

*Excellence in Grinding ... since 1972*

**CENTRELESS GRINDERS**



[www.hilifegroup.com](http://www.hilifegroup.com)

**CENTRELESS**

**GRINDING MACHINE**



**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 INFEEED 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 to starting position.
- Amount of infeed, infeed rate and spark off time are adjustable.

### INFEEED SYSTEM

- Infeed is imparted to the Regulating Wheel slide through a hardened and ground feed screw, which ensures high positioning accuracy and repeatability.
- Specially deigned 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 special attachment.

### HYDRAULIC / ELECTRICAL UNIT

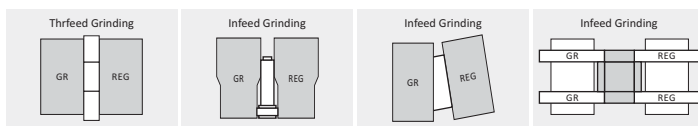
- Hydraulic power pack unit is housed outside the machine for easy maintenance.
- All electricals mounted in a concise panel box. Centralized controls for operator's convenience.

### 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-S	HLC-150-S	HLC-200-S
Grinding range (Diameter)	mm	2-100	2-125	2-125
Max. job length in infeed grinding	mm	95	145	195
Grinding wheel size (diameter x width)	mm	350 x 100 / 400 x 100	350 x 150 / 400 x 150	400 x 200 / 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	deg	± 1.5	± 1.5	± 1.5
- Vertical plane for thru-feed grinding	deg	0-5	0-5	0-5
Grinding & Regulating Wheel dresser		Hydraulic	Hydraulic	Hydraulic
Swivel of Grinding & Regulating wheel dresser	deg	0-5	0-5	0-5
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 .

## ABOUT HI-LIFE ....

- Established in **1972** (48 years old Company)
- 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 **CE** mark
- An **ISO 9001 : 2015** certified Company



## FEW CUSTOMERS ....



### HI-LIFE MACHINE TOOLS LIMITED

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