

CASE STUDY

CAR MANUFACTURING PLANT, SAN LUIS POTOSÍ: EQUIPPED FOR THE FUTURE

In its San Luis Potosí plant, a German car and motorbike manufacturer has installed a high-quality cabling infrastructure from Datwyler.

The car industry is accelerating – and also promoting growth and economic development in Mexico. In 2017, its share of the gross domestic product of the country already amounted to 2.9 %. Mexico is the seventh-largest car producer in the world and the largest in Latin America. That means more than one fourth of every 100 vehicles built around the globe originates from Mexican plants. In total, nearly two million people work in this industry so important for the country.

Mexico also plays a crucial role in the strategy of many car companies operating worldwide.

Solutions specific to the customer's requirement

As for many other worldwide companies, Datwyler delivered the structured cabling system for the San Luis Potosí site of the BMW Group. The Datwyler specialists were involved in the project at an early stage, so sometimes specific product solutions tailored to the requirements of the BMW Group were developed.

The combined experience of both partners, the vehicle manufacturer and the IT infrastructure solution provider, contributed to the cabling project meeting all specific requirements with regard to cost and capacity.

The system solution which operates in the new plant today consists among other things of 950 kilometres of Category 7 S/FTP data cables and approximately 20,000 shielded RJ45 modules. It offers the user outstanding advantages and improvements as regards electromagnetic disturbance such as NEXT (Near-end Crosstalk) and AXT (Alien Crosstalk) as well as reserve capacity of the power supply to terminals over the data network (Power over Ethernet). This high quality and the security of being able to use the installed system on a long-term basis, also in respect of future transmission standards, was one of the central requirements of the BMW Group.

The backbone cabling and campus cabling consists of 260 kilometres of fibre optic universal and outdoor cables,



which are connected to 520 panels specially designed for the BMW Group. For safety reasons only cable products with flame-retardant, low-smoke and halogen-free coatings, which in the event of fire contribute to the protection of people and property in equal measure, were used throughout the plant.

Cost savings through prefabrication

Regarding the installation in the BMW Group plant, it was beneficial that Datwyler could provide around 300 prefabricated copper and fibre optic trunk cables. These cables enabled the installers to work with multi-cables, which were preassembled exactly according to the customer's standards, cut to length – often custom-made in stages – and fitted with the necessary connectors under

laboratory conditions. The use of such cables not only resulted in excellent attenuation values but also led to faster installation without special equipment, and thus to cost savings.

With their good farsighted organisation Datwyler's Mexican distributor, Marathon Eléctrica de Puebla, contributed to the success of the project just as much as the fully engaged qualified system technicians on site. They ensured a smooth process, on-time acceptance testing and commissioning as well as – perhaps the most important aspect for the BMW Group – high quality installation in conformance with standards meeting the requirements.

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