



TOP WORK
ISO 9001 • CE

SI series

PCD & PCBN Grinder

HIGH PRECISION
HIGH QUALITY



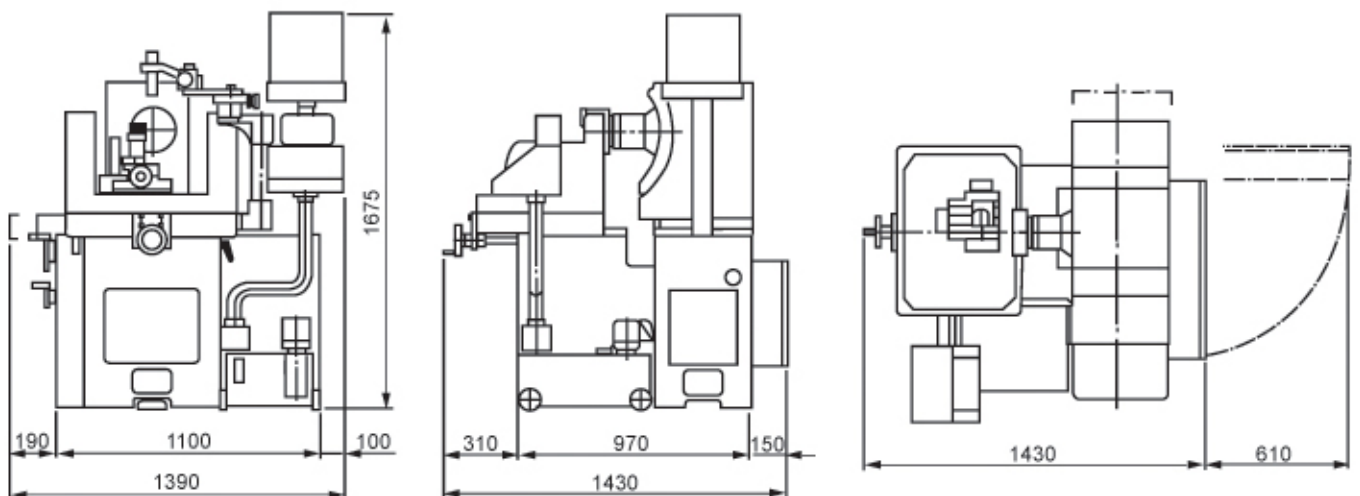
Machine Specifications

Unit mm(in)

		SI-301	SI-302	SI-303	SI-305
General Capacity	Distance Table Between Centers	150mm (5.9)			
	Max. Grinding Diameter	150mm (5.9)			
Grinding Wheelhead Spindle	Wheel Diameter (Dia. x Width x Bore)	150x40x40mm (5.9x1.5x1.5)			
	Wheel Speed	3000rpm(60HZ) 2850rpm(50HZ)			
	Sliding Angle	-3°~+25°			
	X Axis Rapid Feedrate	5m/min(196)			
B Axis	Rotary Angle	-120°~+120°			
Axis Motion	X-Axis Motion	150mm(7.9)			
	Y-Axis Motion	50(2)			
	B-Axis Motion	-3°~+25°			
	A-Axis Motion	-120°~+120°			
	Min. Increment Infeed Rate	0.001mm(0.0001)			
Power System	Workhead Spindle Motor	2.5kw(3hp)			
	Lubrication Motor	0.19kw (1/4hp)			
	Coolant Motor	0.19kw(1/4hp)			
	X Axis Servomotor	0.8kw(1.0hp)Mitsubishi	0.8kw(1.0hp)Mitsubishi	0.8kw(1.0hp)Mitsubishi	0.8kw(1.0hp)
	Y Axis Servomotor	Manual	0.8kw(1.0hp)Mitsubishi	0.8kw(1.0hp)Mitsubishi	0.8kw(1.0hp)
	A Axis Servomotor	Manual	Manual	0.8kw(1.0hp)Mitsubishi	0.8kw(1.0hp)
	B Axis Servomotor	Manual	Manual	Manual	0.8kw(1.0hp)
Machine Space	Net Weight	1500kg			
	Floor Space	1300x1300x1900mm			

All specifications are subject to change without prior notice.

Main Dimensions



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SI series PCD & PCBN Grinder



Designed with advanced concepts in mind, the TOPWORK SI-30 CNC PCD & PCBN Grinder features are ruggedly constructed through for outstanding rigidity and stability. The cast iron base provides rigidity and minimizes vibration.

Full CNC servo control on axis combined with the use of rigid ball screw and linear guides to ensure operational smoothness and maximum stability.

Control

- Mitsubishi software design.
- Very easy to learn and operate.
- Save macro programs be easily applied.



Wheel Grinding Spindle

- The spindle pivots on 4pcs class P4 precision angular bearing.
- Precision angular contact ball bearings.
- The spindle is sealed with grease and doesn't need further lubrication.
- Dynamically balanced by high precision instruments.

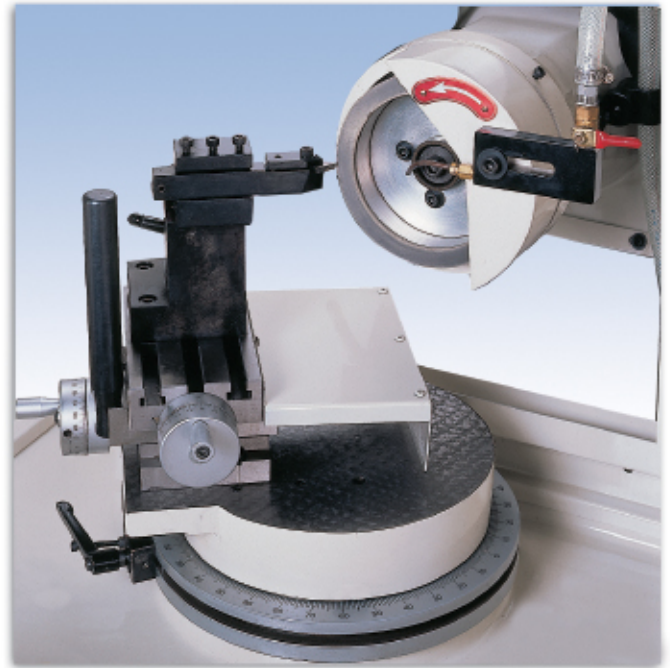
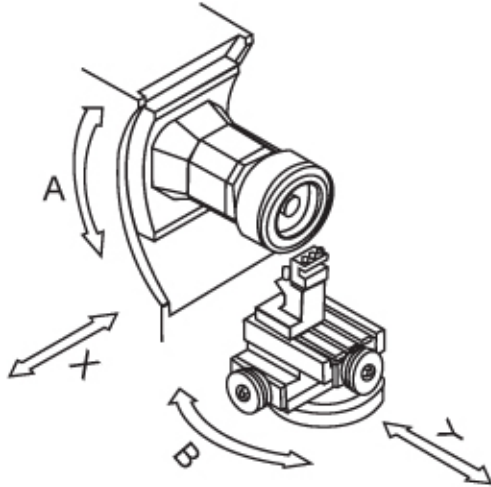
Linear Slide

- X and Z axis linear slides driven by high precision ball screws.
- Central lubrication system ensures maintenance-free operations.
- Backlash-free operations.



FEATURES

- Quickly clamping fixture for rapid clamping of tool stand,
- Production and regrinding of cutting tools made from PCD, PCBN, carbide and other materials.
- Grinding angles and radius on standard and special inserts.



C.C.D. camera system

C.C.D. camera system with TFT monitor. The system moves with the worktable for easy setup and for inspection during and after grinding. Monitor scope with zoom system for adjustable from 28-180 and even 0.05 radius can be ground and inspected.



Extra Attachments

Work light	1 pcs.
Coolant tank without filter	1 set
Quickly clamping fixture	16.20.25 mm
Tool stand	1 set
Angle display	1 pcs.
C.C.D. camera system with zoom system for adjustable from 28-180.	1 pcs.
15" TFT	1 pcs.

Optional

Variable speed attachment (1000~4000 RPM)	
200 liter oil capacity cooler is 2 sets of cylindrical filters. (1 μ m and 5 μ m filter).	
Quickly clamping fixture	8,12,32 mm

