ■



Children's Hospital, Lianyungang: SOLID BASIS for state-of-the-art medical system

In order to take full advantage of the potential of its medical system, the Children's Hospital in Lianyungang decided on an integrated IT infrastructure solution from Datwyler as part of its computerisation project.

The Children's Hospital in Lianyungang was founded in October 1951 by Dr. Liu Yilin, a physician who graduated in Germany.

several generations of hard work and perseverance. It not only performs health care and preventative medical duties, but also shines in medical technology for specialist fields, at the same time integrating research, teaching and further postgraduate training.

When the Children's Hospital began planning a computerisation project two years ago, it was the declared aim of those in charge to use only the most reliable IT infrastructure for the cutting-edge medical system throughout the hospital.

In an early project phase in August 2020 Datwyler IT Infra was given the opportunity of participating in the planning of the technical solutions. Like the First People's Hospital in Lianyungang (see Panorama No. 1/2021) the Children's Hospital finally

decided on a high-performance structured cabling system and Mini Data Centre from Datwyler.

Over 2000 data connection points

The end-to-end cabling, which was installed between March and June 2021, includes more than 2000 data connection points. The Mini Data Centre supplied to the hospital is an all-in-one system with integrated climate control, energy distribution, uninterruptible power supply (UPS) as well as intelligent environmental, monitoring and management systems. It comprises five racks and a precision in-row cooler and is a completely closed system, so in that respect is very energy-efficient.

For Datwyler in China this project was the first with a Mini Data Centre, for which suitable products were specifically developed in Taicang. Since then the Datwyler team has been using the experience gained in this project to support other Chinese customers in implementing similar IT infrastructure projects. (tot) ■



Energy-efficient solution:
Mini Data Centre with integrated in-row cooler

In recent decades it has developed into one of China's leading hospitals thanks to

people's Hospital in Lianyungang (see Panorama No. 1/2021) the Children's Hospital finally



Mubea Automotive Components Co. Ltd., Shenyang:

Integrated IT infrastructure solution FROM A SINGLE SOURCE

Installation of the Mini Data Centre in the premises of Mubea Automotive Components



In only one week Datwyler implemented a reliable and cost-efficient Mini Data Centre solution on the Mubea site in China – including a cable management software platform.

New generation data centres are designed to manage digital transformation, enable intelligent upgrades, reflect innovation and cope with the requirements of 5G, Industrial Internet applications, Cloud Computing and Artificial Intelligence. These new data centres are secure, reliable infrastructures based on multiple data sources, enabling efficient data processing and equipped

with environmentally friendly low-carbon technologies. They typically feature the use of cutting edge technology, high-performance computers, exceptional energy efficiency and a high level of security. The development of information technology and the rapid increase in data have accelerated the change from traditional data centres to this new type.



Installing the air conditioning unit for the Mini Data Centre

Hardware, software and services

As a provider of end-to-end IT infrastructures Datwyler IT Infra has in the past years invested increasingly in the development of products and services for new generation data centres. Datwyler has thus produced innovative solutions for use in Micro Data Centres (MDCs) and modular Mini Data Centres which can be seamlessly integrated into a company's existing structured cabling systems.

In China, moreover, Datwyler provides a unique digital service platform and a simple-to-operate intuitive and efficient platform for the visualisation and management of cabling systems, which meaningfully complement the range of IT infrastructure solutions.

It goes without saying that Datwyler's integrated solutions meet the highest quality standards and are tailored to a customer's specific need and requirements.

Operational within one week

A good example of the successful implementation of such a solution is the modernisation project at Mubea Automotive Components in Shenyang. Since 2013 the globally active lightweight design specialist has been manufacturing components for the automotive industry on a production area of 7000 square metres at the Chinese site.

In mid October 2021, after several rounds of discussion which served to determine

need and specification, Mubea awarded Datwyler the contract to implement an integrated Mini Data Centre solution for the Shenyang site.

This included not only the data centre itself but also, with CABNAVI, an intelligent cable management platform with graphic visualization (see Panorama No. 2/2020), which was combined with an electronic patch panel.

Within one week in December 2021, thanks to the excellent cooperation of Mubea, Datwyler's technical team succeeded in completing the final tests and acceptance of the Mini Data Centre. By contrast with a traditional data centre the Datwyler solution was operational immediately upon acceptance.

In addition to the Mini Data Centre Datwyler supplied Mubea with many other products forming part of the integrated IT infrastructure solution: single-mode and OM3 multimode fibre optic cables for indoor and outdoor use, flame-retardant low-smoke, halogen-free shielded copper data cables, including type IOT101-24-BK intelligent copper cables, and shielded keystone patch panels.

Convenient and cost-effective

The decision to purchase the complete IT infrastructure from Datwyler as the single source proved very advantageous for Mubea: today the automotive supplier on the Shenyang site benefits from the excellent

reliability of the solution and the improved user convenience.

Mubea also saves a lot of time and money due to the integrated IT support and extended technical services. (mew)



The Mini Data Centre following acceptance

Avenue South Residence, Singapore:

AIMING HIGH

Travelling cables for luxury residential tower blocks

Datwyler is supplying the high-rise travelling cables for the 56-floor towers of the Avenue South Residence – and is thus contributing to the reliability of the lifts.

The Avenue South Residence is a new luxury residential project in Singapore. It basically comprises two 56-floor towers with 1074 residential units together with retail premises on the ground floors. The new building project, developed by the UOL Group Lim-

ited together with partners, is located in a central position right beside the central business quarter and the future Greater Southern Waterfront district. It offers residents not only a magnificent view over Singapore's new waterside promenade and

skyline, but also high-altitude natural surroundings thanks to its 18 "Sky Gardens".

What is more, both residential tower blocks set new standards as the world's highest construction project in prefabricated pre-finished volumetric construction (PPVC). In this method all the rooms are delivered to the building site as ready-made modules including fixtures and fittings, and there they are assembled into complete towers.

Project-specific cables

Under contract from Schindler Datwyler IT Infra will supply around four kilometres of project-specific flat multimedia-compatible high-rise travelling cables during the course of 2022 to construct the lifts.

The installation of the lifts with "Schindler R.I.S.E." – an acronym for "Robotic Installation System for Elevators" – is the first time this innovative method is being used in the Asia-Pacific region. It involves a self-climbing robotic system carrying out the installation and assembly work in the lift shaft.

Datwyler is making a major contribution to the efficiency and reliability of the lifts in the Avenue South Residence with its premium-quality, pre-assembled lift cables, which have all the relevant certificates. The prestigious project is scheduled for completion in 2023. (ivt)



Europe:

HIGH-PERFORMANCE COMPANY NETWORKS

from Datwyler and Nokia

Together with Nokia Datwyler is offering end-to-end solutions for industry-compatible 4.9G/5G Private Wireless and Passive Optical LAN infrastructures in several European countries.

The cooperation between Nokia and Datwyler encompasses the fields of technology, sales, marketing and service. The two companies are jointly implementing tailor-made, cost-effective and high-performance data networks for their customers, based, for example, on Passive Optical LAN (POLAN) or 4.9G/5G Private Wireless.

Unlike traditional copper cabling systems, users of POLAN can make significant savings on procurement and operating costs. In addition, 5G mobile wireless technology facilitates comparably high transmission rates, low latency, and provides a high level of flexibility without the expense of cabling.

As part of the partnership Datwyler is auditing and documenting an existing network, pinpointing potential weaknesses, and taking over the planning including implementation of the desired new campus

network. In doing so the company carries out the necessary cabling with copper, fibre optic or wirelessly with 4.9G/5G, and implements Micro and Mini Data Centres for on-site data processing.

In return Datwyler enjoys Nokia Reseller status with access to their entire portfolio.

Hardware, software and know-how

With Datwyler as a sales and systems integrator Nokia is strengthening its Europe-wide partner network. To this end Nokia has trained the Datwyler team on products and solutions relating to Private Wireless, GPON and POLAN devices, and supports it with technical advice and service level agreements (SLA) for the Nokia equipment. Customers in the enterprise market can thus profit from the combined expertise of both companies.

The new partnership is already bearing fruit. In addition to fibre optic cabling Datwyler has supplied Nokia OLT and ONT devices for initial POLAN projects and has installed a 5G company network in Switzerland (see page 4). (kal)



Raoul Harlacher (left), Partner Sales Manager at Nokia, and Karsten Lengnink, Head of Partner Management at Datwyler IT Infra

Asia-Pacific:

BICSI HYBRID EVENT

in Singapore



Worldwide campaign:

THE NEW QUALITY POLICY

Datwyler IT Infra has made further improvements to the level of product and service quality for its customers.

As a company with strong Swiss roots, the outstanding quality of the products offered by Datwyler has always been part of the “corporate DNA”. Nowadays, however, the proverbial “Swiss quality” no longer relates only to the products supplied. The end-to-end customer-specific IT infrastructure solutions now available from Datwyler also include services and software solutions.

This has changed the quality perspective in the company: customers should also be inspired by the superb services and software solutions.

Over recent months Datwyler has formulated this wider perspective in a new quality policy. It serves to further improve the quality level of products and services on an ongoing basis.

This is complemented by Datwyler’s sustainability strategy, now an integral part of the new quality policy. Datwyler aims at carbon neutrality by 2030, thus making a contribution to limiting global warming.

To promote quality consciousness within the company, Datwyler has been carrying out various activities in all its branches since August 2021: these include videos, a poster campaign, town hall meetings,

classroom and online training sessions, a quiz and a Quality Inspection Competition. With these and other activities Datwyler is ensuring that all the teams around the globe are constantly “fit” and state-of-the-art, so that in future their premium quality solutions, products and services can prove attractive to customers. (nol/vak)



Staff at Datwyler’s plant in Taicang at the end of their “Quality Week”

Datwyler addressed the topic of “Micro Data Centres in the Era of Edge Computing” – a session with consequences.

In early November 2021 the Datwyler Team in Singapore took part in the first Hybrid Conference & Exhibition organised by BICSI (Building Industry Consulting Services International). The event was a resounding success.



Josh Soo of Datwyler Singapore giving his talk

Many tests and trial runs having been carried out to ensure the best possible preparation.

Josh Soo, Technical Manager at Datwyler, used the event to exchange ideas with the audience as part of a “Sharing Session”. In his presentation he covered the challenges of Edge Computing and provided information on the added value of an appropriate technical solution such as the Datwyler Micro Data Centre (MDC).

Soo analysed the requirements of MDCs based on the 5W1H concept, a questioning method to define and solve a problem. He also dealt with the critical points in the production of conventional data centres and explained how MDCs in growth sectors can be used to manage the demands of the Edge Computing age.

The presentation only lasted 45 minutes, but the MDC solution had clearly made a lasting impression, as afterwards a number of audience members headed for the Datwyler exhibition stand to see the MDC for themselves.



Presentation of a Micro Data Centre on the Datwyler exhibition stand

The hybrid event was a good opportunity for the representatives of participating companies in the region to find out about Datwyler’s Edge Computing solutions in person – and the Datwyler team in Singapore was able to make valuable contacts despite the continuing Covid 19 restrictions. (tzp)

Germany, Austria, Switzerland:

SUPPLIER OF THE YEAR

Datwyler excels in two categories in the LANline Online Reader Awards.

Datwyler IT Infra took to the stage twice in the LANline Online Reader Awards for “Supplier of the Year 2021”: Datwyler was awarded second place in the Copper Data

Cabling category, came third in the Fibre Optic Cabling class.

Ralf Klotzbücher, Vice President Sales & Marketing and Managing Director of Datwyler IT Infra GmbH, accepted the awards in Datwyler’s offices in Hattersheim.

“We were particularly pleased with our good placings in the vote for Supplier of the Year 2021. This encourages us to work even harder,” says Klotzbücher. “A big thank you to everyone who took part in the LANline survey and voted for us.” (dir)



Ralf Klotzbücher with the LANline trophies



Europe:

ARTIFICIAL INTELLIGENCE

in theory and practice

In Europe Datwyler IT Infra is working closely with the AI Business School (AIBS). This benefits staff and customers alike.

AIBS, a global training provider with the focus on artificial intelligence (AI), robotics, data and digitisation, has been supporting Datwyler IT Infra throughout Europe since 2021 in promoting and speeding up the company's digital development and digital transformation.

"Cooperating with AIBS is mainly about promoting the understanding and enthusiasm of our local teams in the use of new digital technologies," explained Adrian Bolliger, Managing Director Europe at Datwyler IT Infra. "That way we can have a voice worldwide and give our customers the best explanation of new developments and solutions."

At Datwyler IT Infra's Swiss head office these technologies are not merely theory, but established practice, as the plant in Altdorf is currently forging ahead with its conversion into a "smart factory" (see Panorama No. 2/2021).

"We have started to use technologies such as artificial intelligence, robotics or robotic process automation, for example. We will subsequently incorporate machine learning, which can take over tasks or subtasks from staff. At the same time it is important to take the staff with us on this journey," says Bolliger. Datwyler should take this knowledge to customers and use it to support them in their IT projects.

It is also important for the Datwyler manager to let other interested companies share in the experience gained in Altdorf – for example by giving presentations.

Both Datwyler and AIBS are involved in "C-Level", a community of top managers from the 450 biggest companies in the DACH region (Germany, Austria, Switzerland). Bolliger, who sits on the Top Executive Advisory Board, recently gave a talk on the transformation journey of Datwyler IT Infra at the C-Level Strategy Forum.

Also dealt with were the AI applications currently being put in place in the Datwyler plant, since the machines already are linked via IoT. The aim is to use the machine data to acquire knowledge which can be used to optimise the processes via artificial intelligence. (dir)

Adrian Bolliger at the C-Level Strategy Forum 2021

Saudi Arabia:

AGREEMENT WITH MACHINESTALK

Datwyler Middle East has signed a Memorandum of Understanding with MachinesTalk.

MachinesTalk is a company owned by NOMD Holding Co., one of the leading IoT solution providers in Saudi Arabia.

With the agreement signed in February Datwyler and MachinesTalk state their intention to step up their collaboration in order to supply their customers in the Kingdom with innovative IT infrastructures and services.

MachinesTalk was one of the first companies in the country to be certified by the Communications and Information Technology Commission as an IoT Virtual Network Operator. The so-called IoT-VNO Certificate allows MachinesTalk to provide the relevant services in the Kingdom.

Over the past three years Datwyler Middle East has collaborated with MachinesTalk as a strategic partner. Now both firms will develop IT infrastructure use cases, chiefly to sup-



Mohamad Sayaf, Chairman of MachinesTalk, and Asem Shadid, Managing Director of Datwyler Middle East (3rd and 4th from left), together with their teams

port the "Saudi Vision 2030" projects and help organisations in the country to run their IT infrastructures seamlessly and scale their business with ease. The plan is jointly to

boost the project business, drive forward product and solution development, and improve the provision of services for the customers of both companies. (soa)

Mohamad Sayaf, Chairman of MachinesTalk (left), and Asem Shadid, Managing Director of Datwyler Middle East (right)



Germany:
**IMPROVING THE FRAMEWORK
CONDITIONS FOR DATA CENTRE
OPERATORS**

Datwyler IT Infra has been a member of the German DataCenter Association (GDA) since February. The GDA represents the interests and concerns of data centre operators in politics, society and the media. Its objective is to achieve a lasting improvement in the framework conditions for operating data centres in Germany.

“Organisations are only ideally placed for future technical developments if they have appropriate sustainable IT infrastructures. If the IT infrastructure is unsuitable, digitisation does not succeed ei-

ther,” explained Ralf Klotzbücher, Vice President Sales & Marketing and Managing Director of Datwyler IT Infra in Hattersheim. “As equal partners we assess, develop and implement the IT infrastructure of our customers on their road to successful digitisation; we increase their value creation, reduce overall costs and the complexity of their IT infrastructure – all over the world. We would like to pass this know-how on to the GDA.” (dir) ■

GDA website: <https://www.german-datacenters.com/en/home/>

**GERMAN
DATACENTER
ASSOCIATION**



Symbolic handshake:
Andrej Golob, CEO
Alltron AG (on the left),
and Adrian Bolliger,
Managing Director
Europe, Datwyler IT Infra

Switzerland:

**STRATEGIC
PARTNERSHIP**
with Alltron AG

Together Datwyler and Alltron are supplying end-to-end solutions for data centres in Switzerland.

China:

**OUTSTANDING
SUCCESS**



In 2021 Datwyler in China again received coveted awards for its IT infrastructure solutions.

Last year Datwyler was once more delighted to be honoured as “China Intelligent Building Brand”, awarded by the Qianjia Brand Lab.

In the “Structured Cabling Systems” category the company defended its fourth place. But that’s not all: for the second time Datwyler received the “Brand Recommendation Award for Data Center Industry” – clear

proof that the company has made a name for itself in this field as well.

Not least, Datwyler continues to excel with outstanding achievements in high-performance IT infrastructures for airports. The Airport Construction Magazine and the China Airport Construction Network yet again presented Datwyler with the prestigious award of “China’s Preferred Brand for Integrated Cabling in Airport Construction” and in addition chose the company as “Highest Market Share Brand in the Airport Industry”. (chc) ■

For years Datwyler has been working successfully with Alltron as a distributor in the passive component sector. In addition to data cables and patch cables, panels, sockets and ports, the ICT distributor has recently also been supplying racks from Datwyler IT Infra.

The “Competence Center Data Center” set up at Alltron Solutions under Marco Ducati has strengthened the confidence of both parties in developing the data centre market jointly and even more intensively in future. To this end Datwyler and Altron entered into a strategic partnership in March.

“ We are convinced that with our combined strengths we can jointly develop the data centre market.

Adrian Bolliger, Managing Director Europe at Datwyler IT Infra

End-to-end data centre solutions

The partnership puts both companies in a position to offer their customers end-to-end data centre solutions. Alltron contributes the active components such as

servers, storage and end devices, while Datwyler provides the whole IT infrastructure, from racks through power supply and cooling to monitoring and physical security. >>

“We are convinced that with our combined strengths we can jointly develop the data centre market. Good relationships with major manufacturers, an extensive customer landscape and great data centre expertise make Alltron an ideal partner for Datwyler, allowing us to respond as effectively as possible to customers’ wishes as providers of end-to-end solutions,” said Adrian Bolliger, Managing Director Europe at Datwyler IT Infra.

“Thanks to the expanded partnership with Datwyler we can offer services which extend far further than was previously possible,” commented Andrej Golob, CEO of Alltron. “From planning, the choice of components together with their installation, operation and maintenance, through to the consideration of planned future growth, this partnership means that our companies are becoming overall solution providers in the Swiss ICT ecosystem.”

“Thanks to the expanded partnership with Datwyler we can offer services which extend far further than was previously possible.

Andrej Golob, CEO of Alltron

Making partners more successful

Small and medium-sized partners such as value added resellers should also profit from the joint venture. They themselves should be enabled to adopt a forward-looking managed service provider business model and become data centre operators. Micro Data Centres represent a possible way for resellers to get started in this field of business.

Upcoming event in Flums

On 6th September 2022 Datwyler and Alltron are organising an exclusive half-day event at the Hagerbach Gallery in Flums, with talks and a tour of Datwyler IT Infra’s underground data centre. (mae)

There is more information about this at alltron.ch/datwyler-mdc



An overview of rack solutions from Datwyler – from wall cabinets to Mini Data Centres.

Datwyler’s new product guide “Rack Solutions for Every Requirement” is a 24 page overview of tried and tested and new IT cabinets and enclosures as well as of their wide range of rack accessories. The short catalogue also provides informative sum-

maries covering Micro and Mini Data Centres and Datwyler’s infrastructure monitoring system DIMS.

As well as a large selection of standard racks in various sizes the short catalogue also contains modular rack designs which can be supplied as required, i.e. with the desired equipment and cabling and adapted to cooling concepts and security requirements. For all the racks Datwyler provides comprehensive accessories to satisfy every need. The products on offer range from socket strips through intelligent configur-

able locking systems to fans and cable management kits.

The catalogue is rounded off by sensors for the monitoring system (DIMS), which enables the optimum control of sensitive and complex infrastructures, causing a company’s IT operation to become more secure and more profitable in the long term.

The new product guide is available to download as a PDF on the Datwyler website. Any Datwyler branch office will be pleased to take orders for the printed version. (syb)

Italy, Austria:

MDC PARTNERS CERTIFIED

Expert installation and service partners “just around the corner”? Who wouldn’t want that! A scheme from Datwyler makes this possible for Micro and Mini Data Centres (MDCs).



Massimo Angelo Merola, Cabling and Data Centre Specialist, and Dante delli Esposti, Cabling Installer and KNX Specialist, both GTI Srl, with Maurizio Truglia, Sales Engineer, and Gerardo Cetrulo, Project Leader IT Infrastructures, both Datwyler IT Infra (from right to left)

In addition to Distribution Partners, Datwyler IT Infra maintains a worldwide network of trained and certified Solution Partners who support end customers in the design, installation, maintenance and repair of Datwyler cabling solutions.

Datwyler also provides special training courses for the installation of Micro and Mini Data Centres (MDCs) and for the relevant services. This means that MDC users have a certified partner nearby to provide fast uncomplicated installation and from whom

they can expect rapid response times when servicing is required.

Datwyler has trained and certified new partners for MDCs in Europe in recent months. It started with GTI Srl, based in Modena. In late 2021 GTI was trained at the Swiss headquarters of Datwyler IT Infra in Altdorf, and started 2022 as the official partner for Micro and Mini Data Centres in Italy.

Maurizio Truglia, Datwyler sales engineer in Italy, is convinced that GTI is the ideal partner. “The company has many years of experience and a great deal of technical know-how in the fields of Voice-over-IP, Unified Collaboration, data networks, data centres and security. It also shares the approach we take, that of wanting to improve the production, trading and organisational procedures of their customers and making them more competitive on the market.”

Austria follows Italy

At the beginning of this year came the next European partner in the shape of STW, a company based in Thaur in Austria. Since 2005 STW SpleiBtechnik West GmbH has been networking end customers in the Alpine region. An expert partner in communications networks, it supplies end-to-end cabling systems, and if requested also deals with network design, project management, implementation, commissioning and documentation for its customers.

The STW portfolio covers fibre optic networks for every field of application, including high speed solutions for data centres. Since 2022 STW has not only been certified as a Solution Partner for Datwyler’s MDCs, it has also started operating its own Micro Data Centre at its head office.

Other training courses and certifications will follow shortly. Datwyler IT Infra is currently in discussion, for example, with interested companies in Switzerland and Germany. (gec, ank)

Dieter Kaltenriner (right), Managing Director COO, STW SpleiBtechnik West GmbH, and Bernhard Wetsch (left), Sales Engineer, Datwyler IT Infra GmbH in Austria, in front of the new Micro Data Centre





Building sector:

“THE KEY TO GREATER SUSTAINABILITY LIES IN THE PROPERTY PORTFOLIO”

Interview with Dr.-Ing. Tilo Nemuth,
Managing Director of Julius Berger International

As one of the big general contractors, Julius Berger International gets projects off the ground on a daily basis. Managing Director Dr. Tilo Nemuth talked to “Panorama” about the benefits of Building Information Modeling – BIM for short –, the state of digital transformation in the building sector, and sustainable alternatives to the construction of new buildings.

How different is your current project business from what it used to be? How has the pandemic affected your business?

Supply chains were totally disrupted by Covid. That was a critical factor. We also had to find new customer groups, and succeeded in doing so thanks to the great commitment of our workforce. This meant that we were able to penetrate



For years projects at Julius Berger International have been planned entirely as virtual models...

the market more intensively, and fortunately we survived the crisis without serious damage.

What do you reckon are the differences in individual world regions?

There is no simple answer to that question. First of all we have to adapt to the customer base in the relevant market. Today we have had decades of experience with construction planning projects. During that time we had to reinvent ourselves constantly and went through a process of transformation.

We are currently working in Germany and Europe with major players such as, for example, the Internet groups, and this involves having to readjust ourselves again and again. The exciting thing about our field of business is that as general contractors our clients are repeatedly challenging us to implement new technical solutions.

How will digital transformation be experienced in the building sector?

Today we provide our clients with a digital, virtually planned twin of the relevant construction project, which our teams or other building contractors then imple-

ment on a one to one basis. The projects are visualised as 3D models with BIM software. Because of our international business we have already been working with the Building Information Modeling method for around 15 years. Julius Berger International is definitely a pioneer as regards BIM.

For approximately seven years we have even been planning projects entirely as virtual 3D models – and, if the client so wishes, we add scheduling as the fourth

dimension “time”, and the fifth dimension “cost”. Moreover, the scope of our digital projects is very extensive. Julius Berger International is an active force here. We are heavily committed to digitisation, for example by working together with colleges and universities, software developers and startups.

In your projects how much importance is placed on a comprehensive IT infrastructure such as those by Datwyler IT Infra?

We invite tenders for the IT infrastructure solutions in our construction and consulting projects on a product-neutral basis. We have discussed with Datwyler IT Infra how a Swiss company has managed

to become internationally competitive despite higher wage costs. After all, data centres, cabling technology and safety solutions are modularised and prepared to customer requirements.

The simple answer from Datwyler is that they create added value for customers because they can supply more efficient solutions. I personally was able to convince myself of this based on a project in a data centre. It impressed me. >>

... and visualised as 3D models with BIM software.





Modern elegance and technical finesse:
the Godswill Akpabio International Stadium in Uyo,
Nigeria, designed by Julius Berger International

In your projects do you also take new technologies such as 5G or Edge Computing into consideration?

Naturally we deal with these data centre issues, but to be honest our focus is more on the building. Datwyler is the equipment partner and so forms an important interface. We use AI and Augmented Reality in pilot projects. In our network we see good prospects for this, but the sector is still a long way from the consistent market penetration of these technologies.

How relevant is sustainability to your clientele?

In 2022 the issue of sustainability is very important in our dialogue with clients: we discuss EU taxonomy, ESG criteria and energy-efficient improvements. Existing clients and owners of large property holdings in particular ask for sustainable solutions. In response we are currently developing a new product for these client groups in collaboration with two partners.

Today sustainability is no longer a slogan, but must become living reality.

What can exert a positive influence on the CO₂ footprint of new or existing buildings?

Constructing new buildings is the wrong approach today! We need to focus much more on converting existing property and, for example, trying to continue using a building's components. We must view a building project much more in terms of the value creation chain and a better circular economy – from planning through construction to subsequent re-processing or reuse. The whole cycle is important.

Thank you very much for talking to us.
(mac)



A Datwyler Micro Data Centre

Datwyler Micro Data Centres (MDCs) provide numerous benefits, particularly to companies with branches in multiple locations – from a low space requirement through to energy efficiency as expressed in low Power Usage Effectiveness (PUE).

Because of these benefits MDCs have led to a change in perspective as to how an IT infrastructure should be set up and used nowadays. The provision of IT networks – particularly in densely populated cities – no longer depends on the type of cabling or the IT equipment used, but must also take into consideration other services such as all the mechanical and electrical engineering (M&E). This convergence of IT and building management services has led to the development of MDCs, which are used in both Cloud and Edge Computing applications.

Since 2021 Datwyler has been supplying a Micro Data Centre with a power rating of 10 kVA and integrated cooling in the Asia-Pacific region. It is setting new standards to the extent that it was designed for a higher energy requirement. This MDC has aroused great interest in the IT sector, especially from service providers offering environmental monitoring or security services. They can now install their application servers in optimally cooled racks in the immediate vicinity of the data sources without having to worry about overheating during operation. With the MDC Datwyler has realised the concept of set-

Micro data centres:

MORE THAN A PRODUCT INNOVATION

When considering the cost benefit of a Datwyler Micro Data Centre users should also take account of the intangible benefits and opportunity costs.

ting up a complete data centre in a pre-assembled rack which integrates environmental monitoring and security systems in addition to key elements such as power supply and cooling.

Particularly during the Corona pandemic it became apparent that an MDC can solve numerous problems in the provision and operation of IT infrastructures. Thus a Datwyler Micro Data Centre can flexibly and easily be adapted to changing working conditions and environments. A good example of this is the remote monitoring function: this allows the remote detection and even rectification of any defects which might occur, without the service team having to visit the company premises.

More a business innovation

But what is the financial benefit? Capital expenditure (CapEx) and operational expenditure (OpEx) are the key figures used to calculate the overall value of an investment over its entire life cycle. While the concrete benefits of a product innovation like the Datwyler MDC are easy to see, the intangible benefits only become apparent after a closer look. Yet it is precisely these which are becoming the key factors in all business activities and sustainability strategies.

Datwyler is the only system provider which has designed its Micro Data Centre to take account of both IT and M&E services – for every kind of IT infrastructure solution. If someone orders the MDC pre-assembled, the quality of the components is already assured in the factory, i.e. prior to delivery. Hence fewer coordination measures are necessary between individual service providers. These one-stop services can reduce project planning time by 30 percent. Furthermore, the work involved in commissioning is cut by 80 percent.

Keeping an eye on overall operating costs

Even after commissioning Datwyler supports its customers with maintenance and repair as a single point of contact – with Service Level Agreements (SLAs) adapted to differing requirements. System down times can be reduced and the apportioning of responsibility between different service providers in rectifying faults can be avoided by comprehensively documenting all IT and M&E services.

The cost of warehousing by the supplier is one of the greatest variables in overall operating costs. Which is why Datwyler maintains a worldwide network of specialist service partners who ensure quick

access to spares for maintenance. This produces other intangible benefits for business continuity: cutting the cost for spares storage and logistics, and considerably shorter response times with SLAs.

One aspect of overall operating costs which is frequently overlooked are the opportunity costs. For example: the team responsible for operating the data centre normally has to be trained in a wide variety of technical areas in order to understand the various services provided in the IT and M&E field. But if Datwyler takes over the system maintenance of the Micro Data Centre as an expert partner, the operating team has more time to concentrate on its core competences.

This is also an intangible benefit, because it reduces the need for large training budgets.

So Datwyler IT Infra has not only developed a product which meets the demand and requirements of tomorrow; an MDC is also always a sustainable business solution which allows Datwyler customers to occupy a top position in a challenging market environment over the long term. (gaa)

Modular patch panel solution:

The ultimate in FLEXIBILITY

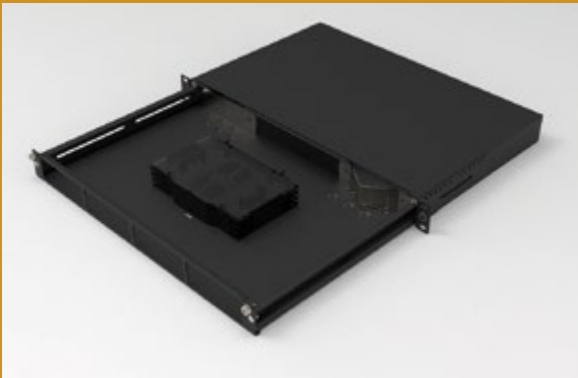
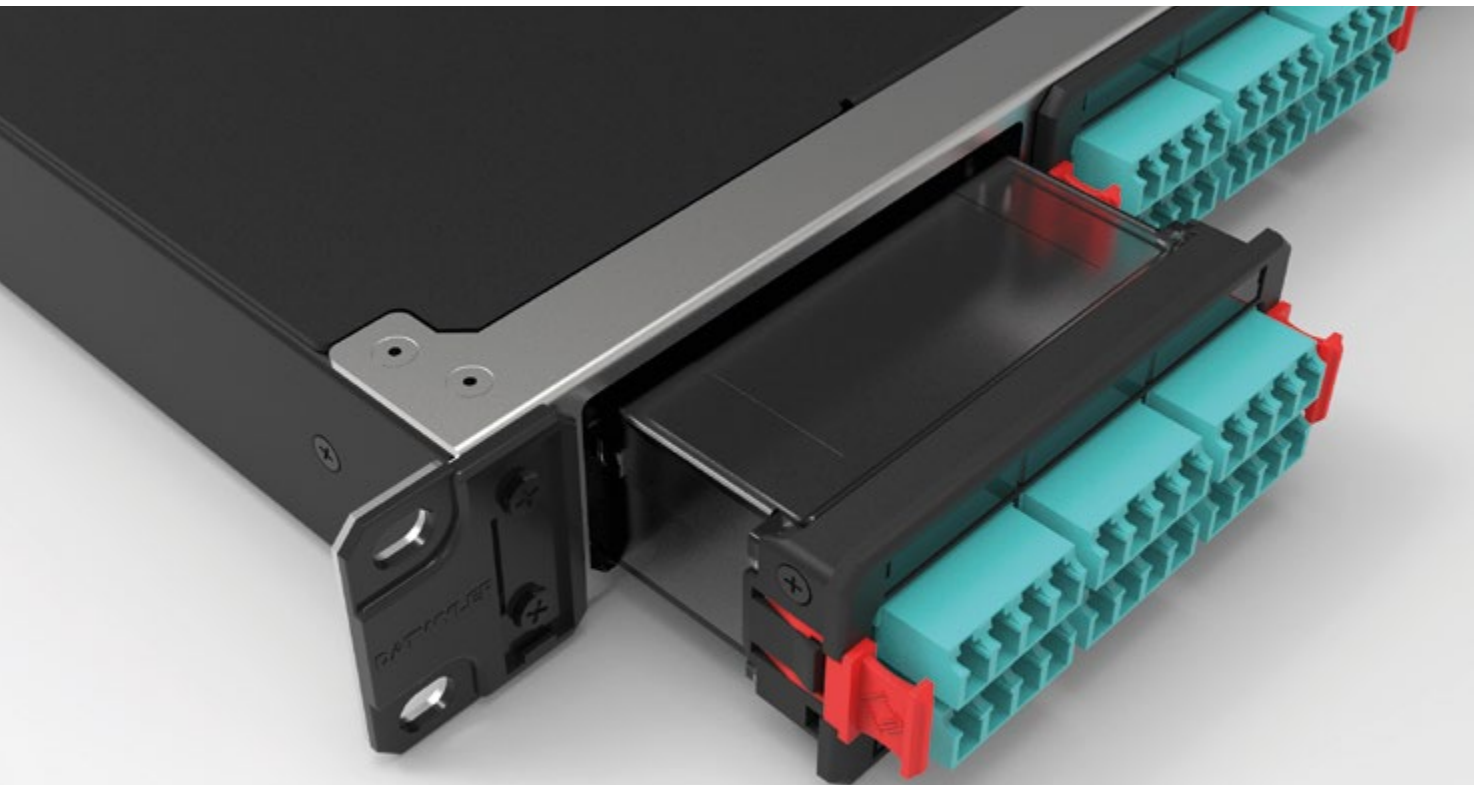
New series of modular patch panels gives customers in China a solution which is space-saving, practical and above all extremely flexible.

For a long time suitable cables were the main focus of attention in China when it came to data cabling. Not much attention was paid to connection technology on the other hand – despite the fact that it accounts for around 70 percent of terminations, distribution, connections and patches. So until today various types of patch panel have been inserted in many

network and server racks, separated by shielded and unshielded copper systems, different fibre optic terminations (LC, SC, FC, MPO, etc.), breakout and splicing solutions and others.

The disadvantage of doing this, however, is that it uses up a relatively large amount of space and provides hardly any flexibility.

Simply pull! The red clips also allow for fast maintenance in a very tight space.



1U patch panel with plug-in modules for various connection systems ...

... also available in variants with pull-out and laterally hinged drawers

Datwyler is giving Chinese customers a novel user experience with a new series of modular panels – called “Lingdong” in China. At the same time this solution addresses the critical challenges in project execution and practical application.

Broad product portfolio

The panels are in 19 inch standard format with one rack unit (1U), also available with 2U and 4U as well as in variants with pull-out and laterally hinged drawers. A broad product portfolio covering the most varied application scenarios is available for panel assembly: front panels for various copper systems – identified by the printing on the dust protection flap –, fibre optic plug-in modules

(cassettes) with pigtails and splice trays, plug-in modules for trunk cables (breakout solutions for various connection systems) and front cable management solutions.

The modules can be purchased to suit current requirements and configured as desired in the panel – for one rack unit up to four different adjacent ones. This modular system setup facilitates the fast provision and delivery of individual components, speeding up extensions and upgrades as well as replacements during maintenance.

Practical features

The fibre optic plug-in units are fixed in the panel with specially developed clips and

can easily be detached simply by pulling. They have matt transparent covers which allow users to quickly locate faults in cables or fibres.

Another feature of this solution is that fibre optic trunks can be affixed to the plug-in module without a special tool and can also be easily removed again for maintenance.

Datwyler’s new patch panel solution provides the ultimate in flexibility, not only for all current application scenarios. With its easily replaceable front panels and plug-in modules it is also the ideal solution for future expansion, for example to 100G or 400G. (bos)



Copper data technology:

UNSHIELDED CAT.6_A SOLUTION

Datwyler IT Infra can supply a complete portfolio of unshielded Category 6_A products to organisations wanting to set up a high-performance copper data network.

Nowadays Category 6_A cables and connection technology are the first choice for many companies worldwide when it comes to setting up IT infrastructures using copper technology. They make it possible to achieve high transmission rates of up to 10 gigabits per second and enable the integration of speech (voice over IP), video (CCTV) and other multimedia applications.

As of now Datwyler IT Infra provides a complete portfolio of unshielded Category 6_A products for customers wishing to set up high-performance unshielded copper data networks.

The product range encompasses thin flexible U/UTP data cables, patch cables, RJ45

modules and patch panels which allow the creation of Class E_A structured building cabling systems.

Thin flexible data cable

The key component of the Datwyler solution is the CU 692 4P data cable, with which users can transmit high data rates at a frequency of 500 megahertz for distances of up to 100 metres. Datwyler offers this cable in a significantly improved design, namely in a thinner and more flexible version than the previous one.

Category 6_A U/UTP cables are characterised by a specific construction designed to minimise Alien Crosstalk (AXT). This includes larger conductors, tighter twisting, additional internal air space and a separator

(cross profile) between the conductor pairs. These features normally increase the external diameter of fully unshielded cables.

The optimised design of the CU 692 4P means that not only has the coupling of interfering signals between the pairs as well as between individual cables been substantially curbed.

Datwyler was also able to reduce the cable diameter to eight millimetres. It has therefore become appreciably more flexible, thus permitting smaller bending radii during installation.

As far as fire properties are concerned, the CU 692 4P versions supplied by Datwyler meet the most stringent international re-

quirements, for example those of Classes D_{ca}, C_{ca}, and even B2_{ca} of the European Construction Products Regulation (CPR).

The KU-TC Plus RJ45 module

Datwyler's Category 6_A KU-TC Plus module is a perfect match to the new data cable. It is available in black or white, is fitted with a dust cap, and comes in cardboard boxes of 12. Apart from the fact that it has a tool-free connector complying with the Keystone standard, it is notable for being particularly compact, making it possible to install 48 ports in a single 19 inch rack unit.

At the same time the ingenious clamping

system in the rear section of the module fulfils several objectives: the metal flaps play an important part in curbing far-end crosstalk – particularly with high port densities – and ensure simple and effective contact. The module can also be quickly, economically and reliably crimped to the cable, obviating the need for cable connectors.

Category 6_A patch cables

Also new are the Category 6_A unshielded patch cables, available from Datwyler in lengths from 0.5 to 10 metres. The cables are grey throughout. Anti-kink sleeves in other colours are also available on request.

Datwyler's Class E_A unshielded solution is completed by the KU 24x 19 inch patch panel. Panels KS 48x (flat) and KS 48x-a (angled) panels are also available for greater port densities.

Datwyler also supplies self-supporting front panels, matching surface-mounted boxes, and various adapters for differing designs.

Datwyler is offering "sustainable" demo bags for anyone wishing to try out the cable and RJ45 module combination. Those interested can request these from their Datwyler contact right away. (ivc) ■

Monitoring and security: RACK MONITORING SYSTEM

DIMS, a combined hardware and software solution for monitoring critical IT infrastructures, is available for customers of Datwyler in Europe.

Datwyler's new Infrastructure Monitoring System DIMS gives a complete overview as well as detailed displays of the status of the IT infrastructure in one or more racks, for example in Micro and Mini Data Centres. The system features real-time remote monitoring of the environmental conditions, access and energy consumption of IT infrastructure equipment and systems.

It has a multilingual Web GUI with integrated logic, autosensing ports for the automatic detection of the DIMS sensors, user access management, and integrated interfaces for Ethernet, USB, CAN, analog and digital.

In addition to these interfaces there are two slots available: an SD card slot – useful for storing camera images – and one for SIM cards, to connect an LTE modem for example.

The unit is SNMP-compatible, firstly to connect external devices and

secondly to integrate the DIMS in higher level data centre infrastructure management (DCIM) systems.

In the event of malfunctions or emergencies the DIMS warns users so that they can take the necessary action in time to protect the business-critical IT systems. Notifications such as maintenance and alarm messages may be sent either via e-mail, SMS or SNMP traps.

As mentioned above, Datwyler also provides a comprehensive range of sensors. These cover all environmental monitoring, security and performance monitoring functions. (alk) ■

You can find more information about the new monitoring solution on the Datwyler website.



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