

MANUALE TECNICO

EN Technical manual

F Manuel technique

D Technisches Handbuch

ES Manual técnico

V 1.0.0

AUTO Jet TURBIX



- Type: separators with automatic unloading
- Model: AUTO Jet
- Revision 1.0.0

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GENERAL INFORMATION

1. USING THE MANUAL

The instruction manual is a document written by the manufacturer and is an integral part of the central vacuum unit. In the event that it is resold, given or rented to others, it must be handed to the new user or owner.

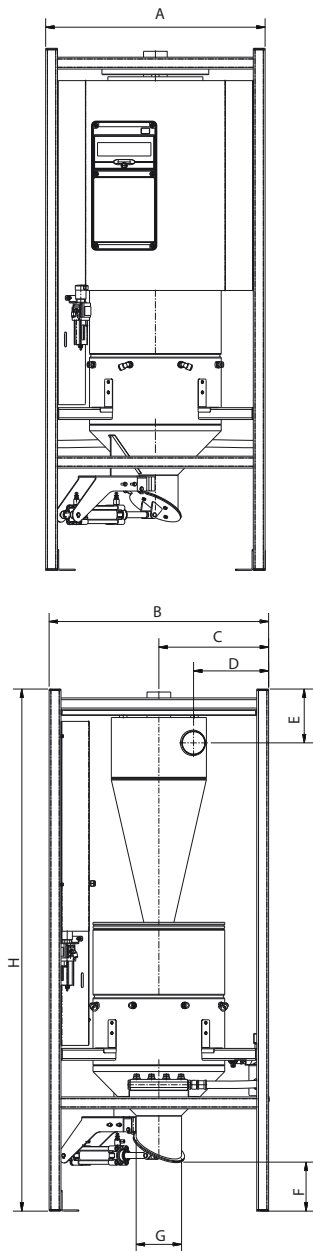
It is recommended to use it and store it carefully during its entire service life.

The main objective of this manual is to indicate the correct use of the equipment, so that the best performance is obtained, while keeping it in perfect working order and safe condition.

No part of this document may be reproduced, copied or disclosed by any means without the written permission of TECNOPLUS s.r.l. owner of the SISTEM AIR brand. The TECNOPLUS company s.r.l. reserves the right to make improvements or modifications to this manual and to this device at any time, without the obligation to give prior notice to third parties.

To obtain the best results, the use of original SISTEM AIR consumables is recommended
The SISTEM AIR trademark mentioned in this manual is a registered trademark and belongs to the owner TECNOPLUS S.r.l.

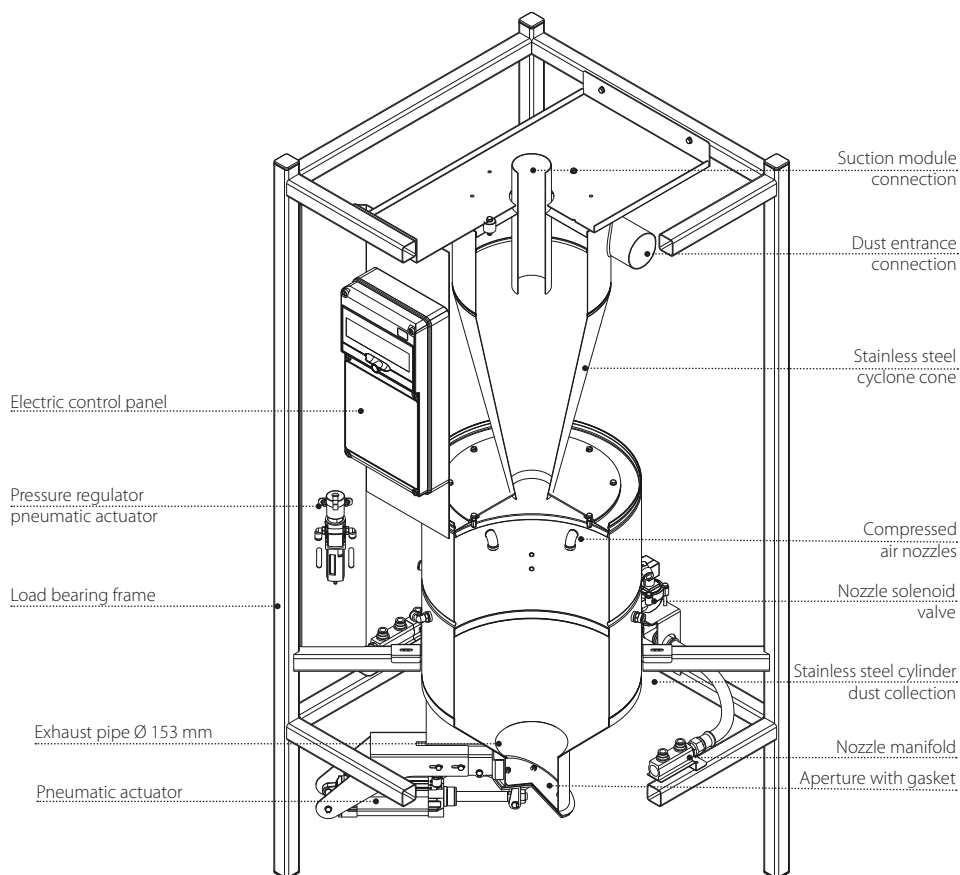
2- TECHNICAL FEATURES



Separators with automatic unloading

| Template | | Auto Jet TURBIX |
|---|------|--------------------|
| Article | | 7010.3 |
| Control panel | | YES |
| Degree of protection | IP | 44 |
| Supply | V ac | 230 |
| Absorption | A | 1,5 |
| Container capacity | l | 76 |
| Pneumatic actuator pressure | Bar | 6 |
| Dust entry | mm | 80 |
| Blowing motor exhaust outlet | mm | 80 |
| Pressurized air inlet | G | 3/4" |
| Nozzle pressure | Bar | 6 ÷ 10 |
| Maximum number of recommended operators | | 2 |
| Weight | kg | 105 |
| Size A | mm | 740 |
| Size B | mm | 740 |
| Size C | mm | 370 |
| Size D | mm | 253 |
| Size E | mm | 182 |
| Size F | mm | 165 |
| Size G | mm | 153 |
| Size H | mm | 1760 |

3 - CONSTRUCTION FEATURES



Dust separators for industrial use can be used in countless applications, thanks to their versatility and compatibility with the other components of a centralized industrial vacuum system.

In particular, the special Auto Jet Turbix separator is a unique product of its kind: the presence of the cone with cyclonic effect allows it to have an extraordinary ability to eliminate dust, preventing it from clogging the central vacuum unit filter, while the automatic exhaust device makes it suitable for the aspiration of large volumes of material without needing continuous emptying of the collection vessel. The presence of the nozzles that discharge compressed air into the collection cylinder represent a further advantage in the automatic emptying, making the separator suitable for use even in the case of aspiration of very light and voluminous materials.

The AUTO Jet separator has been designed and constructed according to the criteria imposed by current regulations and the community directives, without neglecting fundamental elements such as functionality and practicality of use.

The main technical characteristics can be listed as follows:

- Load bearing structure in epoxy powder coated steel
- Cylindrical shell in AISI 304 stainless steel
- Pneumatic linear actuator
- Possibility to connect 8 compressed air nozzles
- Control panel for the blowing, powder filling and dust discharge systems.

The pneumatic actuator allows the opening of the discharge door even in the presence of strong depressions inside the separator, in order to allow the discharge of the material in any situation.

To facilitate the discharge of any type of collected material, even the lightest and most voluminous ones, the separator is equipped with 8 nozzles that allow the discharge of compressed air when the lower door is opened.

The shape of the cone allows the cyclonic separation of the collected material to be carried out, guaranteeing a great effectiveness in eliminating dust, even fine ones, without using a filter. Maintenance will also be greatly reduced on the plant filter.

Rotating the material inlet fitting through 360 °, it is possible to rotate the inlet of the collected material by unscrewing the fixing screws of the cone with predefined progressive angles of 45 ° each.

The separator with automatic drain is made of stainless steel: this material makes it suitable for the aspiration of liquids, but also of incandescent particles. By accurately adjusting the timing of the discharge, in case of entry of liquid and solid materials during the same suction cycle, it is possible to avoid the formation of wet sediments which then solidify, becoming difficult to dispose of.

Finally, through the three potentiometers on the control panel it is possible to adjust the following operating parameters:

- suction timing (to avoid excessive filling of container)
- aperture opening timing (to be set according to the specific weight and consistency of the vacuumed material)
- compressed air jet timing which operate in emptying phase

Using the TEST button it is possible to test these three settings immediately, in order to find the optimal settings based on the type of vacuumed materials.

4 - SAFETY FEATURES

It is recommended to read carefully all of the instructions relative to installation, use and maintenance contained in this manual.

Moreover, the following WARNINGS must always be followed:

- In case of maintenance:
 - **disconnect the appliance from electrical power supply**
 - **close the AUTO Jet compressed air system**
 - **discharge the pressurized air present in the AUTO JET system**
- Do not use the appliance for improper use.
- Do not allow children to approach the equipment
- This appliance must not be used by persons (including children) with reduced intellectual, sensory or mental abilities, or by persons without experience and knowledge, unless they are supervised, or instructed to use the appliance by persons responsible for their safety.
- Wear protective gloves and a mask to perform maintenance work,
- Use only original spare parts

Finally, remember that pictograms or signs of danger and prohibition are found in the parts of the equipment where, if you do not comply with the conditions dictated by the warnings, you can certainly create unsafe situations.

WARNINGS: TECNOPLUS S.R.L. declines any form of responsibility or warranty if the purchaser or for those who make changes or modifications to the product purchased, albeit minimal.

The equipment thus designed and manufactured is able to satisfy the current needs of the centralized household suction market regarding both quality and application.

All materials and components used for its construction meet the CE safety standards and the certificates are held at the offices of TECNOPLUS S.R.L.

4.1 Safety symbols



DANGER OF ELECTRICITY OR ELECTRICAL CURRENT

Danger of serious personal injury.

During maintenance operations, disconnect the power supply and ensure that the power supply cannot be restored.



DANGER OF CUTTING

Danger of serious personal injury.

During maintenance operations, disconnect the power supply and ensure that the power supply cannot be restored.



DANGER OF AUTOMATIC START

Danger of serious personal injury.

During maintenance operations, disconnect the power supply and ensure that the power supply cannot be restored.

We remind you to pay full attention to pictograms and warnings of danger or prohibition that are located on various parts of the product: if not respected, it is possible to create unsafe situations.

4.2 Declaration of the absence of harmful substances

TECNOPLUS S.r.l. declares that its products and equipment are made with materials that comply with the limits established by current health and environmental protection regulations and do not contain substances classified as SVHC (Substance of Very High Concern) in accordance with EC regulation 1907 / 2006 (REACH, ie registration, evaluation, authorization of chemical substances; Registration, Evaluation, Authorization and Restriction of Chemical substances). Even if the aforesaid substances are not used in the processing cycles of the raw materials and our products, their presence can not be excluded in the order of p.p.m. (parts per million), due to micro-pollution of raw materials.

4.3 Safety related to fixed closure guards

Access to the electrical parts is protected by a cover removable only by means of special equipment. Each intervention on the equipment must be performed by qualified operators and with disconnection of the electrical power supply.

4.4 Safety relating to movable closure guards

There are no movable closure guards, each enclosure is considered as a fixed enclosure, secured by special screws. TECNOPLUS s.r.l. remind users that it is strictly forbidden to replace the screws used in the design and construction of the machines, with others of different characteristics.

TECNOPLUS s.r.l. will immediately suspend the product warranty in case of any tampering by the Customer.

5 - INTENDED USE OF THE MACHINE

The AUTO Jet Turbix must strictly be connected to the system network and accordingly to a fine dust separator, as it is not to be considered as a separator, but as a pre-separator. Incorrect connection can generate blockages and breakdown of the central vacuum unit.

Installation of the AUTO Jet Turbix is recommended in environments where large amounts of powder suction, particularly fine powder is required








When continuous use of the suction system is expected, powders can be discharged and collected in containers of various kinds and sizes, without necessitating turning off the vacuum system.

When using the system to vacuum liquids, it is advisable to consult Sistem Air, in order to make the right adjustments so as not to compromise the functionality of the motor unit.

The AUTO Jet Turbix must be used in combination with one or more blower motors with systems configured for air flows up to 400 m³ / h.

These components are used for plants with the following characteristics:

- Ø 63/80 mm upright column
- Dust inlet Ø 80 mm
- Possibility of using the system simultaneously with up to 2 operators advised.

| OPERATORS Ø flexible tube 32 | OPERATORS Ø flexible tube 40 |
|---|---|
|     |    |

6 - UNINTENDED USE OF THE MACHINE

It is extremely important NOT to use the appliance for the following uses, deemed incorrect and dangerous:

- It must not be used to vacuum heavy, incandescent or liquid materials unless previously notified to the Manufacturer.

Furthermore the appliance is not designed to be used in explosive hazard environments, therefore:

- It is forbidden to vacuum materials with a high risk of explosion (gunpowder) or materials that are individually inert but which, once they have been vacuumed and mixed in the dust collection container, can cause dangerous chemical reactions.
- It is absolutely forbidden to use the equipment in explosive atmospheres or outside the standard temperature, pressure and humidity values.
- Do not vacuum any material that could cause electrostatic charges inside the tubing if not previously communicated to the Manufacturer.

Uses other than those indicated above are not allowed.

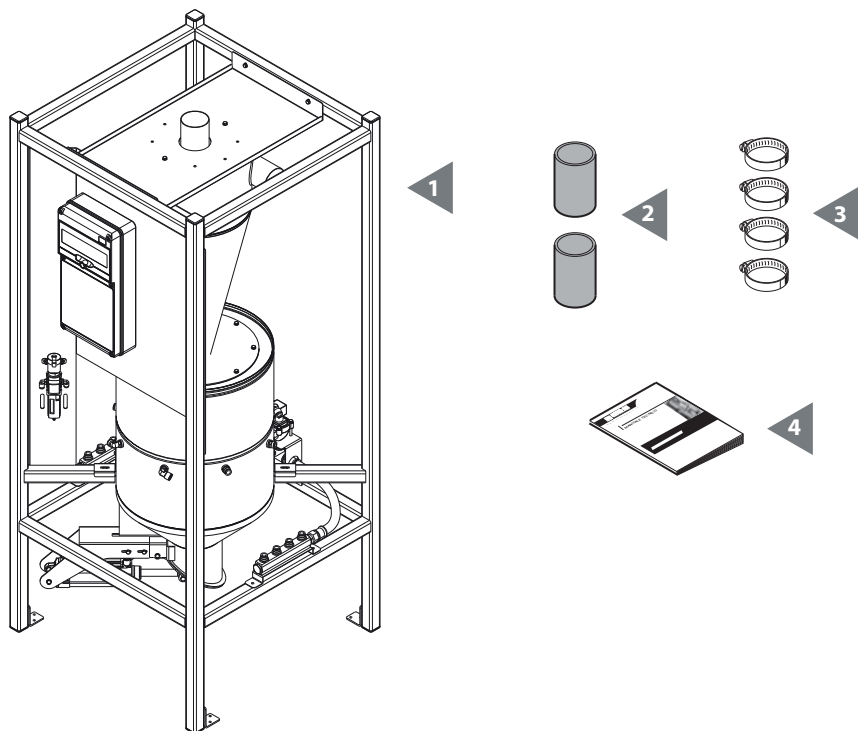
Any adaptation or modification of the product in order to make it suitable for vacuuming a particular type of material must be approved in writing by the manufacturer.

Any use other than that for which the product was built represents an anomalous condition that can cause damage to the unit and constitute a serious danger for the user.

7 - KIT AND ACCESSORIES

The sales package of the plant also includes the accessories kit, comprised of the following elements:

- 1) N°1 AUTO Jet
- 2) N°2 rubber sleeves for connection to the suction tube network
- 3) N°4 metal clamps for fixing the sleeves
- 4) N°1 installation, use and maintenance manual



8 - INSTALLATION

- CAUTION -
THESE OPERATIONS MUST BE PERFORMED
BY QUALIFIED PERSONNEL

It is the responsibility of the installer to check the risks present in the area where the product is installed and to determine its suitability in compliance with the current legal regulations and with the characteristics of the product described in this manual.

The installer must also comply with the provisions of this manual, as well as inform the user on the operation and maintenance of the installed products, and report any hazards related to their use. It is essential to leave adequate free space around the product to enable access in case of inspection, repair and maintenance.

The product must not be exposed to atmospheric elements and must not be installed in areas subject to: high humidity, possible flooding, or high temperatures.

The AUTO Jet Turbix separator can be installed in service rooms or in service areas protected from bad weather, humidity and excessive temperature changes (working room temperature $-5 \div 45^{\circ} \text{C}$, relative humidity $20 \div 85\%$ without condensation or freezing) .

8.1 Positioning

In order to allow correct use of the machine and easy maintenance, it is advisable to keep at least 60cm free space on all four sides.

Allow the necessary space to facilitate the opening of the material discharge door, positioned in the lower part of the AUTO Jet.

8.2 Mounting

The separator does not require special fixing.

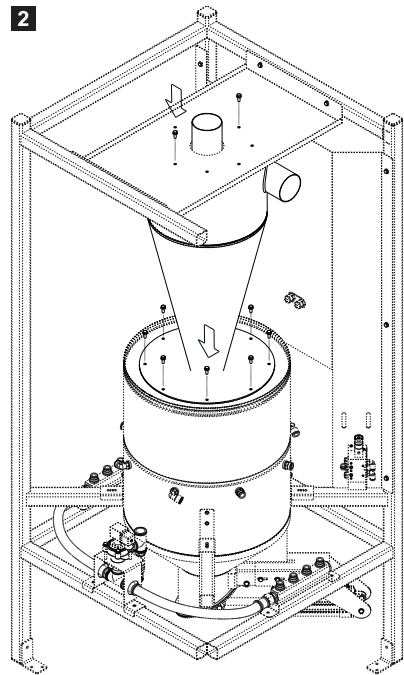
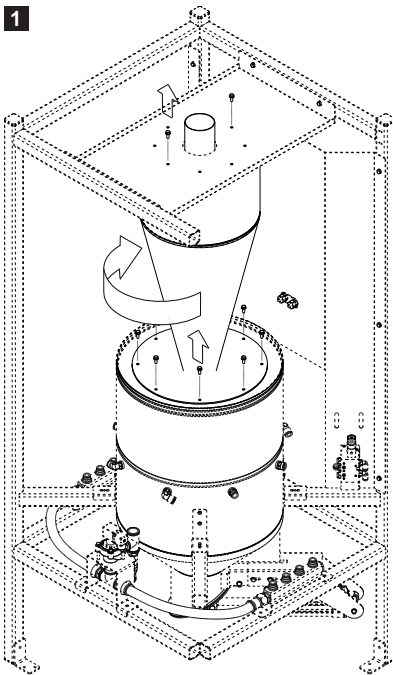
However, it is necessary to make sure that the selected installation area has the following minimum requirements for correct and safe positioning:

- a solid, perfectly level and horizontal supporting surface;
- a surface which is not subjected to vibration.

Moreover, it is also essential that there are no disconnections/irregularities which make the separator unstable.

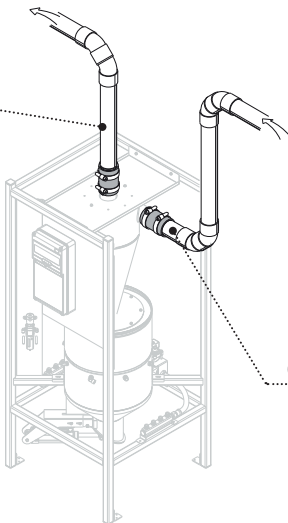
8.3 Reversibility

The AUTO Jet is designed to be able to position the dust inlet fitting according to installation needs. Unscrewing the 2 upper screws, fixing to the frame plate, and the 8 lower screws, fixing to the cylinder, it is possible to rotate the inlet of the sucked material with pre-defined 45 ° progressive angles each.



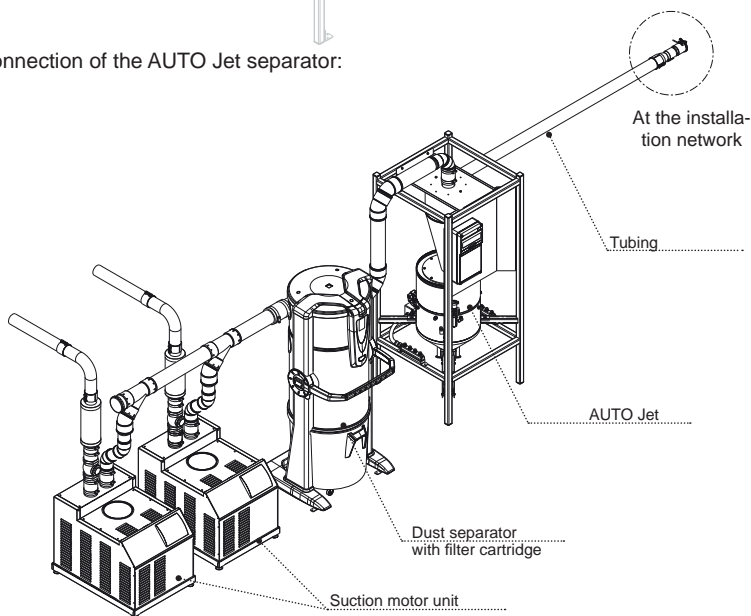
8.4 Connection of the tube network

Connect, using the sleeve and the supplied metal clamps, the AUTO JET separator to a dust separator with filter cartridge



Connect the separator to the pipe network of air intake, using the sleeve and the metal clamps supplied.

Example of connection of the AUTO Jet separator:

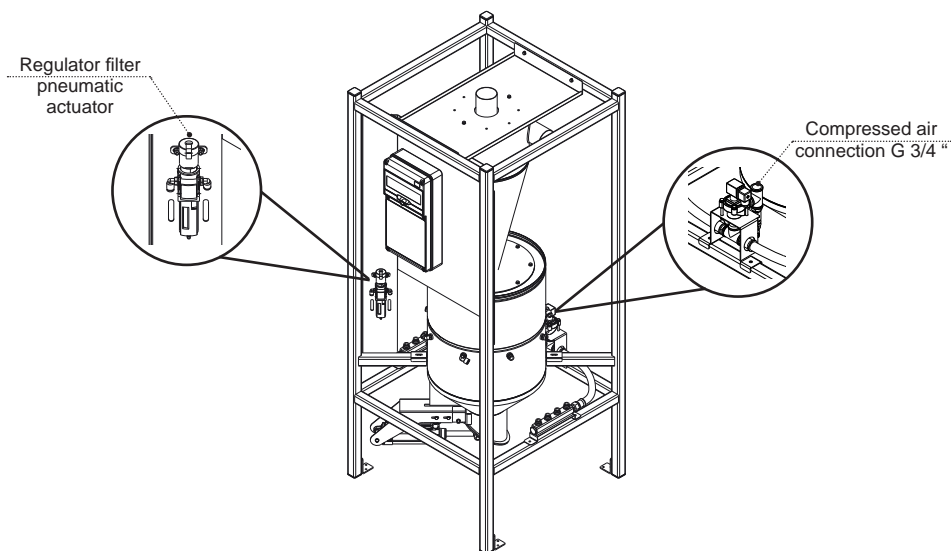


The sizing of the suction unit and of the suction lines leading to the Auto Jet Turbix must be made giving consideration to the number of simultaneous users and the type of material to be vacuumed.

N.B. It is advisable to position AUTO Jet as close as possible to the Industrial Motor to avoid power loss due to tube network length and the use of connecting bends and branches.

The Sistem Air Technical Office is available for consultancy and / or estimates.

8.5 Connection of the compressed air network



**- CAUTION -
NEVER APPLY PRESSURE OVER
10 BAR OR LOWER THAN 6 BAR**

Connection of compressed air system:

Connect the compressed air system to the G 3/4" fitting located on the back of the AUTO Jet system. It is always advisable to apply the maximum available pressure to the system, always respecting the limits indicated, so as to be able to have the greatest flow rate on the nozzles, in order to assure their correct operation.

Install a tap for closing the compressed air and a drain valve for the safe maintenance of the appliance.

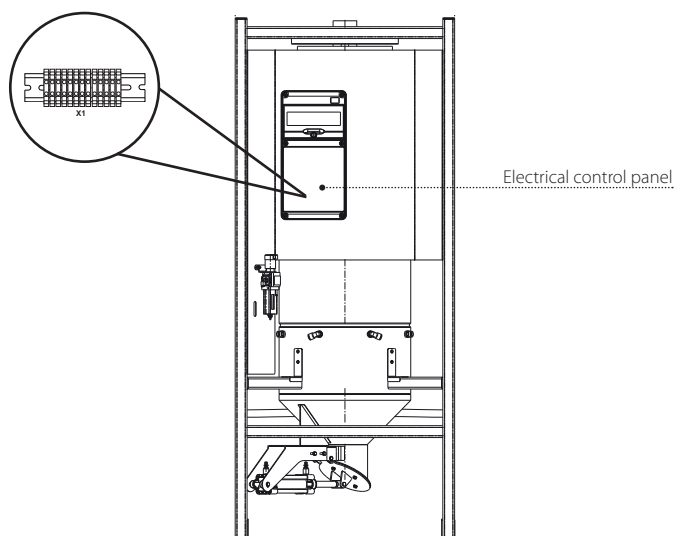
Pressure regulation applied to pneumatic actuator:

Before starting the AUTO Jet system, check that the pressure applied to the pneumatic actuator is between 6 - 10 bar.

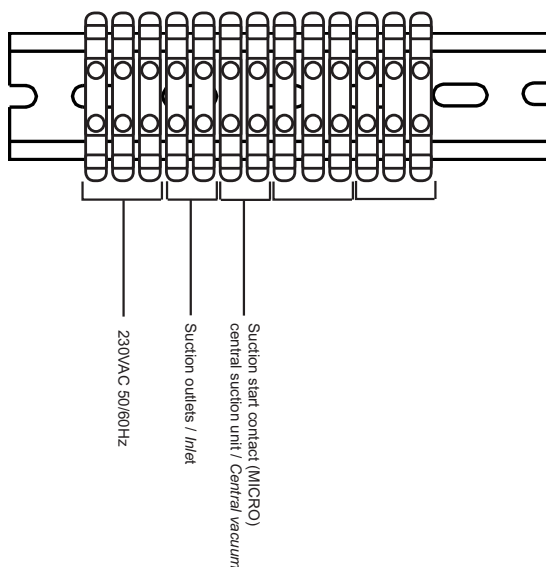
Never exceed the maximum pressure of 10 bar to avoid damaging the actuator itself.

In case the pressure is incorrect, adjust the regulator filter located on the front panel.

8.6 Electrical connection

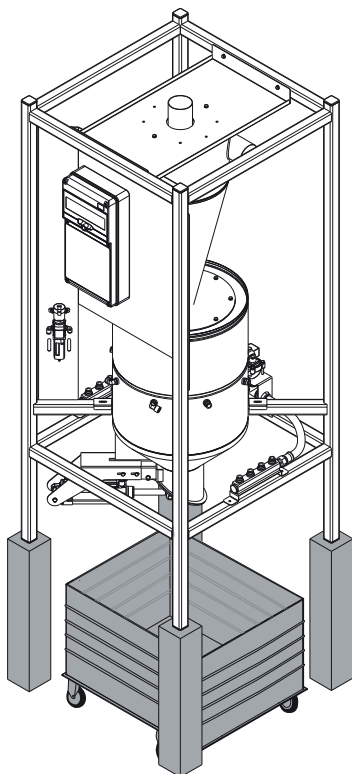


Open the front cover of the control panel to gain access to the terminal block for the electrical connections.



The complete schematic diagram is present inside the control panel.

8.7 Application examples



Solid residues / powders

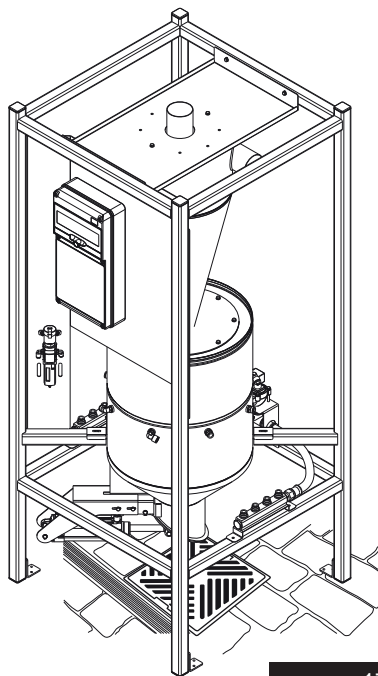
The self-supporting frame can be raised or fixed to other structures to allow the positioning of the separator on top of trolleys, Big Bags or other collection systems. In this way the handling and any recovery of the vacuumed materials is facilitated.

Liquids

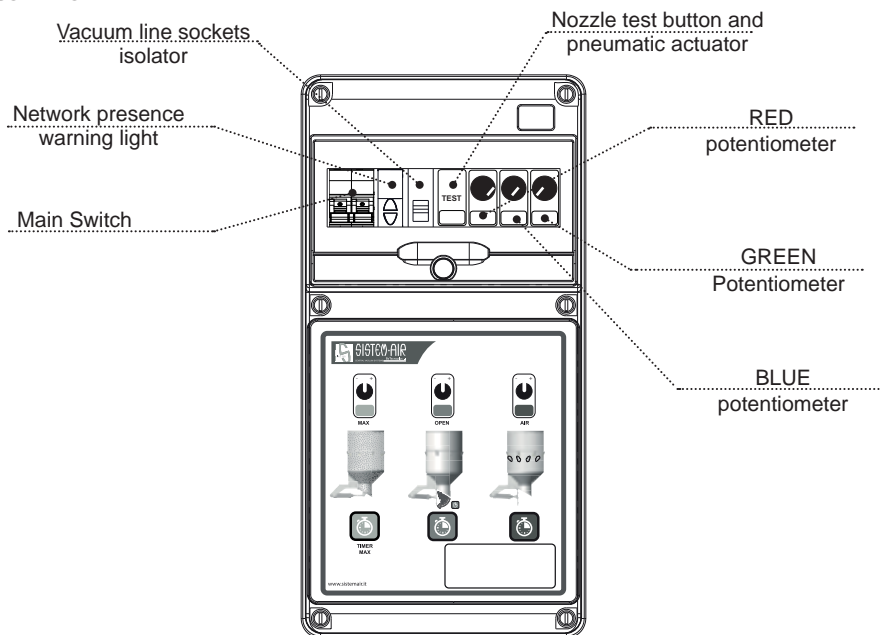
The Turbix Auto Jet separator can be installed in such a way as to allow the discharge of the vacuumed liquids where it is most suited to production cycles:

- in drains,
- in dedicated tanks
- in cisterns.

It is advisable to contact the Technical Office to best manage the use of this product with liquids.



9 - CONTROL PANEL



Main switch: magnetothermic switch for isolating and protecting the power supply line of the control panel.

Warning light : if on, indicates the presence of power supply at the control panel.

Vacuum line isolator: switch to isolate the suction activation command in case of maintenance.

TEST button: by pressing this button it is possible to manually force a material discharge cycle, thus checking that the AUTO Jet system is working correctly.

RED Potentiometer: adjustment of the maximum interval time between one discharge and the next one. In this way it is possible to automatically force the discharge of the material without stopping the suction.

Adjustment time: 5 to 225 seconds

GREEN Potentiometer: regulation of door opening time to allow complete emptying of collected material inside the AUTO Jet separator.

Adjustment time: 5 to 225 seconds

BLUE potentiometer: adjustment of nozzle blowing time to facilitate complete emptying of collected material inside the AUTO Jet separator.

N.B. The door opening time (RED potentiometer) has priority over the nozzle blowing time.

Adjustment time: 0 ÷ 225 seconds

10 COMMISSIONING AND USE

Before putting the AUTO Jet system into service, make sure that the tubing system is correctly and securely fixed to it, that the electrical and compressed air connections have been made according to the law, as well as the systems to which it is connected, and that the pressure in the circuit complies with the limits indicated in chapter 8.5

Set up a vacuum cycle to check its operation, then before vacuuming the selected material, check that there are no foreign bodies inside.

Verify that everything indicated in chapter 8 has been done correctly.

Set the main switch and the isolating switch to 1.

Set the adjustment of the 3 potentiometers on the control panel, see chapter 9.

Carry out some loading and unloading cycles of the material to verify that the settings are correct.

It is advisable never to exceed the level of the nozzles positioned in the dust collection cylinder of the AUTO Jet system, in order to facilitate the operation of unloading the material.

Once the AUTO Jet system is operating: further adjustment of the potentiometer could be necessary if the specific weight or type of material to be vacuumed is changed, even marginally.

In such cases it is sufficient to recalibrate the loading time, so that it is adequate to fill the loading cylinder of the AUTO Jet system at each cycle.

In cases where the AUTO Jet system will be inoperative for an extended period, turn the main switch to 0, switch off the power supply, close the compressed air tap and discharge the AUTO Jet pressurized air system.

11 - MAINTENANCE AND END OF LIFE

11.1 Intervention criteria

It is absolutely forbidden to intervene on the product for repairs and / or maintenance not expressly authorized in this manual.

All repairs for faults or malfunctions must be performed by qualified service personnel.

In case of interventions by unauthorized personnel, any warranty on the product becomes void and relieves the manufacturer from any liability for any damage to persons and / or property resulting from such intervention.

11.2 End of life

Disposal of the packaging, the accessories and the appliance must be carried out according to local regulations, ensuring the recycling of the raw materials from which they are made.



12 WARRANTY

PRODUCT LIMITED WARRANTY CONDITIONS

The Manufacturer guarantees to the original purchaser the absence of defects in material and workmanship of the product for the period stated, from the date of purchase. Except as prohibited by applicable law, this warranty is non transferable and it is limited to the original purchaser. The present warranty gives the buyer specific legal rights and the possibility to claim rights which can vary under local laws.

Read all warnings and instructions before using the product purchased.

The entire liability of the manufacturer and your exclusive remedy for any breach of warranty will be at the discretion of the Manufacturer:

(1) To repair or replace the product, or (2) refund the purchase price, provided that the product has been returned to the point of purchase, or such other place as may be specified by the manufacturer, with a copy of the sales receipt or detailed and dated receipt. The shipping and handling are not free of charge, except in cases where this is prohibited by applicable law.

To repair and replace the product, the manufacturer may, at their own discretion, use new, refurbished or used parts in good working condition. Any replacement product will be warranted for the remaining time of the original warranty period, or for any period of time that complies with the provisions of the current law.

This warranty does not cover problems or damage resulting from (1) accident, abuse, misapplication, repair, alteration or unauthorized disassembly; (2) maintenance operation, use which is not in accordance with the product instructions or connection to an improper voltage supply; or (3) use of consumables and spare parts which are not supplied by the manufacturer or authorized service center.

Valid warranty claims are generally processed through the point of purchase of the product.

Please agree this detail with the retailer where you purchased the product.

The Warranty claims that cannot be processed through the point of purchase, as well as any other product related questions, should be addressed directly to the manufacturer. Addresses and contact information for customer support can be found at the internet address www.sistemair.com

Except as stated by relevant laws in force, any implied warranty or condition of merchantability or suitability for a particular purpose relating to this product is limited to the duration of the Limited Warranty period for the specific product purchased.

Some jurisdictions do not allow limitations on the duration of implied warranties or the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary from state to state, or from jurisdiction to jurisdiction.

Consumers have legal rights under applicable national legislation governing the sale of consumer products. Such rights are not affected by the warranties in this Limited Warranty.

No dealer, agent, or employee of the manufacturer is authorized to make any modification, extension or addition to this warranty.

13 DECLARATION OF CONFORMITY

TECNOPLUS S.r.l.
 Capitale Sociale € 99.000,00
 27020 Gravelloa Lomellina (PV) ITALY - Via Clavegna, 53
 C.G.I.A.A. Pavia n. 185869
 Cod. Fisc. e P.IVA 01432570181
 Tel 0381-450082 Fax 0381-450120
 e-mail: info@sistemair.it - http://www.sistemair.it

SISTEM-AIR

DICHIARAZIONE DI CONFORMITA' CE

A mezzo della presente, il fabbricante:

Tecnoplus S.r.l. - Via Clavegna, 53 - 27020 Gravelloa Lomellina (Pv), ITALIA

dichiara che il macchinario di sua produzione, identificata con la targhetta **CE** fissata sulla parte frontale dell'apparecchiatura:

| | |
|----------|-----------------------------|
| TIPO | Complementi per aspirazione |
| MODELLO | Separatore AUTO Jet Turbix |
| ARTICOLO | 7010.3 |

è conforme e rispondente alle disposizioni delle seguenti:

- 1) Direttive CEE pertinenti:
 - 2006/42/EC
 - 2014/35/UE (VLD)
 - 2014/30/UE (EMC)
- 2) Direttiva ROHS 2002/95

Nome e posizione della persona autorizzata a firmare la Dichiarazione
 Giancarlo Plebani, Amministratore Unico Tecnoplus S.r.l.

Nome e indirizzo della persona autorizzata a costituire il Fascicolo Tecnico
 Tecnoplus S.r.l. - Via Clavegna, 53 - 27020 Gravelloa Lomellina (Pv), ITALIA

Gravelloa Lomellina, 23/04/2018

[LINGUA ORIGINALE]

Firma

TECNOPLUS S.r.l.
 Capitale Sociale € 99.000,00
 27020 Gravelloa Lomellina (PV) ITALY - Via Clavegna, 53
 C.G.I.A.A. Pavia n. 185869
 Cod. Fisc. e P.IVA 01432570181
 Tel 0381-450082 Fax 0381-450120
 e-mail: info@sistemair.it - http://www.sistemair.it

SISTEM-AIR

EC Declaration of Conformity

We:

Tecnoplus S.r.l. - Via Clavegna, 53 - 27020 Gravelloa Lomellina (Pv), ITALIA

hereby declare that the following machine of our own production, identified by the **CE** mark fixed on the front of the device:

| | |
|---------|---------------------------|
| TYPE | Special uses |
| MODEL | Separator AUTO Jet Turbix |
| ARTICLE | 7010.3 |

is conform to the following norms and directives:

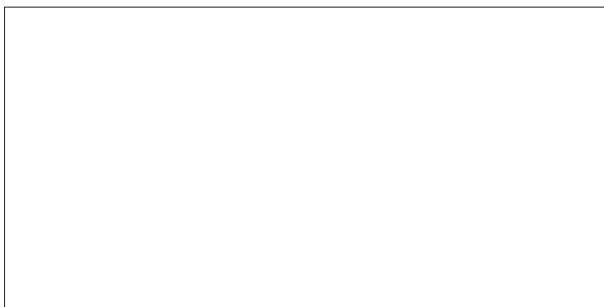
- 1) Relevant EU Directives :
 - 2006/42/EC
 - 2014/35/UE (VLD)
 - 2014/30/UE (EMC)
- 2) ROHS Directive 2002/95

Name and position of the person authorized to undersign the Declaration:
 Giancarlo Plebani, Sole Director Tecnoplus S.r.l.

Name and address of the person authorized to compile the Technical File
 Tecnoplus S.r.l. - Via Clavegna, 53 - 27020 Gravelloa Lomellina (Pv), ITALIA

Gravelloa Lomellina, 23/04/2018

Signature



F0920548