



AGROPHARMA Fast Roll-up Doors for Clean Rooms

Designed to divide operating and/or storage environments in the food and pharmaceutical sectors, it allows to automate operators' passage by isolating different environmental zones, without introducing operating barriers. Suitable for environments that require frequent and constant washing, leakproofing (clean room), low maintenance. Available as an option with self-repairing system.



The AgroPharma vertical rapid roll-up door for cleanrooms automates the passage of operators, isolating areas with different environmental characteristics, without introducing operational barriers. High opening and closing speeds and tightness characteristics help control air exchange between environments, reducing contamination, minimizing pressure loss and protecting environments from air flows, humidity, dust and dirt. Used in the pharmaceutical, chemical, food and electronics industries, it is optimal for partitioning between operating and/or storage environments with controlled atmosphere, which require special conditions of use such as:

- Frequent wash down capability
- Positive air tight feature
- Reliable operation over time

For better natural lighting and visibility between rooms AgroPharma can be equipped with windows.

The flexible curtain can be provided with an optional "Crash and Self Repair" system. In case of an accidental crash, the curtain will exit the side tracks and it will slide back into its operating position. This enables the door to become fully operative automatically.

Air tightness

The new AgroPharma design allows best air tightness between the flexible curtain and the side tracks. This is achieved by special low friction, wear-resistant strips applied on either side of the curtain.

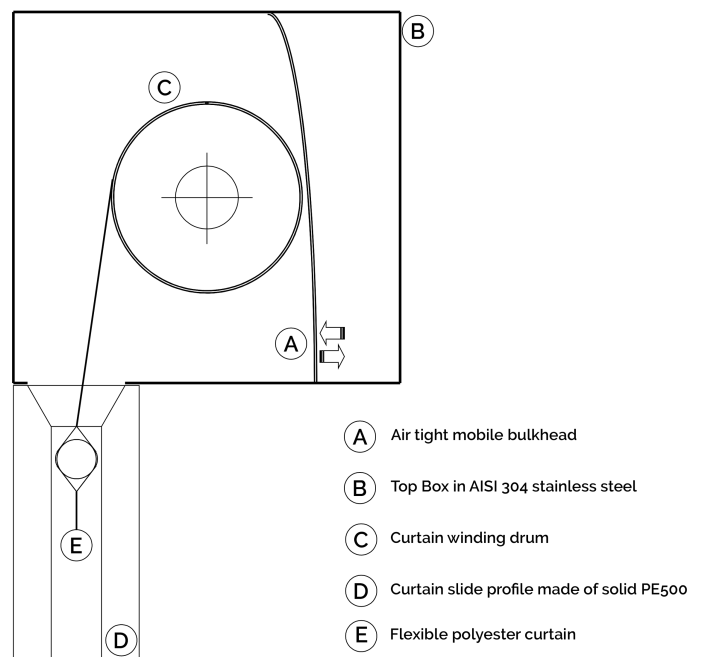
The design of AgroPharma door features a header box with a rotary drum and a mobile bulkhead which prevents unwanted air entrapment from the uppermost area of the winding curtain and the surface of the horizontal support beam.

Clean room facility

La possibilità di mantenere un elevato livello di igiene è assicurata da:

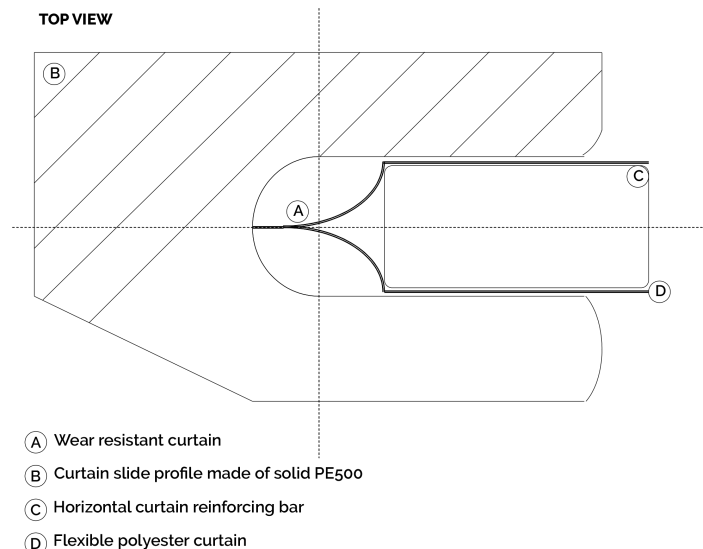
- basic structure components made of materials, certified for use in food processing areas, which can be washed down with aggressive cleaning chemicals.
- No side brushes or wipe liners which may house bacteria nests
- Special side tracks featuring one piece construction and no corners
- High pressure wash down possibility also for the curtain winding drum

CROSS VIEW



Non-scaled drawing

TOP VIEW



Operating controls

This door is usually fitted with a standard COIL electronic control panel, fail-open mode, with a 3-phase 400 V. 50 Hz. mains supply. The ride up speed has been set to 0.9 m/sec. Upon request, a control panel with inverter, 230V-.single phase can be supplied. This optional control panel allows a choice of different curtain speed, both for ride up and descent, with a max, ride up speed to 1,2 m/sec.

Applications

Cells with temperature and atmosphere controlled



Partitioning of processing / storage areas for shipments



Closure with conveyor



Retractable air block box between controlled atmosphere environments



Technical specifications

Structure

Self-support structure with side tracks and continuous smooth surface without corners. The side jambs, made of solid PE500 (a certified food-grade Polyethylene), feature an open design for total wash down operation. The top section features a fully enclosed stainless steel header box, finished with non-toxic white paint.

Drive Motor assembly

Right side, front mount position. A. 3-phase self-braking motor, 220/380 V, with rating of 0.6 kW. complete with safety overheat detector. Non reversible oil-bath speed reducer with worm screw coupled with the winding drum. Electro-magnet lock brake. The drive motor is fitted inside a waterproof casing rated IP 55

Speed

Standard opening speed 0.9 m/sec, up to 1.2 m/sec with optional Inverter panel.

Flexible Curtain

Made of self-extinguishing polyester fabric curtain, with one row of transparent windows flexible air tight side seal system. Horizontal reinforcement bars fitted inside curtain pockets sealed by thermal-welding. Optional "Crash & Self-Repair" system for automatic restoring door operation after accidental impact.

Wind pressure resistance

UNI EN 12424 Class 1/2.
Air pressure value with door in Up or Down operation is approx 240 Pascal.

Air leakage

UNI EN 12426 Class 3
The air permeability values are guaranteed up to $6 \text{ m}^3/\text{m}^2/\text{h}$ for a reference door with a net passage clearance of mm. 3000xh. 3000 (approx. values $150 - 250 \text{ m}^3/\text{m}^2/\text{h}$).

Safety device

Manual emergency opening by means of a pushbutton fitted on one side of the door jambs.

Manual operation In the event of power failure or breakdown.

Safety detector when an obstacle is detected a dual photocell beam stops the curtain descent and reverses its travel, sending it up to an open position.

Control Box

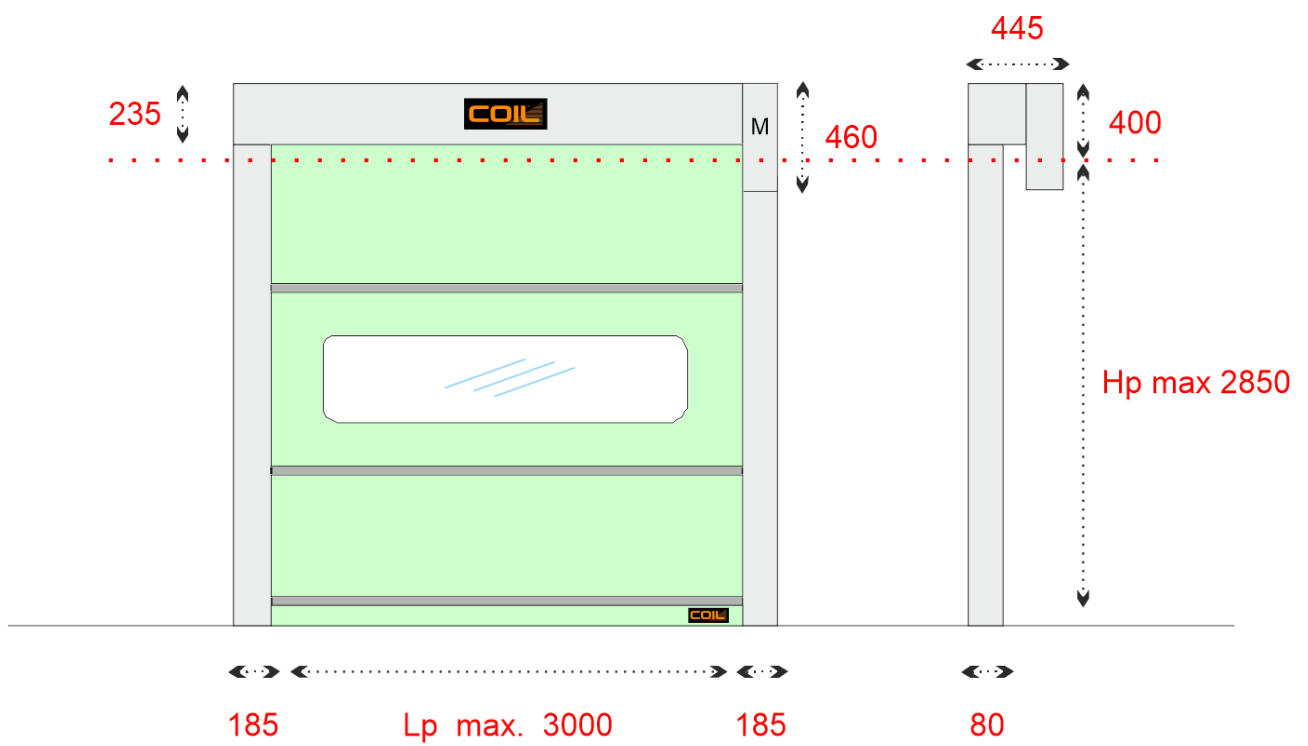
COIL door is supplied with an exclusive electronic control unit powered by 400V three-phase, equipped with electronic limit switches with absolute multi-turn encoder.

It also offers the possibility of expansion and connection to external devices (fire or emergency security systems) and remote control. Equipped with a large and specific display for programming, diagnostics and checking of operating cycles.

Alternatively, the door can be supplied with the exclusive electronic programmer with single-phase INVERTER 230 V, for the regulation and customization of the upward and downward speeds of the door curtain, the slowdown in the opening and closing limit switch phases.

Optional opening devices

Opening and closing of automatic doors occur by using a variety of controls. These include Manual Commands such as Wall Pushbutton, or Pull Cord from ceiling, or Manual Remote Control using a Radio Transmitter. Automatic commands are also available including Floor Induction Loops (which works only when a metal vehicle treads on the induction loop areas), or mono/stereo Radars.



Warranty

Manufactured with the best electronic materials and components, AGROPHARMA doors are tested in the most severe applications in industry and commerce and are covered by a standard 12-month warranty.

Certifications

Product in compliance with the product standard UNI EN 13241:2016 Industrial and commercial closures. All COIL doors are supplied with original CE certificate.

CE certification ensures that construction and design of the product complies with requirements of the following safety directives:

- UNI EN 13241:2016 Product standard for Industrial and Commercial Closures
- 305/2011 Construction Products Directive
- 2014/35/EU Low Voltage Directive or LVD
- 2014/30/EU Electromagnetic Compatibility Directive or EMC Directive
- 2006/42/EC Machinery Directive
- UNI EN 12604 Mechanical aspects
- UNI EN 12453 Safety in use of motorized doors
- UNI EN 12424 Wind load resistance

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