

Conveyor system in plastic paint shop

Rehau, Brake

CUSTOMER

Rehau company specializes in polimer based products and services used in construction, automotive and industry. Factory in Brake produced plastic parts, like bumpers, mirror covers and other car parts, for Mercedes Benz.

TASK

Commissioning of a conveyor system for the paint shop. Parts are processed through the following process lines: Power wash, water dryer, flaming (gas heaters on robot arms to heat the plastic surface), Paint booths (Primer, Base Coat, Clear Coat). After each painting booth the parts go through flash off, dryer, cooling zone.

Material flow in the paint shop is controlled by E-MES (ENisco GmbH & Co. KG). Placement of each part is known exactly in the PLC. That information is available through the operating panels and any computer/tablet with a browser. PLC controls the cycle time of the production line, which ensures the optimal painting and drying conditions. Modification of process parameters is possible until the part goes into the process booth. Those parameters are altered by MES.

The main production line cooperates with the skid sorting line, where the skid sequences are prepared, according to the part type. The supervisory system controls, in which order the skids are transferred through the plant, to reach the desired cycle time.

SCOPE OF SUPPLY:

- Programming S7-1500 PLC
- Commissioning
- Warranty and post-warranty service

APPLIED TECHNOLOGY:

- 2 S7-1517F PLC's
- Safety PLC
- Profinet
- SICK Safety light barriers
- RFID Siemens RF180C
- SEW Drive technology

