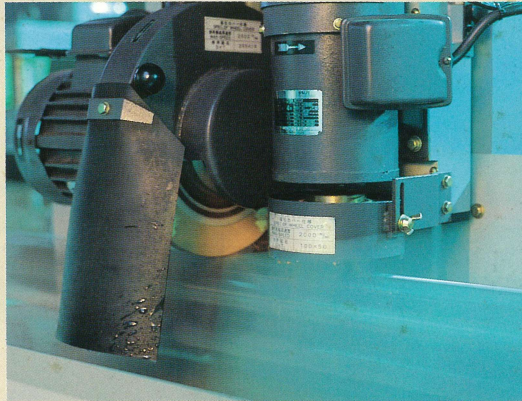


WOODWORKING SUPER SURFACER



MARUNAKA TEKKOSHO INC.

The Royal Phoenix III has a large and spacious turntable relatively to the length of the knife. As a result, wood shavings can be discharged very smoothly in both forward and reverse operation. Besides, the surfacer is not clogged with shavings nor has any

inferior grain due to shavings clogged but ensures a lustrous surface finish. Employing an open side system and an EG knife stock together with the powerful material feeding and cutting capabilities facilitates to handle the Royal Phoenix III.

ROYAL PHOENIX-III



■ SPECIFICATIONS

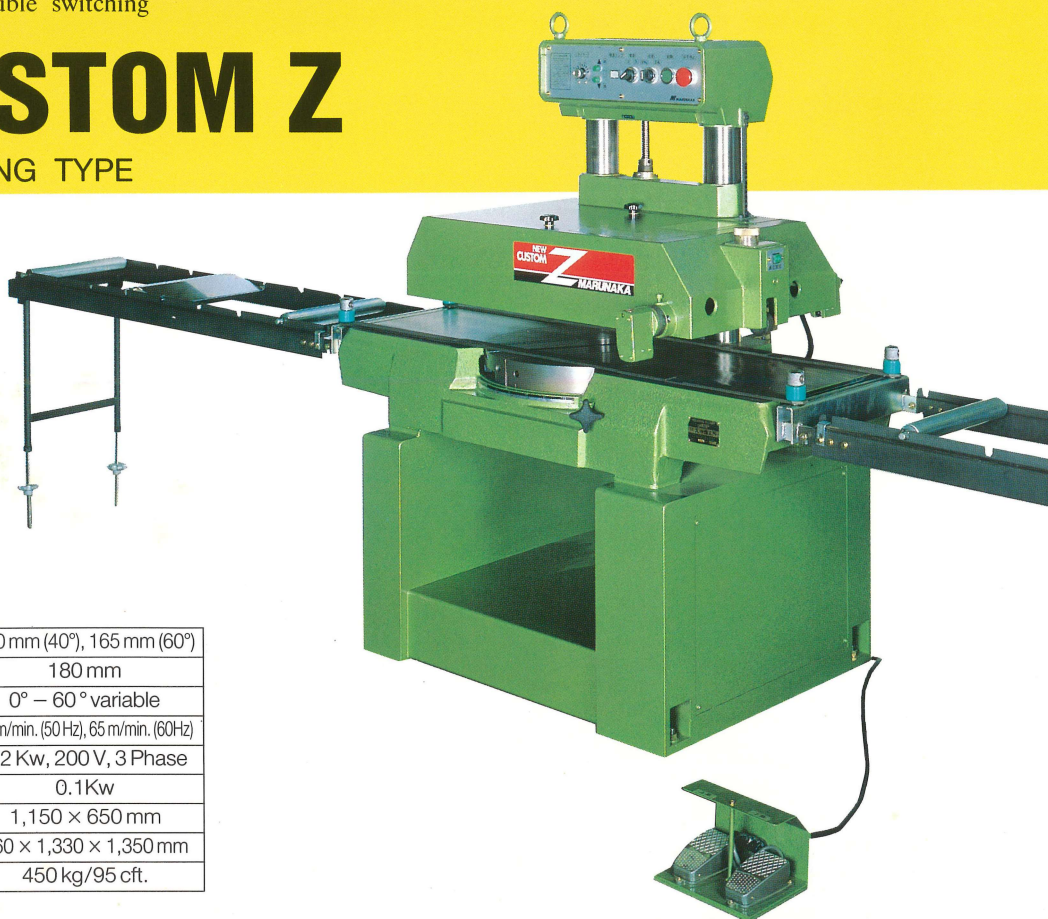
| | |
|--|--------------------------------------|
| Work capacity: max. width | 250 mm (40°), 165 mm (60°) |
| Max. thickness | 180 mm |
| Knife bias angle | 0° — 60° variable |
| Material feed speed | 75 m/min. (50 Hz), 90 m/min. (60 Hz) |
| Power required (feed motor) | 1.5 Kw/2.2 Kw, 200 V, 3 Phase |
| Table size (overall length × overall height) | 1,150 × 650 mm |
| Machine size (width × length × height) | 850 × 1,245 × 1,270 mm |
| Net weight/Packing volume | 405 kg/Approx. 75 cft. |

Large body displays extremely high rigidity and excellent material feeding capability. Wide material feeding area provides stable cutting which promises a beautiful finishing. Material feed direction switching uses a unique double switching

system which eliminates sudden braking. Good chip disposal is ensured by U-type base which improves workability considerably.

NEW CUSTOM Z

RECIPROCATING PLANING TYPE



■ SPECIFICATIONS

| | |
|--|--------------------------------------|
| Work capacity: max. width | 250 mm (40°), 165 mm (60°) |
| Max. thickness | 180 mm |
| Knife bias angle | 0° — 60° variable |
| Material feed speed | 54 m/min. (50 Hz), 65 m/min. (60 Hz) |
| Power required: feed motor | 2.2 Kw, 200 V, 3 Phase |
| head elevation motor | 0.1Kw |
| Table size (overall length × overall height) | 1,150 × 650 mm |
| Machine size (width × length × height) | 860 × 1,330 × 1,350 mm |
| Net weight/Packing volume | 450 kg/95 cft. |

The Royal 14FX, an open side type surfacer, is capable of working even a wider material than the table width. This facilitates machine adjustment and maintenance as well as operation. The turntable permits the bias angle to vary from 0° to 60° according to the material.

Among many other features, a height-fixed table is employed in the Royal 14FX. In addition, it is considerably easy to operate, with switches gathered in a switch box on your side.

ROYAL-14FX



■SPECIFICATIONS

| | |
|--|---------------------------------------|
| Work capacity: max. width | 350 mm (45°), 250 mm (60°) |
| Max. thickness | 240 mm |
| Knife bias angle | 0°–60° variable |
| Material feed speed | 25 m, 50 m (50 Hz) 30 m, 60 m (60 Hz) |
| Power required: feed motor | 3.7 Kw, 200 V, 3 Phase |
| Head elevation motor | 0.2 Kw, 200 V, 3 Phase |
| Table size (overall length × overall height) | 1,170 × 680 mm |
| Machine size (width × length × height) | 1,030 × 1,330 × 1,600 mm |
| Net weight/Packing volume | 640 kg/Approx. 113 cft. |

To strengthen the material feeding capability, the Royal 18FX has an enlarged body of rigid construction. With the material feed area so expanded, the Royal 18FX is capable of cutting a 450 mm wide work at the maximum with stability.

And the large spacious table as compared with the knife length allows shavings to be discharged smoothly.

ROYAL – 18 FX



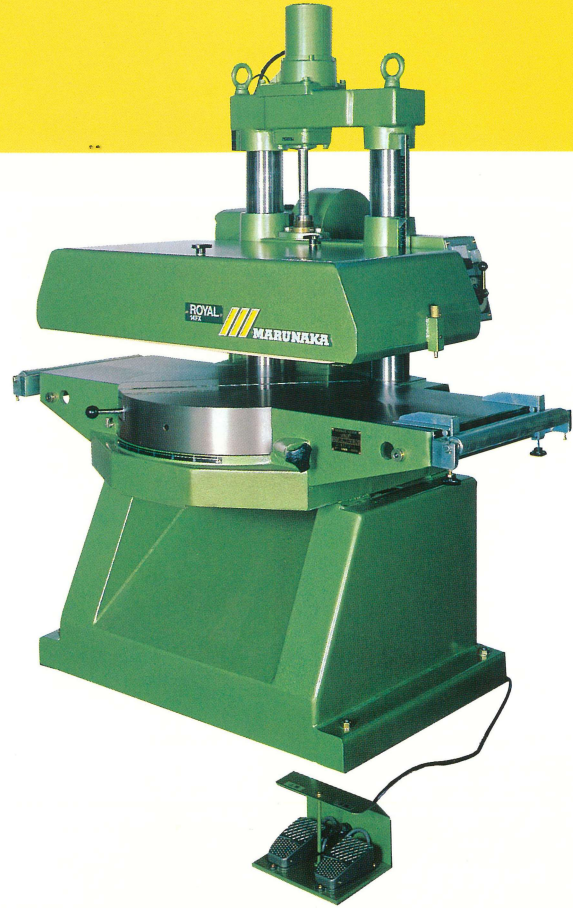
■SPECIFICATIONS

| | |
|--|--------------------------------------|
| Work capacity: max. width | 450 mm (45°), 320 mm (60°) |
| Max. thickness | 240 mm |
| Knife bias angle | 0° – 60° variable |
| Material feed speed | 60 m/min. (60 Hz), 50 m/min. (50 Hz) |
| Power required: feed motor | 5.5 Kw |
| head elevation motor | 0.4 Kw |
| Table size (overall length × overall height) | 1,500 × 680 mm |
| Machine size (width × length × height) | 1,300 × 1,600 × 1,730 mm |
| Net weight/Packing volume | 1,140 kg/Approx. 230 cft. |

The Royal 14FX, an open side type surfer, is capable of working even a wider material than the table width. This facilitates machine adjustment and maintenance as well as operation. The turntable permits the bias angle to vary from 0° to 60° according to the material.

Among many other features, a height-fixed table is employed in the Royal 14FX. In addition, it is considerably easy to operate, with switches gathered in a switch box on your side.

ROYAL-14FX



■SPECIFICATIONS

| | |
|--|---------------------------------------|
| Work capacity: max. width | 350 mm (45°), 250 mm (60°) |
| Max. thickness | 240 mm |
| Knife bias angle | 0°–60° variable |
| Material feed speed | 25 m, 50 m (50 Hz) 30 m, 60 m (60 Hz) |
| Power required: feed motor | 3.7 Kw, 200 V, 3 Phase |
| Head elevation motor | 0.2Kw, 200V, 3 Phase |
| Table size (overall length × overall height) | 1,170 × 680 mm |
| Machine size (width × length × height) | 1,030 × 1,330 × 1,600 mm |
| Net weight/Packing volume | 640 kg/Approx. 113 cft. |

To strengthen the material feeding capability, the Royal 18FX has an enlarged body of rigid construction. With the material feed area so expanded, the Royal 18FX is capable of cutting a 450 mm wide work at the maximum with stability.

And the large spacious table as compared with the knife length allows shavings to be discharged smoothly.

ROYAL – 18 FX



■SPECIFICATIONS

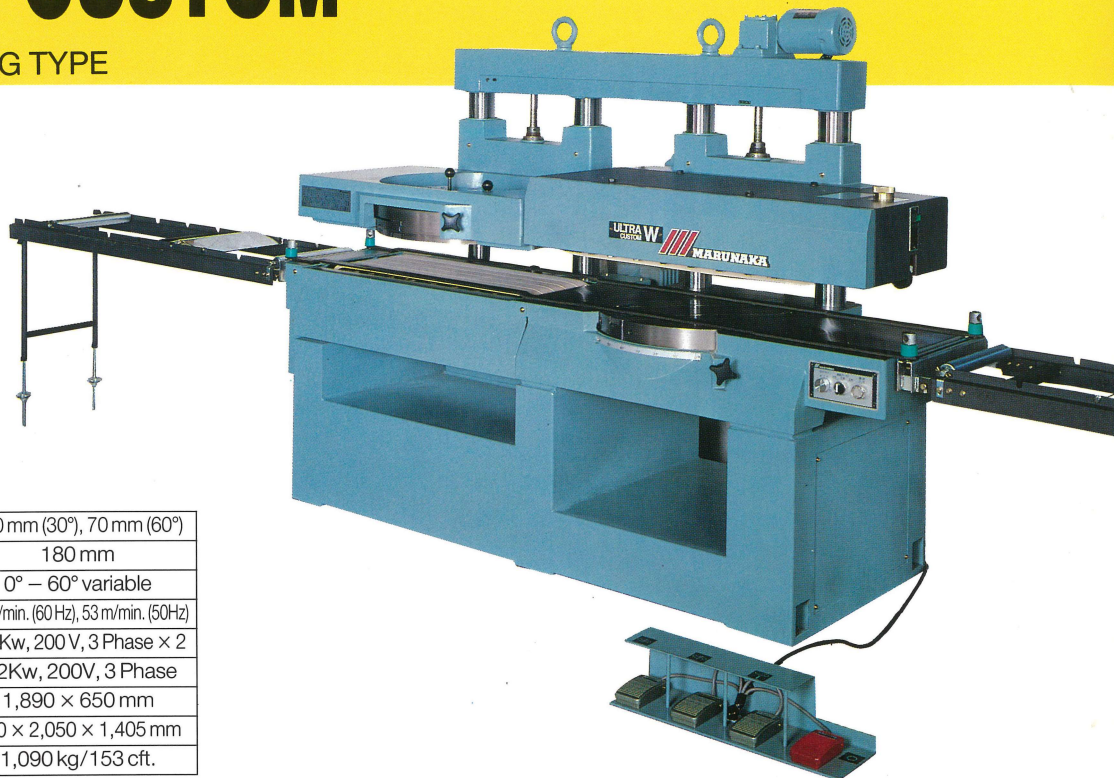
| | |
|--|--------------------------------------|
| Work capacity: max. width | 450 mm (45°), 320 mm (60°) |
| Max. thickness | 240 mm |
| Knife bias angle | 0° – 60° variable |
| Material feed speed | 60 m/min. (60 Hz), 50 m/min. (50 Hz) |
| Power required: feed motor | 5.5 Kw |
| head elevation motor | 0.4Kw |
| Table size (overall length × overall height) | 1,500 × 680 mm |
| Machine size (width × length × height) | 1,300 × 1,600 × 1,730 mm |
| Net weight/Packing volume | 1,140 kg/Approx. 230 cft. |

Top planing and bottom planing performed by one machine. Since two knives, one for rough planing and one for finish planing are set at both of the top and bottom, both sides can be planed with one material feed. Therefore, planing time can be shortened

considerably. It can also be built into a line. Variable bias angle system permits to choose the optimum bias angle to obtain the best finishing for the material according to its hardness and moisture content.

ULTRA W CUSTOM

RECIPROCATING PLANING TYPE



■SPECIFICATIONS

| | |
|--|--------------------------------------|
| Work capacity: max. width | 250 mm (30°), 70 mm (60°) |
| Max. thickness | 180 mm |
| Knife bias angle | 0° – 60° variable |
| Material feed speed | 64 m/min. (60 Hz), 53 m/min. (50 Hz) |
| Power required: feed motor | 2.2 Kw, 200 V, 3 Phase × 2 |
| Head elevation motor | 0.2 Kw, 200 V, 3 Phase |
| Table size (overall length × overall height) | 1,890 × 650 mm |
| Machine size (width × length × height) | 940 × 2,050 × 1,405 mm |
| Net weight/Packing volume | 1,090 kg/153 cft. |

The Royal Eight is an ultra-economical model provided with all the features in the Royal Series, e.g. turntable reverse mechanism or the like. The table is of height-fixed type and can turn to permit to obtain the optimum knife angle for the workpiece to be machined.

With the high performance of the Royal Phoenix Series made effective use of as it is, the Royal Eight is further rationalized in every aspect.

ROYAL-EIGHT



■SPECIFICATIONS

| | |
|--|--------------------------------------|
| Work capacity: max. width | 200 mm (30°), 116 mm (60°) |
| Max. thickness | 180 mm |
| Knife bias angle | 0° – 60° variable |
| Material feed speed | 90 m/min. (60 Hz), 75 m/min. (50 Hz) |
| Power required: feed motor | 1.5 Kw |
| Table size (overall length × overall height) | 800 × 660 mm |
| Machine size (width × length × height) | 590 × 890 × 1,250 mm |
| Net weight/Packing volume | 230 kg/Approx. 46 cft. |

Our unique line setting system with the grinding and lapping wheels aligned on one line is employed. Switching from rough grinding to lapping is performed smoothly and high precision work is secured. The top face grind-and-lap

method permits visually checking the work, which also permits easy knife mounting and dismounting. Water cooling system prevents warping and burning of the knife.

MICRO-LAPPER GLE-502 · 602

■ SPECIFICATIONS

| | |
|---|--|
| Max. work length (knife length) | 500 (640) mm |
| Size of grinding wheel (OD × thickness × arbor hole dia): Grinding | ∅255 × 16 × ∅25.4 mm |
| Lapping | ∅100 × 50 × ∅15.88 mm |
| RPM of wheel (grinding & lapping) | 1,400 (50 Hz), 1,700 (60 Hz) |
| Motors: Grinding/Lapping | 0.75 Kw, 4P/0.2Kw, 4P |
| Pump | 60 W or 40 W, 2P |
| Overall width × length × height | 1,280 × 690 × 1,335 (1,560 × 690 × 1,335) |
| Packing volume | 78 (93) cft. |
| Weight | 250 (290) kg |



These are high grade grinders with back-face grinding function. Back-face grinding work is done safe and simple. Ultra-precise mirror surface finishing is performed in 1/5 the time of manual work. The slideways use high frequency hardened high-class steel.

Roller lubrication system improves wear resistance and maintains high accuracy for a long time. With the grinding wheel forward-backward device (standard with 70 m and 90 m), all work, from grinding to lapping can be performed without changing the knife setting angle.

MICRO-LAPPER GH-50 · 50M · 70M · 90M

■ SPECIFICATIONS

| MODEL | GH-50 | GH-70 m | GH-90 m |
|---------------------------------|---------------------------|---------------------------|---------------------------|
| Max. work length (knife length) | 500 mm | 700 mm | 900 mm |
| Feed speed : 50 Hz | 6.2, 12.5 m/min. | | |
| 60 Hz | 7.5, 15 m/min. | | |
| Motors : Grinding/Lapping | 0.75 Kw, 4P/0.4 Kw, 4P | | |
| Pump | 40 (60) W 2P | | |
| Feed | 0.2/0.1 Kw 4/8 P | | |
| Lamp | 60 W 100 V | | |
| Machine size : Manual feed type | 1,770 × 760 × 1,285 mm | | |
| Auto feed type | 1,770 × 653 × 1,285 mm | 2,050 × 653 × 1,285 mm | 4,285 × 820 × 1,550 mm |
| Net weight | 330kg*340kg | 420 kg | 550 kg |



This machine is equipped with double grind-and-lap unit separately used for grind-and-lap work on high speed steel blades and cemented carbide blades. The two units, each of which is composed of a grinding head and a lapping head driven independently by the motor and set in a line to accomplish grinding and

lapping on the blade successively without replacing the wheels, are arranged back to back with the rotary support of heads in between so that they can be easily reversed for their own job. The machining can be clearly viewed due to the up-face grind-and-lap method.

DIAMOND DOUBLE LAPPER GLP-60M

■ SPECIFICATIONS

| | |
|---|--------------------------|
| Max. work length (knife length) | 640 m |
| Size of grinding wheel : C.C.T.Grinding | ∅ 125 × 52 × ∅ 25 mm |
| C.C.T. Lapping | ∅ 100 × 40 × ∅ 25 mm |
| Feed speed : Inverter controll | 2 ~ 9 m/min. (50, 60 Hz) |
| Motors : Grinding/Lapping | 0.75 Kw, 4P/0.4 Kw, 4P |
| C.C.T. Grinding/C.C.T. Lapping | 0.75 Kw, 2P/0.55Kw, 2P |
| Pump | 40W (60W) 2P |
| Feed | 0.4Kw 4P 1/50 |
| Lamp | 60 W (100 V) |
| Machine size | 2,350 × 1,080 × 1,390 |
| Net weight | 600 kg |

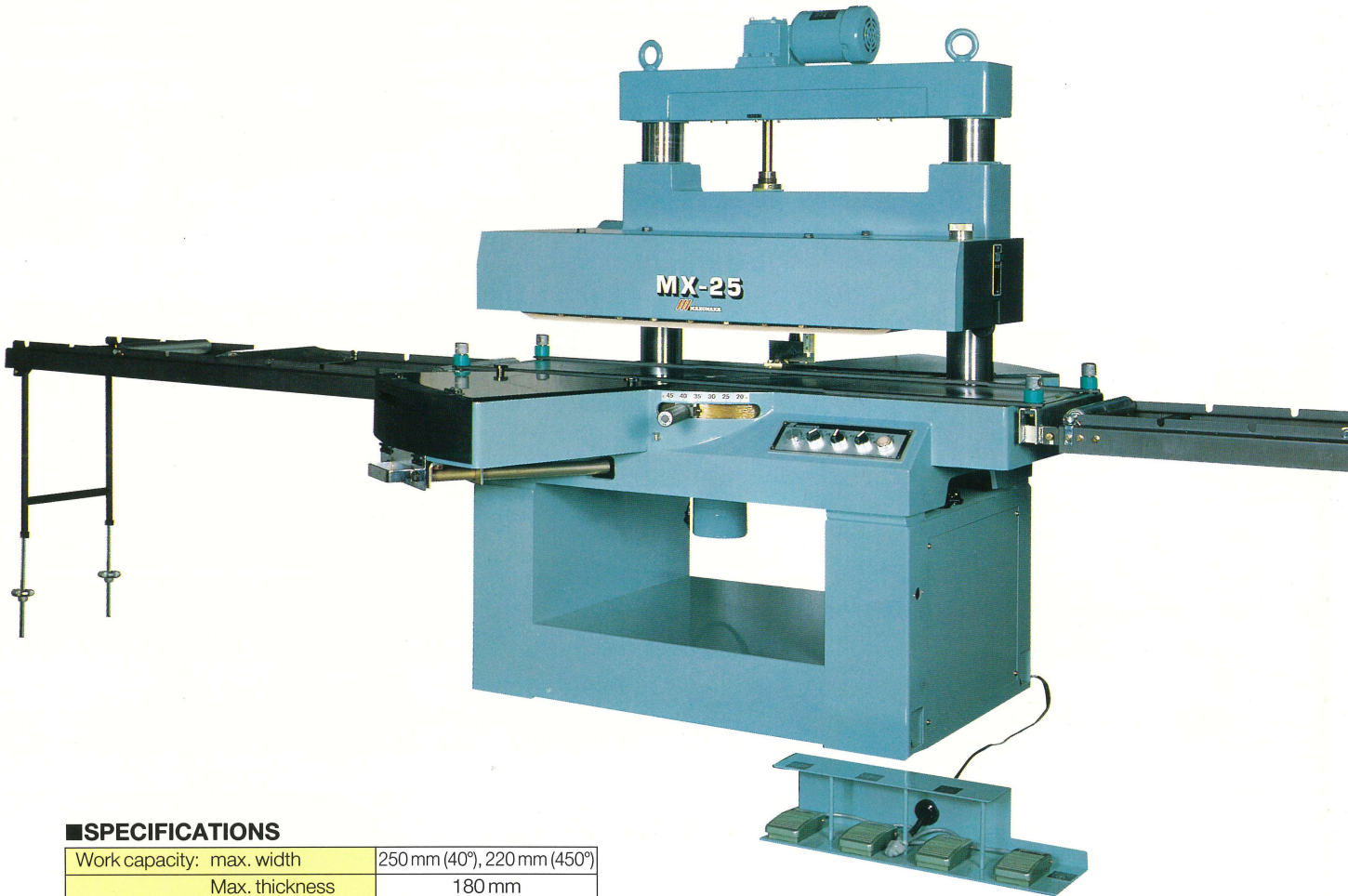


A combination of five cutting methods and four reciprocating frequencies can be selected by micro-computer control system. This high performance machine provides a superior finish by once putting the material. Unique and patented slider system,

which performs forward and return cutting with separate knives, also extends the life of the knives. All operations, such as head up/down, feed start/stop and discontinue of reciprocating are performed by foot-switch for excellent operability.

MX-25

RECIPROCATING PLANING TYPE, MICROCOMPUTER CONTROLLED



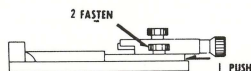
SPECIFICATIONS

| | |
|--|-----------------------------------|
| Work capacity: max. width | 250 mm (40°), 220 mm (450°) |
| Max. thickness | 180 mm |
| Knife bias angle | 20° – 45° variable |
| Material feed speed | 64 m/min. (60Hz), 53m/min. (50Hz) |
| Power required: feed motor | 2.2 Kw, 200V, 3 Phase |
| head elevation motor | 0.2 Kw, 200V, 3Phase |
| Turn table motor | 0.2kw, 200V, 3Phase |
| Table size (overall length × overall height) | 1,235 × 650 mm |
| Machine size (width × length × height) | 1,430 × 1,395 × 1,450 mm |
| Net weight/Packing volume | 750 kg/160 cft. |

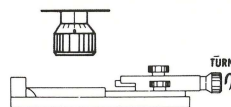
MICROSETTING – GAUGE

For Super Surfacer Knife

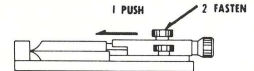
- 1 Put on the back knife and push it lightly with the upper gauge so that its front edge will touch the basic plates. Secure it with the setscrews.



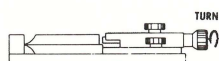
- 2 Turn the micrometer to adjust "o" to the vertical red line.



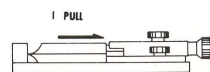
- 3 Place the knife face downward on the base and push it lightly with the under gauge so that the cutting edge will touch the basic plates. Secure it with the setscrews.



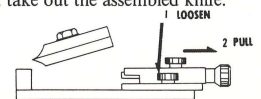
- 4 Set the micrometers at a proper scale in accordance with the material to be used.
Examples: 2 – 3 for hard wood
2.5 – 3.5 for soft wood



- 5 Pull the back knife to your side until its back end touches the micrometers.



- 6 Set up the knife and the back knife with screws. Loosen the setscrews on the under gauge and take out the assembled knife.



CRAFTNICS, Marunaka's New Concept

Ever since its founding, Marunaka has ceaselessly insisted that its products be of top-quality. In order to do this, it has cultivated a spirit of craftsmanship which it feels is necessary. In addition, Marunaka has been continuously collecting relevant information and pushing mecatronics, the leading edge of research and development.

These efforts have crystallized into the form of a new technology, Marunaka's "Craftronics". This has proved to be the answer to the diverse needs of our customers for high-performance, easy-to-use, and durable equipment.



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