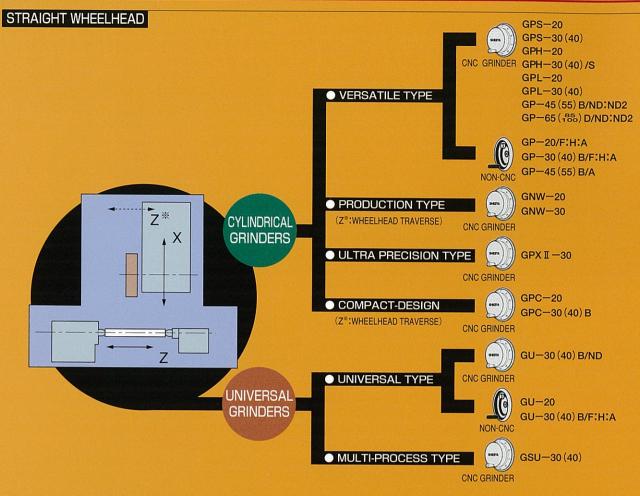
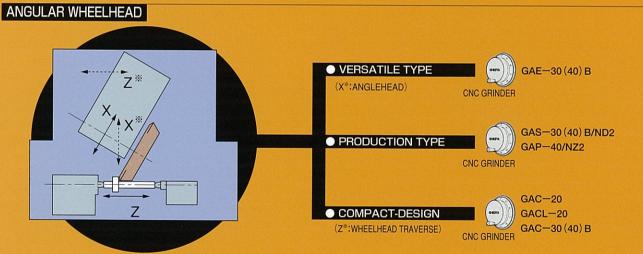
SHIGIYA GENERAL GATALOG







CUSTOM DESIGNED



CVT Grinder GSF-30



CNC Masterless CAM Grinder GCMH-30



CNC Crank Pin Grinder GOCP—30



CNC Eccentric Pin /Polygon Grinder GPES-30



CNC Thread Grinder GSR-48B



Compact CNC Rubber roll Grinder GRN-20



Face Grinder SG-38B



CNC Multiple Centerless Grinder SMG-10 CNC Centerless Cylindrical Grinder GCO-16



UNIQUE PROGRAMING SYSTEM CONTAINING ABUNDANT GRINDING "KNOW-HOW"

CNC CYLINDRICAL GRINDER

GPS-20series

SHIGIYA has designed this series of machine, keeping in mind the flexibility to allow for a wide range of grinding applications, as well as retaining a userfriendly conversational programming package.

Operators without CNC programming experience can use the machine as efficiently as an operator with a vast knowledge of CNC programming.

MODEL	
GPS-20 • 25/50	
SPECIFICATIONS	
SWING OVER TABLE	φ200mm
CENTER DISTANCE	250 · 500mm

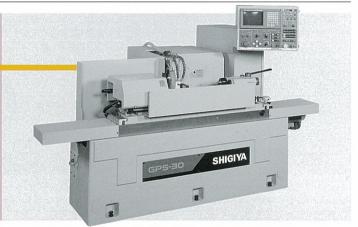


CNC CYLINDRICAL GRINDER

5-30(40) SERIES

This model has substantially inherited SHIGIYA's traditional performance and quality and supports high precision and highly efficient grinding with its excellent highly-durable mechanism.

MODEL	
GPS-30 (40) •40/60/100/15	0/200
SPECIFICATIONS	() GPS-40
SWING OVER TABLE	φ300 (410) mm
CENTER DISTANCE	400 (370) •600 (570) •1000 (970) 1500 (1470) •2000 (1970) mm



CNC CYLINDRICAL GRINDER WITH HANDWHEELS

GPH-20 SERIES

This model is equipped with handwheels on the X axis (wheelhead infeed) and the Z axis (table traverse), which can be operated just like those of manual operation machines, and with an electronic table stopper on the apron. This mechanism makes single workpiece grinding faster than manual operation machines. For larger lot sizes, workability has been enhanced with its performance combined with the automatic function of NC machines.

MODEL		
GPH-20 • 50		
SPECIFICATIONS		
SWING OVER TABLE	φ200mm	
CENTER DISTANCE	500mm	

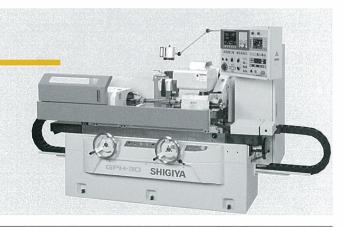


CNC CYLINDRICAL GRINDER WITH HANDWHEELS

GPH-30(40) SERIES

This model is an easy-to-use CNC cylindrical grinder with handwheels. In addition, S type (high precision specification), for which a closed type hydrostatic wheelhead slide and an extremely low vibration wheel spindle motor are provided as standard, is also available in order to satisfy high required precision.

MODEL		TYPE
GPH-30 (40) ·40/60/100/150/200		S
SPECIFICATIONS	() GPH-40
SWING OVER TABLE	φ300 (410) mm	
CENTER DISTANCE	400 (370) •600 (570) •1000 (970 1500 (1470) •2000 (1970) mm	



CNC CYLINDRICAL GRINDER

GPL-20 SERIES

Superior "CNC control" and "Variety of Optional Accessories" complement customization for specialized applications. "GPL-20" Allows any combination of options to provide highly accurate grindings.

MODEL	
GPL-20 • 25/50	
SPECIFICATIONS	
SWING OVER TABLE	φ200mm
CENTER DISTANCE	250 • 500mm



CNC CYLINDRICAL GRINDER

GPL-30(40) SERIES

The GPL-30 series CNC Cylindrical Grinders are a new concept of machines aiming for flexibility, with a large selection of options to customize and meet individual customer's requirements.

MODEL	
GPL-30 (40) •40/60/100/150	0/200
SPECIFICATIONS	()GPL-40
SWING OVER TABLE	φ300 (410) mm
CENTER DISTANCE	400 (370) •600 (570) •1000 (970) 1500 (1470) •2000 (1970) mm

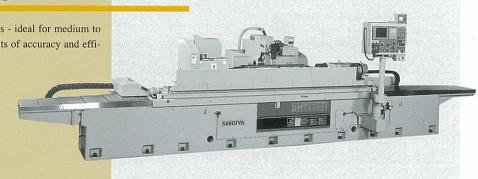


CNC CYLINDRICAL GRINDER

GP-45(55)B SERIES

Designed and strongly-built for versatile applications - ideal for medium to large size work meeting with critical job requirements of accuracy and efficiency.

MODEL	TYPE	
GP-45 (55) B•100/150/200 /300/400/500	ND·ND2	
SPECIFICATIONS	()GP-	55B
SWING OVER TABLE	φ450 (550) mm	
CENTER DISTANCE	1000mm	1500·2200·3000 4000·5000mm
MAX.WORK LOAD (BETWEEN CENTERS)	650kg	1000kg

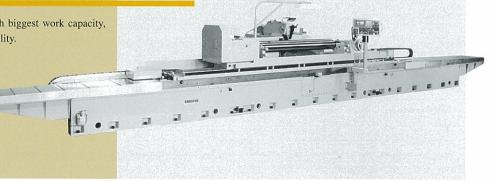


CNC CYLINDRICAL GRINDER

GP-65(85·100)D SERIES

Huge, table traversing type cylindrical grinder with biggest work capacity, featuring uncompromising precison grinding capability.

N	ODEL	TYPE
GP-65(85)	0.300/400/500/600	ND·ND2
SPECIFICAT	IONS	() GP-85D,GP-100D
SWING OVE	R TABLE	φ650 (850,1000) mm
CENTER	GP-65 (85) D	3000-4000-5000-6000mm
DISTANCE	GP-100D	2500·3500·4500·5500mm
MAX.WORK LOAD	(BETWEEN CENTERS)	3000kg



2-HEAD CNC CYLINDRICAL GRINDER

GNW-20-10

This machine has a small footprint and was designed for small and very precise workpieces.

With twin wheelheads and optional center drive workheads, it is possible to grind all surfaces in one chucking and significantly reduce cycle times while still maintaining a high degree of accuracy.

SPECIFICATIONS	
SWING OVER TABLE	φ200mm
CENTER DISTANCE	85mm
WHEEL SIZE ODXWIDTH	φ280×20mm

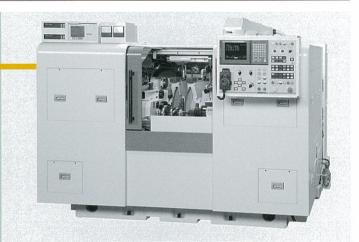


2-HEAD CNC CYLINDRICAL GRINDER

GNW-30 SERIES

Double wheelhead design allows 2 simultaneous grinding to yield high production output; perfect for small and medium lot production with a wide variety of products.

MODEL		
GNW-30 • 25/40/60/80		
SPECIFICATIONS		
SWING OVER TABLE	TABLE	
CENTER DISTANCE	250·400·600·800mm	



COMPACT CNC CYLINDRICAL GRINDER

GPC-20·10

GPC-20 is a wheelhead traverse type CNC Compact Angular Slide Cylindrical Grinder which offers accurate grinding in small work-pieces with small diameters.

SPECIFICATIONS	
SWING OVER TABLE	φ200mm
CENTER DISTANCE	100mm
WHEEL SIZE ODXWIDTH	φ355×38mm



COMPACT CNC CYLINDRICAL GRINDER

GPC-30(40)B SERIES

This model has achieved a narrow machine width of 1.95 m for the center distance of 400 mm (1.58 m for the center distance of 250 mm). This feature allows easy automatization, and its smaller body is helpful in constructing production lines.

MODEL	
GPC-30 (40) B • 25/40	
SPECIFICATIONS	() GPC-40B
SWING OVER TABLE	φ300 (410) mm
CENTER DISTANCE	250 · 400mm



COMPACT CNC ANGULAR CYLINDRICAL GRINDER

GAC-20-10

Simultaneous grinding of O.D. and shoulder face. Machine is small in size, yet big in useability. Perfect for high efficiency, precision grinding of small parts. Easily combined with auto loader and fransfer equipment, allowing quick changeover to automation system.

SPECIFICATIONS	
SWING OVER TABLE	φ200mm
CENTER DISTANCE	100mm
WHEEL SIZE ODXWIDTH	φ355×38mm



LINEAR MOTOR SYSTEM COMPACT CNC ANGULAR CYLINDRICAL GRINDER GREL-20-20

A linear motor and a high-resolution linear scale have been provided on the wheelhead feed mechanism (X and Z axes), and thus allowing high-precision positioning. The machine width is as narrow as 1500 mm, and this has saved space and allowed easy automatization by combination with loaders.

SPECIFICATIONS	
SWING OVER TABLE	φ200mm
CENTER DISTANCE	200mm
WHEEL SIZE ODXWIDTH	φ510×50mm



COMPACT CNC ANGULAR CYLINDRICAL GRINDER

GAC-30(40)B SERIES

One of the two greatest series as well as GPC series. That is powerful high accuracy cylindrical grinder and can grind O.D. and shoulder at once.

MODEL	
GAC-30 (40) B • 25/40	
SPECIFICATIONS	() GAC-40B
SWING OVER TABLE	φ300 (410) mm
CENTER DISTANCE	250 · 400mm



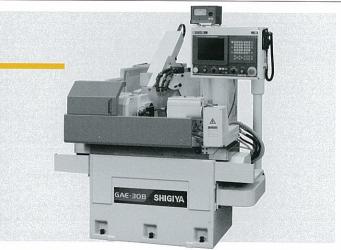
CNC ANGULAR CYLINDRICAL GRINDER

GAE-30(40)B SERIES

GAE-30 series are CNC 2-axis Angle Head General Purpose Cylindrical Grinder.

The angle head type wheelhead on a straight approach grinder has made rapid progress in easy to use.

MODEL	
GAE-30 (40) B • 25/50/75/100/	150/200
SPECIFICATIONS	() GAE-40B
SWING OVER TABLE	φ300 (410) mm
CENTER DISTANCE	250 (220) •500 (470) •750 (720) 1000 (970) •1500 (1470) •2000 (1970) mm
WHEEL SIZE ODXWIDTH	φ510×50mm

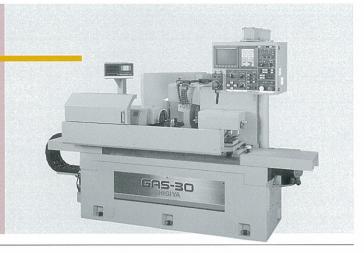


CNC ANGULAR CYLINDRICAL GRINDER

GAS-30(40)Bseries

Features large diameter wheelspindle and rigid tailstock design. Heavy-duty precision grinding achieved by highly stable spindle rotation, and very efficient operation by simultaneous grinding of O.D. and shoulder face.

MODEL	TYPE			
GAS-30 (40) B • 50/100	ND2			
SPECIFICATIONS	() GAS-40B			
SWING OVER TABLE	φ300 (410) mm			
CENTER DISTANCE	500 (430) ·1000 (930) mm			
WHEEL SIZE ODXWIDTH	φ610×75mm			

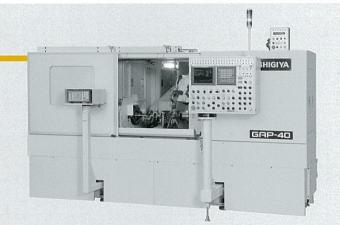


PRODUCTION TYPE ANGULAR CNC CYLINDRICAL GRINDER

GRP-40 SERIES

Massive construction for heavy duty operation to meet medium and large lot production requirements with a very wide wheel. Provides highest efficiency for plunge-cut grinding.

MODEL	TYPE		
GAP-40 • 60/100	NZ2		
SPECIFICATIONS			
SWING OVER TABLE	φ410mm		
CENTER DISTANCE	530 • 930mm		
WHEEL SIZE ODXWIDTH	φ760×160mm		
WHEEL SIZE ODXWIDTH (Option)	φ760×205mm		



ULTRA-PRECISION CNC CYLINDRICAL GRINDER

GPXII-30

This model is an ultra-precision CNC cylindrical grinder with the highest-level performance inherited from the first "GPX", and has been produced by combining SHIGIYA's technologies including a closed type hydrostatic wheelhead slide and an extremely low vibration wheel spindle motor. Innovative ultra-fine infeed has been realized with this model.

MODEL	
GPX II -30 • 40/60	
SPECIFICATIONS	
SWING OVER TABLE	φ300mm
CENTER DISTANCE	400.600mm
WHEEL SIZE ODXWIDTH	φ405×50mm



CNC UNIVERSAL GRINDER

GSU-30(40) SERIES

This machine grinds a variety of work pieces accurately, without extra grinding machines and worthless arrangements for each work piece. By the synchronized multi-axis control, GSU, the comprehensive grinder, is capable of the great productivity with accuracy.

MODEL	
GSU-30 (40) •400/600/1000	
SPECIFICATIONS	() GSU-40
SWING OVER TABLE	φ300 (410) mm
CENTER DISTANCE	400 (370) •600 (570) •1000 (970) mm





CONVENTIONAL OPERATION GRINDERS

SUPERIOR OPERABILITY FOR QUALITY GRINDING

SHIGIYA's precision cylindrical and universal grinders, series GP/GU is a fullline, ranging from manual to motor-driven infeed grinding operation; a wide selection of models is able to meet every kind of grinding need.

This series of machine is flexible enough for system expansion allowing for quick adaptation to an automated production line.

SHIGIYA's machine design common to all models features excellent operability and flexibility for production needs.

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	WHEELHEAD FEED			TARLETRAVEROE	
TYPE-CHARACTERISTICS	RAPID	INFEED		TABLE TRAVERSE	
ANAMAD BARANDANAN MARKIS IKA	HYD.	MANUAL	HYD.	MANUAL	HYD.
MANUAL HIGH REPEATABILITY FOR PRECISION GRINDING	-	•	_	•	-
HYDRAULIC EASY WHEELHEAD INFEED AND TABLE TRAVERSE SIMPLY BY HANDLE OPERATION	•	•	-	•	-
AUTOMATIC HYDRAULIC ACHIEVED BY MECHANICAL FEED STOP AT HYDRAULIC CYLINDER END	•	•	•	•	•

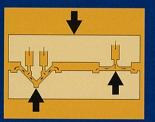
Shigiya's advanced design concept

NON-CONCENTRIC WEDGE-TYPE HYDRO-DYNAMIC BEARINGS SECURE HIGH ROTATIONAL STABILITY OF THE WHEELSPINDLE



The essence of our finest expertise in manufacturing and fabrication is the wheelspindle. Its optimal design-andbuilt curved wedge, hydro-dynamically operating bearing, secures maximum rotational stability and accuracy for high precision grind quality for many years of service.

HIGHLY RUGGED FEED MECHANISM TO GUARANTEE PRECISION GRINDING



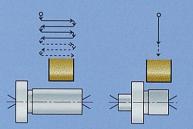
SHIGIYA's precision grinders incorporate a highly sturdy infeed mechanism with a large diameter precision grade ballscrew directly coupled with a high output AC servo drive, thus assuring extremely high repeatability in positioning accuracy.

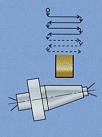
The wheelhead with wide V and flat slide guides provide sufficient load capacity and

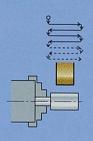
rigidity through the support of a hydro-static lubrication bearing system.

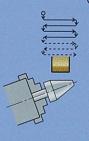
GRINDING PATTERN

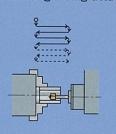
(Live spindle workhead with swivel base is required.)

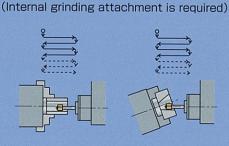












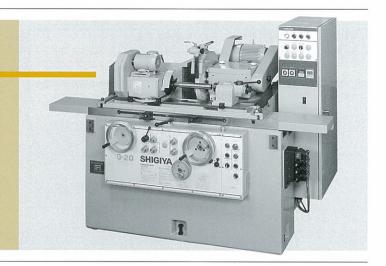
SMALL CYLINDRICAL/UNIVERSAL GRINDER

G-20series

Wide choice, from manual to automatic infeed, to best fit each application.

Highly reliable in delivering precision grinding for small parts.

MODEL	TYPE	
GP-/GU-20/25		
GP/GU-20/50	F·H·A	
SPECIFICATIONS		
SWING OVER TABLE	φ200mm	
CENTER DISTANCE	250 · 500mm	



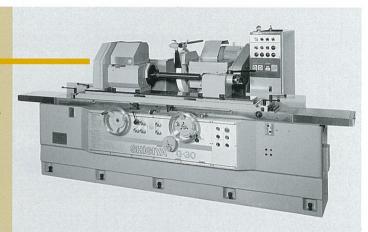
CYLINDRICAL/UNIVERSAL GRINDER

G-30(40)BSERIES

Varies from manual to automatic infeed type.

Huge number of options available ,to satisfy evry cylindrical grinding need. This series is the most long-seller. It proves high quality & reliable operation.

MODEL	TYPE			
GP-/GU-30 (40) B+40/60	F·H·A			
GP-/GU-30 (40) B • 100/150/200	H•A			
SPECIFICATIONS	() G-40B			
SWING OVER TABLE	φ300 (410) mm			
CENTER DISTANCE	400 (330) •600 (530) •1000 (930)			
CENTER DISTANCE	1600 (1530) •2100 (2030) mm			



CYLINDICAL GRINDER

GP-45(55)B_{SERIES}

Versatile, Medium-sized machine.

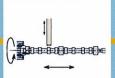
	Easy-to-operate, offering c unchanging grinding precis	onstruction ruggednes	s for		
	Ideal for medium and large	components.			
	MODEL	TYPE			
	GP-45 (55) B+100/150/220/300 /400/500	A			
	SPECIFICATIONS	() GP-55B			
	SWING OVER TABLE	φ450 (550) mm			
	CENTER DISTANCE	1000mm 1500·2200·3000 4000·5000mm			
1	MAX.WORK LOAD (BETWEEN CENTERS)	650kg 1000kg			
		SHIGIYA			

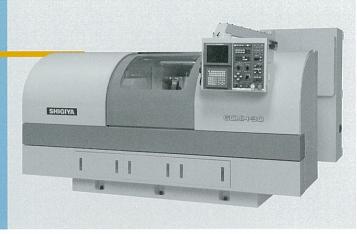
CNC MASTERLESS CAM GRINDER

GCMH-30

Aiming for high quality and high production. SHIGIYA CNC Masterless Cam Shaft Grinder GCMH-30 series is equipped with conversational cam and journal automatic programming system. 350mm(14inch). 100m/sec. (20000ft/min.) CBN wheel capability as standard.

MODEL	
GCMH-30 • 25/60	
SPECIFICATIONS	
SWING OVER TABLE	φ300mm
CENTER DISTANCE	250/630mm
WHEEL SIZE ODXWIDTH	φ350×25mm





Speciality

DEDICATE AND RESIDENCE CHILDERS

Special purpose or dedicated machines are designed to achieve high productivity and grinding quality, thus permitting an ideal fit to the diversified needs from a wide variety of users.

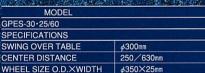


POLYGON-SHAPE PATTERN

CONTRACTOR AND PROPERTY AND PARTY.	White State of the last
1. DIAMOND	8. SUARE +
2. ECCENTRIC +	9. HEXAGON
3. DROP	10. RECTANGLE +
4. TRIANGLE	11. SINGLE D
5. OVAL	12. DOUBLE D
6. TRAPEZOID	13. POLYGON +
7. TRACK	14. PRE SHAPE +

CNC ECCENTRIC PIN/POLYGON GRINDER

Such high performance gunding as eccepture pin, polygon oval will-be done with easy operation. Automatic functions for grinding conditioning and work spiritle speed overruing are equipped with the machine. These provide excellent shaping precision and make the surface smooth.





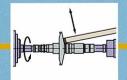
CVT GRINDER

GSF-30

This is the machine designed for CVT shaft journal and face within the one chucking.

Utilizing CBN wheel with programmable wheelhead for hi-speed hi-accuracy plunge, traverse and conturing grinding.

SPECIFICATIONS	
SWING OVER TABLE	φ300mm
CENTER DISTANCE	350mm
WHELL SIZE OD X WIDTH	φ350×25mm



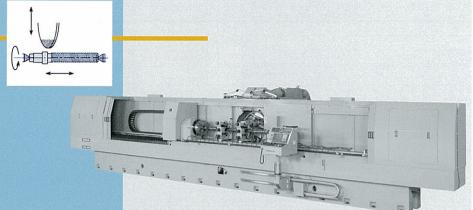


CNC THREAD GRINDER

GSR-48B

This model is a CNC screw thread grinder for heavy duty grinding, which offers highly-efficient grinding of injection screws, etc. With this model, the wheelhead and the NC 2-axis wheel dressing device can be simultaneously rotated by the motor according to the screw lead angle, and thus substantially improving set-up changes.

MODEL	
GSR-48B • 150/400	
SPECIFICATIONS	
SWING OVER TABLE	φ480mm
MAX. GRINDING DIAMETER	φ200mm
CENTER DISTANCE	1500·4000mm



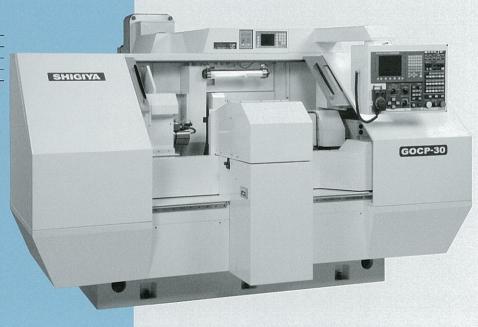
CNC CRANK PIN GRINDER

GOCP-30:50

Because of the special grinding spec, like journal center, GOCP achieves the accurate grinding for any types of eccentric works, like Crankshafts.

SPECIFICATIONS	
MAX. GRINDING DIAMETER	φ300mm
CENTER DISTANCE	500mm
1/2 stroke	50mm





COMPACT CNC RUBBER ROLL GRINDER

GRN-20 SERIES

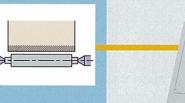
Rubber roll crown grinding is no longer the big issue.

This GRN-20 series CNC compact size machine is

designed specifically for rubber roll grinding, using

SHIGIYA's superior cylindrical grinding manufacturing and technological know-

MODEL	
GRN-20 · 50/25W/34W	
SPECIFICATIONS	
SWING OVER TABLE	φ200mm
CENTER DISTANCE	600mm
WHEEL SIZE ODXWIDTH	φ405×50mm
WHEEL SIZE ODXWIDTH 25W/34W	φ355×250/340mm





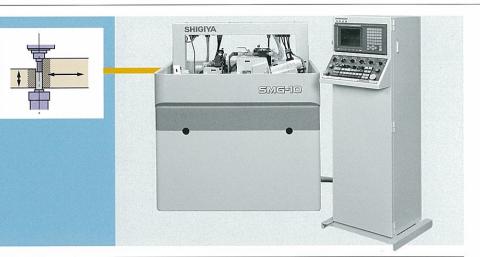
CNC CENTERLESS GRINDER

SMG-10

This is OD/Face centerless grinder equipped with CNC longitudinal control.

Not only do thru feed, and plunge OD, this centerless grinder is able to do oscillate grinding, traverse grinding.

SPECIFICATIONS	
MAX. GRINDING DIAMETER	φ0.5∼10mm
MAX. GRINDING LENGTH	30mm
WHELL SIZE OD X WIDTH	φ255×32×φ127mm

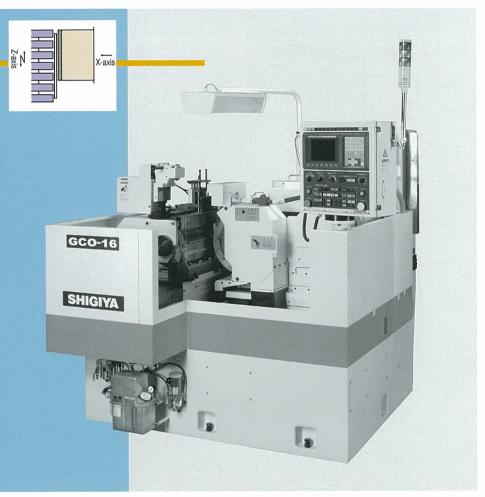


CNC CENTERLESS CYLINDRICAL GRINDER

GCO-16 SERIES

GCO has an innovational concept. In addition, this centerless machine has easy operation.

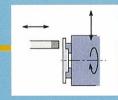
MODEL	
GCO-16 · 15/32	
SPECIFICATIONS	
MAX. GRINDING DIAMETER	φ45mm
MAX. GRINDING LENGTH GCO-16.15	150mm
GCO-16.32	320mm



FACE GRINDER

SG-38B

Faces of bearing spacers, gears, side faces of slitter knives, metal saws, diamond wheels, etc. can be ground to the highest standards.



φ400mm
250mm
φ305×25mm



Automation

AUTOMATED SYSTEM TO ACCOMPLISH COST-SAVING PRODUCTION

One of the current approaches receiving considerable attention as a way to effective production management is cost-saving throughout an organization; searching for the most effective technique in every field. SHIGIYA's cylindrical and universal grinders have excellent precision durability, operability and application flexibility, resuling in high productivity. This productivity can be enhanced by the grinder's easy adaptation, when linked with an industrial robot auto loader and transfer equipment, etc., resulting in a configuration for the most competent automation system. Current market needs, such as low cost production, high quality products,... are satisfied by SHIGIYA with field-verifiable achievements.



ROBOT

- Freedom in job floor layout
- Wide selection of transfer devices
- Flexibility of production system configuration
- A single robot is able to load/ unload parts into/out of a multiple number of machines



GPL-30

TWIN-ARM LOADER

- Application OD grinding locating between centers
- Example:Motorshafts, gear shafts etc.



GANTRY TYPEAUTO LOADER

©CRADLE TYPE AUTO LOADER ©OTHER CUSTOM

LOADER

DESIGNED WORK

90°Indexable work loader

- Application:OD grinds locating on inner dia.
- Example Speedgears,
 oil pump gears, etc.

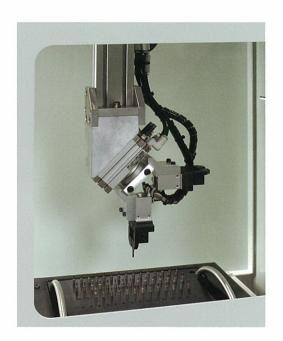
Variety of automation lines can be constructed like clockwork

Integration with CNC Robot



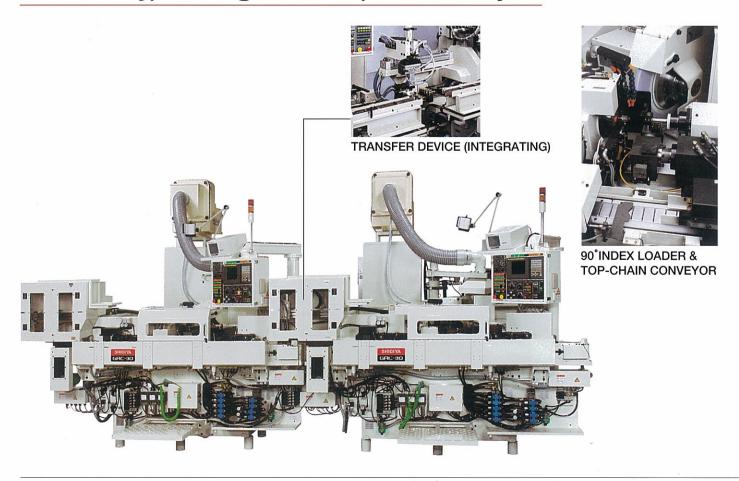


■Integration with CNC controlled gantry loading system





■90°index type loading arm and top chain conveyor







SHIGIYA, #1 variety of product lines, has reinforced the Research and Development department in order to increase its development capacity for high accuracy and quality advancement. SHIGIYA pursues to develop complex/multi-function and high-speed machines for high productivity,cost savings,and super high accuracy requirements. SHIGIYA has also accepted the challenge to develop advanced technologies to cope with new and hard to grind materials and to meet the users' needs precisely and specifically.



Assembly shop



Temperature-controlled factory (Ultra-precision column-type surface grinding machine)

SHIGIYA (USA) LTD. 406 Diens Dr.Wheeling IL 60090,USA



Design room





SHIGIYA MACHINERY WORKS LTD.

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SHIGIYA (USA) LTD.

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