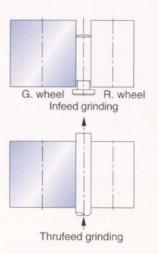
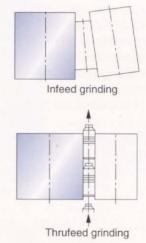
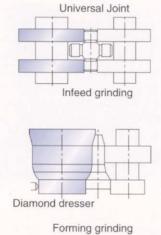


OPERATION APPLICATIONS







FEATURES:

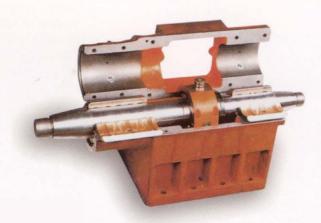
1. Machine main chassis

It is made of high grade cast iron FC-30 melted by advanced induction furnace then cast by resin cores. In order to ensure its stability and rigidity, it is heat-treated by normalizing procedure prior to machining.

2. Wheel spindle.

Wheel spindle is made of SNC-21H, Ni-Cr-Mo alloy steel and case-hardned, carborized, then sub-zero degree treated by computerised controlled isstallation. Surface hardness is more than HCR 62° for a depth of over 1.5mm. Hardness at hub is about HRC 30°, resistance to wear and not easily deformed, Furthermore, the center hiles, thread and outer diameter are precisely ground. Accuracy and long life are guaranteed.





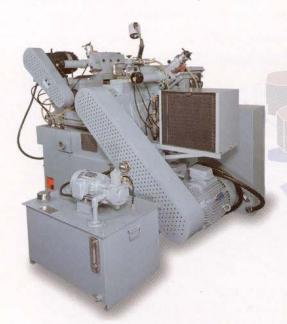
SPINDLE & BEARING





4. Regulating wheel drive

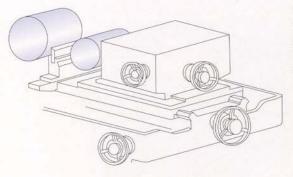
Servo Motor variable speed control from 10 to 250 RPM is used for Regulating wheel which can be adjusted to ideal linear speed. When diameter of Regulating Wheel changes the same linear speed can still be maintained so as grind out the best quality products. Motor is deiven by timing-belt to reduce the vibration and noise. Since motor housing and spindle housing are joined together as a whole body, the regulating wheel tilts the motor also follows. This device completely overcome the problems caused by unparallelism and torsion of belt pulleys and the belt.



5. Lubrication system.

There is a variable vane type oil pump for the hydraulic dressing and enforced spindle lubrication. The oil tank is located outside of the machine for easy maintenance.

Two layers of filter plus pressure regulator to ensure the cleanness of lubrication oil and the consistency of oil film thickness, thus extent the service life of wheel spindle and the steady of accuracy.



6. Slide device.

The lowerside slide consists two "mounted inside base" shaped slides and cuneiform protector to ensure the smooth movement, stable operation and expel the entering of dirts or liquid from the working environment. The swivel slide consists of dovetail flute and it is available for +/- 5 degrees swivel. There is a fine tuning handwheel for precise adjustment. The accuracy per calibration is 0.001mm in diameter for high precision and easy operation.

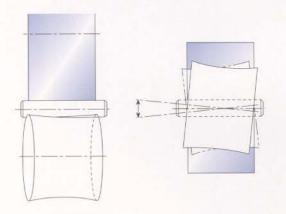


CENTERLESS GRINDING MACHINE



7. Wheel dressing device.

This device is made of FC-30 cast iron and normalized then precisely ground. It is driven by hydraulic system with stepless speed regulator for easy and steady dressing operation. There is a safety handle for emergency purpose. In order to upgrade the straightness and the surface finish on through-feed grinding of long work piece, please adjust the angle (available for +/-5 degree swivel) of dressing device of regulating wheel to shape the regulating wheel as concave barrel type to increase the contacting length while grinding. Refer to fig. 1 for more details.



8. Quality of our machine.

All our machines are strictly inspected in the performance of roundness, straightness and surface roughness on standard workpiece before delivery.

(Performance difference in geometry assurance and surface roughness measurement).

CUT OFF = 0.25MM TRAVERSING LENGTH = 1.0MM MAG = 10000

0.15 um
0.1 pm CONOCOM MAG NO. 20000 K 60890 FILTER SPECIMEN 500 SFT-428
JOES EDITION OR

 $Ra = 0.02 \ \mu m$ $Rt = 0.22 \ \mu m$ $RMS = 0.02 \ \mu m$ $Rz = 0.24 \ \mu m$ $RMAx = 0.28 \ \mu m$ $Rtm = 0.20 \ \mu m$

- Workpiece.Ø 2x 20ℓ
- Metal: SUJ-2.
- Hardness. HRC-62°
- Grinding wheel WA 1000#
- Machine. JHC-18



CENTERLESS GRINDING MACHINE



Standard work rest (dia) Special work rest (dia) Grinding wheel size (dia x width x hole)		ø1~ø25mm	Regulating wheel feed on handwheel	4mm(Rev) 0.02mm(Gra)
		ø25~ø40mm ø305 x 150 x ø120	Regulating micro feed on handwheel Table feed on handwheel	7mm(Rev) 0.05mm(Gra)
Grinding wheel speed		1900 R.P.M.	Dressing handwheel	1.25mm(Rev) 0.01mm(Gra)
Grinding wheel motor		7.5HP	Regulating wheel tilt angle	+5° ~ -3°
Regulating wheel speed	JHC-12BN JHC-12S	20-337 R. P. M. 10-300 R. P. M.	Regulating wheel swivel angle	±5°
Regulating wheel motor	JHC-12BN JHC-12S	1 HP x 6P 2 HP (Servo Motor)	Floor space (approx)	1750x1350x1400mm
Spindle circulating pump motor		1HP	Net weight / Gross weight	1600kgs / 1750kgs
Coolant pump motor		1/8HP	Size of case (approx)	2300x1100x1700mm

[•] Manufacturer reserves the right to change specification without prior notice.



CENTERLESS GRINDING MACHINE



Standard work rest (dia)	ø1~ø50mm	Regulating wheel feed on handwheel	3.5mm(Rev) 0.05mm(Gra)
Special work rest (dia)	ø40~ø100mm	Regulating micro feed on handwheel	0.1mm(Rev) 0.001mm(Gra)
Grinding wheel size (dia x width x hole)	ø455x205xø228.6	Table feed on handwheel	9mm(Rev) 0.05mm(Gra)
Regulating wheel size (dia x width x hole)	ø255x205xø111.2	Table micro feed on handwheel	0.2mm(Rev) 0.001mm(Gra)
Grinding wheel speed	1500R.P.M.	Dressing handwheel	2mm(Rev) 0.01mm(Gra)
Grinding wheel motor	15HP	Regulating wheel tilt angle	+5° ~ -3°
Regulating wheel speed	Variable Speed 10-250 R. P. M.	Regulating wheel swivel angle	±5°
Regulating wheel motor	Servo Motor 4 HP	Floor space (APPROX)	2300x1940x1530mm
Spindle circulating pump motor	1HP	Net weight / Gross weight	2800kgs / 3100kgs
Coolant pump motor	1/4HP	Size of case (APPROX)	3200x1400x1800mm

[•] Manufacturer reserves the right to change specification without prior notice.





Standard work rest (dia)	ø1~ø50mm	Regulating wheel feed on handwheel	3.5mm(Rev) 0.05mm(Gra)
Special work rest (dia)	ø40~ø100mm	Regulating micro feed on handwheel	0.1mm(Rev) 0.001mm(Gra)
Grinding wheel size (dia x width x hole)	ø510x205xø254	Table feed on handwheel	9mm(Rev) 0.05mm(Gra)
Regulating wheel size (dia x width x hole)	ø305x205xø127	Table micro feed on handwheel	0.2mm(Rev) 0.001mm(Gra)
Grinding wheel speed	1350R.P.M.	Dressing handwheel	2mm(Rev) 0.01mm(Gra)
Grinding wheel motor	20HP	Regulating wheel tilt angle	+5° ~ -3°
Regulating wheel speed	Variable Speed 10-250 R. P. M.	Regulating wheel swivel angle	±5°
Regulating wheel motor	Servo Motor 4HP	Floor space (approx)	2300x1940x1530mm
Spindle circulating pump motorr	1HP	Net weight / Gross weight (approx)	3200kgs / 3500kgs
Coolant pump motor	¹ /2HP	Size of case (approx)	3200x1400x1800mm

[•] Manufacturer reserves the right to change specification without prior notice.