



Comparison before and after the modification

## RETROFIT OF A PACKING PLANT WITH A 3 AXES PORTAL

Complete technical plant maintenance of an existing plant of the automobile industry

### Scope of work

The target was to execute a modernisation and optimisation of an existing plant that packs drive shafts regarding hardware and software. The technology of the plant was quite obsolete and it has to be updated to the today's state of the art.

The challenge of this project was mainly the short time for commissioning. After mechanical and electrical complete retrofit in 4 days and 2 additional days software set up production can be restarted with a part of the plant. The start-up of the complete plant was done after two weeks. This was only possible by a good preparation and simulation processes previously.

### Operation of the plant

Regarding the operation of the plant it must be mentioned that there are two plant parts. On the first part the drive shafts are conveyed to a lifting table by means of a chain conveyor. After fetching the shafts out of the second plant part by a portal the empty pallet on which the shafts are stored is conveyed to the next plant by another chain conveyor. The sec-

ond plant part has a 3 axes portal that is positioned by servo drives. By means of that portal the different shafts are conveyed in a box especially provided for it. The logistics is done fully automated.

### Modernisations

The plant was disassembled mechanically and all wear parts are modernised. In the course of that the pneumatic components are also replaced.

Regarding the electrical installation the switchboard cabinet including operator panel was replaced. For safety functions a safety control with corresponding safety components (safety door switches, safety brake) was inserted. By using an operating interface especially made for the plant it becomes possible to monitor all process conditions of the entire plant.

### CE and documentation

On the basis of the new declaration of conformity of the plant an extensive documentation including risk evaluation according to appendix VII of the EC machinery directive has to be made.



### 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 favourable conditions

### ABOUT THE AUTHOR



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