

smt installed the complete Destacker and End of Line area for two Press-Retrofits at an automotive manufacturer in the Czech Republic

18.05.2020 smt

smt realized the complete retrofit incl. new automation on two large suction presses together with other companies.

The new equipment has been designed for fully automatic set-up. Adjustment and lifting axes with servo drives for all equipment parts allow a highly flexible and dynamic destacking of different blank shapes up to max. blank sizes of 4.100 x 2.100 mm, as single or in double blank production.



- Pallet carts with laser-controlled indication for the fully automatic positioning of two different pallets and material stacks
- With two independent lifting frames
- Roller conveyors with cross slides for correction of the position of the pallets and stacks



- The fanner magnets and side stops can be adjusted individually to the stacks
- All set-up movements are controlled fully automatically



- A double blank tray with two separate cassettes
- Designed as a mobile version
- Cassette change possible during production



- Destacking with two robots on an additional linear axis



- Automatic tool change station for destacking robot with additional changing robot



- All conveyor belts are designed with toothed belt conveyor belts
- Prepared for later retrofitting of vacuum generating equipment
- The belts can be individually adjusted by the motor laterally

This order for press automation by **smt** was completely assembled and commissioned in our plant in Siegen with our technicians. The entire equipment was provided with noise protection housing and adapted to the existing press connections on site.

The complete Front of Line area consists of the following main components:

- 2 multi-functional pallet carts with a load capacity of 20 tons each, for up to 2 stacks of blanks with pallets. Cart with drive to move offline, 2 lifting units with driven roller conveyors and 2 lateral slides for the aligning of the blank stacks in the line
- Laser alignment
- 2 destacking robots with additional linear movement axes in the transverse direction, robot provided for automatic tooling change
- 1 toolchange robot with 3 change racks, outside of the destacking area
- 2 fully automatic fanner stations, with 20 magnetic heads each
- Separate automatically adjustable side stops for aluminum blanks
- 1 infeed conveyor with 10 laterally adjustable conveyor belts
- 1 double blank tray with 2 cassettes, removable individually by forklift
- Integration of a **smt** Blank Washing Machine with separate Bridge Conveyor
- Integration of a Spray Lubrication System
- 1 buffer belt with also separately adjustable conveyor belts
- Continuous-motion camera technology with lighting system from below
- 1 Centering belt with 2 positions and separately switchable electro magnets
- All robots with separate automatic tooling change through change racks on swing doors of storage racks



The complete End of Line area consists of:

- Outfeed shuttle with rotary module and tooling structure
- 2 robots, all with separate automatic tooling changes through exchange holders on swing doors
- 1 lighting zone for visual control
- 2 conveyor belts, approx. 36 m length and 1,6 m width each
- Inclusive pedestals and in the front area with noise protection housing

For further information and any questions, please do not hesitate to contact our Automation team by phone under +49 (0)271 7751 212 or by Email m.stahlberg@schleifstein.de.