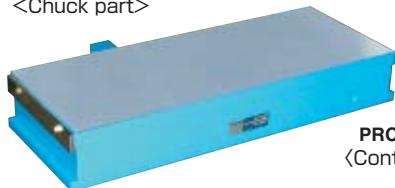


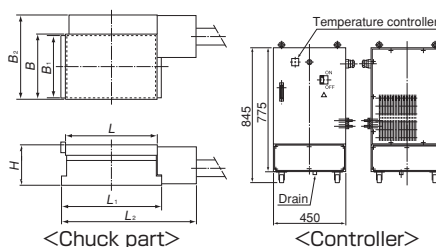
Model PRB PROMELTA\* SYSTEM

A system to enable a wide range of precision grinding of any materials; nonferrous, resin or ceramic.

PRB-2050A  
<Chuck part>



PRC-220B  
<Controller>



Model	Dimensions								Rated Current	Mass
	B	B <sub>1</sub>	B <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	H			
PRB-1218A	125 (4.92)	121 (4.76)	161 (6.33)	177 (6.96)	193 (7.59)	260 (10.2)	77 (3.03)	3A	14kg/ 30 lb	
PRB-1530A	150 (5.90)	146 (5.74)	186 (6.07)	300 (11.8)	316 (12.4)	-	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

Two types of fixing agent; standard type and low-viscosity type (high precision type) available!

Standard type

Melting temperature 65°C

The fixing power is high, but its film thickness is 5 to 10 μm.

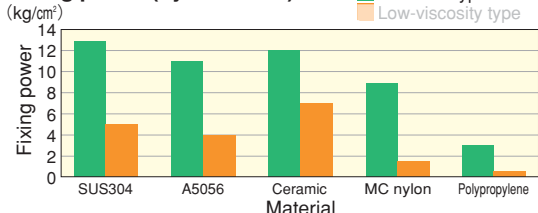
Low-viscosity type (High precision type)

Melting temperature 45°C

The fixing power is low, but its film thickness is only 1 to 2 μm, which makes this type suitable for finishing operations. The following graphs indicate the holding power of the waxes (per cm<sup>2</sup>) by materials.

Discontinued sale

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, a high-performance cleaner and ultrasonic cleaner (optional) are available.

[Features]

A wide variety of workpieces!

Workpieces of such nonmagnetic materials as plastic, aluminum, stainless steel, ceramic and glass that are difficult to hold during grinding can be held easily. In particular, this system is suitable for small workpieces that cannot be held by magnetic chucks. ※1

Significantly improved grinding accuracy!

Highly precise grinding in the order of micron achievable!

- The bonding film that affects grinding accuracy has been made thinner by using "workpiece fixing agent" newly developed by KANETEC to realize a grinding accuracy in the order of micron. Also it has been made possible to secure workpieces at low temperature close to room temperature and a difference in temperature during securing and releasing workpieces has been reduced to minimize thermal impact on workpieces. Wet operations are allowed. ※2
- Adverse influence on accuracy due to warping of workpieces, which is unavoidable when mechanical clamps are used, has been eliminated.
- The work face is made of iron in consideration of accuracy stability and wear resistance. The work face accuracy can be recovered by regrinding the work face.

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.

Compact controller

The controller measures as small as 450 mm wide × 450 mm deep × 845 mm high and can be installed in any place. It comes with a remote operation box.

- ※1 Both magnetic and nonmagnetic materials can be secured. In particular, this system is suitable for grinding of cemented carbide, ceramic, stainless steel and aluminum. However, 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
- ※2 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.

Item	Securing method	PROMELTA System				
		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 marking)	○	○
	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	△	△	○	○	○

For test grinding

Material	Workpiece Size and shape	Method	Grinding			※Grinding Accuracy		Material	Workpiece Size and shape	Method	Grinding			※Grinding Accuracy	
			Grinding wheel	Fixing agent	Flatness	Parallelism	Grinding wheel				Fixing agent	Flatness	Parallelism		
SKD	65×65×15 (mm)	Surface grinding 2 μ per pass	Diamond grinding wheel	Both sides low viscosity	2 μ	3 μ	Cemented carbide	10×20×5 (mm)	Surface grinding 2 μ per pass	Diamond grinding wheel	Both sides low viscosity	1 μ	1 μ		
Ceramic (Alumina)	50×50×10 (mm)	Surface grinding 2 μ per pass	Diamond grinding wheel	Both sides low viscosity	2 μ	3 μ	S50C	12×100×6 (mm)	Surface grinding 2 μ per pass	GC grinding wheel	Both sides low viscosity	2 μ	3 μ		
Carbon	50×50×5 (mm)	Surface grinding	GC grinding wheel	{Face A} Standard 2 μ per pass {Face B} Low viscosity 2 μ per pass	1.5 μ	3 μ	SUS304	φ72×20 (mm)	Surface grinding	GC grinding wheel	Standard	1 μ	3 μ		

※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.

ELECTROMAGNETIC CHUCKS  
MAGNETIC CHUCKS  
CHUCK CONTROLLERS  
PERMANENT ELECTROMAGNETIC CHUCKS  
PERMANENT ELECTROMAGNETIC CHUCKS  
BLOCKS FOR MC  
VACUUM CHUCKS  
PROMELTA\* SYSTEM  
SINE BAR CHUCKS  
BLOCKS, HOLDERS, MINI CHUCKS  
HOLDING TOOLS  
MEASURING TOOL HOLDERS  
MAGNETIC HOLDERS  
MAGNETIC TOOLS