

















JAY ENGINEERING

PROJECT	NO.
CLIENT	DATE
PROJECT NAME	DATE

MADE IN INDIA



Machine Id	:- 1387	Serial No	:-
Category	:- Gear Related Machines	Model	:- PA 320 CNC
Country	:- Germany	Make	:- Pfauter
Type of Machine	:- 3 Axis Gear Hobbing Machine - Vertical	Year	:- REBUILT MACHINE 2023
Weight	:- 0.0	Dimensions	:-
Power	:-	Location	:- Mumbai Warehouse,India

Specification :-

Type of machine :- 3 Axis Gear Hobbing Machine - Vertical

Make :- Pfauter PA 320CNC

Three Axis CNC Controlled with Siemens 808 (brand new 2023)

Max. workpiece Ø350 mm

Max. modulus f. hobbing cutters 8 mm

Max. addendum circle Ø163 mm

L max. 230 mm (depending on cutter arbour Ø)

Cutter cutter Ø22, 27, 32, 40 mm

Mounting taper MK5

Radial carriage travel 225 mm

Tangential carriage travel 170 mm

Axial carriage travel 250 mm

Max. cutter head pivoting angle +30°...-40°

#workpiece spindle outside Ø350 mm

Workpiece spindle bore 150 mm

Counter holder travel 550 mm

Counter holder bore 150 mm

Speed - tool 120-400 rpm

Speed - tool spindle 1-40 rpm

Rapid speed on X axis 5,000 mm/min.

Rapid speed on Y axis 750 mm/min.

Rapid speed on Z axis 1,000 mm/min.

Automatic. workpiece feeding unit

Cooling lubricant system

Oil mist extraction and filtering system

Additional information

complete with change gears, etc

complete , handbooks and machine manuals etc.

fully rebuilt with BRAND NEW 2023 YOM

Siemens 808 , Digital drives and AC servo motors

CNC Controlled Axis X and Z + hob shifting,

Free standing Electrical Cabinet fitted .

Suitable for Spur , Helical , Crowning & slightly tapered gears both for batch and heavy production of components

Machine Features

•Hydraulic Clamping & Tailstock ,

•Automatic Hob shift

•Full change gear set

•One 1.25' hob Arbor, outboard bearing, Arbor wrench

•Two copies of the machine operators manual

•Two copies of all electrical and mechanical prints

•Can be tooled up to customers as per customers requirement

•Machine is ready for immediate delivery subject to prior sale.

The Advantages of New Siemens 808 Advance System are as below:-

The benefits are as per below:-

1. It is close loop system so positioning accuracy of axis is far better.

- 2. It has Auto servo tuning (AST) facility so that load can be tuned with servo motor for better performance with torque.**
- 3. It has Direct servo control (DSC) by Drive Bus communication so that drives can perform better with controller commands.**
- 4. It has friction compensation facility.**
- 5. Servo motors available up to 40Nm whereas in 808D it was only 4,7,10Nm only.(e.g. for Z-axis we used 15Nm**
- 6. Absolute encoder available with Servo motor so that referencing is not required (like 828D)**
- 7. It has Ethernet communication port so that PLC and Data Upload/Download is much faster.**
- 8. It has Ethernet Interface so that it can be monitored remotely (like 828D) for**
 - a. Transfer of Part program, user cycles, Machine data, R-parameter, PLC data, HMI data etc..**
 - b. PLC Logic can be monitored**
 - c. PLC upload/download**
 - d. Part program send/receive**
 - e. Execute part program**
 - f. Screen shots can be taken.**

This machine is recontrol or recertification with SIEMENS 808 Advance System Exactly as per Pfauter Standards.

All recontrolled and recertified machines are fully cleaned.

All moving slides, spindles and parts handling systems are inspected for problems.

Any gibs or adjustable backlash systems are adjusted to the best possible settings.

All hydraulic, coolant, lubrication and pneumatic systems are checked for proper functionality and leaks.

All filters are replaced. All worn hoses, broken cables, connectors, buttons, lamps and wires are replaced.

All guarding is installed and checked.

All machine cycles are tested. Parts are cut to verify the machine capability.

Charts from the test cutting are documented for your viewing.

Description :-

The gear hobbing machine pfauter PA 320 CNC was designed as a universal tool machine to produce gears used in building and construction machines, wind turbine gearboxes, machine tools, mining equipment, aircraft, textile machinery, etc. it can be used for individual and small batch production, as well as for mass production. As part of the modernization process the machine is being dismantled completely and then retrofitted according to the latest findings and technologies to become an up-to-date high-performance hobbing machine, equipped with the modern CNC-control system siemens 808.

The figures are showing a CNC retrofit, completely modernized, designed for maximum performance and accuracy in flexible manufacturing, acceptance testing according to DIN and manufacturer's standards, including the control system SIEMENS 808 and the digital drive technology from SIEMENS.