

OVERHAUL

Overhaul with New CNC of forging machine GFM SXL-16

YOM: 1974 - Serial number: 1293

1. SCOPE OF DELIVERY

Point 1.1 Engineering work in order to mantle a new control system, including mechanic and hydraulic adaption .

Point 1.2 New control system Siemens SIMATIC S7-Technology V4.2.
This control system is specially developed and optimized for such kind of equipment.

This new Siemens control consist of:

- graphical user interface
- simple input of basic dimensions
- measuring resolution by linear transducers
- diagnostic system with clear text display
- integrated PLC control system
- control panel based on LCD-screen system to maintain machine settings
- display of alarms and messages
- CNC Bosch Rexrot XM21 used for Hydraulic system

The Siemens and Bosch Rexrot control consists of:
System unit with an integrated power supply including system software pre-tested and pre-mounted.

Point 1.3 Set of mechanical parts for position feedback consisting of:

- measuring system for measuring chuck head position
- adaption parts for the measuring system of hammer adjustment

Point 1.4 Complete new control cabinet including motor control based on electric diagram SX-16 consisting of:

- transformer
- cables, plugs and wiring material
- contactors
- soft start SIEMENS for main motor
- main switch, etc.

MECHANICAL OVERHAUL

The mechanical overhaul consists of the following:

- Group 01** Gear box
- Exchange of bearings and sealing including the main pinion motor
- Group 02** Forging box
- Exchange of bushings, sliding bands and sealings
 - check mechanical tolerances
- Group 04** Hammer adjustment
- Exchange of bearings and seals
 - check mechanical tolerances
- Group 06** Piping
- Checking and repair of all necessary pipes around machine
 - Exchange of rubber piping
- Group 08** Chuckhead
- Exchange of sealings with some mechanical part damaged
 - Exchange of grease pump
- Group 09** Chuck head bed
- Exchange strip
 - Checking the rails guide
 - New cover protection guide
- Group 12+16** Centering guides
- Repairing of mechanical part damaged
 - Retrofitting of cylinders
- Group 22** Cooling water
- Exchange of heat exchanger for hydraulic and lubrication
- Group 24+30** Loading and unloading system
- Checking and repair
- Group 5+33** Lubrication and hydraulic
- Exchange of hydraulic and lubrication pump coupling
 - Exchange of all sealing's for all hydraulic cylinders
 - Retrofit pumps and new proportional valves with manifolds
- Group 39** Block support
- Exchange bolt and rollers