CASE STUDY

FUTURE-PROOF INFRASTRUCTURE FOR NEW DIESEL HEAD OFFICE

One motto of Diesel, the world-famous lifestyle brand, is 'be stupid'. Behind this lies a company which pursues its objectives with great foresight, using the latest technology. An example of this is the new Diesel head office building in the Italian town of Breganze where future-proof, structured cabling from Datwyler has been installed.

Diesel is one of the best-known designers and manufacturers of jeans, apparel, accessories and perfumes. The company employs around 6000 staff in Europe, Asia and America and achieves a turnover of approximately 1.3 billion Euros. The worldwide Diesel distribution network includes 5,000 points of sale in over 80 countries, including 400 monobrand stores which are owned by the company.

Market trends are forcing Diesel to invest in advanced technologies all the time. When building the new company headquarters in Breganze, the company therefore decided to install a modern high performance cabling infrastructure which will enable Diesel to cope with the technical challenges of the next 15 to 20 years.

In collaboration with Jacobs Engineering Italy, Diesel's IT staff were able to define the technical specifications for the new communications cabling during the planning phase for the new building. They decided on a structured building cabling system with central distribution and a maximum of five sub-distributors from which all the workplaces could be reached.

Diesel wanted there to be at least twice as much connection capability as it currently needs. Each individual line was to be certified for 10 Gigabit per second (10 Gbit/s). The entire infrastructure should offer a high degree of flexibility to allow for possible changes of use and expansion, and at the same time present an elegant design. High requirements were also placed on loading, ventilation and the functional capability of the required racks.

Professional system supplier and integrator

Jacobs brought Datwyler on board for project planning. The international Datwyler team provided all the information required about the different technologies available on the market and also suggested a cabling system solution which would enable Jacobs to meet all Diesel's expectations, from performance, flexibility and reliability through method of installation to an attractive price.

In this project Datwyler also acted as the system integrator. This was made possible through close cooperation with SAIV, an integration partner which managed, coordinated and supervised activities at the construction site.

Pre-assembled cables – rapid installation

Installation itself took place between July 2009 and September 2010 within several narrow time slots. Over ninety racks which had been specially designed for Diesel were installed and cabled in the new data centre. The 220 fibre-optic links used multiple (trunk) cabling which had been cut to length, pre-assembled with LC connectors and measured at the factory, allowing plug-and-play installation. For the 640 copper links in the data centre the installers also used pre-assembled multiple cable, each of which consists of six Category 7 S/FTP cables with Category 6_A RJ45 connectors (to IEC) at each end.

Thanks to the pre-assembled products, installation was comparatively quick. The result is a tailor-made, very tidy and extremely flexible cabling solution.

Around thirty distribution cabinets were constructed for the horizontal cabling. They are connected to the data centre by

fibre-optic cables. For the infrastructure in the offices around 7000 copper links were used from the sub-distributors to 300 consolidation points, again with Category 7 cables and Cat. 6_A RJ45 connectors.

Taylor-made solutions

From the outset, Datwyler not only acted as an adviser to Diesel but also provided practical support. For example, during the planning phase, a rack prototype was tested 'under extreme conditions' which led to a number of adaptations and the development of a tailor-made model. At very short notice, Datwyler also developed a solution for links with high bending radius to enable them to achieve the correct attenuation value for 10 Gbit/s transmissions.

Tested quality

Diesel's company headquarters now has a high-end, future-proof infrastructure with a guarantee of quality. Every single piece of multiple cables was supplied with its own acceptance certificate and a manufacturer's warranty. After installation, Datwyler and SAIV performed a complete certification so that they could guarantee correct installation and expected performance, enabling them to hand over the 20-year Datwyler system warranty.

"We would like to thank Datwyler and SAIV for meeting our specifications down to the smallest detail and creating a cabling infrastructure which is tailor-made for Diesel, state-of-the art, will be able to cope with all future challenges and doubtless also looks good. A real masterpiece!" says Mauro Vettore, Head of Technology & Communication in Diesel's IT department.

(May 2011)

