

RETROFIT OF A ROTARY MACHINE IN CHINA

Control exchange with complete electric and pneumatic system overhaul



Task

The goal was to modernize one existing plant for the production of halogen bulbs, which is in use in various auto- mobiles. The production plant consist- ing of a supply as well as a discharge conveyor belt, a rotary machine and various quality assurance units is op-erated in Songzi (China) and is part of an automated production line. Because the lifetime of the components exceed- ed and the controller was discontinued, the system should be brought to the newest state of technology.

Engineering and project management

The engineering and production of the components was done in Germany. All finished parts including accessories for modernization were transported to China by air freight. The project management in the preparatory phase was coordinated from Stolberg and continued with the implementation in China.

Electrical modernization

The complete machine installation including control cabinet group and user interfaces should be exchanged. An existing vision system was adapted to the new concept and revised. The product tracking and operational data

acquisition was modernized and integrated into the new control cabinet

Mechanical modernization

Old pneumatic actuators were replaced by bus-connected valve terminals, the pneumatic installation was renewed.

Software / Visualization

The new software was prepared in Germany and tested in a simulation. In addition, the BDE system was revised, adapted to the new control system and integrated in the infrastructure of the customer. The user interfaces were developed in cooperation with the customer.

Conversion and commissioning

One priority was of course a possible short downtime of the production line. By optimal project planning and prepa-ration we were able to let reconstruc-tion and commissioning phase flow seamlessly into each other, so that the production loss during modernization was reduced to a minimum.

Documentation / Training

On site an operator training was done and an operating manual was prepa-

red. The electrical circuit diagrams were newly made in EPLAN P8.

OUR PHILOSOPHY



Only if our systems are integrated at the customer completely they develop their entire performance potential. Therefore it is important for us that our customers are integrated in the process from the very first day of the project carry out.

Communication is about it the most important connecting part between us and our customers.

CUSTOMER TARGETS

- Maximum production efficiency and quality
- Stable industrial processes
- Well trained personal
- Low service costs
- Most favorable conditions



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