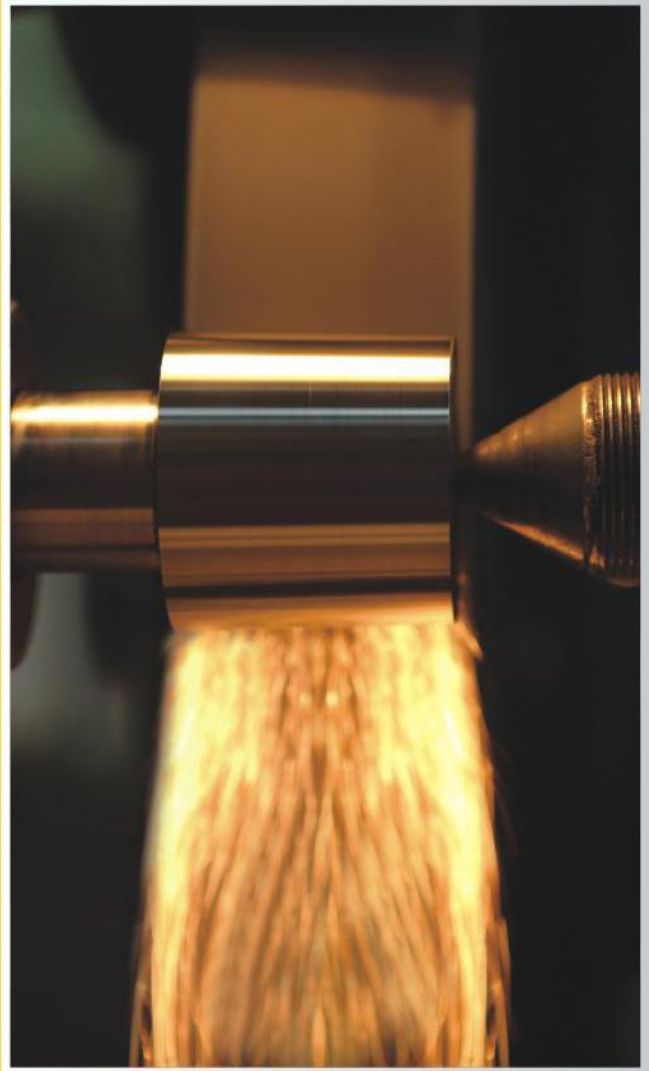


YOUR IDEAL CHOICE FOR
CYLINDRICAL
GRINDERS

- HYDRAULIC CYLINDRICAL GRINDER
- CNC CYLINDRICAL GRINDER
- CNC INTERNAL GRINDER
- CNC CRANKSHAFT
- JOURNAL / PIN GRINDER
- CNC CENTRELESS GRINDER
- CNC CAM LOBE GRINDER
- VALVE SEAT GRINDER



COMPACT HYDRAULIC CYLINDRICAL GRINDER

High performance, compact, economical model eco 200 is ideally suited for grinding of high precision components in tool room and in production shops having small batch quantity. Key features of eco 200 machine are:

- Compact in size
- Flexibility for tilting of table and workhead providing higher degree of grinding angles
- Precise and Accurate repeatability of wheel slide within ± 0.001 mm

SPECIFICATIONS	U/M	ECO 200
Swing Diameter	mm	200
Admit Between Centre	mm	400 [600]
Grinding Length	mm	400
Grinding Wheel (Max dia x Max width)	mm	350 x 50
Spindle Power	kW	3.7
Wheel Speed	m/Sec	33

[] Option

MODEL ECO 200



PRECISION HYDRAULIC CYLINDRICAL GRINDER

Machine model GC 350 Hydraulic grinder is used for precision tool room & production application for medium size components. Swing down type internal grinding head makes the universal model an ideal choice for diverse application of various industries.

SPECIFICATIONS	U/M	GC 350		
Swing Diameter	mm	350		
Admit Between Centre	mm	630	800	1200
Grinding Length	mm	500	750	1150
Grinding Wheel (Max dia x Max width)	mm	400[500#]x50[80]		
Spindle Power	kW	3.7 [5.5]		
Wheel Speed	m/Sec	33 [45]		

Only for External model

[] option

MODEL GC 350



HEAVY DUTY HYDRAULIC CYLINDRICAL GRINDER

Heavy duty model GCH 440 series cylindrical Grinders are in diverse production and tool room application. These grinders are available in both external and universal versions.

MODEL GCH 440



SPECIFICATIONS	U/M	GCH 440		
Swing Diameter	mm	400		
Admit Between Centre	mm	800	1600	2000
Grinding Length	mm	750	1500	2000*
Grinding Wheel (Max dia x Max width)	mm	500[600#]x80[100]		
Spindle Power	kW	7.5 [11]		
Wheel Speed	m/Sec	33 [45]		

* Higher capacity machine upto 3000 ABC are available specifications on request

Only for External model

ECONOMICAL CNC PRODUCTION CYLINDRICAL GRINDER

Simple Grind is an economical, simple cylindrical grinding solution for plunge and traverse grinding application with two axes CNC System. This machine is available in Angular & Straight configuration.

Specifications	U/M	SG 40 CNC	SG 63 CNC	SG 100 CNC
Swing Diameter	mm	350	350	350
Admit Between Centre	mm	500	800	1200
Grinding Length	mm	400	630	1000
Grinding Wheel (Max dia x Max width)	mm	Ø500 X 50 [80#]	Ø500 X 50 [80#]	Ø500 X 50 [80#]
Spindle Power	kW	3.7 [5.5]	3.7 [5.5]	3.7 [5.5]
Wheel Speed	m/Sec	33 [45]	33 [45]	33 [45]

with recess

[] option

MODEL SIMPLE GRIND



CNC PRODUCTION CYLINDRICAL GRINDER

This is a compact machine available for both Straight or Angular plunge grinding of small & medium sized components. Salient features are:

- Cross Slides moves on highly sensitive and stick slip free linear guideways
- Auto lubrication for various sliding parts for better response
- Effective guarding design makes it TPM friendly

Machine is ideally suited for large volume manufacturing of small parts like camshafts, drive shafts, small transmission shafts of small engines & electric motor shafts, high precision fuel injection parts etc.

SPECIFICATIONS	U/M	e GRIND 200 CNC
Swing Diameter	mm	200
Admit Between Centre	mm	250
Grinding Wheel (Max dia x Max width)	mm mm	Ø450 [500]X 50 [80 with spacer]
Spindle Power	kW	5.5
Wheel Speed	m/Sec	45

[] option

MODEL e GRIND 200 CNC



MEDIUM DUTY CNC PRODUCTION CYLINDRICAL GRINDER

SM series is developed for grinding of mass and batch production of medium size components. This machine offers great degree of flexibility and versatility in grinding applications: for example shaft type components having single or multiple diameters can be ground in one setting or plunge grinding application where profiles have diameters, shoulders and radius all ground in one setting. Grinding Wheel approach can be straight or angular as per requirement of grinding process.

Specifications	U/M	SM 40	SM 63	SM 100
Swing Diameter	mm	320	320	320
Admit between Centre	mm	400	630	1000
Grinding wheel (Max dia x Max width)	mm	Ø550 x 80 [120#]	Ø550 x 80 [120#]	Ø550 x 80 [120#]
Spindle Power	kW	7.5 [11]	7.5 [11]	7.5 [11]
Wheel Speed	m/Sec	45	45	45

with recess

[] option

MODEL STALLION (SM Series)



HEAVY DUTY CNC PRODUCTION CYLINDRICAL GRINDER

SH series is especially developed to suit heavy load grinding applications for four wheeler and other general engineering industry. Machine is available with wheel surface speed upto 60MPS, enable higher material removal rate (MRR) with increased productivity. Grinding Wheel approach can be straight or angular as per requirement of grinding process.

Specifications	U/M	SH40	SH 63	SH 100
Swing Diameter	mm	320	320	320
Admit between Centre	mm	400	630	1000
Grinding wheel (Max Dia x Max Width)	mm	Ø660 x 145 [#] (45 m/s)	Ø660 x 145 [#] (45 m/s)	Ø660 x 145 [#] (45 m/s)
		Ø660 x 120 [#] (60 m/s)	Ø660 x 120 [#] (60 m/s)	Ø660 x 120 [#] (60 m/s)
Spindle power	kw	11 [15]	11 [15]	11 [15]
Wheel speed	m/Sec.	45 / 60	45 / 60	45 / 60

with recess
[] option

*Grinding Wheel with Ø760 x 180 mm width and 22 kW motor power is available as an option

MODEL STALLION (SH Series)



CNC HEAVY DUTY CYLINDRICAL GRINDER

Heavy duty production CNC Cylindrical Grinder for diverse heavy duty production applications ideally suited for end journals of long crankshafts in single plunge, grinding of Printing Rollers, Heavy duty Punches and large shafts for different applications etc. for automobile, defence, agriculture, railways and other heavy engineering industries.

- Wheel head spindle consists of high precision class angular contact ball bearings
- Workhead consists of spindle holding MT6 Centre
- Workhead and Tailstock are designed for carrying heavy jobs upto 750 kgs

Specifications	U/M	h GRIND 360 CNC
Swing Diameter	mm	360 / 500/ 600
Admit between Centre	mm	630 / 1200 / 2000 / 3000
Grinding wheel (Max Dia x Max Width)	mm	Ø760 x 180 [#]
Spindle power	kw	22 [30]
Wheel speed	m/Sec.	45

with recess
[] option

MODEL h GRIND 360 CNC



CNC PRODUCTION CYLINDRICAL GRINDER

RHINO model is a dedicated Cylindrical grinding machine for crankshaft Journal & Pin grinding. This machine have 2-Channel & 5 Axes CNC system for dressing during grinding cycle to minimize / eliminate dressing time. Workhead and tailstock are designed to withstand heavy grinding loads during cycle, helping to increase productivity with higher degree of component accuracy.

Specifications	U/M	R80	R120
Swing Diameter	mm	500	500
Admit between Centre	mm	800	1200
Grinding wheel (Max Dia x Max Width)	mm	Ø900 x 50	Ø1066 x 50
Spindle power	kw	15	22
Wheel speed	m/Sec.	45	60

with recess
[] option

MODEL RHINO R80 /120



CNC PRODUCTION CENTRELESS GRINDER

Salient Features

- The ribbed structure of bed ensures better static, dynamic rigidity & vibration damping
- Rigid out board support with High Precision Bearing for Regulating wheel spindle
- Heavy duty pre-loaded high precision roller guideways for in-feed movement
- Spindle type Dynamic Balancing system for Grinding wheel available as option.
- Grinding Wheel & regulating Wheel spindles had undergone FEA analysis for maximum load in dynamic condition.
- Two axes CNC Grinding wheel dresser for any profile
- 2 axis CNC dresser for Regulating wheel as Optional

Specification	U/M	CLG 5020	CLG 6015	CLG 6025 S
Component Size Min, ~ Max. Dia	mm	2 ~ 60	2 ~ 60	2 ~ 60
Grinding Wheel – Dia x width x bore	mm	Ø510 x 200 x Ø 254	Ø610 x150 x Ø 304.8	Ø610 x 250 x Ø304.8 (RBS)
Max Wheel Surface Speed	m / Sec	45	45	45
Grinding Wheel Spindle Power	kW	11 [15]	11 [15]	15
Regulating Wheel – Dia x Width x bore	mm	Ø305 x 200 x Ø127	Ø305 x 150 x Ø127	Ø350 x 250 x Ø127 (RBS)
Regulating Wheel Spindle Power	kW	1.5	1.5	1.5
Infeed Slide Servo Motor	Nm	11	11	11

[] option

MODEL CLG 5020



Specifications	U/M	CLG 6020	CLG 6025	CLG 6030 (TG)
Component Size Min, ~ Max. Dia	mm	3 ~ 120	3 ~ 120	3 ~ 120
Grinding Wheel – Dia x width x bore	mm	Ø610 x 200 x Ø304.8	Ø610 x 250 x x Ø304.8	Ø610 x 305 x Ø304.8
Max Wheel Surface Speed	m / Sec	45	45	45
Grinding Wheel Spindle Power	kW	22 [30]	22 [30]	30
Regulating Wheel – Dia x Width x bore	mm	Ø350 x 200 x Ø152.4	Ø350 x 250 x Ø152.4	Ø350 x 305 x Ø152.4
Regulating Wheel Spindle Power	kW	2.2	2.2	2.2
Infeed Slide Servo Motor	Nm	22	22	22

TG = Twin Grip

[] option

MODEL CLG 6020



AUTOMATION FOR CNC CENTRELESS GRINDER

- Auto loading/unloading equipment for in-feed grinding (Optional)
- Engine valve Automation
- Gantry type loading/unloading system
- Auto loading/unloading equipment for Thru feed grinding (Optional)
- Vibratory bowl feeder for small work pieces
- Roller/Belt Conveyor for round tubes and bar



CNC INTERNAL PRODUCTION CYLINDRICAL GRINDER

Internal Production Cylindrical Grinder IG 50 CNC is compact machine delivering high productivity at very competitive price. This machine is ideally suitable for precision grinding application of components with small bores, taper bore, face and stepped bore. Machine can be offered with High frequency spindles or Belt Driven grinding spindles as per application requirement

SPECIFICATIONS	U/M	IG 50 CNC
Max. Swing dia of Chuck	mm	170 [250]
Max./ Min. Grinding diameter	mm	50 [70] / 5
Maximum Grinding depth	mm	70
Workhead Spindle Nose		A2-4 (A2-5)
Max. component weight (including Chuck)	kg	50
Work Spindle speed range	rpm	100-1200
Internal Grinding spindle	RPM	Belt Drive- upto 35,000 / HF Drive -upto1,05,000

[] Option

MODEL IG 50 CNC



PRODUCTION CNC INTERNAL GRINDER

CNC internal Grinder is designed & manufactured to produce High Precision Components for Bore and face Grinding. Example Synchro Ring, Gear etc of automobile.

- Modular Design to suit individual requirements
- Slide runs on Precision roller guideways with 0.1-micron resolution on both axis thru encoder and glass scale as an option
- High Frequency Internal grinding spindle upto 105000 rpm can be mounted
- IG 150 U model is having External Grinding spindle for OD/ Face grinding operations

Specifications	U/M	IG 150	IG 150 U
Max. Swing dia of Chuck	mm	300 [450, 600]	300 [450, 600]
Max./Min Grinding diameter	mm	150 [250] / 5	150 [200] / 5
Maximum Grinding depth	mm	200	120
Workhead Spindle Nose		A2-5 [A2-6, A2-8]	A2-6 [A2-8]
Max. component weight (including Chuck)	kg	70 [110, 150]	110 (150)
Internal Grinding spindle	RP M	Belt Drive-upto 35,000/HF Drive - upto 1,05,000	Belt Drive-upto 35,000/HF Drive - upto 1,05,000
OD grinding Wheel size	mm	--	Ø 400 x 50

[] Option

MODEL IG 150 / IG 150 U



HIGH SPEED VALVE SEAT GRINDER

GVS CNC is valve seat grinder specially designed for customers manufacturing Engine valves. This machine is designed for High Production Grinding of Engine Valve seat. The machine features 60 mps wheel peripheral speed & Automatic Loading / Unloading of the Engine Valves. Due to 60mps cutting speed and an optimized loading/unloading system the productivity gain is significant (40% for valve head diameter up to 28mm).

Specifications	U/M	GVS 60 CNC
Head Diameter	mm	20 ~ 50
Seat Angle	Degree	45 ~ 60
Grinding Wheel (Max Dia x Max Width)	mm	Ø610 x 20
Type of Wheel		Conventional [CBN]
Spindle Power	kW	5.5
Wheel Speed	m / sec	60

[] Option

MODEL GVS CNC



PLC ENGINE VALVE SEAT GRINDING MACHINE

This machine is designed for High Production Grinding of Engine Valve seat. This machine features

- Automatic Loading & Unloading of the Engine Valves.
- Automatic Dressing of Grinding wheel and compensation.
- Antifriction work head provides consistent roundness
- Machine is control thru programmable logic controller
- Totally enclosed guarding providing safety and prevent spillage of cutting oil

SPECIFICATIONS	U/M	GVS 60 CR
Head Diameter	mm	Ø 20 ~ 60
Seat Angle	Degree	45° ~ 70°
Stem Diameter	mm	4.5 ~ 15
Overall Length	mm	55 ~ 170
Cutting Speed	m / sec	45

MODEL GVS 60CR



TOYODA MICROMATIC CAM LOBE GRINDER

This machine is jointly Designed & developed with **JTEKT Corp. (Toyoda Japan)** & is being manufactured by Micromatic Grinding Technologies Ltd. This is a high production machine with **CBN wheel speed upto 120m/sec.** It is suitable for grinding non-round profiles such as **cam lobe, eccentric shaft, punches** etc

SPECIFICATION	U/M	GC20M - 25S
Swing Diameter	mm	200
Admit Between Centers	mm	250
Grinding Wheel (Dia x width)	mm	Ø350x20
Hydrostatic Spindle Power	Kw	15
CBN Wheel Speed	m/Sec.	Upto 120 mps
Work Head taper	MT	MT4
Tailstock Taper	MT	MT4 (MT3 NC)

MODEL GC 20M - 25S



() Option

- All critical elements like hydrostatic guideways, spindle assy, cam software in this machine are procured from Toyoda Japan.
- This machine is been Marketed & Sold by Toyoda Micromatic Machinery India Ltd in India & S.E. Asia market only

SPM – SPECIAL PURPOSE MACHINES & AUTOMATION SOLUTIONS

SPM – Special Purpose Machines & Automation Solutions

Over the years many challenges posed by our customers have helped us develop several import substitutes. **Special Purpose Machines** for Piston Ring Profile, Fuel Injection parts, non-round parts have been indigenously developed by us. We also provide customized cost effective **Automation Solutions** using Gantry and Robot to suit our customer's requirements to enhance their productivity. Complete system integration is done by our highly capable in-house engineering teams to ensure uninterrupted & smooth operation between the machine & the automation hardware.



- Since continuous development is taking place, design and specification are subjected to change without prior notice and information
- Color shown in picture may not match with actual color due to printing limitation



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