

WORLD'S
FINEST
GRINDING
TECHNOLOGY
**CYLINDRICAL
GRINDERS**

shardamachines.com

SHARDATM
SINCE 1970



SHARDA MECHANIC WORKS PVT. LTD.

was grounded in 1970.

Formerly known as **AMBA PETLAR.**

SHARDA MECHANIC WORKS PVT. LTD. is one of the leading manufacturer and exporter of Cylindrical Grinding machines since 1970. SHARDA is a family owned company with third generation running the business making it dynamically energised. The manufacturing plant is spread over an area of 76,500 sq. ft. We have more than 15000+ machines installed to date.

SHARDA majorly manufactures a variety of External, Internal, Universal and Special Purpose Cylindrical Grinding Machines in CNC, PLC and Hydraulic versions since 1970. Also, SHARDA manufactures customisable Cylindrical Grinding machines according to the requirement of the customer. The machine shop is equipped with Planning, boring, turning, drilling, milling, grinding machines etc. SHARDA focusses on providing solution based on customer preference which is why it is a technology-driven, customer focussed solution provider. SHARDA promises a 'POINT TO POINT PERFECTION' in the field of grinding technology.

All the machines are drafted and well-outlined using latest software for 3Dmodelling such as 'Solid Works'. A well-managed and experienced team of employees makes SHARDA systematic and efficient. We have more than 3000 satisfied customers all over the world, majorly in INDIA.

INFRASTRUCTURE

SHARDA is extended over an area of 76,500 sq. ft. SHARDA encompasses a state-of -the-art in-house facilities to ensure a better quality product. We have divided our infrastructure in sections like: research & development, production, sales & marketing, quality testing. The machine manufactured not only meets stringent criteria but also exceeds it.

QUALITY

The aim of quality control is solely to maintain the efficiency and accuracy of machines. At SHARDA, QC works by finding defects in the machine and correcting them before delivering them to the client. Therefore, we are committed to detailed checking of systems and programs thereby improving the quality of the product and services in order to achieve customer satisfaction.

REGISTERED WITH

IMTMA : Indian Machine Tools Manufacturers Association

MTMA : Machine Tools Manufacturers Associations



INDUSTRIES WE SERVE!

Committed to cater to the diverse requirements of our clients



AVIATION



MINING



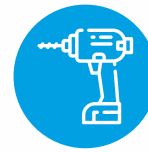
AGRICULTURE



TOOLS



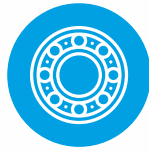
DEFENCE



DRILL



HEALTH



BEARING



AUTOMOBILE



MARINE



CEMENT



GARAGE



MEDICAL



FASTENER



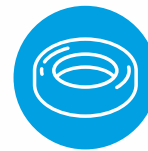
VALVE



TEXTILE



MOTOR



RUBBER

CNC INTERNAL

CYLINDRICAL GRINDING MACHINE

MODEL: ICG-100

SHARDA™

SINCE 1970



Established in the year 1970. Sharda Mechanic Works Pvt. Ltd., to-day is one of the leading manufacturing of high Precision Cylindrical Grinding Machine. Experience in Internal Grinding, Latest construction and state-of-the-art CNC Technology are combine in order to meet the customer's requirement. An efficient and flexible machine for any Internal Grinding application suitable for small and large scale production.

MACHINE BASE

Cast iron machine bed is designed for rigidity, vibration & terminal stresses ensuring consistent machine performance with high accuracy.

INFEEED(X-AXIS) & TRAVERSE SLIDE(Z-AXIS)

- The slide move on high precision anti-friction preloaded linear guide ways, deliver micronic response and high rigidity. Driven by A.C. Servo motor directly coupled with preloaded ball screw ensure backlash free motion.
- Centralized lubrication is provided to ensure better lubrication and longer life to the guide ways.
- Ingress of dust and coolant in avoided by adaption of proper protection cover.
- A high precision linear encoder can be used as an optional for / higher positional accuracy and feed back to the CNC System.

DRESSER

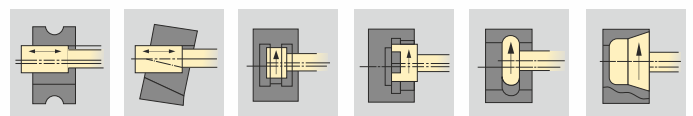
Fixed dresser unit is mounted on the work slide at a position which ensure minimum idle movement during dressing cycle.

WHEEL HEAD

- Internal belt driven spindle is clamped in a rigid housing and is driven through flat belt and induction motor. The spindle is grease packed for life for better maintainability.
- High Frequency spindle of dia. 100 / 120 / 150 /170 can be offered for higher material removal and mass production.

WORK HEAD

- The machine has a rigid live work head. The work spindle is with high precision bearings preloaded for better stiffness.
- The spindle is driven BY A.C. induction motor and variable drive. The Work head has a swiveling arrangement and can be set at an angle for taper grinding.
- Hydraulic cylinder for clamping / de-clamping (optional).





MACHINE CONTROLS

- The machine can be offered with 'FANUC' or 'SIEMENS' or 'MITSUBISHI' CNC System with A.C. Servo motor, drive and inbuilt absolute rotary encoder. The best in class switch gears are integrated on the machine to provide highly reliable operations.
- The machine cabinet & operator panel are conveniently mounted on the machine for 'plug & start' operation there by the installation time.

SPECIFICATION

DISCRPTION	UNIT	VALUE
CAPACITY		
Maximum Grinding Diameter	mm	200
Minimum Grinding Diameter	mm	5
Grinding Depth Max.	mm	100
Maximum Component Weight (including Chuck)	kg	50

CROSS TABLE INFEEED (X-AXIS)

Table Stroke	mm	200
Rapid Feed Rate	m/min	10
Resolution	mm	0.001

LONGITUDINAL TABLE (Z-AXIS)

Table Stroke	mm	300
Rapid Feed Rate	m/min	10
Resolution	mm	0.001

WORK HEAD

Spindle Speed (variable)	rpm	100-1000
Swivelling Range	deg.	- 5° TO 30°
Motor Power	kW	1.5

INTERNAL GRINDING HEAD

Spindle Speed (Belt Driven)	rpm	18000
Motor Power	kW	3.7
Optional Spindle (Belt Driven)	rpm	* 10000/12500/15000/ 22400/28600
High Frequency Spindle (Optional)	rpm	On Request

CONTROL SYSTEM

FANUC / SIEMENS / MITSUBISHI

General		
Operation Voltage	volts	415+/-10% AC 3 Phase
Floor Space	mm	L 2500 mm X W 1700 mm

NOTE: • All marked " * " values / items are optional at extra price.

- Since continuous development is taking place, design and specifications are subject to change without prior notice and information.
- Colour shown in picture may not match with actual colour due to printing limitations.
- Available machines shown may vary depending on optional equipment or periodic design changes.



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