Flexible and high-performance lines

As a worldwide operating specialist the Becker-Group produces above average precision machines and production lines. Tailor-made, innovative systems and solutions, which are created at high-end up-to-date CAD workplaces, are realized for precisely CNC-controlled manufacturing.

Technical data

Door specifications:
- Length: 1500 mm up to 2800 mm
- Width: 550 mm up to 1300 mm
- Thickness: 30 mm up to 105 mm
- Numerous surfaces, types of wood and edging as well as coatings
- Cycle time for standard doors: 21 sec

Becker door-fittings production line realized in record time

The preparation of the entire production line took only about six month from the ordering to the beginning of installation and commissioning of the complete facility. Since March 2011 the manufacturing of many different door sizes, various types of wood, surface structures, coatings and types of edging is running.
The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.

Turning and adjusting unit

The turning unit ensures that the doors go always in correct position into the processing range of the machine. The turner is equipped with horizontal strap-belt cross-tracks. Opening and closing is performed centrically. The thickness measurement for exact top pressure adjustment of the machine is executed during the work-piece transportation into the adjustment station (accuracy > 0,2 mm). After reaching the end position, the door is fixed with vacuum suction cups and the width dimension is verified. The door can then be moved into the first processing station.

SINUMERIK-controlled processing stations

Inside of the three CNC processing units, which are equipped with Siemens SINUMERIK 840D sl, (at this point the station CNC 2 for handle and case processing) up to 24 SINAMICS drives controlled axes with numerous spindle and servo motors of different manufacturers cooperate precisely. Data exchange between the drives, and the communication with the host PC is realized with PROFINET (based on Ethernet) with cycle times < 10 ms.

Controlling and HMI realized with Siemens

A panel PC 477C with WinCC flexible and WinAC RTX Soft-PLC for the line control, HMI stations, as well as 4 mobile panels MP177 for on-site operation directly at the stations, ensure a reliable and convenient operation and monitoring of the line.

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