

Lapp Application Report

Playing it safe with Lapp



M+W Group Clean Room Technology with UL-certified Cables



M+W GROUP

The customer

The M + W Group is the leading global partner for engineering, design and project management in the advanced technology sector, the life science industry, energy & environmental technologies and the high-tech infrastructure sector. It provides a range of services from concept development to ready-to-use services. Fast implementation, high quality standards and affordable production are included as standard. With its specialist expertise, particularly in the fields of process and automation technology and integrated solutions in complex systems, the M + W Group mainly focuses on leading electronics, life science, photo-

voltaics, chemical, automotive and communications companies, as well as universities and research institutes. The M + W Group has around 6,000 employees and recorded a turnover of almost € 1.8 billion in 2010.

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Requirements and advantages

There are still restrictions on the use of AWM (Appliance Wiring Material) cables in North America. In order to avoid being subjected to a ban on operations by local authorities, M + W wishes to use appropriately certified cables in its precision

air conditioners. The Lapp Group boasts an extensive range of UL-listed cables for North America that also correspond to the new NFPA 79 Standard, so with Lapp products, M + W is playing it safe. In addition, the UL-listed cables do not need to be laid in closed systems or pipes. This reduces the cabling costs by up to 40 %.

Products used

ÖLFLEX® Tray and ÖLFLEX® CONTROL TM connecting and control cables, UNITRONIC® 300 CY and UNITRONIC® BUS data network cables as well as Multinorm EPIC® industrial connectors.

The application

The Stuttgart-based M + W Group is one of the world's leading providers of clean room technology, complying to extremely high standards for a clean production environment. The production plant in Stuttgart produces high-tech equipment primarily for the electronics, life science and automotive industries in an absolutely clean environment (clean room class 8).

The Lapp Kabel solution

Some process steps, such as the lithography of sensitive wafers, also require that exact temperature and moisture levels be maintained – the tolerance for temperature deviations is 0.05°C, for example. Here, ÖLFLEX® Tray cables control a device that analyses the structures on the wafer. The ÖLFLEX® CONTROL TM is used to control the side channel compressor, pumping highly compressed air to the lens in order to maintain the temperature level.

UNITRONIC® 300 CY data network cables are used for the temperature sensors in the transmitter box. The PLC for the box software is secured using UNITRONIC® BUS cables. The M + W Group also relies on Lapp for connectors. The Multinorm EPIC® industrial connector is not only certified in accordance with European standards – it can also be used on the Canadian market and in the USA.