REFERENCE PROJECT
SOFTWARE SOLUTION FOR HIGH PERFORMANCE COMPUTING CENTRE

MARKET INFORMATION
BRANCH OFFICE OPENED IN DUBAI

MULTIMILLION INVESTMENT IN PRODUCTION

Cabling Solutions
EDITORIAL
03 Actively shaping change

REFERENCE PROJECTS
04 Intelligent software solution for Swiss high performance computing centre
06 District hospital in Winterswijk gets good quality and help in finding the right solution
08 New network for Landesbank Berlin in London
09 Datwyler successfully completes FTTH pilot project in Zurich
10 China Petroleum building in Wuhan: Structured cabling over 30 floors
11 555 links for the Aargau Cantonal Bank
12 Current projects – in brief

MARKET INFORMATION
13 Datwyler opens branch office in Dubai
14 Datwyler invests in high tech production in Altdorf

INNOVATION
16 Improved transmission reliability using bend-optimised optical fibres

NEWS
18 Cabling Solutions News

INDEX

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Dear Readers

Economic upheavals often take us by surprise. They can paralyse industrial sectors and economies and sometimes, as now, can keep half the world on tenterhooks. The debt crisis in many western countries is being accompanied by a strengthening of the BRIC states – Brazil, Russia, India and China – followed by parts of the Middle East and by South Africa – the latter probably an irreversible process. In Switzerland, Datwyler’s home base, on top of everything else we have to contend with the increasing strength of the Swiss franc.

In my view there is little prospect of success in sitting the situation out. The important thing is to identify, accept and respond proactively to major trends and underlying conditions. In the course of this year Datwyler has devoted a great deal of attention to necessary structural change, set important new directions and in the process taken some uncomfortable decisions. The strategic and operational measures we have implemented will ensure that in future Datwyler can continue to thrive, trade profitably, and participate in world events.

For the first time over half of Datwyler Cabling Solutions’ employees will be working outside Switzerland by the end of 2011. In China alone we now have a workforce of around 340 – and the trend is rising rapidly. This year we opened our own offices in the United Arab Emirates and the Russian Federation. A joint venture to handle future European cable assembly is being set up in the Czech Republic. The former Swiss cable manufacturer has become an internationally well-established business.

Datwyler has – and retains – strong roots in central Switzerland. Innovative strength and “Swiss Quality” are key factors in our success. But it is equally important to supply a competitive product and maintain a strong local presence with you, our customers. That way Datwyler can respond appropriately to your requirements, cope with even the most demanding projects, and provide you with the best possible service wherever you are.

I am convinced that we have adopted the right course and must continue to steer it through stormy seas. Datwyler is a Swiss-based international company which will carry on supplying innovative and competitive tailor-made complete solutions for your electrical and ICT infrastructures – wherever you want them.

Best regards,

Johannes Müller
CEO Datwyler Cabling Solutions
Member of the Group Executive Board

I wish you an interesting read!
The Centro Svizzero di Calcolo Scientifico (CSCS) is Switzerland’s national high performance computing centre. An autonomous service and research unit of ETH Zurich (Swiss Federal Institute of Technology), the CSCS works closely with Swiss higher education institutions, ETH Research Stations, CERN, the national meteorological service and other research institutes, including international ones.

In the field of computer-assisted science the CSCS is considered to be Switzerland’s central contact, with both the technical resources and know-how to make high performance computing (HPC) possible in the first place. It makes modern supercomputers available to Swiss research, for example to analyse large amounts of data or to calculate simulations of complex processes. It also supports its customers using tailor-made in-house developments and by passing on the requisite technical knowledge. To this end the CSCS maintains Switzerland’s largest and most efficient HPC system in Manno.

In spring 2012 the CSCS is moving to new premises in Lugano, so extensive preparations are necessary. A central component of relocation planning is to fully document every detail of the Manno data centre in advance with the aid of software. Among the things needed to do this are a component library and an object designer to create the master data for equipment and infrastructure.

**Future management tasks**

As well as for ongoing documentation, CSCS plans to use the software for other important management tasks on the new site. Numerous other features were therefore required in addition to standard tools like troubleshooting and a search for available ports, for instance. This meant that the software had to show hierarchies, cable ducts and cable runs, and automatically calculate the cable lengths required. It had to provide the option of triggering orders for essential installations and mapping workflows. Warehouse management called for various functions including the simple administration of cable stocks, particularly patch cables. Simulations of error situations had to allow those responsible to identify potential single points of failure in advance.

The Swiss National Supercomputing Centre opted for a proposal from Datwyler covering both support and services for comprehensive data centre documentation and sophisticated future management tasks.

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Not least, the CSCS wanted options for reading the energy consumption data of individual devices and for automatically allocating these and other costs – for example services rendered – to individual cost centres.

In November 2010 CSCS commissioned a specialist engineering consultancy to evaluate a suitable solution. After a standardised evaluation process Datwyler beat all its competitors’ offers in April 2011.

**Attractive total package**

The greatest impression of all was made by “Panorama”, the multi-client, web-based management software solution, which met the requirements of the CSCS in every respect. What clinched the matter, however, was not only the software itself, but also the services provided by Datwyler, including customised workshops and the good price/performance ratio of the total package.

The software was set up at CSCS for several users. Following an initial workshop held on-site in August 2011 those responsible at CSCS created the module database (component library). They are in the process of implementing the modules now.

The second workshop was held in November 2011, before the move takes place.

Beat Schertenleib
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In the past few years the Queen Beatrix District Hospital in Winterswijk, Holland, has implemented several major modernisation projects. System solutions from Datwyler played an important part in all these projects.

Streekziekenhuis Koningin Beatrix (the Queen Beatrix District Hospital) in Winterswijk, SKB for short, is a modern hospital with 314 beds, around 1,100 employed in direct patient care and support services, and over 80 specialist doctors. Together with its outposts the SKB serves the eastern region of Achterhoek, part of the Dutch province of Gelderland, with a population of approximately 150,000.

The emphasis at SKB is not only on excellent basic care and close patient contact. There is also continual investment in medical and technical equipment and new products. Over the past few years this has included three major projects – modernising the operating theatres, upgrading safety technology and improving patient and visitor comfort. Datwyler system solutions played an important part in all these projects.

Christian Pennings, Facility Management Project Manager at the SKB, has a simple explanation: “Datwyler has a large product portfolio, and the quality is good. We also value the close contact, the good advice, and their help in finding the right solution. Datwyler is always open to all our concerns and queries – and always comes up with good suggestions.”

At SKB this now covers three areas of the electrical infrastructure: communications network, fire safety technology and building automation.
“DATWYLER HAS A LARGE PRODUCT PORTFOLIO, AND THE QUALITY IS GOOD. WE ALSO VALUE THE CLOSE CONTACT, THE GOOD ADVICE, AND THEIR HELP IN FINDING THE RIGHT SOLUTION.”

Christian Pennings

Fibre optic network prevents disruption
SKB recently totally refurbished five elderly operating rooms (ORs). This included using miniswitches to connect the rooms’ PCs, medical equipment and video system to the hospital’s fibre-optic network. “We opted for fibre-optic technology in the ORs because it is EMC-proof and guarantees trouble-free systems operation”, says Project Manager Pennings.

In the Winterswijk hospital, which comprises a complex of eleven one to three storey buildings, all nine plant rooms as well as two data centre sites are now interlinked with OM3 fibre-optic connections. Installatietechniek Enschede B.V., the installation company responsible, has been using cables prefabricated with connectors from Datwyler’s portfolio for years – as they did when modernising and expanding this network. “We only use prefabricated FO cables because they are quicker and easier to install”, explains Pennings, “more recently in the ORs and now again when constructing the new dialysis centre which we opened in May.”

The recently acquired electronic parking meter system in the visitors’ car park, around 120 metres from the main block, was also cheaply and easily integrated into the SKB network via an optoelectronic switch and fibre-optic cable. Pennings’ department is currently planning video monitoring with IP cameras, and this will also be incorporated in the communications network.

Building automation from Datwyler
SKB’s Technical Services have been familiar with KNX building automation from Datwyler since back in 2003. Today Power and Combi flat cables provide a reliable power supply to all window blinds and to lighting in the corridors, restaurant and outdoor area. At the same time, in combination with decentralised actuators and luminous intensity and wind measurement on the roof, Datwyler’s Combi cables are used for automatic shading and light control. Both systems can also be controlled centrally from various workstations.

Maximum safety for patients, visitors and staff
In the building complex the electricians responsible have also installed numerous Pyrofil fire safety cables and tested components with systems circuit integrity. In the event of fire the certified E30 and E90 systems will ensure that the fire safety installations in the hospital are supplied with power for a defined period. This includes the new sprinkler system, for example, which Winkels installed in the foyer of the main block in January 2010 and which is fed by a safety cable system of E90 extended functional integrity. The freshly renovated foyer of the SKB, enlarged from 500 to 1,400 square metres, now provides space for a generous reception area, restaurant and pharmacy.

“Datwyler’s material is quick and easy to work with and is always supplied with full test reports,” explains Tom Nordkamp, Project Manager at Winkels Installatietechniek Enschede B.V.

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Fibre-optic technology was chosen for the ORs because it is EMC-proof and guarantees trouble-free systems operation.

SKB recently used miniswitches to connect the medical equipment to the fibre-optic network.
With the partner companies 2BM, G4 and Datwyler the London Branch of LBB Landesbank Berlin decided for a high-quality communications cabling and comprehensive data centre solution.

Landesbank Berlin AG is a universal bank with its headquarters in the German capital city since 1818. LBB’s London Branch currently occupies five floors of the Crown Court building in Cheapside.

In summer 2011, Datwyler were asked to provide a comprehensive copper solution to replace the existing Category 5 communications cabling within these offices. Datwyler provided a Category 6/Class E cabling system using Uninet 7060 S/FTP copper cable and shielded RJ45 modules.

The building also houses a data centre which needed to be re-built, re-cabled and reduced in size. This involved the installation and cabling of eleven new data cabinets.

The network cable installation was carried out by G4 Networks Ltd., an experienced structured cabling contractor.

2BM Ltd, specialist for data centre design and build, carried out the overall data centre refurbishment.

This project involved new dedicated electrical power supplies, UPS backed distribution, new water chilled air conditioning, fire rated walls, gas suppression and fire detection system, raised access floor alterations, network cabinets, environmental monitoring and general decoration. For LBB this project was a turnkey solution, a project which was programmed over several months and involved the installation and commissioning over copper links.

Some 20,000 metres of Uninet 7060 cable was used to install 1008 copper ports. Datwyler also provided 8-core multimode fibre-optic cable terminated onto a 1U fibre panel using LC connectors in the data centre.

“THIS IS THE FIRST PROJECT WE HAVE CARRIED OUT WHERE EVERY SINGLE CONNECTOR WORKED FIRST TIME.”

Dave Allen

The Datwyler solution paid for itself during installation: “This is the first project we have carried out where every single connector worked first time,” says Dave Allen, Director at G4 Networks.

Installation work was undertaken during the day and night to ensure LBB’s business was not interrupted. Thanks to a ‘live site’ operation the Bank remained fully operational during the installation.

Paul Hunter
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The first thing when connecting fibre optics to all 106 buildings was to sink nine telecom shafts and route approximately 38 kilometres of part pipes through the existing infrastructure. These interconnect the shafts and the main optical distribution board, known as the PoP (Point of Presence). The telecom installation companies used microtubes between the shafts and the individual optical premises distributors.

The contract also involved blowing fibre-optic cables into the ducting and included all the requisite splicing and connecting work. The PoP and the telecom shafts are interconnected by over eight kilometres of feeder cable. Around 20 kilometres of Datwyler’s newly developed S-Micro cable were used for the connections from the shafts to the buildings, in the so-called drop area.

At the same time, as part of the excavation work and in parallel to the FTTH network installation, main terminals and main electrical connection boxes were replaced in buildings with old electrical house connections.

Expert turnkey supplier

Datwyler is a leading supplier of premium quality solutions for the electrical and ICT infrastructure in public and commercial buildings and data centres as well as for FTTx networks. In its capacity as a turnkey supplier Datwyler carries out on-site analyses all over the world, draws up infrastructure design proposals, delivers the requisite system solutions and – in close collaboration with certified partners on the ground – takes on the installation, documentation and maintenance of new infrastructures.

In Zurich, Datwyler implemented the pilot project in collaboration with local civil engineers, telecom assembly companies, installation and splicing contractors from October 2010. Construction work was completed in March 2011 thanks to Datwyler’s expert planning and extensive project experience, and the turnkey project was handed over to ewz on time.
The sub-provincial city of Wuhan, capital of Hubei Province and river port at the confluence of the Han and Yangtze Rivers, is the industrial hub of Central China. The administrative area of Wuhan has a population of around 10 million, almost half of whom live and work in the inner city. The China Petroleum Building was opened in Jianghan district in August 2011. It comprises a 5-star hotel and several Grade A offices, and is a simple but elegant building which forms a distinct contrast with its surroundings. The building is run by the Wuhan branch of Petroleum Sunshine Property Management Co. Ltd., part of China Huayou Group Corporation. Both are wholly-owned subsidiaries of the China Natural Petroleum Corporation CNPC, the largest state petroleum and natural gas producer and supplier in the People’s Republic.

The China Petroleum Building has 30 storeys of floor space totalling approximately 68,000 square metres. 21 floors belong to the hotel, the offices are housed on the other nine. The hotel has around 300 comfortable rooms and suites, from well-designed standard rooms through upmarket business areas to boardroom and presidential suites. The guests have the use of a ballroom and a wide selection of high-class restaurants, including one Cantonese, one “European” and a specialty restaurant. There is also a pool and many other amenities. The complete generic cabling system in the building was provided by Datwyler. Since 1998 the Shanghai office has been supplying the Chinese market with cables, systems and services of the best Swiss quality. For the China Petroleum building in Wuhan, Datwyler supplied top-quality high performance solutions, including not only the cabling systems but also a patch cable management system comprising electronic patch panels, scanners, cascading devices and software.

Installation began in May 2010 and was completed in August 2011. All the products were then tested – showing that they met or even exceeded the technical and performance specifications defined in the standards.

A few months ago Datwyler installed a top quality communications cabling system in the China Petroleum Building in Wuhan, which opened to the public in August 2011.
The Aargauische Kantonalbank AKB uses a communications network from Datwyler in its new administrative headquarters.

In the middle of June 2011 AKB centralised the bulk of its back office jobs, previously spread over several local sites, in Aarau. In the new station building, constructed by Swiss Federal Railways and inaugurated in October 2010, employees enjoy ultra-modern workplaces on 3,000 square metres of floor space. These include individually height-adjustable desks, an innovative cooling ceiling, sound-absorbent ceiling panels and a modern, high performance communications infrastructure. The latter comes from a single source – Datwyler.

10-Gigabit ready
The financial services provider entrusted the electrical planning to the Zurich firm of Hefti. Hess. Martignoni (HHM), which has a branch in Aarau. The requirement was for a Class E, generic cabling system conforming to the current ISO/IEC Standard, which could transmit all their applications at data rates of up to 10 gigabits per second (10 Gbit/s). Walter Jilli, the planner responsible, recommended a Datwyler cabling system which was installed by Kurt Lüscher AG of Aarau, starting in October 2010.

The new communication cabling comprises 555 links and connects all the office work stations in AKB administrative headquarters with a central plant room. For security reasons the backbone connections are of redundant design: fibre-optic and copper cables are sent in parallel to two large sub-distributors in the office complex. On the individual floors Category 7 cables and Datwyler’s new Category 6, connection technology are used for trouble-free data, voice and power transmission (Power over Ethernet, PoE). Roland Meer, the service engineer, and his team have fitted 22 kilometres of Uninet 7702 shielded cable and over 1,000 MS connection modules inside the hollow floor.

High future viability
A special feature of the modern communication infrastructure is high investment security as regards future changes of use. Contributing to this is Datwyler’s 20 year system guarantee as well as the mini-tubes laid parallel to the data cables into the office area. Should the AKB ever need higher transmission rates, thin fibre-optic cables can be blown into these mini-tubes to implement integrated Fibre-to-the-Desk cabling (FTTD).

Both installation and start-up went off smoothly, thanks to the high quality and ease of installation of the material used, careful work by the installers and good coordination between all those involved. The new infrastructure was handed over to the AKB on time.

Roland Häfelfinger
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Multisite project: Hitachi Medical Systems Europe
In 2009/2010 Hitachi Medical Systems Europe (HMSE) installed a high performance cabling solution from Datwyler on all their sites. Datwyler also took on the project management of the French installation at short notice. HMSE now has a Europe-wide standardised, high performance communications network which facilitates the central monitoring, maintenance and control of IT. "Our cooperation with Datwyler as the project manager was a success despite the extremely short timeframe", explains CIO Martin Paierl. He expects the top quality IT infrastructure to hold its value for a long time and says that it promises "great potential for savings".

Germany: Goethe University, Frankfurt am Main
Datwyler’s decentralised workplace connection solutions are popular at Frankfurt’s Goethe University. For the new Social and Educational Sciences building and administrative block on the Westend Campus Datwyler supplied around 2,000 floor boxes which obtain their power supply via one Power-5x10mm² flat cable (63A). Intech obtains the floor boxes wired ready for connection and inclusive of sockets, FI circuit breakers, device casings and connecting cables – the latter supplying power to FO miniswitches among other things. Compared with conventional solutions Datwyler’s preassembled floor boxes give improved operating safety and better personal and fire protection – with lower investment, less space requirement and shorter installation times.

Switzerland: Fibre-to-the-Home network in Lucerne
In Lucerne ewl and Swisscom are developing an extensive FTTH network which will be connected up to 42,500 users by the end of 2014. Datwyler is supplying the special cables and wall sockets needed to take the fibre-optic cabling straight into people’s homes. The key factors in making this choice were product quality and price, considerable fibre-optic know-how, FTTH project experience and prompt delivery. The Datwyler products are being installed by Cablex AG and Network 41 AG, who obtain the material from Kablan. In the first year alone ewl was able to make 12,000 connections, thanks to good cooperation between all concerned.

China: Perfect International Buildings in Peking
Perfect International Buildings, located near Datun railway station in Chaoyang district, is a building complex with 55,000 square metres of floor space. The software company Perfect Time has invested 700 million renminbi, or over 80 million euros, in the building. By the spring of 2011 Datwyler had installed the whole office complex with generic cabling and a customised solution comprising well over 10,000 links.

Further information on many of our projects can be found under “Reference Projects” on our homepage.
Daetwyler opens branch office in Dubai

In February 2011 Daetwyler Middle East was officially registered as Daetwyler Switzerland Inc’s office in the emirate of Dubai. It is sited in the Jebel Ali Free Zone, one of the most important free trade zones in the United Arab Emirates.

The new Daetwyler branch was set up in Dubai as head office for the whole Middle East. It also covers a series of other markets including, for example, India, Turkey, some of the CIS states and North Africa. There were several reasons for siting it in the Jebel Ali free trade zone: This allows companies to be set up without domestic shareholders, is a duty free zone, and offers access to the region’s largest port and logistics hub. In addition it has a pool of qualified manpower and an appropriate infrastructure for the distribution of goods.

Datwyler’s aim in the Middle East is to become one of the leading total solution providers for communications infrastructures. The main strategic contacts are telecom providers (backbone and FTTx networks) and the constructors and operators of functional buildings such as airports, hospitals, public buildings, military establishments, shopping centres and data centres. The key factors to success here are the development of a partner network – installers, suppliers, service and technology partners – and an understanding of the requirements and challenges which customers need Datwyler to meet.

First turnkey project

Daetwyler Middle East recently signed a framework agreement for a first turnkey project in the United Arab Emirates – the construction of a FTTH network for “Smart Cities” in six districts of Abu Dhabi. The agreement encompasses network design, product supply, project management, installation, acceptance and start-up together with lifecycle management, in other words the “turnkey” handover and long-term maintenance of the fibre-optic network.

The Smart City project, for which an investment of 1.5 billion US dollars has been budgeted, will get underway in late 2011 and take place in three development phases. By 2020 tens of thousands of homes, 38,000 apartments, 8,000 villas, 29 hotels with around 7,000 rooms, various museums and cultural centres, three marinas and two golf courses will have been connected to the fibre-optic network.
DATWYLER INVESTS IN HIGH TECH PRODUCTION IN ALTDORF
Every day around the clock an infinite amount of data is being sent around the world. Nowadays practically every household has an Internet connection. There also needs to be an uninterrupted flow of bits and bytes in massive quantities for the use of TV sets, digital cameras, music and telephone systems – and the trend is ever upward.

Modern high performance cables are required to make this possible. Even today, and increasingly in future, fibre-optic systems are the measure of all things in data transfer. Thanks to fibre optics huge amounts of data can be transmitted at lightning speed in a compact space.

Top-quality products
25 years ago Datwyler began manufacturing fibre-optic cables on the Altdorf site, one of the first producers of these cables in Switzerland. Innovation is a long tradition with Datwyler. For 96 years two other technologically sophisticated product lines – copper data cables and safety cables – have been manufactured in Altdorf. These premium quality products have made the company a leader in the niche markets served, and consequently Datwyler cables are in demand all over the world.

From cable manufacturer to total solution provider
Datwyler has now evolved from a simple cable manufacturer into a system and service provider, increasingly operating as a lead or general contractor and supplying total solutions in the fields of electrical and ICT infrastructure. Particularly in Fibre-to-the-Home projects (FTTH), which provide households and businesses with modern fibre-optic connections, Datwyler has established itself as a “turnkey” partner, supplying not only cables and systems, but taking care of all the details and ultimately handing over a ready-to-use project to the customer.

Millions invested in Altdorf
Datwyler is now spending around 30 million Swiss francs on developing the Altdorf site as a high tech production site. 17 million are going on modernisation and the purchase of new production facilities and equipment, 13 million are being invested in upgrading the buildings.

By mid 2013 production will be concentrated in the core zone of the building complex. This will facilitate an optimised traffic flow for internal transportation as well as for delivery and dispatch.

This investment will help to keep the Altdorf site competitive in a challenging international environment. The aim here is both to modernise the systems and optimise the procedures and processes, for Datwyler’s new strategy includes production which in future will be more flexible and need-based, i.e. “just in time”.

Continuing evolution
Increasing global competition means that businesses have to keep on evolving and working as efficiently as possible. Datwyler is rising to the challenge by expanding and modernising production. Current investment – in China and Switzerland alike – shows that Datwyler is maintaining both locations. High performance products of a quality and innovative potential on which customers and users can rely will continue to be manufactured in high-price Switzerland.

The Swiss headquarters of the Datwyler Cabling Solutions division, Altdorf, is becoming a high tech production site for top-quality data and safety cables. To achieve this Datwyler is investing 30 million Swiss francs.

Different colours of optical fibre are very important for correct cable installation.
In standard multimode cables, where attenuation budgets are getting tighter anyway, utilisation errors or mechanical stress can rapidly increase the attenuation of an optical connection to the extent of producing reduced transmission rates or even failures.

**Tight attenuation budgets**

For fibre-optic runs with multimode cables it has been found that the higher the data rates, the more unrealistic the attenuation values stipulated in the standards.

**Two examples are given below:**

For the transmission of a 10 Gb/s Ethernet signal with a wavelength of 850nm on an OM3 fibre over 300 metres EN50173-1:2011 permits a maximum attenuation of 2.6 decibels (dB). According to the cabling standard the optical fibre has an attenuation coefficient of 3.5 dB/km. The G50/125 µm OM3 fibre used at Datwyler typically has an attenuation of 2.5 dB/km. Even this fibre reaches an attenuation of 0.75 dB at a length of 300 metres. In this link, for which a maximum attenuation of 2.6dB is defined, a residual attenuation budget of 1.85 dB is therefore available for all the connectors together. This poses no problem with two connectors, but in a channel with four connectors that only leaves around 0.45 dB for each connector. The standard, however, allows an insertion loss of max. 0.5 dB for 95% of all the removable FO connections, up to 0.75 dB for the remaining 5%.

For 40 and 100 Gb/s transmission using OM3 and OM4 fibres Standard IEEE 802.3ba:2010 defines transmission path insertion losses of maximum 1.9 dB (OM3) and 1.5 dB (OM4), including the fibre. Inclusive of fibre and modal noise this leaves just 1.5 dB and about 1.0 dB respectively for all the connectors together. In practical application that is really tight.

Of course the fibre-optic connectors available today give better values: their typical insertion loss is around 0.2dB. But even this figure can change rapidly due to minute dirt particles or wear.*

What does this have to do with bending radii? Minor additional installation-related attenuation due to microbending and macrobending often remains unnoticed in the first instance. Even minimal additional attenuation in connectors can subsequently cause a link to suddenly exceed the maximum permissible value.

During initial installation great care is generally taken to observe the permissible bending radii of installation cables as well as of patch cables and pigtails. In operation it is often quite a different matter. Especially with patches it frequently happens that the bending radius of an FO patch cable falls well below that specified.

In the worst case the differences in attenuation mentioned can lead to a connection failing or at least to a reduction in transmission rate, for example allowing only 1 Gb/s instead of 10 Gb/s. If a lot of workstations are linked into this transmission path, all the users connected have to share the lower transmission rate.

Datwyler only supplies Category OM2 to OM4 multimode cables with bend-optimised G50/125 µm fibres. This is because these fibres provide much safer optical transmission in LANs and data centres.
Minimising risk
Using bend-optimised multimode fibre reduces the risk of additional attenuation caused by typical usage errors and mechanical stress. The table showing the macrobending properties of these fibres is an impressive demonstration of this (see below). Even when coiled through several complete 360 degree loops the resultant additional attenuation remains relatively low.

Full compatibility
Now and then you read that connectors between bend-insensitive and traditional multimode fibres may not be fully compatible. Extensive studies, however – most recently in the specialist journal LANline 8/2011 – show that the reputable optical fibre manufacturers guarantee full compatibility, and that the new generation of fibres has no effect on FO connector insertion loss or on transmission path bandwidth.

Summing up
As bend-optimised G50/125 µm fibres ensure greater transmission safety in LANs and data centres, Datwyler have been using only these fibres in their Category OM2, OM3 and OM4 multimode cables since the beginning of 2011 – and at no extra cost to customers.

Macrobending properties of bend-optimised multimode fibre

<table>
<thead>
<tr>
<th>Bending radius</th>
<th>Number of windings</th>
<th>850 nm</th>
<th>1300 nm</th>
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</thead>
<tbody>
<tr>
<td>37.5 mm</td>
<td>100</td>
<td>≤ 0.05 dB</td>
<td>≤ 0.15 dB</td>
</tr>
<tr>
<td>15.0 mm</td>
<td>2</td>
<td>≤ 0.10 dB</td>
<td>≤ 0.30 dB</td>
</tr>
<tr>
<td>7.5 mm</td>
<td>2</td>
<td>≤ 0.20 dB</td>
<td>≤ 0.50 dB</td>
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</tbody>
</table>
CABLE SOLUTIONS

MOSCOW:
DATWYLER OPENS BRANCH OFFICE

In October 2011 Datwyler finished setting up its own office in Moscow. The “RepOffice” is located in a modern new building in the northwest of the metropolis, within walking distance of the “Botanical Garden” metro station. It provides a suitable setting for Datwyler’s work in Russia, at the same time creating the requisite conditions for more effective IT links, easier sampling and much more. The RepOffice is managed by Nadejda E. Ignatieva, who has worked freelance for Datwyler in the Russian Federation since 2007. The search is underway for other qualified local staff.

BASLE:
INELTEC STAND IN THE NEW CORPORATE DESIGN

There can be no doubting that Datwyler’s stand at Ineltec was a real eye-catcher. The trade fair, held in Basle (Switzerland) in September, was the first to feature the Cabling Solutions Division, complete with a stand in the modern corporate design – right down to the design of the team neckties. The new image went down well – with both staff and the large numbers of visitors.

PEKING: FOCUS ON DATWYLER’S ENGINEERING SERVICES

During this year’s China Intelligent Building Continuous Development Exchange Meeting, held in September in Peking’s Hotel Minzu, Justin Pan, Datwyler’s Sales Manager for the Great North China region, had occasion to address an audience of numerous industry representatives. In his presentation he talked about Datwyler’s premium quality, high performance generic cabling system solutions. The participants expressed a lively interest, most especially in Datwyler’s comprehensive engineering services, which Pan illustrated using the example of the Kunming New International Airport and the BMW plant in Shenyang. In China too demand in this area is high in order to shorten the construction phase itself.
NEWS

DATWYLER’S NEW FIRE SAFETY CATALOGUE ISSUED

“System circuit integrity in the event of fire. Safety cables and systems from a professional” is the first catalogue (since October) to reflect Datwyler’s new image both inside and out. Its 150 pages give a detailed overview of all our halogen-free safety cables, support and mounting systems, fire stop systems, distribution boxes and accessories. It also contains important information on Datwyler’s safety cable systems, for example on conductor identification, test methods and standards.

The FTTH Catalogue has been available for several months now. The new catalogue with Datwyler’s ICT infrastructure products and solutions is also scheduled to appear in 2011.

MUNICH: FTTH CONFERENCE 2012

The 9th FTTH Conference of FTTH Council Europe will take place in Munich from 14 to 16 February. Datwyler will be participating as a sponsor, with its own stand and presentations. This conference – attended by around 3000 manufacturers, operators, analysts, developers, decision-makers and investors – is the biggest Fibre-to-the-Home event in the world.

New products and solutions will be showcased on Datwyler’s stand, together with the company’s comprehensive FTTx network services which extend from consultancy and conception to turnkey construction.

SOFTWARE SOLUTIONS
BY DATWYLER

Recording, planning and documenting, visualising, observing and controlling: nowadays there are sophisticated, easy-to-use tools for all these tasks to make work easier for planners, installers, network supervisors and facility managers. That is why since October the Cabling Solutions Division’s redesigned homepage has a “Software” menu item featuring solutions which usefully complement Datwyler’s cabling systems and package deals. Datwyler offers these optionally inclusive services and support, customised to meet the customer’s particular requirements relating to any projects involving LANs, data centres, FTTH networks or building automation.

LONDON: DATWYLER TAKES PART
IN DATACENTER DYNAMICS

Datacenter Dynamics, to be held at the ExCeL International Convention Centre (ICC) in London on 30 November and 1 December, is one of the most important European conferences and exhibitions relating to data centres. Here Datwyler will unveil several new high-speed and high-density cabling solutions, including services.

You can find current news under “News” and “Events” on our homepage.