

Coko Werk GmbH u. Co. KG – Expert for processing synthetic material

tde® links injection moulding machines while business continues



For generations, synthetic materials have been processed at the Coko factory. Founded in 1926 as a manufacturer and retailer of vacuum cleaner brushes, the long-established firm is one of the most distinguished system suppliers for technical plastic parts in all kinds of branches. The automobile industry and the mechanical engineering sector rely on Coko's expertise as well as other clients from various fields such as leisure, consumable durables, heating technology and electrical engineering. In the scope of restructuring the data collection system Coko decided to integrate its moulding machines into the network. Coko has chosen tde® – trans data elektronik GmbH's patented modular cabling system to connect their machines and to install the optic fiber node connections.

of technical plastic parts and exhibits various ways of processing plastics. From the development of the tool to its making and injection moulding Coko offers all products and services from one source. After manufacturing injection-moulded parts a lot of plastic parts are processed further and used for assembling components, varnishing, foaming, welding and hot stamping.

Integrating injection moulding machines into the network

Coko has decided to integrate its injection moulding machines into the network for the first time to improve control systems and handling. Therefore it was necessary to install 4 optic fiber node connections per machine, while laying-up connections redundantly. Installation time had to be kept to a minimum to avoid affecting the daily business workflow. With regard to partner companies Coko has trusted in FPE GmbH's experiences. As an engineering consultant with expertise in process engineering projects in various fields such as refrigeration and air conditioning, electrical engineering, washing and disinfection technologies, FPE has worked with Coko for many years when it comes to air conditioning and IT. "We have chosen tde® because of tde®'s references as well as our own experiences", says Thorsten Speckmann, Coko's Head of IT. In 2001 tde® demonstrated its competence with a large installation for Coko.

tML®-system with huge advantages

tde® supported Coko with planning and implementing the new cross-linkage of the injection moulding machines and the establishing of the nodes' optic fiber connections. „In our opinion, the tML®-system shows many advantages and meets our demands: extremely small cable diameter, general plug & play system and the possibility to combine fiber optic and copper installations on 1U. The binning of the cables additionally

System supplier for technical plastic parts

As a system supplier Coko provides their partners with all types

Reference report



offers an easy installation and a remarkable decrease of line size“, Thorsten Speckman says.

The tML®-system is space efficient due to its high packing density and furthermore reduces the measuring expenditure due to using tested and tailored components. FPE GmbH's task lay with the planning, installation and commissioning of the new structures. Therefore, the supplies had to be calculated, nodes had to be defined, installation lines had to be determined and cable lengths had to be specified in advance. A total amount of 336 CU and 24 optical fiber ports were installed. Since the cables were combined merely 28 copper and 2 fiber optic cables had to be used in order to implement the number of ports. Lines between 10 and 65 meters were run with copper; lines up to 120 meters were run with fiber optics.

Installation while business continues

„The installation with Coko is a perfect example of how the development industry 4.0 forges ahead. We are happy to assist our partners in further bringing together the virtual and the real world within the industrial production process“, André Engel tde®- trans data elektronik GmbH's CEO explains. The installation within existing and operating structures was a special challenge, which was handled well thanks to the solid construction of the tML®-system. Additional demand for compo-

nents, which occurred during the installation, was satisfied since tde® was able to deliver in short time. „Conventional cabling always requires great effort, especially with larger distances in the industrial sector. A fitted, previously tailored and tested solution such as the tML®-system on the other hand is space, time and cost efficient. This was also the case with Coko“, says André Engel, tde®'s CEO. Subsequent and replacement installations are moreover instantly realizable. The sturdy constructions of the tML® components and the fast installation have also convinced Coko. „We have only had good experiences with the new cable system. The intended integration of the moulding machines into the network works flawlessly and the working relationship with tde® was outstanding from our first contact to planning and implementing the project – very constructive, reliable and therefore successful.“