OPERATOR 5/E

NUMERICAL CONTROL DOOR AND WINDOW PRODUCTION UNIT

SAOMAD

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Variable roller speed
from 2,5 to 15 m/min

Rubber-coated rollers
with small axle-to-axle
distance for movement
of short pieces

Splinter protection
shaft for profiles
on assembled frames

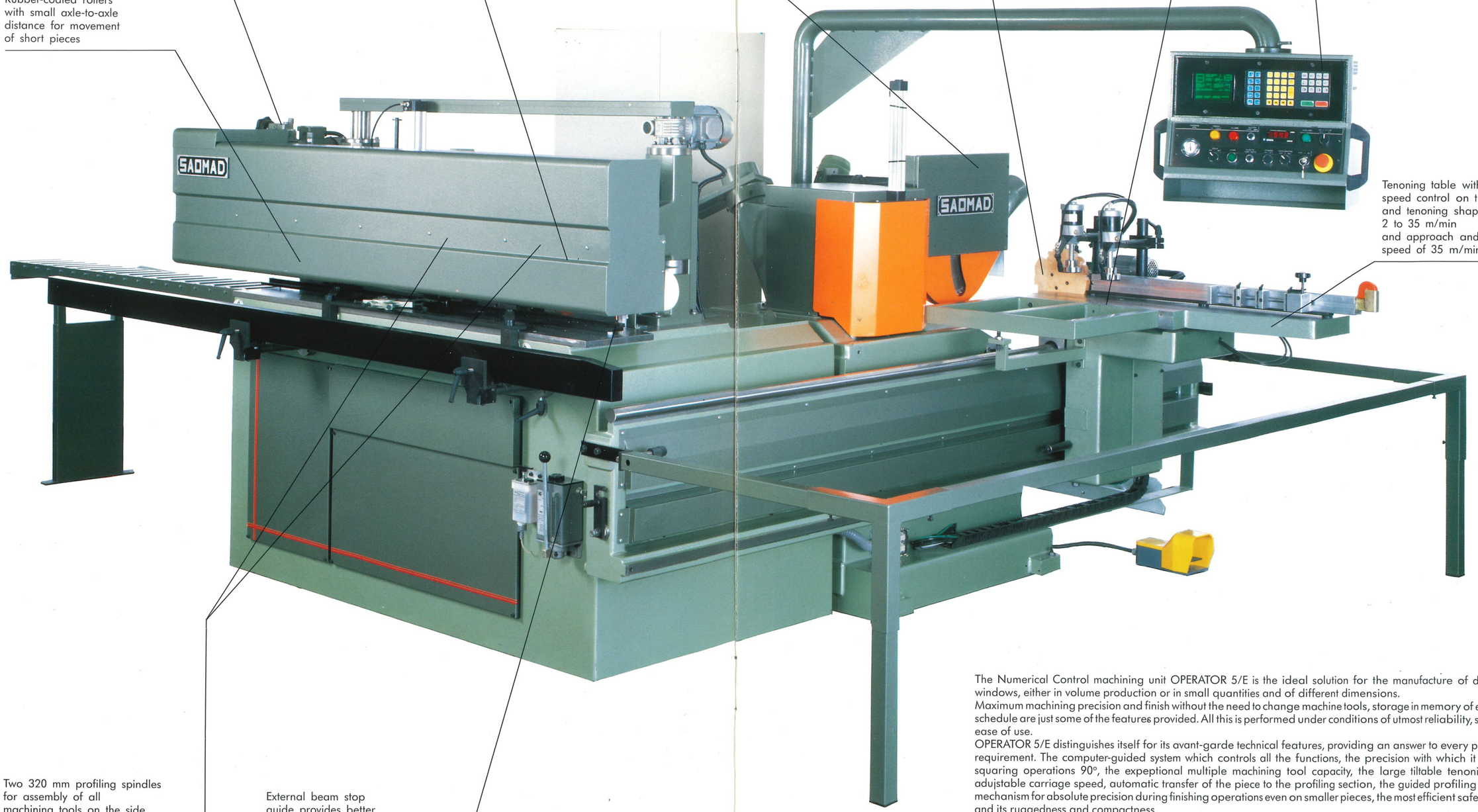
Pneumatic saw shifting mechanism,
8+8 positions with mechanical stops
(an optional electronic
positioning feature is available)

6-position manual disk
splinter protection
(automatic on request)

Tilt-top table, through
+/- 45°, for slanted
tenoning

Programmable microprocessor
control panel with 99 possible
programs in memory,
for repeated or sequential production

Tenoning table with separate
speed control on the saw
and tenoning shaper from
2 to 35 m/min
and approach and return
speed of 35 m/min



Two 320 mm profiling spindles
for assembly of all
machining tools on the side
of the machine

External beam stop
guide provides better
profiling finish

The Numerical Control machining unit OPERATOR 5/E is the ideal solution for the manufacture of doors and windows, either in volume production or in small quantities and of different dimensions.
Maximum machining precision and finish without the need to change machine tools, storage in memory of each work schedule are just some of the features provided. All this is performed under conditions of utmost reliability, safety and ease of use.
OPERATOR 5/E distinguishes itself for its avant-garde technical features, providing an answer to every production requirement. The computer-guided system which controls all the functions, the precision with which it performs squaring operations 90°, the expeptional multiple machining tool capacity, the large tiltable tenoning table, adujstable carriage speed, automatic transfer of the piece to the profiling section, the guided profiling transport mechanism for absolute precision during finishing operations even on smaller pieces, the most efficient safety systems and its ruggedness and compactness.
All these features put together make the OPERATOR 5/E the ideal choice for carrying out your job quickly, easily, with utmost precision and the highest quality and profitability.

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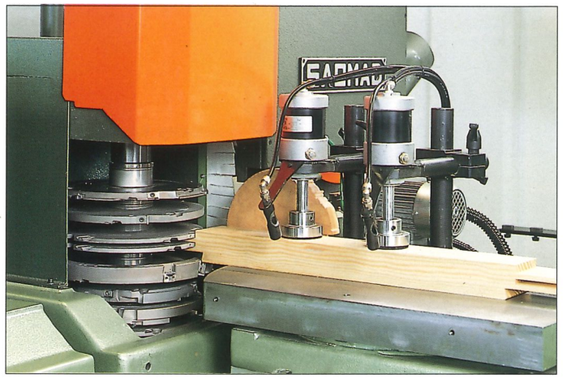
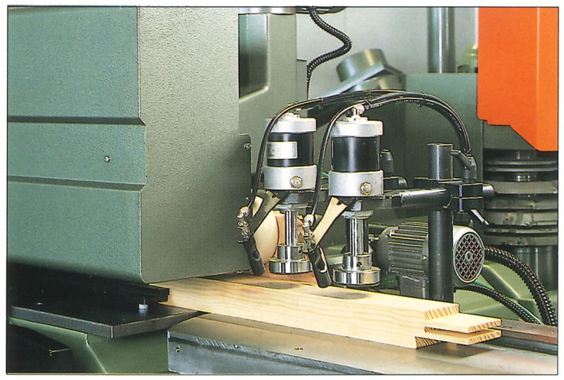
SAWING

Horizontal positioning of the saw by means of a revolver mechanism, with 8 forward and 8 reverse positions, determining the tenoning length.
Optional continuous motor-driven saw axle positioning mechanism.
During machining operations, the safety shield is drawn back to uncover the saw blade.



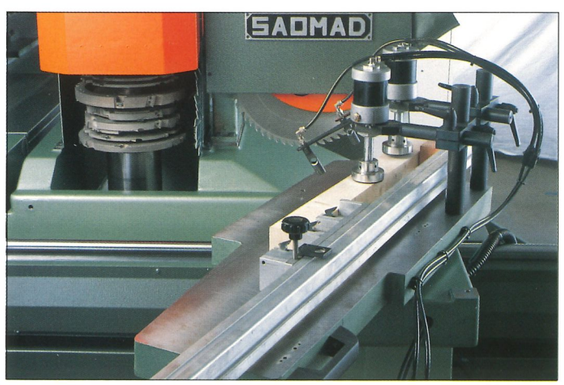
TENONING

Worm screw tenoning shaft, with multiple tool capacity for tenoning operations.
Maximum diameter of tools: 350 mm.
The tools are shielded by a safety guard which opens automatically, to dampen noise and for a better dust suction.



PROFILING

From the tenoning process the piece is automatically transferred to the profiling section by means of the first two automatic trailing rollers.



INCLINED SAWING AND TENONING OPERATIONS

Slanted tenonings can be done by tilting the table up to +/- 45°, in order to avoid repositioning the pistons and the aluminium guide and to be able to make greater use of the work plane, bringing about a consequent saving of time during machining operations.

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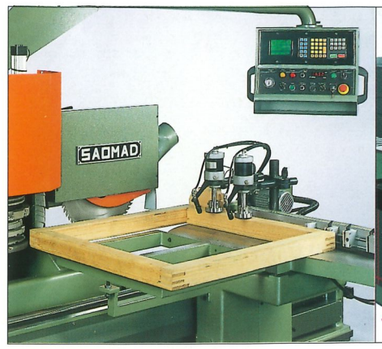
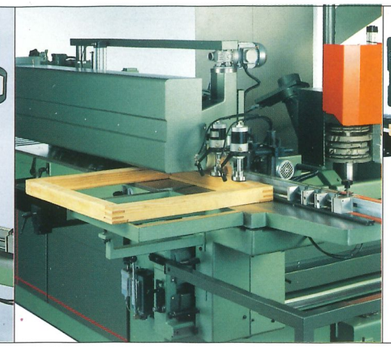
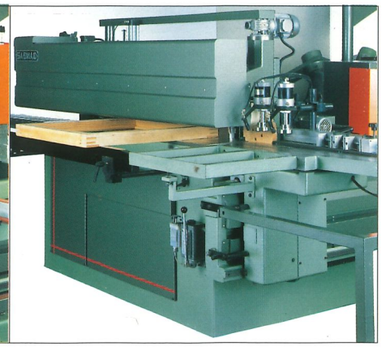






SQUARING ON THE TENONING EDGE

Squaring operations performed on the wing between uprights and crossbeams needs only two passes to produce a perfect right angle 90°.

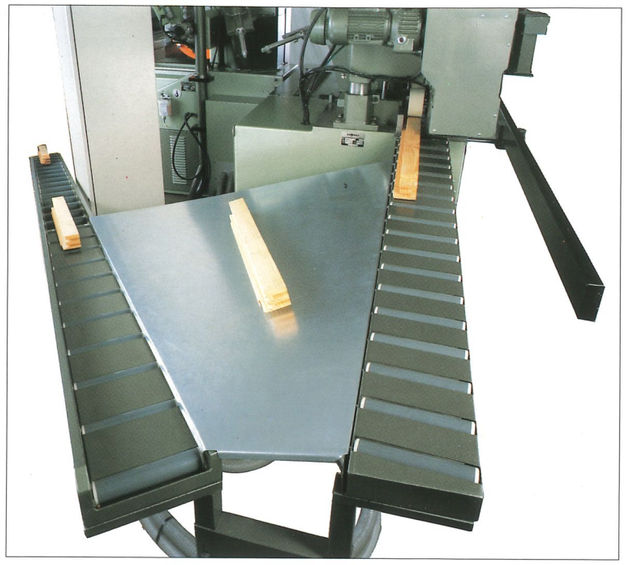
MOULDING OPERATIONS ON PROFILING MACHINE

Automatic entry of the wing into the profiling unit for moulding operations.

Splinter protection device for moulding operations on profiling edge by right-hand rotation of the first shaft, with timer control.

AUTOMATIC CONTINUOUS SQUARING AND MOULDING PROCESSES

OPERATOR 5/E



LOCATION STOP

NUMERICAL CONTROL (optional)
The stop position, which is controlled by the computer, allows batch or sequence machining to be carried out, after having pre-determined the case and wing dimensions. This substitutes manual wood stop positioning operations.

PIECE RETURN CHUTE

Drop chute.
Eliminates the need for an Operator at the output end of the machine. The machine is closed on the rear end, in order to prevent chips and sawdust from entering into the mechanisms in motion.

- Left-hand profiling guide for calibration of the wood beam and improvement of finish.
- Glass beading saw unit.
- Hardware grooving unit
- Profiling shafts with "U" shift positioning.
- Small diameter roller with small axle-to-axle distance, to improve machining on small pieces.
- Ground work table made of heavy duty steel.
- Forced lubrication on the sliding plane.
- Air blowers maintain the work table clear from sawdust.

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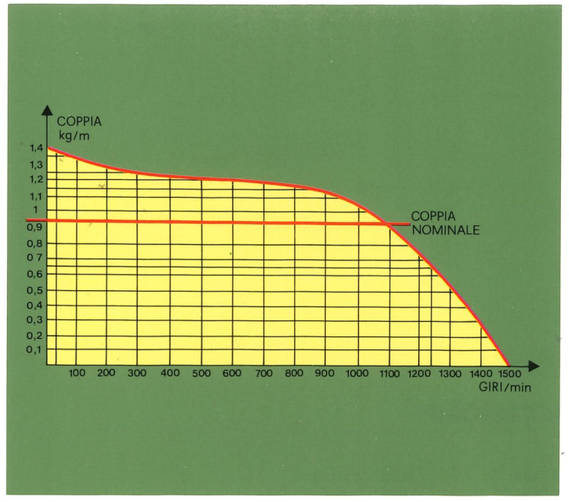
CONTROL PANEL

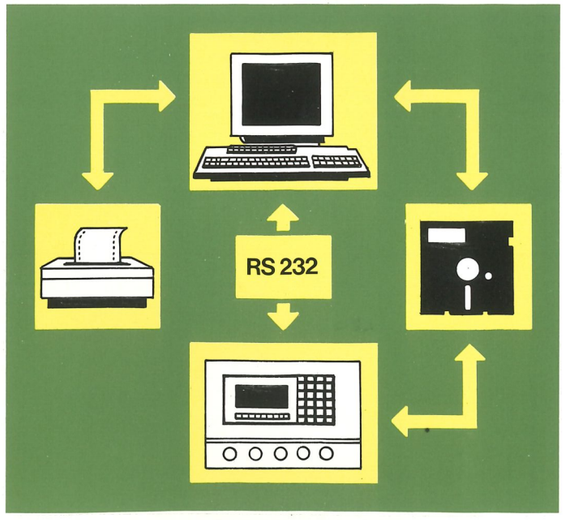
Programmable microprocessor-based control panel with 99 possible programs storable in memory.
Possibility to run batch or sequence machining operations.
Easy-to-learn programming sequences.
A program which determines the dimensions from the case to the wing is also available upon request.
The control unit is capable of communicating with all remote machinery by means of an RS 232 serial interface.



MOTOR

Driven by a constant torque d.c. motor. Regulation of motor speed varies the table traverse velocity, maintaining a constant travel force.

MAXIMUM TORQUE
OF MONOPHASE
2-HP 4-POLE MOTOR



A MODERN WORKING CENTER

OPERATOR 5/E has been designed as an open system, providing the capability to communicate with other computerised units within a modern and efficent company environment.
The unit is equipped with an RS 232 serial interface port which allows exchange of data with a personal computer, in order to transmit production schedules referring to form, dimension, number of pieces and types of doors and windows, as well as automatic positioning of the saw through numerical control and of the wood stop.

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TECHNICAL FEATURES

Butting disk saw	
Motor power	HP 4 (kW 3)
Saw rotation speed	3.000 r.p.m.
Saw Ø	400 mm. (max. 450)
Saw cutting depth	125 mm. (max 145)
Saw shaft Ø	30 mm.
Saw pneumatic horizontal traverse	100 mm.
Horizontal double revolver stops	No. 8+8
Tenoning spindle	
Spindles	No. 1
Shaft Ø	50 mm.
Length	320 mm.
Rotation speed	3.600 r.p.m.
Motor power	7,5 HP (5,5 kW)
Maximum tool Ø	350 mm. (380)
Profiling spindle	
Spindles	No. 2
Shaft Ø	50 mm.
Length	320 mm.
Rotation speed	6.000 r.p.m.
Motor power	7,5 HP (5,5 kW)
Maximum tool Ø	240 mm.
Tool rod Ø	110-140 mm.
Left/right rotating splinterproof spindle	No. 1
Glass beading saw unit	
Saw Ø	200 mm.
Shaft Ø	30 mm.
Rotation speed	6.000 r.p.m.
Motor power	3 HP
Horizontal saw traverse	50 mm.
Roller feed	
Motor power	1 HP (0,75 kW)
Continuous roller speed regulation	2,5-15 m/min.
Roller Ø	120 mm.
Roller axle-to-axle distance	130 mm.
Rollers	No. 16
Pneumatic roller pressure regulation	11-40 Kg./cm^2
Overall dimensions	
Tenoning side	3.000 mm.
Profiling side	2.800 mm.
Height	2.100 mm.
Weight	4.100 Kg.

OPTIONAL ACCESSORIES

Hardware grooving unit

Tool Ø	180 mm.
Shaft Ø	40 mm.
Length	80 mm.
Motor power	4 HP (3 kW)
Shaft rotation speed	6.000 r.p.m.
Horizontal tool traverse	40 mm.
Displacement of pneumatic vertical positioning device for 2-position traverse shaft	50 mm.

Return conveyor
Uprated motor
Self-braking motors
8-position motor-driven splinter protection
Motor-driven lifting unit
Continuous saw axle position regulation
Digital display for table inclination reading
Control unit with communication capabilities to external units by RS 232 serial interface.
Aluminium guide tiltable +/- 60°

The manufacturer reserves the right to make all changes necessary in order to improve its products.

SAOMAD

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