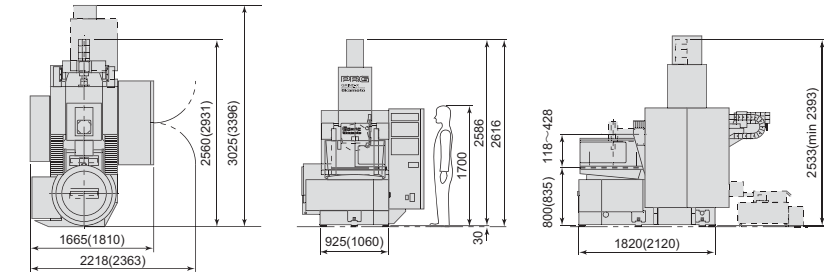
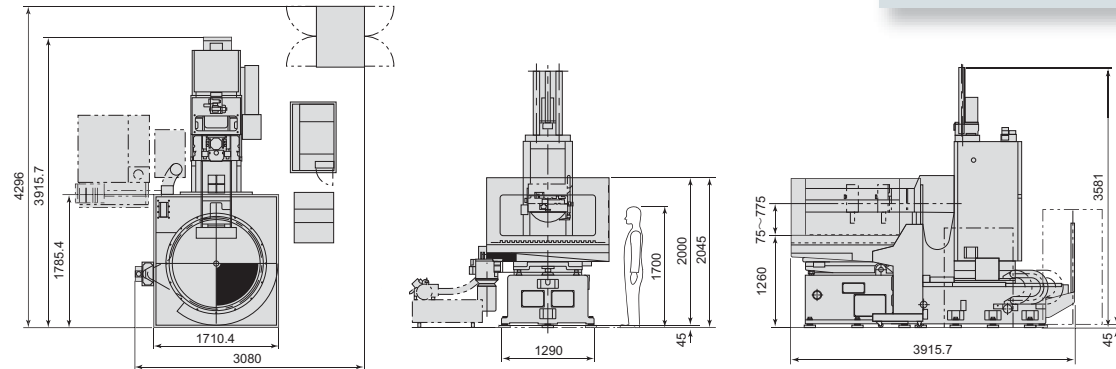


**External view** Figures in ( ) represent PRG8DXNC

**PRG6DXNC/8DXNC**



**PRG10DXNC/12DXNC**



**Standard accessories**

- Electromagnetic chuck
- Automatic demagnetizing with adjustable magnetic power
- Grinding wheel
- Wheel adaptor
- Tabletop dresser with diamond tool
- Automatic circuit breaker
- Chuck interlock
- Half-open table cover
- Necessary tools kit with a tool box
- Levelling bolts and paltes

**Machine specifications**

Item	unit	PRG6DXNC	PRG8DXNC	PRG10DXNC	PRG12DXNC		
Capacity	Diameter of electromagnetic chuck	mm	φ 600	φ 800	φ 1000	φ 1200	
	Swing inside table cover	mm	φ 750	φ 900	φ 952	φ 1130	
	Distance from chuck top to wheel underside	50Hz	mm	-60~250			
		60Hz	mm	-35~275			
	φ 510 wheel	mm			500		
Table load capacity	kg	150	250	1200	1300		
Table	Revolution speed (peripheral speed controlled to be constant, stepless)	min <sup>-1</sup>	20~150	15~130	8~65		
	Inclinable angle	degree	±5	±3	±0.4		
	Drive unit		AC servo motor (NC)				
Column cross feed (X axis)	Travel	mm	450	550	800	860	
	Feed rate under automatic run	set range	mm/min	0~2000			
		override	mm/min	Max.2000(0~150%)			
		rapid feed	mm/min	4000			5000
	Manual pulse feed	per revolution (100 scale)	mm	0.01(×1), 0.1(×10), 1(×100)			
		per scale	mm	0.0001(×1), 0.001(×10), 0.01(×100)			
		jog feed (16 steps)	mm/min	0~2000			
		rapid feed	mm/min	4000			5000
Wheel head vertical feed (Z axis)	Drive unit		AC servo motor (NC)				
	Travel	mm	310			500	
	Feed rate under automatic run	set range	mm/min	0~2000			
		override	mm/min	Max.2000(0~150%)			
		rapid feed	mm/min	4000			
	Manual feed	per revolution	mm	0.01(×1), 0.1(×10), 1(×100)			
		per scale	mm	0.0001(×1), 0.001(×10), 0.01(×100)			
		jog feed (16 steps)	mm/min	0~2000			
rapid feed		mm/min	4000				
Grinding wheel	Diameter X width X bore <50/60Hz>	mm	φ 355/φ 305 X 38(max.50) X φ 127		φ 510 X 50(OP:max.75) X φ 127		
	Revolution speed <50/60Hz>	min <sup>-1</sup>	1500/1800		1000/1200		
Motor	Grinding wheel spindle	kW	7.5				
	Rotary table	kW	2.2	3.7	7.5		
Machine space	Width X depth X height	mm	1665 X 2560 X 2586	1810 X 2931 X 2586	4535 X 4296 X 3581		
Weight	Machine proper	kg	4000	5000	12800	13000	

**Optional accessories**

- Coolant unit
  - With magnetic separator
  - With dust suction unit and magnetic separator
  - With magnetic separator and automatic water temperature regulator
- Overhead wheel dresser
- Wheel adaptor
- GRIND-X micro balancer (MB-3)
- Wheel balancing apparatus with balancing arbor
- Balance arbor for BW-360
- Wheel spindle motor 11kW
- Wheel spindle inverter
  - 7.5kW 1000~2500 min<sup>-1</sup>
  - 11kW 1000~2500 min<sup>-1</sup>
- Wheel spindle meter relay
- Table tachometer
- Automatic oil temperature regulator
- Run hour meter and work counter
- Manual interruption
- Tape memory length
- Integrating run hour meter for hydraulic unit and wheel spindle
- Work end automatic power off unit
- Cycle completion buzzer
- Work light (Z light, halogen light)
- 3-color signal tower
- Calendar timer
- Designated machine color
- 8.4" color LCD display

**GRIND-X**  
OKAMOTO PRECISION SYSTEMS  
**Okamoto**

**OKAMOTO MACHINE TOOL WORKS, LTD.**

3-5-7 Nakamachidai, Tsuzuki-ku, Yokohama,  
Kanagawa, 224-0041 Japan  
TEL:+81-45-949-3881 FAX:+81-45-949-3787

<http://www.okamoto.co.jp>

**CNC ROTARY SURFACE GRINDING MACHINE**

**PRG-DXNC**  
SERIES



**CAUTION**

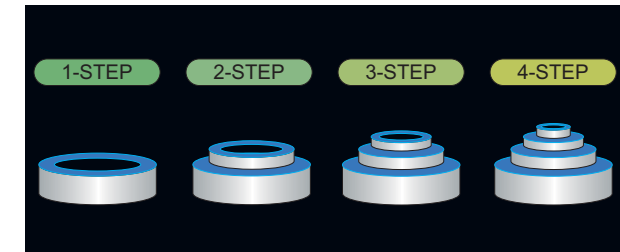
\*When and before using our products, you are requested to well go through the articles on danger, warning and attention for the sake of safety described in operation manual attached to the machine and also in the warning plates mounted on the machine.  
\*Specifications subject to change without notice.  
\*When a product manufactured at our factory comes under the Foreign Exchange And Foreign Trade Control Law and is exported or carried overseas, it is necessary to receive permission or approval of the Japanese Government.  
Printed in Japan in July 2010

**Okamoto**

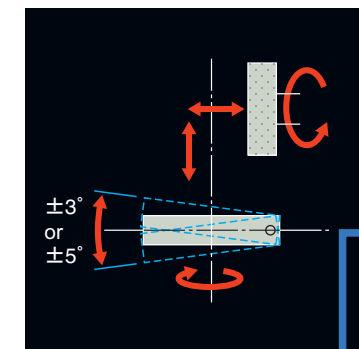
# CNC rotary surface grinding with 2-axis simultaneously controlled attains higher accuracy and much higher productivity. And dynamically accelerates sophisticated quality grinding with coverage from single parts to mass production.

## Step-grinding upto 4 steps with high accuracy and high Speed

Multi-step grinding is one of the big advantages PRG-DXNC series have. CNC 2-axis simultaneous control enables grinding upto 4 steps, thus so widely expands shape coverage of workpieces.



Simple adjustment permits table to incline by  $\pm 5^\circ$  or  $\pm 3^\circ$  respectively for PRG6DXNC or PRG8DXNC. So best suited to tapered parts with interior convex or concave, or blades.



## Unique machine construction supporting high precision grinding

Novel system is employed for wheel head moving. All our advanced design know-how utilized in our machines line-up of high precision specs are made the most of therein. Our original unique construction unparalleled with the conventional one ensures highly performed, excellent operation.

Employing permanent grease seal system and also super-precision class angular contact ball bearing for the wheel spindle, PRG-DXNC is successful in increasing surface accuracy as well as streamlining troublesome maintenance. Metal bearing is optionally available at request.



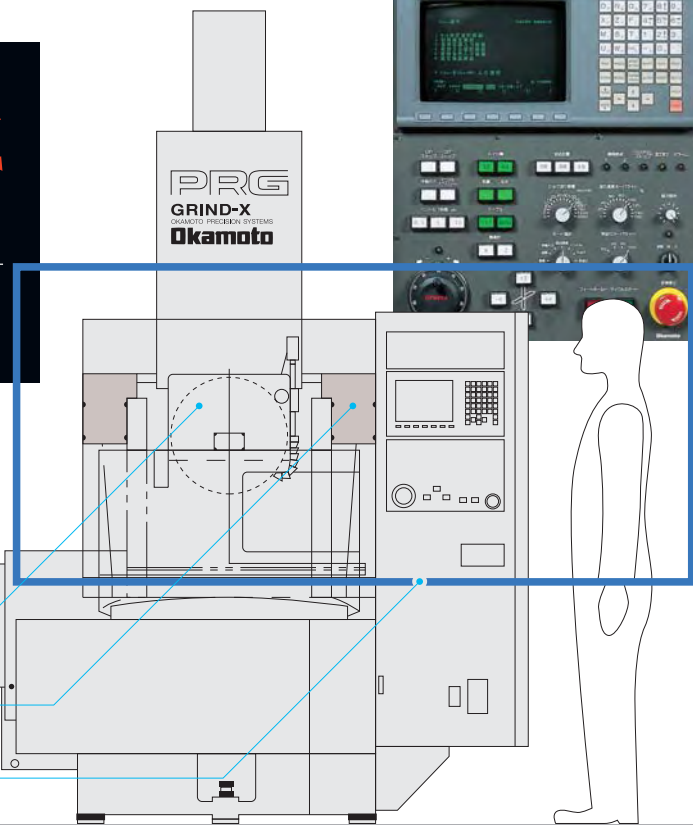
TARKAITE is adopted on slide surface, which therefore leads to stable revolution for long time.

In order to keep peripheral speed at the grinding section constant table revolution varies synchronously with wheel crossfeed moving from periphery to center, thus crossfeed rate per table revolution is controlled to be constant.

Our unique wheel head moving system

TARKAITE slide surface

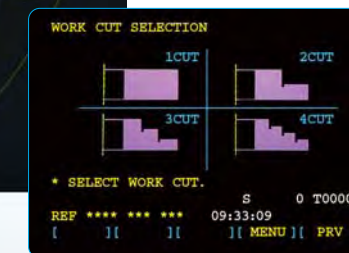
Sophisticatedly arranged operation zone



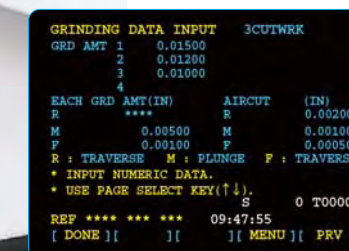
Easy operation through graphic conversational input system and 2-axis simultaneous control performing high efficiency and high speed prove out unrivaled power for mass production grinding.



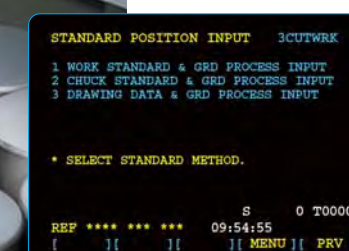
Select grinding mode



Set form data



Enter grinding condition

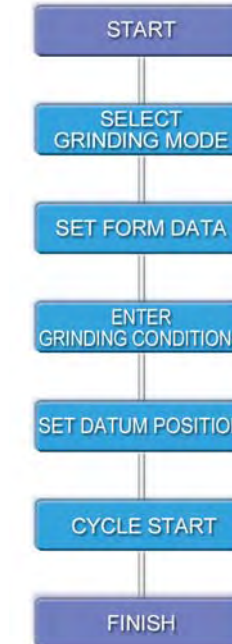


Set datum position

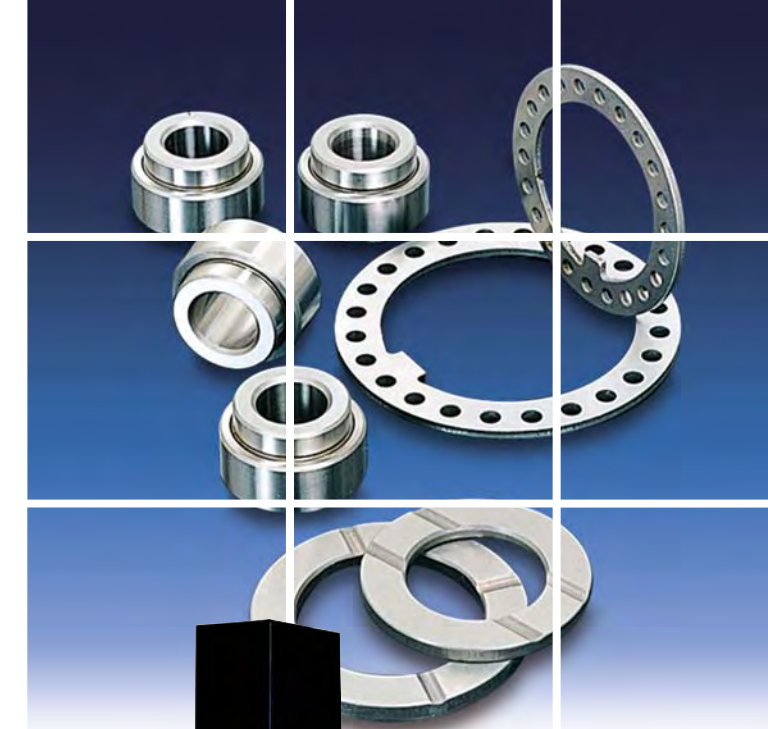
## Graphic conversational input system permits the beginner to operate very easily

Easy operation unnecessary skilled operator. Easy operation system, which has been matured out through our efforts to innovate our grinder series, take conversational system and eliminate programming. Since grinding menu is programmed in-built, you can start grinding simply with responding to questions prompted on the display. Conversational system software quite workably designed presents extremely comfortable and optimized grinding.

## Grinding process simplified



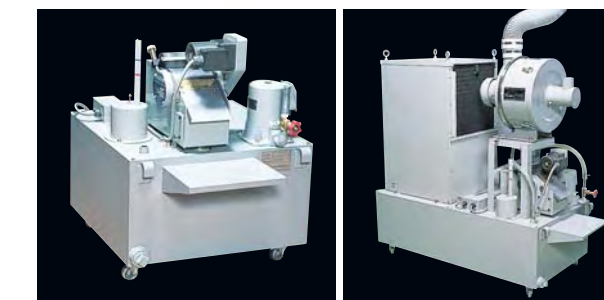
Machine becomes ready to start only by determining 4 items of conditions working from start to finish. Then just press the cycle start button, and the machine runs automatically.



## Variety of optional accessories workable for any needs of grinding operation

### Coolant unit

- [ left ] Equipped with magnetic separator
- [ right ] Equipped with magnetic separator, magnetic suction unit and automatic water temperature regulator



# CNC ROTARY SURFACE GRINDING MACHINE PRG-DXNC series