

CASE STUDY

IWB: SHIELDED CABLE SYSTEMS FOR FAULT-FREE OPERATIONS

To ensure that all its supply systems work reliably, Industrielle Werke Basel (IWB) is increasingly depending on shielded cabling systems from Datwyler.

Industrielle Werke Basel (IWB) supplies the Canton of Basel City with electricity, natural gas, district heating and drinking water. The company also offers energy and telecommunications services. In addition, IWB delivers natural gas to 28 municipalities in north-west Switzerland and drinking water to the municipality of Binningen in Basel-County. The company's responsibilities include building, operating and maintaining its systems to deliver all their energy supply services and operating the regional waste recycling plant (KVA).

"Security of supply for our customers is our top priority. That's why our supply systems have to function absolutely reliably", explained Dominik Naff, IWB's Head of Networks and Systems.

Immunity against electromagnetic disturbances

Where large machines such as pumps are in use, data transmission is particularly susceptible to interference and inductivity. That is why two years ago, IWB gradually began to replace the existing cabling systems, responsible for monitoring and controlling hundreds of machines, with cables and components of Datwyler's Modular Solution.

According to Naff, extensive measurements taken by outside specialists demonstrated that "because it is so well shielded, this system is largely immune to all external electromagnetic interference".

The first project using Datwyler's shielded system was to install universal communications cabling in the master display of the waste recycling plant, which comprises about 250 links. "Our experience with this system was so good that since then we have used it on all our larger new installations", said Naff.

Gradual expansion

Since IWB wants to have a unified system, the unshielded cabling in the offices is now also gradually being replaced by the new shielded systems. Recently an entire floor of the IWB head office was re-cabled. This installation used Uninet 7702



4P data cable. In order to benefit from the supplier's system warranty, IWB is also obtaining the RJ45 connection technology, patch panels and data outlets from Datwyler.

The energy supply company uses the network for telephony, data transmission (up to 1 Gbps) and for monitoring and controlling the machines that guarantee reliable supplies of water, gas, district heating and electricity.

Positive conclusion

"One of the ways in which the quality of a cabling system and its installation can be judged is by its immunity to external interference. In this respect, our universal communications cabling system leaves nothing to be desired", said Naff, summing up the experience of IWB.

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