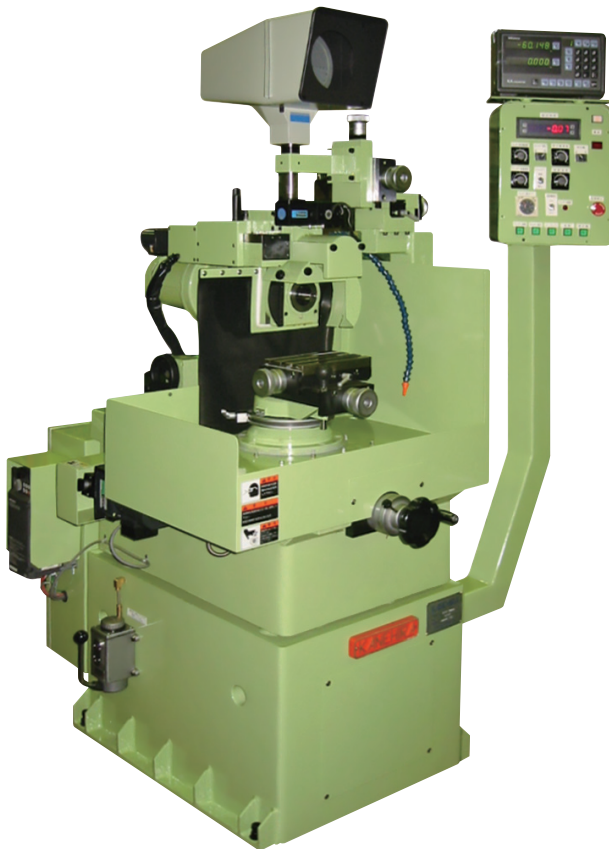


Easily Conquer to Grind Tools of All Hardness

From carbide tool, cermet, CBN to Diamond tool

Compact • Powerful • Economical

RTG-1000 Tool Grinding Machine



KANEHIRA

Merit of RTG-1000

High Precision, High Hardness Structure

RTG1000 is a small and high precision machine, but consists of high hardness structures; the machine body consists of thick castings, steel plates and a bed filled up with concrete.

For that, we guarantee the machine is high hardness and low oscillation.

Also, a wheel spindle with a precision angular-contact-bearing is driven by a powerful motor with 0.75KW (option:1.5KW).

It is guaranteed to grind smoothly from cemented carbide tool, cermet, CBN to diamond tool without chipping.



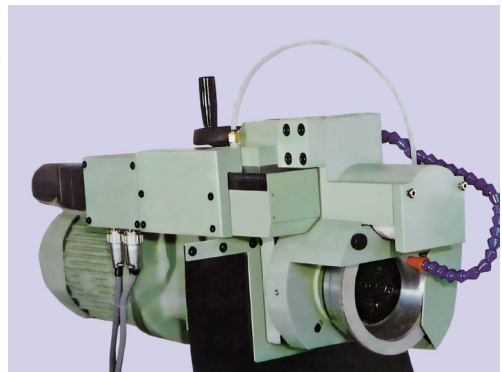
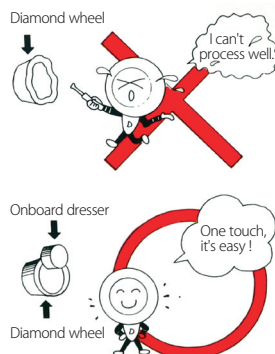
Useful Onboard Dresser

It is said that the most difficult work on processing of cemented carbide tools, especially CBN or diamond tools is the dressing ; removal of the oscillation, keeping of the flatness and reproduction of the sharpness of a diamond wheel.

The dresser (option) provided for the machine is a standard dresser that developed by our experience we've had up to now.

By this, released from troublesome and skilled work, even beginners can process the smooth grinding work.

This dresser can mount on the machine even after installation.



Possible to Measure The Work on The Machine

You can measure the work on the way or after grinding by a projector (option) on the machine.

The projector is able to be attached after installation.

Long Reach is Very Efficient

Oscillation stroke : 50mm

Travel of wheel head : 150mm

The long span of this machine is very effective for long and round works like straight line cutting edges, and reamers or end mills with attachment, and so on.

Infeed by Ballscrew

Infeed is done by using of the high precision ballscrew.

No backlash guarantees the high precision grinding.

Small Space & Excellent Work Efficiency

Floor space of a machine body is small. (910mm×635mm)

Work efficiency is very excellent with operating panel and wheel handles placed functionally.



Fully Functions with Many Attachments

- **Index device**
The compact and short body is possible to spread the work stance.
It can chuck Max. $\phi 42\text{mm}$.
Angle graduation : Min. 1°
Standard division : 12division (30°)
- **Cylindrical grinding attachment**
- **Index device for cylindrical grinding attachment**
Both of them are equipped with SCHAUBLIN W20 (Switzerland) of draw-in collet type with screw.

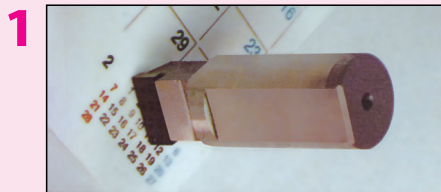


Free capacity with Many Options

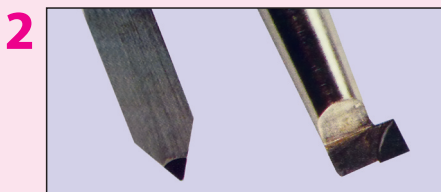
It can combine many options economically suiting for various uses.

- **Digital display**
Quantity of infeed : 0.001mm
Swivel angle : $1'$
It can display quantity of infeed movement at an unit of 1μ by digital.
Also, standard display of swivel angle of the table is an unit of $5'$, but optional swivel goniometer can display at an unit of $1'$.
They improve workability much more precision.
- **Automatic infeed device**
1-axis, NC
It is possible to control high accuracy by servo moter.

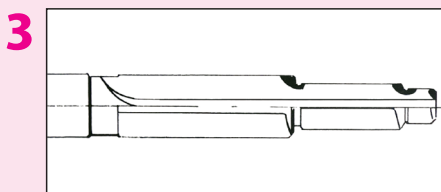
Work samples
by
RTG-1000



- **CBN cutting tool**
(DATA) Grinding area : $6.5\text{mm} \times 16\text{mm}$
Hardness : $4700\text{kg}/\text{cm}^2$
Allowance for machining : 0.1mm
Flatness : 0.001mm
Roughness : $0.125\mu\text{m Ra}$
Grinding time : 3minutes

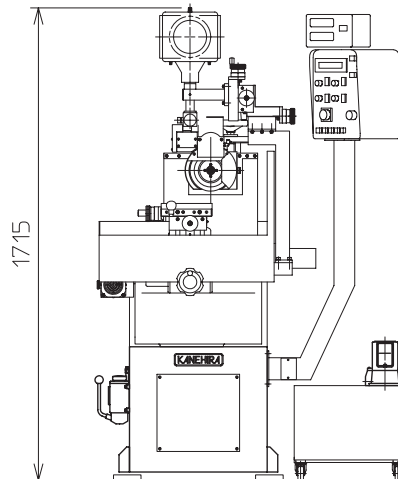
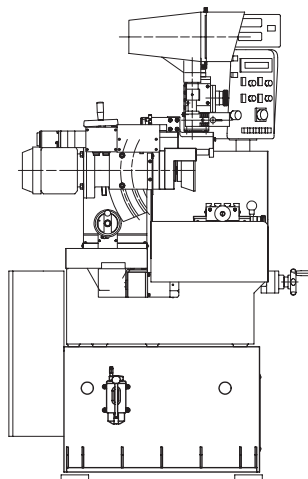
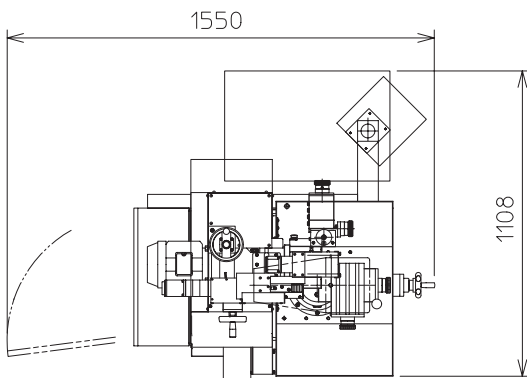


- **PC Diamond triangular & round cutting tools**
It can grind both shoulders angles and nose R at the same time.
It can grind multi-edged tools at high accuracy by using the index device.



- **PC Diamond multi-steps reamers**
It can grind multi-steps reamers by using a index device and a tailstock.
As it uses a large taper cup type ($\phi 150\text{mm}$) wheel, it is possible to grind without an interference at its maximum.

Standard specifications			Option		
1. Wheel spindle	Motor output	4P 0.75kw	1. Projector	Projector screen size : ϕ 150mm	
	Spindle speed	1700rpm		Projector magnification : x20	
	Tilting angle	0~22°		(With special concentric circle screen and epi-illumination)	
2. Wheel head	Oscillation stroke	0~50mm		(Made in Switzerland)	
	Oscillation speed	20 cycles/min.		2. Onboard dresser	With continuous and intermitten dressing functions
	Travel	150mm		Cup-type wheel used	
3. Work table	Cross table travel	40mm(each axis)		Dresser wheel diameter : ϕ 75mm	
	Cross table swivel angles	+100°~0~-100°		3. Wheel spindle motor	1.5kw
	Table handle graduation	0.01mm	4. Variable wheel spindle speed	1000~3000rpm	
4. Angle display	Digital	Minimum 5'	Inverter control		
5. Grinding wheel	Wheel size	Taper cup type ϕ 150x50Tx50.8H	5. Infeed amount digital display	Minimum display unit : 0.001mm	
			6. Swivel angle meter	Minimum display unit : 1'	
6. Machine weight		500kg	7. Oscillation speedup	0~40cycles/min.	
7. Standard accessories	Wheel frange	1set	Oscillation stroke	0~20mm	
	Standard Tools	1set	8. Coolant equipment	60w pump, 60ℓ tank	



Machine dimentions

Optional accessories	
1. Vice A(Work clamp side lock type)	
2. Vice B(Quick change type)	
3. The three dimensional vice	
4. Index device	Angle graduation : Min.1°
	12division
	With standard plate
	Max. ϕ 42 with milling chuck (High precision spring collet type)
5. Cylindrical grinding attachment	
6. Index device for cylindrical grinding attachment	
7. Wheel frange	

Dealership

Manufacture

**KANEHIRA
CORPORATION**

- Diamond wheel automatic forming machine
- Tool grinding machine
- Design & production of special purpose machine
- Design & production of precision measuring device

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