

Excellence in Grinding ... since 1972

CNC CENTRELESS GRINDERS



www.hilifegroup.com

hi-life 
grinding machines

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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' CNC 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

GENERAL

- Simultaneous control of 3/2/1 axis & 1 spindle (Regulating wheel) thru CNC
- Suitable for Infeed grinding of Multi-diameter, Form grinding and Thru-feed grinding
- Automatic dressing cycle with automatic compensation
- User friendly, menu driven Grinding and Dressing cycles

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.
- Automatic oil filtration & circulation unit for Grinding wheel head
- Hi-speed Cartridge type grinding wheel spindle with precision Anti Friction Bearings. **(OPTIONAL)**

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

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

INFEEED SYSTEM

- Infeed slide (Regulating slide) is coated with TURCITE-B
- Precision Ballscrew directly coupled to digital AC Servo motor moves the Infeed slide (X - axis) and guarantee high positioning & repeat accuracy
- 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

- CNC controlled (Y & Z - axis) Grinding wheel dressing slides with Antifriction guideways
- Precision ballscrew directly coupled to AC Servo motor moves each CNC axis (Y & Z - axis)
- Profile dressing of Grinding wheel with the help of Linear & Circular interpolation of Y & Z - axis, eliminates templates
- CNC controlled hydraulic dressing unit for Regulating wheel with variable speed & provision for profile dressing with template

OPTIONAL

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

MODEL		HLC-100-CNC	HLC-150-CNC	HLC-200-CNC
No. of CNC Controlled Axis		1 / 2 / 3	1 / 2 / 3	1 / 2 / 3
CNC System		SIEMENS / FANUC		
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	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
Guideways		TURCITE-B coated / Anti-friction guideways		
Minimum incremental feed - X axis	mm	0.001 thru AC Servo motor		
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 Wheel motor power	hp	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.



HI-LIFE MACHINE TOOLS LIMITED

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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



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