



CENTRELESS

GRINDING MACHINE



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HI-LIFE MACHINE TOOLS LIMITED, established in the year 1972, is a leading manufacturer and exporter of CNC and Hydraulic Grinding Machines in India. 'HI-LIFE' Centreless Grinding Machines are suitable for Thru-feed, In-feed and Form grinding of metallic and non metallic components. These machines are specially designed for mass production with consistent accuracy.

SALIENT FEATURES

MACHINE BED

- Machine bed is of one piece, close grained, graded cast iron.
- Box structure design, heavily reinforced with ribs, provides high rigidity and stability.

GRINDING WHEEL HEAD

- Grinding wheel head of sturdy design is fixed to the machine bed.
- Wheel head spindle is made of special alloy steel, specially heat treated, ground and lapped to achieve high dimensional stability and long life.
- Spindle runs in Hydrodynamic White Metal Bearings, which give very high accuracy and excellent surface finish to work piece.

REGULATING WHEEL HEAD

- Regulating wheel head is mounted on double slide and on a swiveling table arrangement.
- Special alloy steel spindle is specially heat treated, ground and runs in oil immersed precision Anti Friction Bearings to give high accuracy and true running.
- Variable speed of regulating wheel provided with digital RPM display. Optimum RPM of work piece can be set to achieve high production and good accuracies.
- Regulating wheel can be tilted in vertical plane to facilitate through feed grinding.

TAPER CORRECTION

 Regulating wheel can be swiveled in horizontal plane by means of Swivel table, for fast and accurate taper correction and also for taper grinding.

LUBRICATION

 Centralized lubrication system provided for efficient and positive lubrication of moving parts.









AUTOMATIC INFEED GRINDING CYCLE (OPTIONAL)

- Single button operated Automatic Infeed Grinding Cycle.
- Cycle operates as: Rapid approach Auto feed Spark off Rapid retraction and infeed slide moves back to starting position.
- Amount of infeed, infeed rate and spark off time are adjustable.

INFEED SYSTEM

- Infeed is imparted to the Regulating Wheel slide through a hardened and ground feed screw, which ensures high positioning accuracy and repeatability.
- Specially designed nut having backlash adjustment is provided.
- The upper slide moves the Regulating Wheel in relation to the work rest blade for easy job set up and lower (feed) slide is used for feeding work piece to the grinding wheel.
- Work rest base is firmly screwed to the lower (feed) slide. Work rest blade is mounted on work base and it can be adjusted in height on work base for different size of components.

DRESSING UNIT

- Separate hydraulic dressing units with variable dressing speed are provided for both Grinding & Regulating wheel.
- Profile dressing of Grinding and Regulating wheel is possible with template and special attachment.

HYDRAULIC/ELECTRICAL UNIT

- Hydraulic power pack unit is housed outside the machine for easy maintenance.
- All electricals mounted in a concise panel box. Centralized controls for operator's convenience.

OPTIONAL

- Auto loading & unloading system, Automatic ejector, Bar feeding attachment, Form dressing arrangement & Variable speed drive for Grinding Wheel.
- Hi-speed twin grip Cartridge type grinding wheel spindle with precision Anti Friction Bearings.

RANGE OF OTHER MACHINES

- Centreless Grinding Machine CNC
- Cylindrical Grinding Machine CNC/Hydraulic
- Internal Grinding Machine CNC/Hydraulic
- Robotic Automation for Grinding Machines

MODEL		HLC-100	HLC-150	HLC-200
Grinding range (Diameter)	mm	2-100	2-125	2-125
Max. infeed grinding length	mm	95	145	195
Grinding wheel size (diameter x width)	mm	350 x 100 /	350 x 150 /	400 x 200 /
		400 x 100	400 x 150	500 x 200
Regulating wheel size (diameter x width)	mm	230 x 100	230 x 150	300 x 200
Regulating wheel speed (stepless)	rpm	20-200	20-130	20-130
Swivel of Regulating Wheel head in : - Horizontal plane for taper correction / taper grinding - Vertical plane for thru-feed grinding	deg deg	± 1.5 0-5	± 1.5 0-5	± 1.5 0-5
Grinding & Regulating Wheel dresser		Hydraulic	Hydraulic	Hydraulic
Grinding Wheel motor power	hp	7.5/10	10	15/25
Regulating Wheel motor power	hp	1	2	2

^{*}Design & specifications are subject to change without notice. Machine in the photograph includes extra accessories .



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ABOUT HI-LIFE

- Established in 1972
- Ranked amongst the TOP manufacturers of Grinding machines, in India
- More than 3000 satisfied Customers worldwide
- Direct Exports to 15 Countries across the Globe
- 75% of orders received are REPEAT orders from existing Customers
- Sales & Service offices in 10 major cities of India
- State-of-art manufacturing facilities spread over more than 45,000 sq. feet, with CNC machines
- Standard room equipped with latest Metrology equipments
- Fast Delivery, Excellent Accuracy, Reliability & Performance
- Machines available with **C** € mark
- An ISO 9001: 2015 certified Company







FEW CUSTOMERS













































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