

Model **PRB** PROMELTA* SYSTEM

A system to enable surface grinding of a wide range of materials from magnetic materials to such non-magnetic materials as aluminum, stainless steel and ceramic.

[Features]

■ A wide variety of workpieces!

Workpieces of such non-magnetic materials as plastic, aluminum, stainless steel, ceramic and glass that are difficult to hold and secure with conventional chucks can be secured easily. ※ In particular, this system is most suitable for holding small workpieces that cannot be held by magnetic chucks.

Also, negative impact on accuracy due to warping of workpieces, which is unavoidable when mechanical clamps are used, has been eliminated.

It cannot be used with the following workpieces in some cases:

- Workpieces having abrasive-like surface (e.g. plaster)
- Workpieces warped largely (more than 0.5 mm)
- Thin (less than 1.0 mm) workpieces such as stainless steel that tend to be distorted by grinding heat
- Some resins such as Teflon

■ Easy installation

The main unit can be installed on a machine by use of T-slots. Also since its mounting face is made of iron, it can easily be mounted on your magnetic chuck.

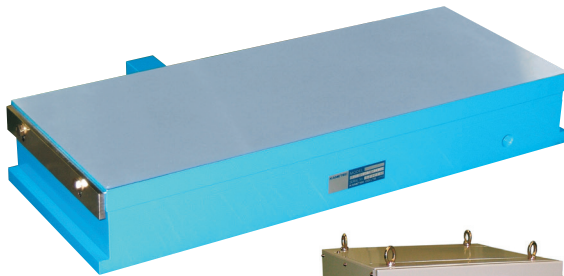
■ A remote control box included!

A remote control box for controlling the chuck unit comes as a standard accessory, which can be installed in an easy-to-operate place.

Operation box size: Width 80 × height 110 × depth 50 mm.

● Exclusive to wet grinding

The wax used with this system is susceptible to impact and therefore cannot be used for cutting as a rule. In dry operations, the temperature of workpieces rises to melt the wax and therefore, it cannot be used.



PRB-2050A <Chuck part>



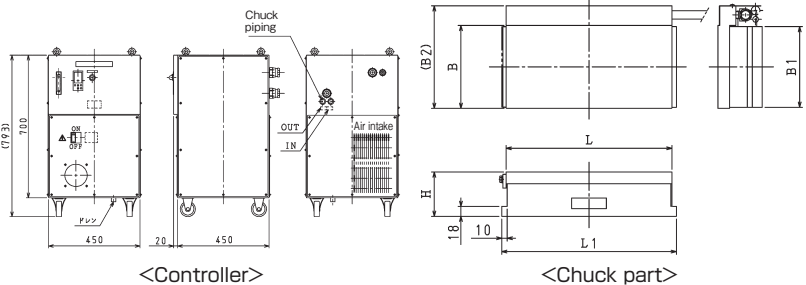
PRC-220B <Controller>



Model	Dimensions [mm (in)]							Rated Current	Mass
	B	B ₁	B ₂	L	L ₁	H	H		
PRB-1218A	125 (4.92)	121 (4.76)	161 (6.33)	177 (6.96)	193 (7.59)	77 (3.03)	77 (3.03)	3A	14kg/ 30 lb
PRB-1530A	150 (5.90)	146 (5.74)	186 (7.32)	300 (11.8)	316 (12.4)	80 (3.14)	80 (3.14)	7A	28kg/ 61 lb
PRB-2050A	200 (7.87)	196 (7.71)	255 (10.0)	500 (19.6)	516 (20.3)			17A	55kg/ 121 lb

※ Three pieces of standard type fixing agent (1 piece: φ30×160) are included. When they have been used up, please purchase them.

Model	Input		Output		Mass
	Voltage		Voltage	Current	
PRC-220B	3-phase 200 VAC, 50/60 Hz		200 VAC	20A	120kg/264 lb

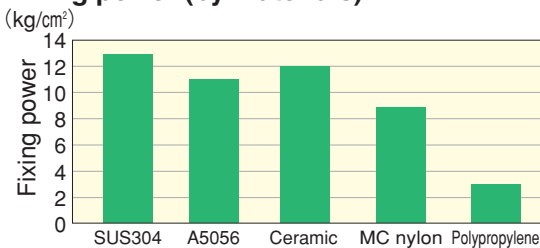


Securing method		PROMELTA System	Refrigerating Chuck	Vacuum Chuck	Magnetic Chuck (Electromagnetic/Permanent)	Mechanical Clamp (e.g. Vice)
Workpiece to fix	Material	○	○	○	× (Magnetic materials only)	△ (Soft materials not possible)
	Size/plate thickness	○	○	△ (Small workpieces not possible)	△	△ (Thin sheets not possible)
	Material distortion	○	○	×	△	△
Operability	Pretreatment	△ (Cleaning required)	△	△ (Unused hole masking)	○	○
	Fixing time	△	△	○	○	○
	Releasing time	△	△	○	○	○
	Post treatment	△ (Cleaning required)	△	○	○	○
Grinding condition	Infeed per pass (Fixing power stability)	○	△ (Weak to grinding heat)	○	○	○
	Wet operations	○	×	○	○	○
Grinding accuracy (Workpiece distortion when clamped)		○	○	△	△ (○ depending on grinding method)	○
		○	○	○	○	○
Cost	Running cost	○	○	○	○	○
	Facility scale	△	△	○	○	○
	System price	△	△	○	○	○

■ Fixing agent

Melting temperature 65°C Its film thickness is 5 to 10μm.

Fixing power (by materials)



Fixing agent: φ30×160 mm (100 g × 3 pieces/set)

Note: These are sold only to the purchaser of the PROMELTA* SYSTEM.

● For removing fixing agent remaining after securing workpieces, cleaning liquid and ultrasonic cleaner (optional) are available.



Fixing agent for PROMELTA SYSTEM



Ultrasonic cleaner (optional)

※Note: The grinding accuracy is presented for reference only. It varies according to shapes, materials and sizes of workpieces and grinding environment such as machines.