



#### EXCELLENT CAPABILITY AT AN AFFORDABLE PRICE

The PMA2 is the foundation model for the entire PMA series of machines. It is a rugged machine and performs as both a single and double surface planer. The bottom head is in the first position to properly handle roughing and finish planing, and is designed to plane wide cupped materials without splitting. If and when four sided planing and moulding become necessary, additional spindles, pre-planing and saw arbor modules can be economically added to this basic model. No other double surface planer offers so much capability to properly handle both todays, and tomorrows production needs.





Infeed drive system



Bottom feed rolls and bottom head with quick adjusting system and jointer



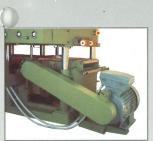
Top infeed rolls with sectional holddown system



#### MAXIMIZE PLANING & RIPPING CAPABILITIES; MINIMIZE LABOR, HANDLING, FLOOR AREA AND COSTS

These models are designed to offer a wide range of planing, moulding and ripping capabilities, while minimizing the cost of producing products like moulding and flooring blanks, furniture and pallet parts, turning squares, S2S1E and S3S lumber, louvers, laths, and much more, in only one pass. These machines are available with optional systems for straight line and optimizing ripping,

as well as pre-planing heads to handle materials that have been sawn too thick.



Outfeed rolls and saw arbor drive system



Gang saw module with feed rolls, anti-kickback fingers, table plate and entry door with outboard bearing



Infeed table with three sets of anti-kickback fingers and optional pneumatic pressure system



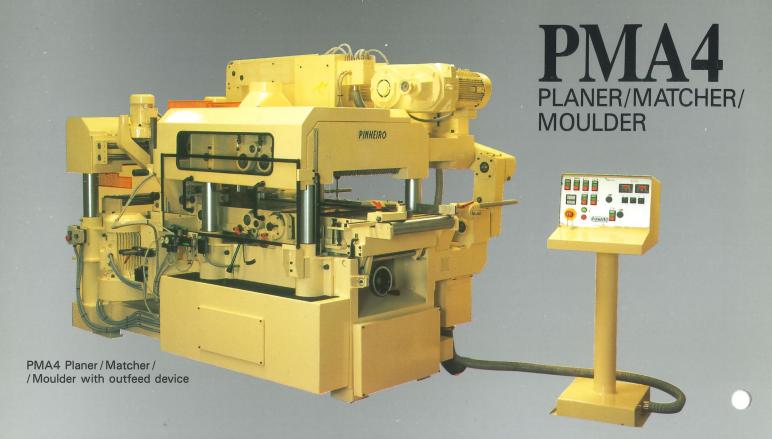
Gang saw module with thickness scale



Device to adjust arbor horizontally

### PINHEIRO





#### **MAXIMIZE CAPABILITY**; MINIMIZE SET UP TIME AND OPERATING COSTS

The PMA4 four head model is produced by adding the side head module to the outfeed section of the basic PMA2 model. This compact and flexible model handles production ranging from simple single and double surface planing to producing complex profiles. Set up times are minimized by stacking multiple knives and

cutters on the spindles and quickly moving the spindles horizontally and vertically into position for each different product.

From producing smaller mouldings to machining large log cabin timbers, no other machine offers so much versatility for such an affordable price.



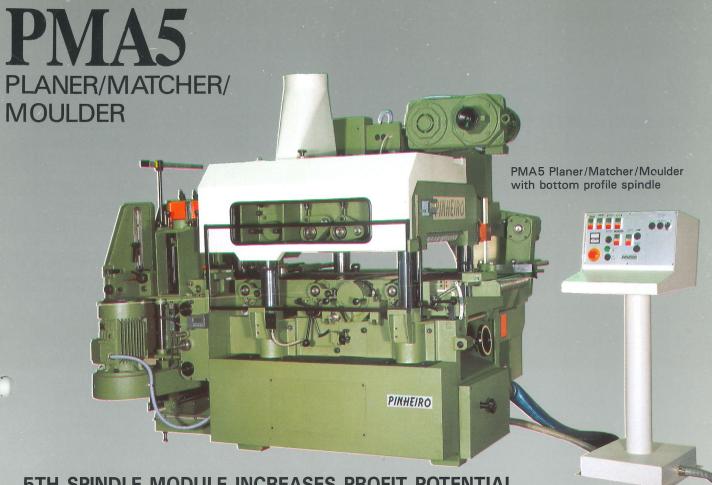
Left side head system



Cardan feed system

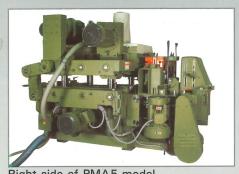


Bottom chip removal adjustment



#### 5TH SPINDLE MODULE INCREASES PROFIT POTENTIAL

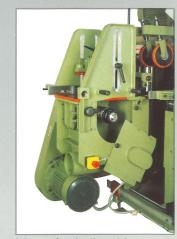
The 5th spindle, bottom profiler module, is installed into the back of the side head module to add more capability to the PMA4 four head model. This spindle can be used for planing, profiling and sawing. An optional heavy duty 5th spindle is available with an outboard bearing to handle heavier sawing and larger timber profiles.



Right side of PMA5 model



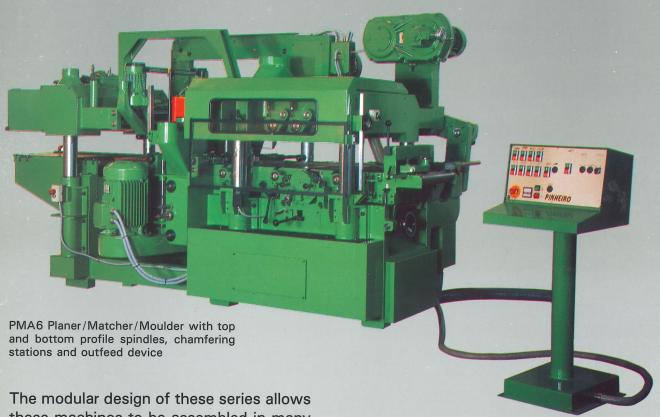
Outfeed section of 5th spindle with adjustable holddown system



View of spindle with access door open

THE PMA SERIES OFFERS THE ADVANTAGE OF HANDLING BOTH TODAYS PRODUCTION NEEDS & TOMORROWS WORLD MARKETS

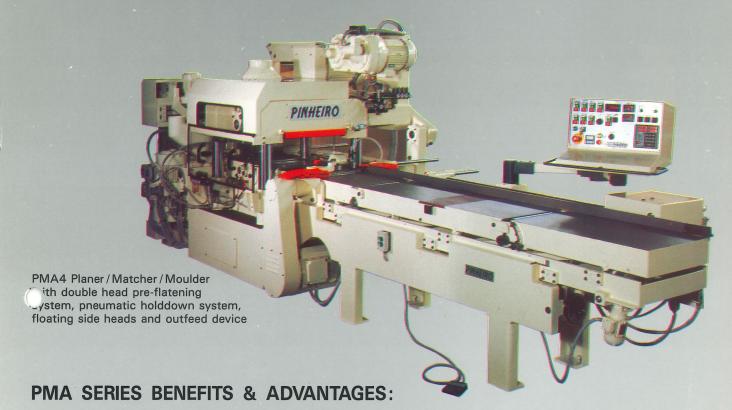
### Custom Built PMA Series Machines



The modular design of these series allows these machines to be assembled in many different configurations of planer heads, spindles and arbors. A wide selection of options are available to allow each unit to be built to meet the exact needs of most every type and every size of woodworking operation.

### PARTIAL LIST OF AVAILABLE OPTIONS:

Computer setworks
Top and bottom pre-planing heads
Pre-straightening heads
Straight line ripping systems
Optimizing ripping systems
Chamfering stations
Floating sideheads
Deep profiling spindles
Pneumatic holddown systems
Automatic random width setworks for side spindles
Powered outfeed systems
Urethane feed rolls for re-manufacturing operations
Disposable tooling systems



Easy to install, set up and operate Minimum training required for new operators Completely self contained machine with electrical panel Heavy, rugged and compact CNC machined frame Designed to simplify set up and maintenance All motors externally mounted for easy access Motors wired star delta to reduce operating costs Fixed main table to simplify conveyer systems Oversize head bearings to improve finish and durability overs designed to improve safety and reduce noise Machines use many «off the shelf» components Large capacity offers wide range of product capabilites Modular design allows for adding more spindles Handles wide cupped boards without splitting Set up time often less than 10 minutes between jobs Well established parts and service programs

The PMA series modular system allows every customer to order his machine set up with the modules and options to handle current production needs and the ability to install additional options, in the field, if future markets impose different production requirements.



MACHINES BUILT TO MEET YOUR EXACT NEEDS

## **Options**



Removable bottom head and portable mounting stand



Removable top head with permanent straight knife jointer



Digital readout for setting finished width



MS module sectional outfeed rolls



Digital readout for setting thickness



Scoring and guide system for straight line ripping, unted on PMA2-MS machine



Top & first bottom roll pneumatic pressure regulators



Bottom planer head with permanent straight knife jointer



Top pneumatic holddown system

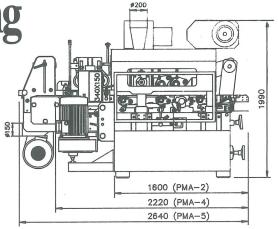
# PINHEIRO

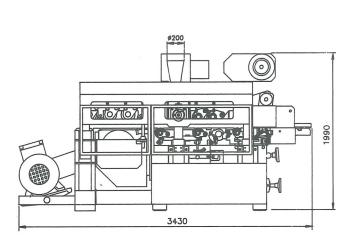
A WIDE SELECTION OF OPTIONS ARE AVAILABLE

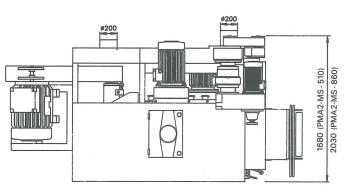
Space Requirements

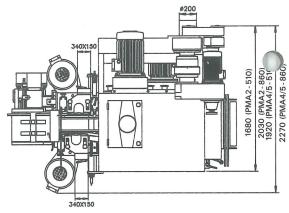
& Dust Hood Exhausting

**Dimensions** 









### Technical Data

	TECH	TECHNICAL DATA		PMA-2		PMA-2-MS		PMA-4		PMA-5	
			UNI.	510	860	510	860	510	860	510	860
o .											
Planing width			mm	0-510	0-860	0-510	0-860	45-490	45-840	45-490	45-84
Planing height			mm	0-260	0-260	12-260	12-260	12-205	12-205	12-205	12-20
Máx. cutting width			mm		ļ	490	840			210	210
Máx. cu	áx. cutting height		mm			120	120			55	55
Máx.	bottom a	arbor	mm	12	12	12	12	12	12	12	12
chip		top arbor		15	15	15	15	15	15	15	15
removal	vertical right arbor		mm	12	12	12	12	12	12	12	12
at	vertical	eft arbor	mm	15	15	15	15	15	15	15	15
Máx.	bottom arbor		mm	13	13	13	13	13	13	13	13
profile	top arbo	top arbor		40	40	40	40	40	40	40	40
depth	vertical right arbor		mm	40	40	40	40	40	40	40	40
at	vertical!	eft arbor	mm	40	40	40	40	40	40	40	40
		- intermittent feed	mm -	415	415	415	415	415	415	415	415
Min. sto	ock lenght										
		- continuous feed	mm	180	180	180	180	180	180	180	180
variable feed speed		m/min	7-40	7-40	7-40	7-40	7-40	7-40	7-40	7-40	
Speed	horizontal arbors		r. p. m.	5300	5300	5300	5300	5300	5300	5300	5300
	vertical arbors		r. p. m.			187		5300	5300	5300	5300
saw arbor		r. p. m.			2300	2300			5300	5300	
Cutting circle			mm	140	140	140	140	140	140	140	140
Máx. cutting circle at vertical tools			mm					220	220	220	220
Vertical arbors diameter			mm					40	40	40	40
Saw arbor diameter			mm			60	60			60	60
Saw sleeve diameter			mm			75	80			75	75
Saw spacers diameter			mm			100	110			100	100
Saw blades diameter			mm				200-400			150-250	
Top feeding rolls diameter			mm	140	140	140/160	140/160	140	140	140	140
# top feeding rolls				4	4	4	4	4	4	4	4
Bottom feeding rolls diameter			mm	112	112	112	112	112	112	112	112
# bottom feeding rolls				3	3	3	3	3	3	3	3
5th arbo	or travelling	horizontal	mm							25	25
5th arbor travelling		vertical	mm							80	80
# knives per cutterhead			4	4	4	4	4	4	4	4	
Knives dimensions horizontal - 510 horizontal - 860		mm	3x35x520		3x35x520		3x35x520		3x35x520		
		mm		3x35x870		3x35x870		3x35x870		3x35x8	
		vertical	mm							3x35x210	
Motor	bottom arbor		KW/CV		7.4/10	7.4/10	7.4/10	7.4/10	7.4/10	7.4/10	7.4/10
	top arbor			10/15	10/15	10/15	10/15	10/15	10/15		10/15
	vertical arbors		KW/CV					5.5/7.5	5.5/7.5	5.5/7.5	5.5/7.
	saw arbor		KW/CV			37/50	37/50				
	5th arbor		KW/CV							5.5/7.5	5.5/7.
	feeding		KW/CV	4/5.5	4/5.5	4/5.5	4/5.5	4/5.5	4/5.5	4/5.5	4/5.5
height adjustment				0.55/0.75							
Net weight			Kg Kg	3.250	3.550	5.250	5.850	3.750	4.150	4.150	4.650
Gross w	Gross weight			3.500	3.800	5.500	6.100	4.000	4.400	4.400	4.900

SUBJECT TO TECHNICAL ALTERATIONS

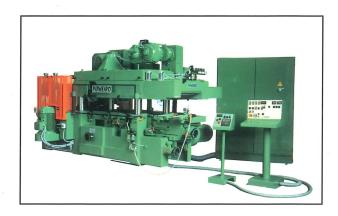


FOR MORE INFORMATION, ASK FOR A QUOTE

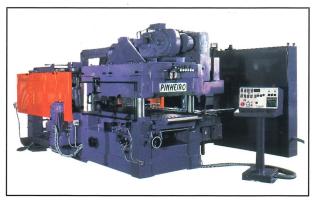
### THE PINHEIRO Heavy Duty Alternative

## THE PMF PLANER/ MOULDER SERIES

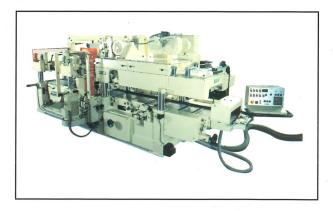
PMF4-450 Planer / Matcher / Moulder with pre-straightening head, hydro-planer heads, top pneumatic holddown system, floating sideheads, outfeed device & double control tables.



PMF5-630 Planer / Matcher / Moulder with pneumatic holddown system, automatic random width setworks for side spindles, double outfeed device & chamfering stations.



PMF6-630 Planer / Matcher / Moulder with six heads and chamfering stations, pneumatic holddown systems, removable top & bottom heads and double outfeed device.





WOODWORKING MACHINERY SINCE 1929



#### MÁQUINAS PINHEIRO, LDA.

HEAD OFFICE — Rua D. Pedro V - Apartado 1 - 4785 Trofa - Portugal TELEG. ORIEHNIP — TELEF. 052-46813 — TELEX 25536 PINEXP-P — TELEFAX 052-46675

SINGAPORE HEAD OFFICE — 257 SELEGIE ROAD — # 04-291 D/293 D (PODIUM BLOCK)

SELEGIE COMPLEX — SINGAPORE 0718

TELF. 65-33-23505 — FAX 65-33-23506