#### STROMAB EXPERTS IN CROSSCUTTING SOLUTIONS SINCE 1965

# MATRIX

AUTOMATIC **CUTTING-OFF** LINES WITH ELECTRONIC PUSH FEED SYSTEM

### "MATRIX" AUTOMATIC CUTTING-OFF LINES

"Evolution of the species": starting from the wide range of manually operated cutting-off machines, TR350, TR450, TR500 and TR600, produced since the start of the 1970s, STROMAB decided to evolve the range and enter the automatic cutting-off line sector, becoming one of the strongest global players.

More than 1000 machines with push feed system have been sold since the idea became reality, and as usual it is purely thanks to the characteristic Made in Italy ethos, an entirely Italian mindset which manages to blend customer care, in-depth market knowledge, the right quality-price ratio and an unwavering confidence in our company, and which has enabled us to become a point of reference on a global level.

**EVOLUTION OF THE SPECIES:** EXPERIENCE IN SOFTWARE.

TR500F

TTENTS

B



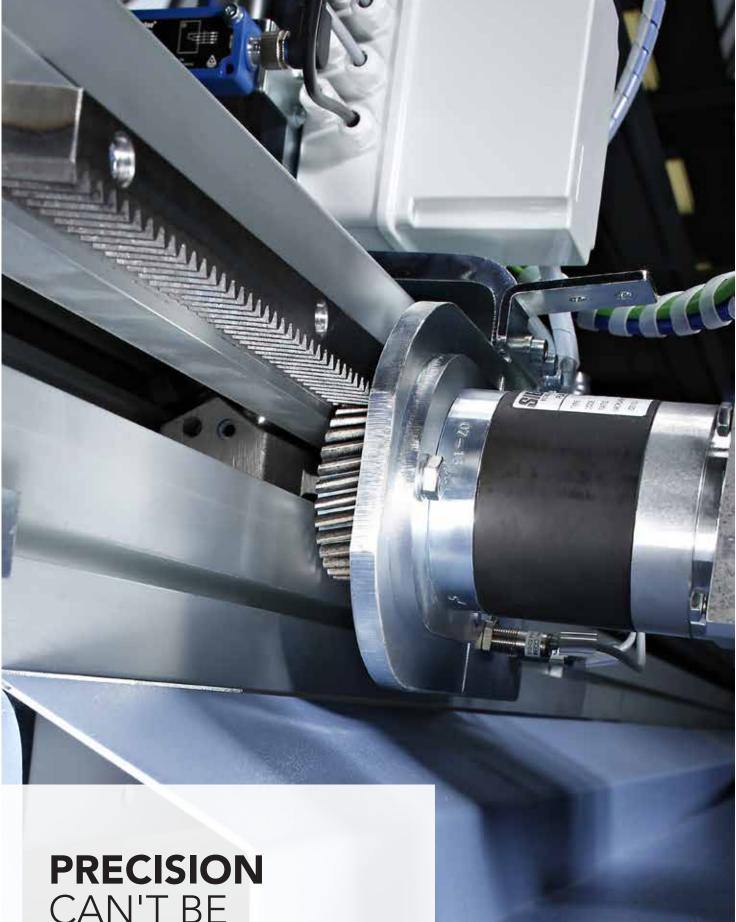




# MATRIX, A **STROMAB** PHILOSOPHY

Matrix is a cutting-off machine with electronic push feed system and controlled axis. The range has evolved with the arrival of new cutting-off units, and today we offer the TR450, TR500, TR600, TR500/F and FAST500. The wide choice of available versions, from 2000 mm to 14000 mm length, with left-hand and right-hand push feed system, and a wide range of accessories enables us to satisfy even the most demanding of clients.





CAN'T BE AN OPINION

### TR450 - TR500 - TR600



Detail of the pusher arm feeding system with rack and pinion and brushless motor for positioning without compromise. TR450 and TR500 4-second cutting cycle TR600 6-second cutting cycle. 3 versions for 3 integrated solutions BASE / OPTI / OPTI-PLUS

clear choices for complex solutions.





#### BASE

Cutting line for those working with uniform-length materials, with workpieces loaded individually or in bundles.

**3 optimisation options** (Maximum length, Sequence and Board sequence)



# 2000 1300... ....500

#### ΟΡΤΙ

Function enabling the automatic measurement of the workpiece being cut. Optimum solution for those working with variable-length materials, with workpieces loaded individually or in bundles.

**6 optimisation options** (Maximum length, Sequence, Board sequence, Volume, Minimum waste and Priority)

#### **OPTI PLUS**

Mark detection function which guarantees **complete optimisation** and the elimination of knots and defects. Marking in fluorescent chalk. (should always be ordered in combination with the OPTI function)

High-resolution 12" touch screen controller with graphics interface. USB port and Ethernet port as standard.

Detail of the push feed system with automatic sensor to measure the workpiece being cut (OPTI function)



### FAST500



The latest addition to the cutting-off machine family was designed to reduce times and increase production. **The cutting cycle is 2 seconds.** 



|      |      | -    |      |
|------|------|------|------|
| 1800 | 1800 | 1800 | 1800 |

#### BASE

Cutting line for those working with uniform-length materials, with workpieces loaded individually or in bundles.

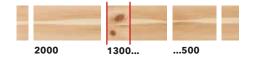
**3 optimisation options** (Maximum length, Sequence and Board sequence)



#### OPTI

Function enabling the automatic measurement of the workpiece being cut. Optimum solution for those working with variable-length materials, with workpieces loaded individually or in bundles.

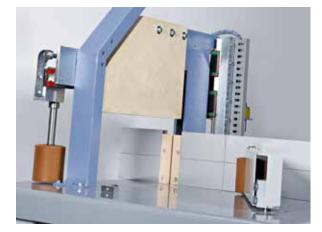
**6 optimisation options** (Maximum length, Sequence, Board sequence, Volume, Minimum waste and Priority)



#### **OPTI PLUS**

Mark detection function which guarantees **complete optimisation** and the elimination of knots and defects. Marking in fluorescent chalk. (should always be ordered in combination with the OPTI function)

Detail of the upper workpiece clamp.



Detail of front clamps.



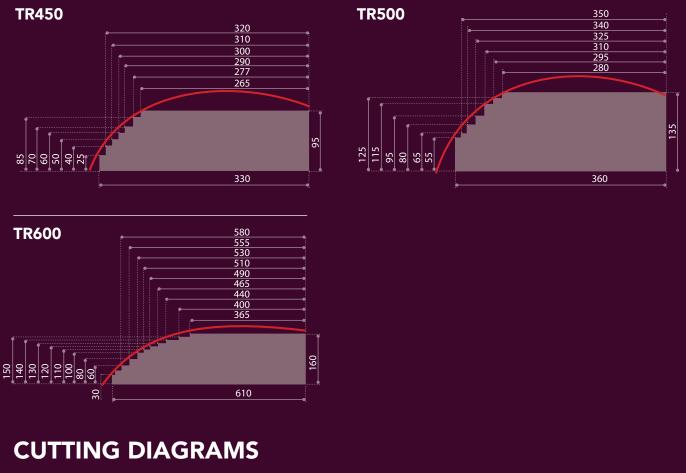
# CUTTING+MILLING: MULTIPLE OPTIONS FOR ANY REQUIREMENT

10

2

## VARIOUS **CUTTING** SOLUTIONS

### **CUTTING DIAGRAMS** TR450-TR500-TR600



# FAST500

Thanks to an innovative mechanical blade positioning system, we've introduced a new variable geometry cutting system , so that a single machine can meet requirements for both maximum height (POS. "A") and maximum width (POS. "B")

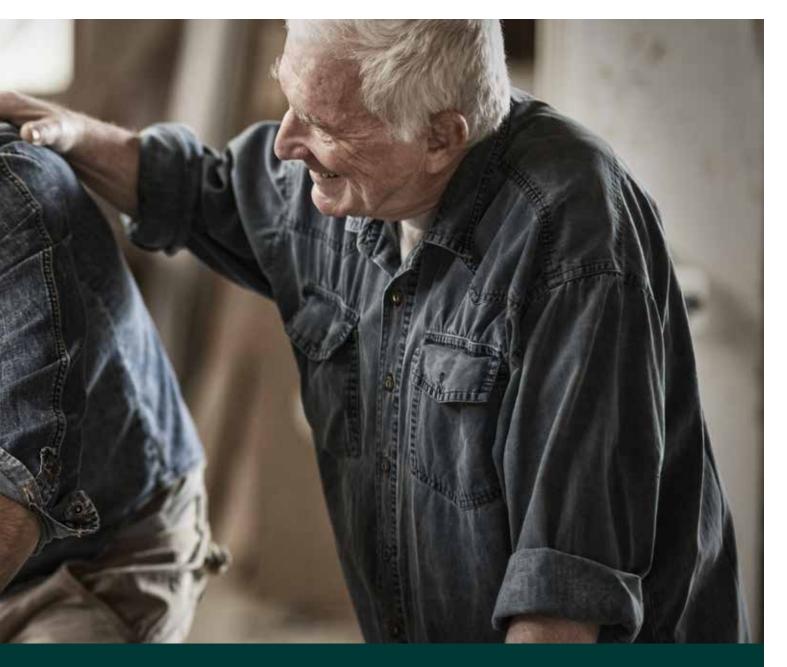


## TO ENHANCE PERFORMANCE



- Automatic loader for individual workpieces or bundles of material
  Chain-type loading system
  Load capacity: 3 to 10 m.





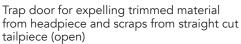
### **ELECTRONIC SORTING CONVEYOR** WITH BELT AND RAPID KNOCKOUT DEVICES

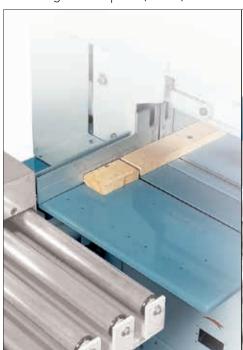
- Variable belt speed: 0-120 m./min.Size/knockout device match-up taken directly from cutting list
- Storage rack with idle rollers



# THE **OPTIONS** THAT MAKE THE DIFFERENCE

Trap door for expelling trimmed material from headpiece and scraps from straight cut tailpiece (closed)







External vertical clamp







### ACCESSORIES

Typical only of Italian industry, we've decided to meet the needs of our customers by introducing a wide range of accessories. Just to name a few:

- loading system located on both the left and right sides of the cutting unit
- push feed system length ranging from 2000 to 14000 mm.
- optimisation software with 6 programming options
- 3 label printers and 1 ink-jet printer
- Automatic loading systems
- Automatic unloading systems

#### Label printer



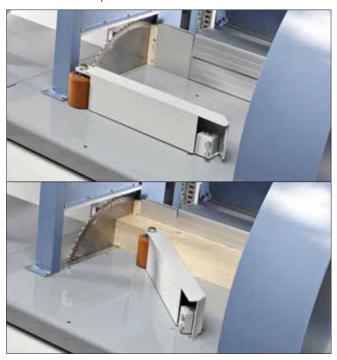
4 vertical printing heads with print height of mm. 50.8



2 vertical printing heads with print height of mm. 25.4



Internal side clamp



REA JET HR high-res ink-jet printer



# A SINGLE MACHINE, A THOUSAND DIFFERENT USES

The MATRIX cutting-off lines are able to meet all the requirements of 90° cutting, popular with manufacturers of traditional packaging (pallets, crates, boxes), garden furniture, solid wood furniture and wooden doors and windows.

















#### TECHNICAL CHARACTERISTICS

| TECHNICAL CHARACTERISTICS |      | TR450       | TR500       | TR600       | FAST500     |
|---------------------------|------|-------------|-------------|-------------|-------------|
|                           |      |             |             |             |             |
| Motor power               | Hp.  | 5.5 (4 kW)  | 10 (7.5 kW) | 12 (9.2 kW) | 10 (7.5 kW) |
| Blade diameter            | mm.  | 450         | 500         | 600         | 500         |
| Intake vents              | no.  | 2 Ø 100 mm. | 4 Ø 100 mm. | 4 Ø 100 mm. | 2 Ø 120 mm. |
| Air flow rate             | m³/h | 1200        | 2400        | 2400        | 900         |
| Air consumption per cycle | nl   | 6           | 4           | no          | 34.8        |
| Cutting system operation  |      | pneumatic   | pneumatic   | hydraulic   | pneumatic   |

| MILLING UNIT                     |     | TR500/F     |
|----------------------------------|-----|-------------|
|                                  |     |             |
| Milling cutter with 4 + 4 blades | mm. | Ø max 280   |
| Milling cutter hole diameter     | mm. | 40          |
| Milling stroke                   | mm. | 400         |
| Max. width of milling tool       | mm. | 100         |
| Milling depth adjustment         | mm. | 0 ÷ 75      |
| Standard motor power             | Hp. | 5.5 (4 kW)  |
| Intake vents                     | no. | 3 Ø 120 mm. |

|   | BASE | ΟΡΤΙ | <b>OPTI-PLUS</b> |
|---|------|------|------------------|
| DATA ENTRY MANAGEMENT   |      |      |                  |
|   |      |      |                  |
| 12" touch screen controller   | •    | •    | •                |
| Creation of cutting lists directly on the on-board controller                     | •    | •    | •                |
| Transfer of cutting lists created by PC via USB or Ethernet port                  | •    | •    | •                |
| Creation of cutting lists on PC (with optional ZS004)                             | •    | •    | •                |
| Import of cutting lists to Excel (with optional ZS005)                            | •    | •    | •                |
|   |      |      |                  |
| PROCESSING SOFTWARE   |      |      |                  |
|   |      |      |                  |
| A) Up to 1000 cutting lists made up of 10 sizes                                   | •    | •    | •                |
| B) One list of 10000 sizes in sequence  | •    | •    | •                |
| 3 Optimisation options (Maximum length, Sequence and Board sequence)              | •    | •    | •                |
| 3 Optimisation options (Volume, Minimum waste and Priority)                       |      | •    | •                |
| PUSHER TECHNICAL CHARACTERISTICS  |      |      |                  |
|   |      |      |                  |
| Working lengths from 2000mm to 14000mm  | •    | •    | •                |
| Feeder system with precision rack and brushless motor                             | •    | •    | •                |
| Maximum push feed system speed 90 m/min   | •    | •    | •                |
| Positioning reading with brushless motor resolver                                 | ٠    | •    | •                |
| Positioning accuracy +/- 0.4 mm.  | •    | •    | •                |
| 8° inclined work surface  | •    | •    | •                |
| Pneumatic lifting of the push feed system at the end of cycle and overhead return | •    | •    | •                |
| Photocell reading of workpiece length   |      | •    | •                |
| Defect detection photocell with fluorescent chalk marking                         |      |      | •                |
| Management of 3 degrees of quality (Q1-Q2-Q3)                                     |      |      | •                |

For 50 years, our family has been passionately building the machines which today help our many clients make their work more rewarding.





# SATISFIED CUSTOMERS



















### THE VALUE OF A FAMILY-OWNED COMPANY

Stromab has stood for reliability since 1965. And we believe that this word best expresses the philosophy behind our products over our more than 40 years in business. The awareness that no investment can offer greater advantages than customer satisfaction leads us to constantly devote new resources for ongoing research into technology, development and human resources. A constant growth trend is the natural result of a company policy based on the value of success in full compliance with environmental requirements. With a surface area of over 5000 m<sup>2</sup>, 40 employees and a constantly updated line of products, Stromab has made a significant name for itself as one of the most dynamic companies in the woodworking machinery sector.

Technical data are not binding and may be altered during construction for improvements.



#### **STROMAB SPA**

42012 CAMPAGNOLA EMILIA (RE) Italy Via Zuccardi 28/a - Z.I. Ponte Vettigano Tel. (0522) 1933300 - Fax (0522) 1933361 info@stromab.com - www.stromab.com