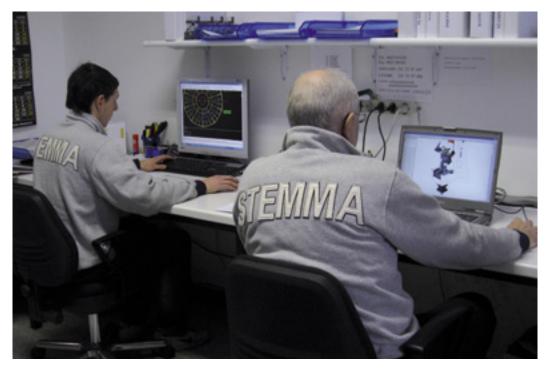


# Company

Stemma is specialized in designing and manufacturing polyurethane processing machines and since 20 years is committed to the development of technologies and systems for the footwear industry.



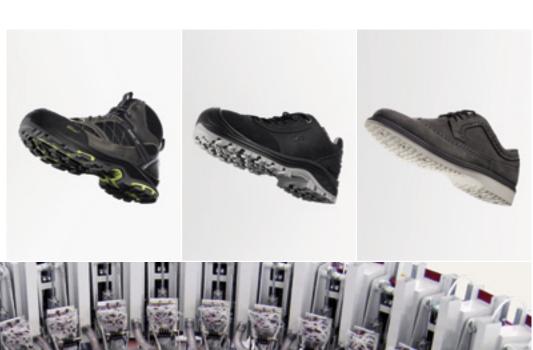
## Maxima 13

Automatic rotary machine 18/24/30 stations for direct molding of PUPU and TPU/PU soles.

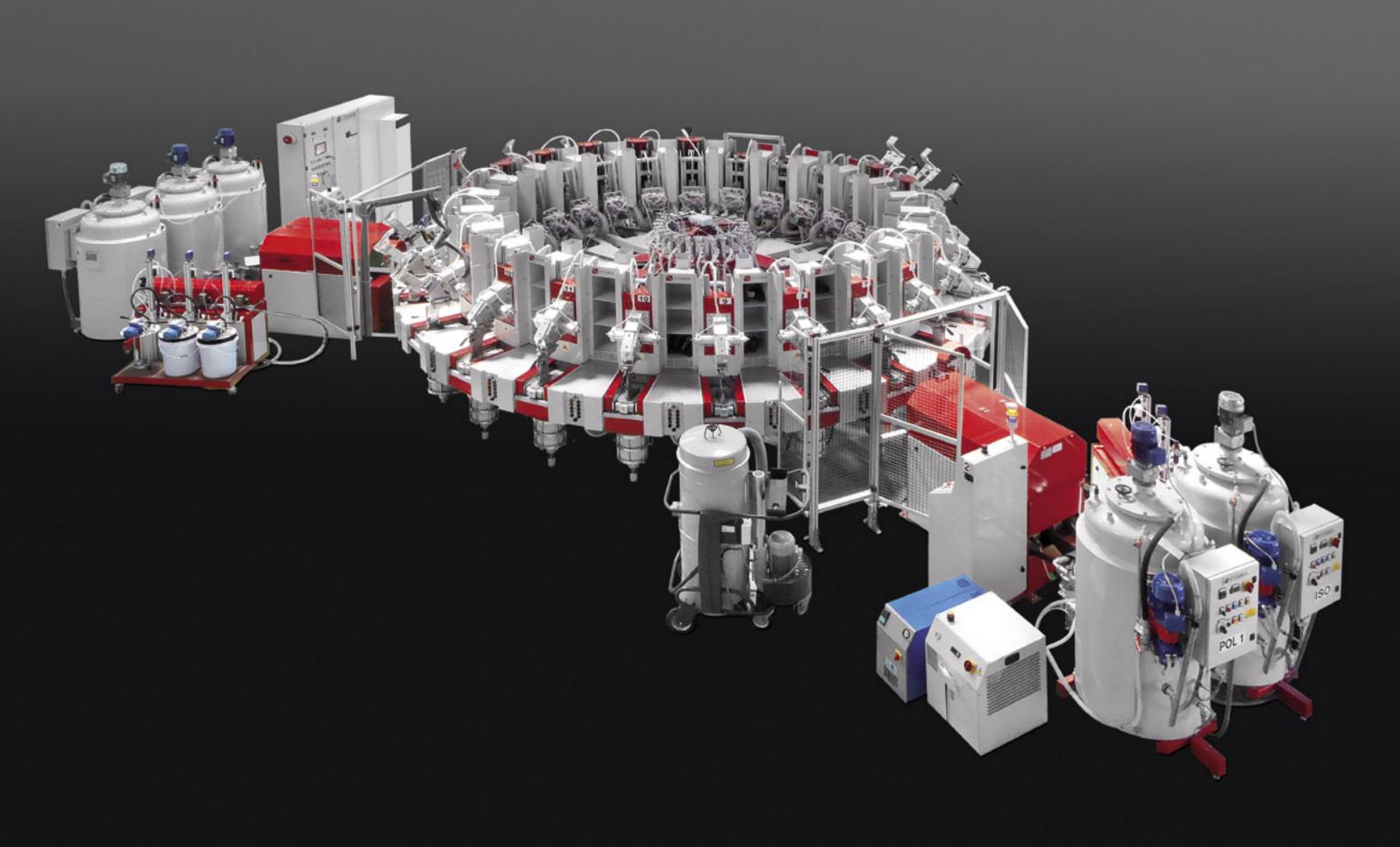
Maxima 13, the third generation of the successful Stemma's machine represents a real step forward in the footwear technology.

Maxima 13 is available in 3 versions:

- Maxima 13S: for direct molding of single-layer PU soles
- Maxima 13B: for direct molding of double-layers PU-PU soles
- Maxima 13T: for direct molding of double-layers TPU-PU soles







# Rotary table & mouldhoders features





- Rotation by Geneva wheel with stabilization system for fast rotation.

  2. "Cleaning Drawer" with
  - 2. "Cleaning Drawer" with absorbent felt insert, to keep the station free of polyurethane residue and spills of release agent.
  - 3. Multi Purposes Working Positions"; with station's movements controlled by PLC. The mould-holder station is controlled by a "Multitasking Pneumatic Control System", which allows different productive cycles to be combined.





- 4. Ample ring opening and last lifting for easy release agent spraying with central suction point for an efficient evacuation of the fumes.
- 5. Use of commercially available pneumatic components easily available on the market.
- 6. Set for "Toe Cap" mould system.
- 7. Automatic last rotation and setting for "Plastic lasts".



# PU Injection Group "Stealth 13"

This new generation of low-pressure self-cleaning unit for injecting polyurethane, benefits of the innovative "Hydrodynamic Drive" to control the opening and closing of the Polyol and Isocyanate injection valves.

With this advanced "hydrodynamic valve-action system" the "injection pin" is moved by pressure of over 100 bar that ensures a very fast opening of the valves when the machine halts for shorts or long stops and guarantees that movements are synchronized to avoid all possible "pre-run fenomena". A new shutter system guarantees the perfect closing of the recirculation valve. The use of this innovative technology guarantees maximum functional stability while, at the same time, maintaining the versatility of the fully independent valves system especially suited to multi-polyol injection groups in which one isocyanate circuit and two or more polyol circuits can be installed.



- 1. Injection group Stealth 13 with multi-polyol system.
- 2. Injection nozzle cleaner with rotating brush system and release agent spray.
- 3. Hydrodynamics unit.
- 4. Hydrodynamic Injection Valves.
- 5. Available with "Manual Screw Change system" or "Pneumatic fast Screw Change System. Mixing screw driven by electrospindle installed online with the screw ensure low noise during functioning and selectable rotation speed of mixing screw.







# **PLC & software**





STEMMA

Injector 1



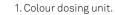


- 2. On line Remote assistance.
- 3. "F.M.I. System" changeable output during injection.
  The flow iacceases gradually.
  The shoot moves along the leught of the mould.
  The material it distribuited equally on the mould surface.
- 4. On line robots remote assistance.









- 2. Integration with ABB robot for roughing process with new Stemma software for managing roughing processes with a more "intuitive" operator interface, and with grading functions for cutting down the time needed to produce and manage roughing operations.
- 3. Integration with ABB robot release agent spray process.
- 4. Reactivation unit for rubber and TPU inserts.



#### Technical data

#### Rotary table and mouldholder stations

Mould sizes: 200x400/430 mm

Mould height: mm 120 (optional mm 150)

Mouldholder ring opening: mm 140 Bottom plate up-dowm movement: mm 20+20 (optional 25+25) Last height adjustable: mm 333, 433, 533

#### PU Injection group

Low pressure – self-cleaning: Model STEALTH 13
Injection and recilculation valves hydrodynamically operated
Mixing screw operated by electrospindle fix in line with the screw
Mixing screw rotation speed range: from 8.000 to 22.000 rpm
Nozze cleaning robot installed on the injection unit

#### Storage tanks

Storage capacity: 250 Kg (Pressurized 0,5 Bar) Drier unit: optional

#### Electric panel, PLC & Software

I.M.F. System (Injection flow control and management) Online Remote assistance Set for UPS unit

### Accessories and automation (optional)

Color dosing unit: Mod. CROMAX Lamp for rubber-TPU inserts reactivation Release agent spray robot Roughing robot TPU Injection group (optional)
Bottom plate for TPU moulding: 75 KN Camping force

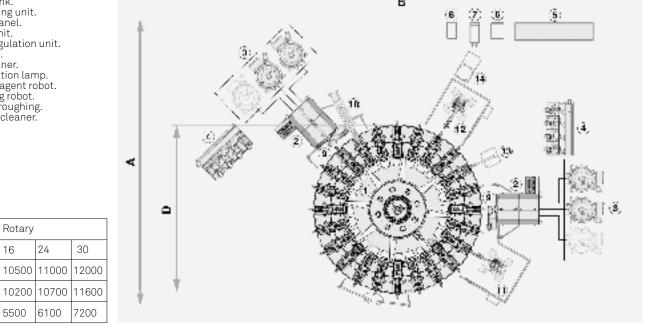
5. Electric panel.

6. Cooling unit.

14. Vacuum cleaner

Rotary 16

24



# **Foto** gallery

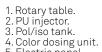














7. Thermoregulation unit. 8. Dryer unit.

9. Head cleaner.

10. Reactivation lamp.
11. Release agent robot.

12. Roughing robot. 13. Manual roughing.

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