





INTEGRATED COMPONENTS AND SYSTEMS

## **Pneumax Group**

# Innovation, Competence and Technology

Founded in 1976, Pneumax S.p.A. is now one of the major international producers of components and systems for automation. The Pneumax group is made up of **27 sales and production companies** that employ more than **800 employees throughout the world**. Continuous investment in research and development have enabled Pneumax to broaden its portfolio of standard products and integrated mechatronic solutions, by combining pneumatic technology, electric actuation and fluid control. The use of the most evolved production technologies guarantees maximum flexibility and quality certified according to the international standards of the various sectors.

The aim is to offer increasingly specialised services within specific industry sectors which has led to the creation of **3 Business Units**, respectively dedicated to:



Automotive

Process automation

Through a network comprised of branches and exclusive distributors, Pneumax operates in over 50 countries around the world, to support its customers throughout every stage of the supply process.





PNEUMATIC TECHNOLOGY









### **APPLICATION SOLUTIONS** FOR THE WOODWORKING **INDUSTRY**









### **Applications**



**Processing** 



**Panel sawing** 



**Edge banding** 



**Polishing** 



**Boring** 



**Assembly** 



**Handling** 







The Pneumax actuator range includes pneumatic and electric technology with a wide range of standard or customised solutions with bores ranging from Ø6 mm to Ø320 mm and strokes up to 6000 mm.

Pneumax actuators are **ideal for applications** which require flexibility and precision such as the positioning of caps or stop guides, or combined with clamping elements, to clamp the components to be machined. Customised solutions designed to create integrated cylinder-solenoid valve systems for specific applications such as spindle selection for drilling heads.

#### **Product families**

- ISO pneumatic cylinders
- Non-compliant pneumatic cylinders
- Rodless cylinders
- Compact cylinders
- Handling
- Electric cylinders
- Electric axes with belt or screw transmission
- Custom solutions

### **CLAMPING**

## Reference stop, stopper and swing clamp cylinders



Over 45 years of experience in the woodworking sector have allowed Pneumax to design all the components used to ensure the panels being processed inside the production lines are placed correctly.

An example of this are the **over 190 versions of stop cylinders** which ensure centesimal precision in maintaining their position during machining or the swing clamp cylinders which enable to work at different pressures and perform translation and rotation movement free from each other.

#### **Product families**

- Version with telescopic rod
- Swing clamp cylinders with independent rotation
- Compact cylinders with integrated rotation system

### **Highlights**

- Over 190 versions of stop cylinders
- · Centesimal placement precision
- · Maximum sturdiness and reliability

### **CONTROL**

## Pneumatic and vacuum systems management solutions



The Pneumax range includes valves and solenoid valves with point-to-point electrical connection ideal for direct assembly on the cylinder and multipolar solenoid valve sets or serial systems that support all main communication protocols used in the sector.

The valve assemblies are available in **both engineering** plastic or aluminium construction and designed to meet all the requirements with regards to size, weight and durability.

Pneumax also manufacture 2 or 3-way shutter valves, poppet valves and solenoid valves for high flow air and vacuum applications.

#### **Product families**

- Pneumatic valves and solenoid valves
- Serial systems
- Shutter valves
- Poppet valves and solenoid valves

### **SAFE & GREEN**

Pneumax components are designed to ensure compressed air consumption optimisation and the safety of machines and operators.

An example of this are the Safeline on-off and discharge valves with electro-pneumatic control and spring return, equipped with a diagnostic system for the valve status and with safety and redundancy functions, **certified and compatible with ATEX environments**. Double version valves are also a component classified in CATEGORY 4 according to ISO EN 13849, suitable for use in safety circuits up to PL=E.

## **Energy savings** and safety automation

#### **Product families**

- · Proportional technology
- Booster
- Pressure switches
- FRL with integrated SAFELINE valves
- Single-stage, multi-stage and multifunction vacuum generators



### PANELS AND SYSTEMS

Panels, systems and integrated solutions are designed to house all the pneumatic circuitry internally, including solenoid valves which can assembled directly on the machine offering a compact solution.

With regard to panel handling, an example are the circuits of directional valves/solenoid valves for suction and blowing control placed inside the suction cup holder or, in polishing, the systems composed of pads integrated with the pressure adjustment electronic systems.

## Plug & play solutions to optimise pneumatic system management





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