

PISTORIUS

MACHINE CO., INC.

PRECISION DOUBLE MITER CUT-OFF SAWS

FOR: ALUMINUM, WOOD, PLASTICS & FIBERGLASS*

17 Models available to suit most mitering or notching applications. A wide range of accessories allows you to customize any model to perfectly suit your specific applications.

DESCRIPTION

The principle of the design of Pistorius double miter saws is to simultaneously cut a left and right miter with each cycle of the machine. Sawhead movement is achieved either by large diameter precision pivot ball bearings or linear ball bearings depending on the model. These machines cut two 45 degree miters in the same length of time that one is made in single cut-off machines.

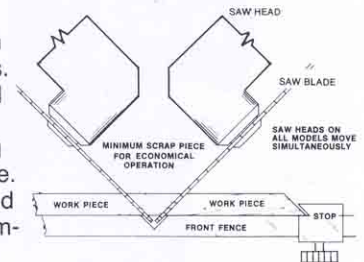
With proper tooling, perfect miters can be achieved repeatedly. Cuts are consistently clean without tearout or burrs. Length measurements are accurately made for either outside "tip-to-tip", inside, or rabbet, with our selection of gage accessories as shown on pages 12 to 15.

Performance is vibration free and pieces are cut to smooth mill-like finishes if proper tooling is utilized. Close tolerances are consistently maintained even during high speed semi-automatic operation.

With Pistorius you can also count on support for dust collection, sawblade resharpening, replacement parts and service as well as the availability of machinery for secondary operations involving miter joining, drilling, routing, milling and PVC thermal welding, etc.

OPERATION – SAWBLADE ARRANGEMENT

Illustrated at right is the fence and sawblade arrangement standard on all non-staggered models. The work fence is located in a fixed position at the front of the table assuring a minimum of scrap waste. Sawblades extend beyond the fence line, cutting completely through material.



Both sawblades are activated simultaneously so that with each cycle of the machine two miters are completed. Fences are mounted in a keyway machined into the table, making it quick & simple to change fences or special support fixtures at any time without losing alignment with the sawblades. Reverse fences are also available for special applications. The machine table is provided with cast slots for mounting fixtures or special attachments.



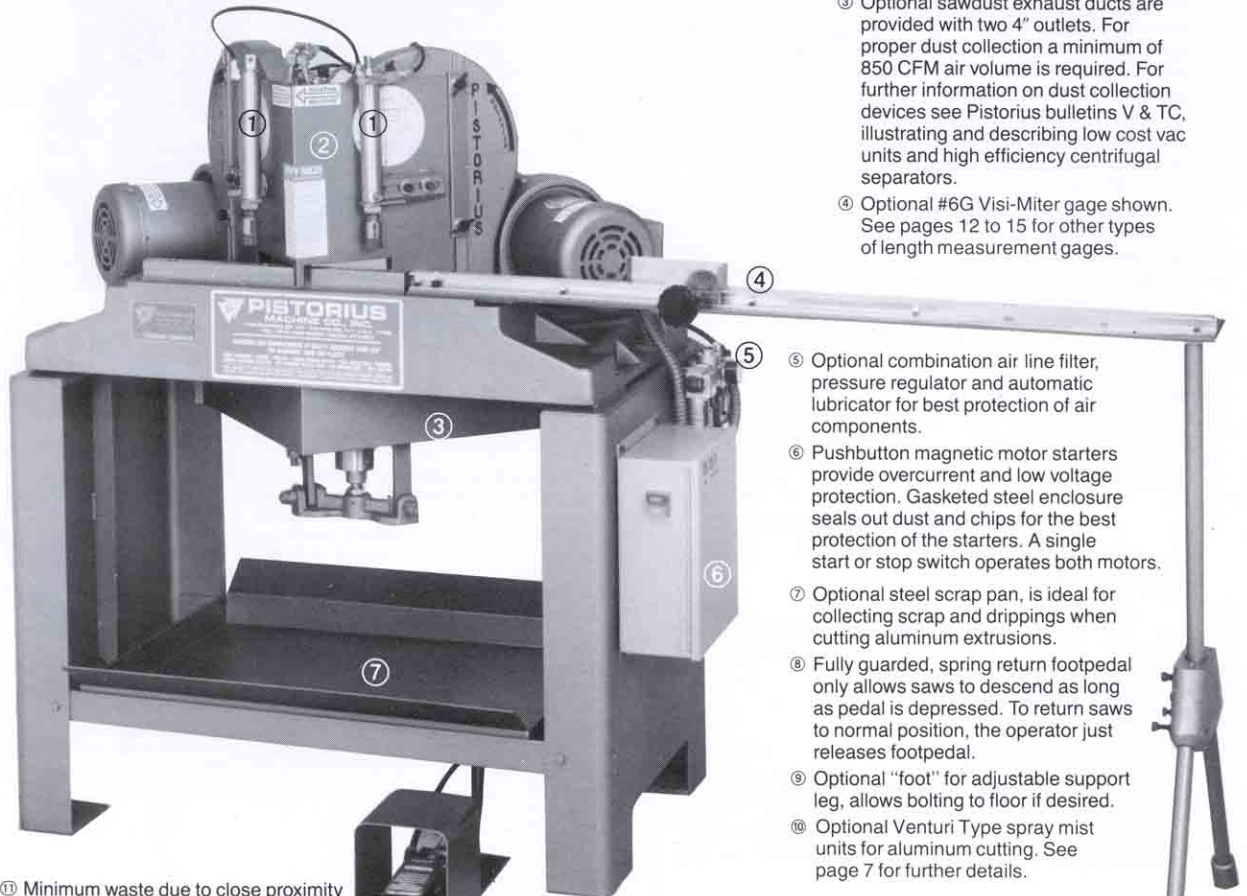
Model MN-200 pneumatically operated machine shown cutting prefinished wood moulding. With front safety guard removed for illustration purposes. Machine cuts equally well on aluminum extrusions, PVC vinyl extrusions, soft or hard woods & most plastics. Always use Pistorius precision made, job matched Mitermaster® carbide sawblades (optional). Optional #9G Digi-Miter™ gage shown. Other available gaging systems are shown on pages 12 to 15.

* NOTE: When cutting fiberglass pultrusions, special tooling and enhanced dust collection modifications are required. Call for more information.

PRECISION DOUBLE MITER CUT-OFF SAWS

MODELS MN-100, 200, 300, HEAVY DUTY PNEUMATIC PIVOT HEAD MODELS. FOR HIGH SPEED, SEMI-AUTOMATIC PRODUCTION.

Designed and constructed to withstand continuous day-in day-out high speed production, these models are built with the finest craftsmanship and components available today. For the ultimate in versatility and efficiency, a full line of accessories are available. Machine is virtually maintenance free, eliminating costly downtime. Keeping blades sharp is your only requirement for continuous trouble-free operation.



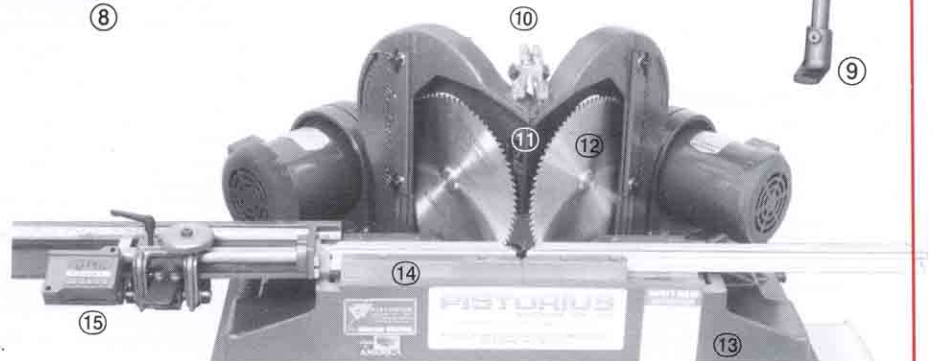
- ① Minimum waste due to close proximity of sawblades.
- ② Optional precision made, job matched carbide and steel sawblades to suit your specific applications.
- ③ Precision machined heavy duty cast iron table.
- ④ Machined keyway in table allows quick changeover in fixtures without loss of alignment.
- ⑤ Optional #2G Electronic Accurcut Gage is designed to provide outside tip-to-tip measurements. Many gages are available, see pages 12 to 15 for further details.

Shown with front safety guard removed for illustration purposes.

Pistorius machines are built to last. Extra heavy duty cast iron and steel construction throughout.

- ① Optional pneumatic hold down clamps. Available for vertical use as shown or special horizontal mounting for specific applications. Supplied with shut-off cock and soft face replaceable rubber clamp pads.
- ② Front safety guard is constructed of heavy gage steel for maximum operator protection. Machine should never be operated without the safety guard installed and adjusted to its lowest position. Safety guard is removable to change sawblades.
- ③ Optional sawdust exhaust ducts are provided with two 4" outlets. For proper dust collection a minimum of 850 CFM air volume is required. For further information on dust collection devices see Pistorius bulletins V & TC, illustrating and describing low cost vac units and high efficiency centrifugal separators.
- ④ Optional #6G Visi-Miter gage shown. See pages 12 to 15 for other types of length measurement gages.

- ⑤ Optional combination air line filter, pressure regulator and automatic lubricator for best protection of air components.
- ⑥ Pushbutton magnetic motor starters provide overcurrent and low voltage protection. Gasketed steel enclosure seals out dust and chips for the best protection of the starters. A single start or stop switch operates both motors.
- ⑦ Optional steel scrap pan, is ideal for collecting scrap and drippings when cutting aluminum extrusions.
- ⑧ Fully guarded, spring return footpedal only allows saws to descend as long as pedal is depressed. To return saws to normal position, the operator just releases footpedal.
- ⑨ Optional "foot" for adjustable support leg, allows bolting to floor if desired.
- ⑩ Optional Venturi Type spray mist units for aluminum cutting. See page 7 for further details.



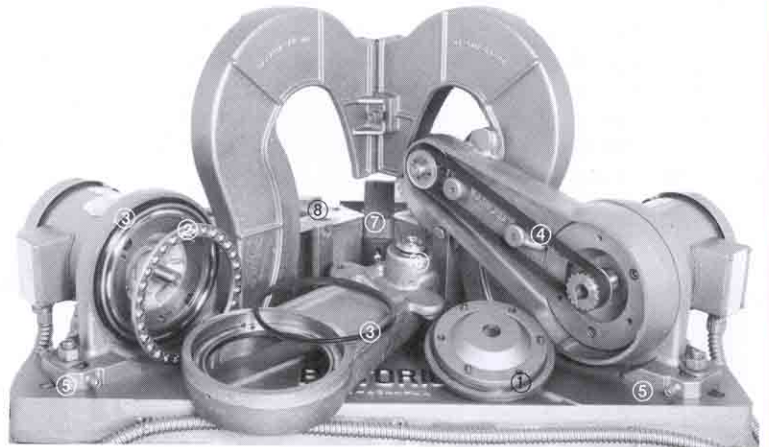
Model MN-200 pneumatically operated machine shown cutting PVC vinyl window sash extrusion with front safety guard removed for illustration purposes. Optional left hand mounted #2G Electronic Gage is shown.

FEATURES

- Designed for the production oriented operation when compressed air is available
- Compressed air does all the work and allows for high speed cycling on a continuous basis.
- Ideal for all types of flat and compound miter cutting.

TYPICAL USES:

- Advertising display frames
- Solar panels
- Clocks
- Shower enclosures
- Outside aluminum storage sheds
- Door lites
- Sliding patio doors
- Picture & mirror frames
- Vinyl & aluminum windows & doors
- Kitchen cabinet doors
- Plastic & aluminum skylights
- Photo frames
- Chalk boards
- Needlepoint frames
- Schedule & bulletin boards
- Medicine cabinet doors
- Architectural sash
- Portable offices & trailers
- Game tables
- Telephone booths
- Greenhouses
- Outside service windows
- Curtain walls
- Ventilators & grills.



- ① Phenolic faced head retainer provides 360 degree surface contact area. Simple adjustment assures perfect sawhead tracking and movement.
 - ② Exclusive 8" diameter hardened and ground ball thrust bearing sawhead pivot. This high quality, precision made bearing assures precise sawblade movement through its arc of travel.
 - ③ Full 360 degree rubber seal helps keep dust and chips out of pivot mechanism.
 - ④ Heavy duty cog type, positive non slip timing belt drive.
 - ⑤ Fine micrometer miter angle adjustment (within 2 degree range) for perfect miter angle settings.
 - ⑥ Double ball bearing saw spindles are available in cartridge form and are simple to remove and replace if necessary.
 - ⑦ Optional phenolic scrap support and fence insert provides support for delicate prefinished materials such as high pressure laminated mouldings. Phenolic back ups provide support to reduce or eliminate chipping or tearout.
 - ⑧ Linkage arms are fitted with self lubricating oilite bushings at each end. Both sawheads move simultaneously by interconnected linkage.
- Shown with belt guard removed for illustration purposes. Machine should never be operated with belt guard or front cover removed.
See page 6 for premium option.

SPECIFICATIONS

Miter Cutting Capacity	Model MN-100 2 ⁵ / ₈ " (67 mm) wide x 2 ⁵ / ₈ " (67 mm) high Model MN-200 3 ⁵ / ₁₆ " (84 mm) wide x 2 ⁵ / ₈ " (67 mm) high Model MN-300 4" (102 mm) wide x 2 ⁵ / ₈ " (67 mm) high
NOTE: When cutting narrow material that is higher than the capacities listed above, additional capacity is available. When cutting to the full width capacity listed, some height cutting capacity is lost. For actual cutting charts and specifications please contact the factory.	
Motor	1 1/2 horsepower, 208-230, 460 volt, 3 phase, 60 Hz, 3600 RPM totally enclosed fan cooled, constant torque. When run at 50 Hz RPM is reduced to 2950. Note: Standard motors will run at 208 volts or up to a 10% variation from rated voltage.
Drive	Non slip timing belts
Amps	Total 1 1/2 HP—208 volts, 3 phase, 60 Hz—10.0 1 1/2 HP—230 volts, 3 phase, 60 Hz— 8.7 1 1/2 HP—460 volts, 3 phase, 60 Hz— 4.4 1 1/2 HP—240 volts, 3 phase, 50 Hz—11.0 1 1/2 HP—230 volts, 1 phase, 60 Hz—20.0 1 1/2 HP—220 volts, 1 phase, 50 Hz—22.0 1 1/2 HP—380 volts, 3 phase, 50 Hz— 5.3 1 1/2 HP—575 volts, 3 phase, 60 Hz— 3.5 3HP—230 volts, 3 phase, 60 Hz— 7.4 3HP—460 volts, 3 phase, 60 Hz— 3.7
Switch	*Standard motor supplied with machine. IEC size A, magnetic starters mounted in a common NEMA 12 dust tight enclosure with recessed start switch and extended stop switch. Control circuit operates on 24 volt and a pilot light indicates the machine is running.
Arbor	5/8" (15.88 mm) standard.
Blade Capacity (sawblade not included)	MN-100—10" OD (254 mm) (305 mm) (356 mm)
Sawdust Exhaust (optional accessory)	Two 4" OD. Requires approx. 400 CFM per outlet.
Air Consumption (3/8" air line minimum)	1.5 CFM at 65 PSI based on 15 cycles per minute.
Air Pressure	65 PSI 4.5 (BAR)
Weight	Without accessories or gages Crated (domestic) 651 lbs.—(296 kg) Crated (export) 676 lbs.—(307 kg) Uncrated 551 lbs.—(250 kg)
Table Height	35 1/2" from floor (902 mm)
Actuation	Air valve, fully guarded, foot operated, spring return.
Production Rate	Up to 60 cycles per minute with infinite feed control. Actual production rate varies with requirements of specific application.

