

Fagor Press Line For Gestamp Slovakia

CLIENT

Gestamp is a Spanish multinational company that designs, develops and manufactures metal parts and assemblies for the automotive industry. The works took place in Nitra Gestamp Factory.

FAGOR Arrasate is a world specialists in design, manufacture and supply of forming machine tools, from presses and complete stamping systems to lines for manufacturing, processing and cutting sheet metal. Fagor supply presses from 630 kN up to 150,000 kN, using mechanical, hydraulic or the most updated servodriven technology depending on the needs of the Users.

TASK

Comissioning of the Wave Press Line automatic control system. The Press Line consisted of 6 servodriven presses with maximum pressing force of 25000, 20000 and 12000 kN. Transport of parts between the presses was realized by 6 ABB Twin Robot Systems (TRX). Thanks to use of servodriven press technology, the press line can work in a synchronous (wave) mode that allows to improve the production speed by 20% while maintaining the same part quality parameters. The press line was designed to work both with steel and aluminum parts.

Each press is controlled by a PLC Controller and a Numeric Control system for controlling the movement of press main motors. In addition, the first press includes a hydraulic cushion system for better stamping force control. When working in the wave mode, the presses are synchronized with each other and the robots by an additional Numeric Control system.

ACCOMPLISHED WORKS:

- Throughout check of the control system electrical installation
- Commissioning and improvement of the control software
- Commissioning and adjustment of the HMI System

TECHNICAL SPECIFICATION:

- 6 Siemens Simatic S7-317F Controlers,
- 8 Siemens Simotion D445-2 Numeric Control Modules,
- 13 ABB ACS Drives,
- 6 Beckhoff C6930 Industrial PCs,
- Rexroth MAC8 Multiaxis Numeric Control,
- Profinet Network.

