



Customer Product Manual Part P/N 10001 REV.A



# Transfer pump High-density powder NEA430

This document is subject to change without notice. Check http://www.vernetechnology.it for the latest version.

### CONTACTS

#### ADMINISTRATIVE HEADQUARTERS:

Verne Technology S.r.l. Via Montenapoleone, 8 20121 - MILANO (MI) - ITALY-Tel. +39 (0)2-783275 | Fax +39 (0)2-784087

e-mail: info@vernetechnology.it www.vernetechnology.it

### LOGISTICS:

(shipping and delivery)

Via Elettrochimica1, 23900 LECCO (LC) - ITALY -Tel. +39 (0)341-423183

e-mail: logistica@vernetechnology.it

# **Table of Contents**

Sarery Qualified Personnel Intended Use Regulations and Approvals Personal Safety Fire Safety Grounding Action in the Event of a Malfunction Disposal	1 1 1 2 2 3 3
<b>Disposal</b> Pump Components NEA 430 Theory of Operation Pumping Purging Specifications	4 6 7 8
Installation	9
Maintenance	10
Traublashaating	10
noobleshooling	ΙZ
Repair Fluidizing Tube Replacement Pump Disassembly Pump Assembly Pinch Valve Removal Pinch Valve Replacement Pinch Valve Installation Tubing Diagrams	15 16 18 20 21 22



#### Contact us

VERNE TECHNOLOGY welcomes requests for information, comments, and inquiries about its products. General information about VERNE TECHNOLOGY can be found on the Internet using the following address: http://www.vernetechnology.it.

#### Note

This is a VERNE TECHNOLOGY publication which is protected by copyright. Original copyright date 2016. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of VERNE TECHNOLOGY. The information contained in this publication is subject to change without notice.

### Safety

Read and follow these safety instructions. Task-and equipment-specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

1

Make sure all equipment documentation, including these instructions, is accessible to all persons operating or servicing equipment.

### **Qualified Personnel**

Equipment owners are responsible for making sure that Vere Technology equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

### Intended Use

Use of NEA 430 equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.

- Some examples of unintended use of equipment include
- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

### **Regulations and Approvals**

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Verne Technology equipment will be voided if instructions for installation, operation, and service are not followed.

All phases of equipment installation must comply with all federal, state, and local codes.

### **Personal Safety**

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.
- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.
- Keep clear of moving equipment. Before adjusting or servicing any moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.
- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.
- Obtain and read Material Safety Data Sheets (MSDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection device Grounding inside and around the booth openings must comply with NFPA requirements for Class 2, Division 1 or 2 Hazardous Locations. Refer to NFPA 33, NFPA 70 (NEC articles 500, 502, and 516), and NFPA 77, latest conditions.
- To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.



### **Fire Safety**

To avoid a fire or explosion, follow these instructions.

- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored.
- Provide adequate ventilation to prevent dangerous concentrations of volatile materials or vapors. Refer to local codes or your material MSDS for guidance.

2

- Do not disconnect live electrical circuits while working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.
- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.
- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.
- Use only replacement parts that are designed for use with original equipment. Contact your Vere Technology representative for parts information and advice.

### Grounding



**WARNING:** Operating faulty electrostatic equipment is hazardous and can cause electrocution, fire, or explosion. Make resistance checks part of your periodic maintenance program. If you receive even a slight electrical shock or notice static sparking or arcing, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected

- All electrically conductive objects in the spray areas shall be electrically connected to ground with a resistance of not more than 1 megohm as measured with an instrument that applies at least 500 volts to the circuit being evaluated.
- Equipment to be grounded includes, but is not limited to, the floor of the spray area, operator platforms, hoppers, photoeye supports, and blow-off nozzles. Personnel working in the spray area must be grounded.
- There is a possible ignition potential from the charged human body. Personnel standing on a painted surface, such as an operator platform, or wearing non-conductive shoes, are not grounded. Personnel must wear shoes with conductive soles or use a ground strap to maintain a connection to ground when working with or around electrostatic equipment.
- Operators must maintain skin-to-handle contact between their hand and the gun handle to prevent shocks while operating manual electrostatic spray guns. If gloves must be worn, cut away the palm or fingers, wear electrically conductive gloves, or wear a grounding strap connected to the gun handle or other true earth ground.
- Shut off electrostatic power supplies and ground gun electrodes before making adjustments or cleaning powder spray guns.
- Connect all disconnected equipment, ground cables, and wires after servicing equipment.

### Action in the Event of a Malfunction

If a system or any equipment in a system malfunctions, shut off the system immediately and perform the following steps:

3

- Disconnect and lock out electrical power. Close pneumatic shutoff valves and relieve pressures
- Identify the reason for the malfunction and correct it before restarting the equipment.

#### Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

#### Description

See Figure 1

The NEA 430 (High-Density powder, Low-Volume air) powder pump transports large amounts of powder from one location to another.

The pump design and the small diameter suction and delivery tubing used with the pump allow it to be purged quickly and thoroughly.

The pump is more efficient than traditional venturi-style pumps in that very little of the air that is used to operate the pump is mixed into the powder stream. Only the air that is used to move the powder out of the pump and into the delivery tubing enters the powder stream.



Figure 1 High density pump NEA430

### High capacity pump components NEA 430

See figure 2.

n° Item	Description	Function			
Air contro	Air control components				
1	A control valve of fluidization DX tubes EV3	Seek alternate cycles the positive and negative compressed air to the fluidizing tubes.			
2	A control valve of fluidization SX tubes EV4	Seek alternate cycles the positive and negative compressed air to the fluidizing tubes.			
3	The valve control valve sleeve EV2	Seek alternate cycles the compressed air between the valves and the sleeve.			
4	Cycle activation control valve EV1	Seek alternate cycles the compressed air in the activation cycle valve.			
5	R3 - Regulator and pressure gauge (SUPPLY)	Adjust the pressure of the pump NEA 430 to 0.48 MPa (4.8 bar).			
6	R2 - Regulator and pressure gauge (TRANSPORT)	Adjust the transport of the product pressure. Usually set to from 0.07 to 0.1 Mpa (0.7-1.0 bar).			
7	R1 - Regulator and pressure gauge (PINCH VALVES)	Adjust the closing pressure of the sleeve valves to 0:24 to 0:27 Mpa (2.4-2.7 bar).			
8	Silencers	It allows silent operating an air outlet of the pump.			
9	Vacuum generators	Relying on the venturi principle, it generates air negative pressu- re needed to attract the dust in the fluidization tubes.			
10	Timer 1	Check the operating sequences of the following components: valve activation cycle control, valve control fluid tubes. Right. and valve control sleeve valves.			
11	Timer 2	Check the operating sequences of the following components: valve activation cycle control, valve control fluid tubes. Right. and valve control sleeve valves.			
12	Timer 3	Check the operating sequences of the fluid control valve tubes. Left.			
13	Timer 4	Check the operating sequences of the fluid control valve tubes. Left.			



Figure 2 Pump Components (Internal, cover removal)



### Principle of operation

#### Pumping

The pump NEA 430 is composed of four tanks that alternate in a continuous cycle 4-stroke collection and transport of the powder.





### Cleaning



The purge process depends on the type of integration of the pump in the line of powder coating system.

7

#### Initial cleaning:

keeping in operation the pump, start the cleaning cycle by entering different air pressure pulses in the cyclonic valves.

#### Final cleaning:

Turn off the pump and repeat the cleaning cycle.

**NOTE:** During the purging time the air pressure line runs through the fluidizing tubes, the sleeve valves and out of the pickup-transport lines.

If the purge air is supplied by a central alimentazioneo from a stem delivery system, it is usually pulsed. The pulses are typically active for 500 millisecondie inactive for a few seconds.

If the bleeding is started manually by pressing the purge button on a station manual pump, the bleed air is not pulsed. The purge button is pressed repeatedly to supply air pulse.



Figure 4 Operating principle - cleaning



### 8

### Technical data

Purge Air (max)	4kg (9 lb) per minute
Minimum inlet pressure	0.6 Mpa (6 bar)
General Supply pressure (SUPPLY)	0.48 Mpa (4.8 bar)
Bleeding Air	Maximum line Air Pressure 0.7 Mpa (7 bar)
Operating Air Pressure Pinch valve(PINCH VALVES) Transport air (TRANSPORT)	0.24 - 0.27 Mpa (2,4 -2,75 bar) 0.07 - 0.1 Mpa (0,7 - 1,0 bar)
Air consumption Total air consumption	330 l/min
Air humidity allowed	95% without condensation
Operating ambient temperature	from +15 to +40 °C
Size Air inlet pipes Powder extraction Powder power	polyuretane outer diameter 10 mm polyetilene outer diameter 16 mm, max. lenght 3,5 m polyetilene outer diameter 16 mm, max. lenght 30 m NOTE: For best results, keep the suction tubes and more power short as possible.
weight/size	Kg 14.5 - See figure 5



Figure 5 Pump dimensions



### Installation



**WARNING:** The pump must be securely connected to a true earth ground. Failure to ground the pump could result in a fire or explosion.

9

**NOTE:** The pump is normally mounted on a panel that includes an operating air regulator, and a manual pushbutton and piloted-operated air valve for manual purging. The panel may also include an auxiliary regulator for fluidizing the powder source.





Use the supplied M6 screws, washers, and nuts to mount the pump.

**NOTE:** Included are 6 mounting holes and 1 set of Ø7 fasteners. Use the six mounting holes that best match your mounting surface.



### **Tubing Connections**

**NOTE:** For best results, keep the powder suction and delivery tubing as short as possible.

CONNECTION	ТҮРЕ	FUNCTION
A	10 mm blue polyurethane tubing	From customer-supplied purge air source 7 bar (0.7 Mpa) max.
B	16 mm clear polyethylene tubing	To powder destination
C	16 mm clear polyethylene tubing	From powder source
D	10 mm blue polyurethane tubing	From input air source min. 6 bar (0.6 Mpa).
	Pump ground wire	To earth ground



10

# **Operation** See figure 8.

- To start the pump turn on the air supply operation (min 0.6 • Mpa (6 bar)). Set the regulator SUPPLY at 0.48 Mpa (4.8 bar).
- Set the regulator TRANSPORT at 0.07 0.1 Mpa (0.7-1 bar). ٠
- Set the regulator PINCH VALVES at 0.24 0.27 Mpa (2.4 2.7 • bar).
- To stop the pump, turn off the operating air supply. ٠



11

### Maintenance

Perform these maintenance procedures to keep your pump operating at peak efficiency.



**WARNING:** Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

**NOTA:** You may have to perform these procedures more or less frequently, depending on factors such as operator experience and type of powder used.

Frequency	P/N	Procedure
Every four Months or Each Time You Disassemble the Pump	<image/> <section-header></section-header>	Remove the body IN-OUT from the assembly pump and check if you show signs of wear or sintering. If necessary, clean these components with an appa- ratus for ultrasonic clea- ning.
Daily	<image/> <section-header></section-header>	Inspect the pinch valve body for signs of powder leakage. If you see powder in the pinch valve body or stress cracks in the pinch valves, replace the pinch valves.



Frequency	P/N	Procedure
Every four Months or Each Time You Disassemble the Pump	P/N 10006	Remove the body from the assembly INTERMEDIATE pump and check if you show signs of wear or sinte- ring. If necessary, clean these components with an appa- ratus for ultrasonic clea- ning.
Every four Months or Each Time You Disassemble the Pump	nrº6 M5x25 nrº6 grover ø5 nrº6 washer ø5 nº6 washer ø5	Remove the body CYCLO- NE VALVE from the assem- bly pump and check if you show signs of wear or sinte- ring. If necessary, clean these components with an appa- ratus for ultrasonic clea- ning.

### Diagnostics

Problem	Possible cause	Corrective action
<ol> <li>Reduced powder output (The sleeve valves</li> </ol>	Lock in the tube towards the destination	Check the hose presents blocks. Clean the pump.
open and close)	Air transport set too high	Decrease air pressure transport.
	Air transport set too short	Increasing the air pressure transport.
	Defective sleeve valve	Replace the sleeve valves.
	Fluidization clogged pipes	Replace the fluidizing tubes.
	Valve PV3 transport air not working	Refer to the diagrams of the pipes. Turn off the pump and disconnect the pipes connected to the pump body. Turn on the pump and check if the tubes have alternating pressure positive and negative air. If there is no pressure, replace the valve. If the valve works, but does not feel positive or negative air pressure in the pipes, check if you are blockages in the air lines that entering and exiting the valve.
	Valve PV4 transport air not working	Refer to the diagrams of the pipes. Turn off the pump and disconnect the pipes connected to the pump body. Turn on the pump and check if the tubes have alternating pressure positive and negative air. If there is no pressure, replace the valve. If the valve works, but does not feel positive or negative air pressure in the pipes, check if there are blockages in the air lines that entering and exiting the valve.
	TIMER T3 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.
	TIMER T4 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.



### Diagnostics

Problem	Possible cause	Corrective action
<ol> <li>Reduced powder output (The sleeve valves do not open and close)</li> </ol>	Defective sleeve valve	Replace the sleeve valves.
	Defective non-return valve	Replace the non-return valves.
	PV2 valve of pressure suction not working	Turn off the pump and disconnect the tubes connected to CYCLONIC VALVE. Turn on the pump and check if the tubes have alternating positive air pressure. If there is no pressure, replace the valve. If the valve works, but You do not feel air pressure in the pipes, check if there are blockages in the air lines that entering and exiting the valve.
	PV1 valve cycle release Recovery / Transport	Turn off the pump and disconnect the tubes output from the respective fittings. Turn on the pump and check if the tubes have alternating positive air pressure. If there is no pressure, replace the valve. If the valve works, but You do not feel air pressure in the pipes, check if there are blockages in the air lines that entering and exiting the valve.
	TIMER T1 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.
	TIMER T2 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.
	TIMER T3 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the outlet (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.
	TIMER T4 does not respect time activation	Refer to the diagrams of the pipes. Turn off the pump and disconnect the tube from the exit (2) of the timer. Turn on the pump and check if exits pressure in alternation. Check for proper operation of the display and the respect of the time PRE-SET. If there is no pressure, replace the timer.

### Diagnostics

Problem	Possible cause	Corrective action
3. Reduced dust Input (Loss of suction	Blockage in dust tube from power source	Check if the tube has blocks. Purge the pump.
from the source of dust)	Loss from vacuum generators empty	Check the vacuum generators are contaminated. Check the exhaust silencers. If the exhaust silencers are clogged, replace them.
	O-rings damaged in the path dust	Check all O-rings of the trail dust. Replace O-ring damaged or worn.
	Fluidization clogged pipes	Sostituire i tubi di fluidizzazione.
4. Pinch Valves that quickly spoil, with cracks around the flange	The powder is tribo-charging in pump and has a grounding through the sleeve valves	Install kit P / n 10034 valves black sleeve - NON CONDUCTIVE.

### Repair

**WARNING:** Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

16

**WARNING:** Shut off and relieve system air pressure before performing the following tasks. Failure to relieve air pressure may result in personal injury.

### Fluidizing Tube Replacement

**NOTE:** In the fluidization tube kits I am including four O-rings. Replace O-rings if they are worn. It is not necessary to replace the o-ring every time you replace the fluidizing tubes.



#### 17

### **Pump Disassembly**



**WARNING:** Shut off and relieve system air pressure before performing the following tasks. Failure to relieve air pressure may result in personal injury.

**NOTE:** Tag all air and powder tubing before disconnecting from the pump.

- **1.** See figure 9. Disconnect the purge air lines from the top of the pump.
- **2.** Disconnect the inlet and outlet powder tubing from the bottom of the pump.
- **3.** Remove the two screws (A) and the cover from the pump.
- **4.** See figure 9. Disconnect one end of each of the air tubes indicated.
- 5. See figure 10. Remove the four screws (B) securing the pump assembly to the base.
- **6.** See Figure 11. Starting with the fluidizing tubes, disassemble the pump as shown.

**NOTA:** Refer to Pinch Valve Replacement on page 21 for instructions on pulling the pinch valves out of the pinch valve body.

Figure 10



0

0





### **Pump Assembly**

**CAUTION:** Follow the assembly order and specifications shown. Pump damage may occur if you do not carefully follow the assembly instructions.







#### 21

### Substitution of the PINCH VALVES



**WARNING:** Wear eye protection while performing this procedure. The pinch valves will quickly snap back to their normal shape when you pull them out of the pinch valve body.

NOTE: In the upper flanges of the sleeve valves is modeled after the word UP

NOTE: Replace the filter discs (included in the pinch valves kit) when replacing the valves

### Pinch Valve Removal



Place the pinch valve body in a padded vise with the bottom end facing you. Grasp and pull the bottom end of the pinch valve with one hand.



Use your other hand to pinch the flange on the opposite end of the pinch valve.

Pull the pinch valve firmly

until it comes out of the

pinch valve body.







#### 22

### Installing the pinch valves

**NOTE:** All pinch valves intended for repeated contact with food must be cleaned thoroughly prior to their first use.



Turn the body of the pinch valves so as to have in front of the upper side.

After putting the value in the tool insertion, flatten the flange on the end of the value UP.







Insert the end of the valve in the tool HIGHER for the insertion of the pinch valves.

Compress the UP end of the flange and introduce the small end into the flattened flange, inside the pinch valves.

NOTES: Observe the straight side of the valve as in the figure or the pinch valves NOT RUN '.



of the flange, pull the tool itself.

While it compresses the UP end



Pull the insertion tool through the valve body, until the end of the valve UP and the insertion tool out of the upper side of the body of the pinch valves.



Diagrams of the tubes



	D.E/I	color	lenght mm
A-A	10x8 mm	blue	150
B-B	10x8 mm	blue	140
C1-C1	10x8 mm	blue	67
C2-C2	10x8 mm	blue	67
D1-D1	8x6 mm	l.blue	145
D2-D2	8x6 mm	l.blue	145
E1-E1	8x6 mm	l.blue	155
E2-E2	8x6 mm	l.blue	155
F1-F1	6x4 mm	blue	185
F2-F2	6x4 mm	blue	185
F3-F3	6x4 mm	blue	185
G1-G1	6x4 mm	blue	205
G2-G2	6x4 mm	blue	205
I-I	6x4 mm	blue	200
H1-H1	6x4 mm	blue	230

	D.E/I	color	lenght mm
H2-H2	6x4 mm	blue	230
J-J	6x4 mm	blue	150
K-K	6x4 mm	blue	110
L-L	6x4 mm	blue	185
M1-M1	6x4 mm	blue	98
M2-M2	6x4 mm	blue	98
M3-M3	6x4 mm	blue	98
M4-M4	6x4 mm	blue	98
N1-N1	6x4 mm	blue	85
N2-N2	6x4 mm	blue	85
N3-N3	6x4 mm	blue	85
N4-N4	6x4 mm	blue	85

	D.E/I	color	lenght mm
0-0	4x2.5 mm	clear	165
P-P	4x2.5 mm	clear	165
Q-Q	4x2.5 mm	clear	130
R-R	4x2.5 mm	clear	130
S-S	4x2.5 mm	clear	300
T-T	4x2.5 mm	clear	300
U-U	4x2.5 mm	clear	300
V-V	4x2.5 mm	clear	300
W-W	4x2.5 mm	clear	165
X-X	4x2.5 mm	clear	100
Y-Y	4x2.5 mm	clear	165
Z-Z	4x2.5 mm	clear	165

ITEM P/N:	Pcs	Description
	1	NEA 430 ASSEMBLY - WITH P/N 10034
	1	NEA 430 ASSEMBLY - WITH P/N 10035
10002-34	1	BODY PUMP ASSEMBLY-NEA 230   430 - WITH P/N 10034
10002-35	1	BODY PUMP ASSEMBLY-NEA 230   430 - WITH P/N 10035

ITEM P/N:	Pcs	Description
10003	2	FITTING G1/2"-16 SPECIAL for NEA 10001-34 fitting G1/2"-16
10004	1	BODY IN-OUT-NEA 230   430 INCLUDED: 2 pcs O-Ring 130 6 pcs threaded screw M5x50 6 pcs ring for M5 6 pcs grover for M5
10005	1	BODY PINCH VALVES-NEA 230   430 INCLUDED: 2 pcs O-Ring 3024
	1	BODY INTERMEDIATE-NEA 230   430 INCLUDED: 2 pcs O-Ring 3024 4 pcs O-Ring 3118 4 pcs O-Ring 123 2 pcs Compass Filter Brass P/N 10007
10007	2	COMPASS FILTER BRASS - NEA 230   430 <b>INCLUDED:</b> 2 pcs in sinterized brass for COMPASS 2 pcs O-Ring 6x1.5



ITEM P/N:	Pcs	Description
	1	BODY TUBES FLUID - NEA 230   430 INCLUDED: 2 pcs O-Ring Silicone 3024 4 pcs O-Ring Silicone 3131 All Fittings
	4	TUBES FLUID - NEA 230   430 INCLUDED: 8 pcs O-Ring Silicone 123
	1	BODY CYCLONE VALVE - NEA 230   430 INCLUDED: 6 pcs screw M5 4 pcs O-Ring Silicone 123 2 pcs O-Ring Silicone 1.3 x 1.5 2 pcs O-Ring Silicone 3143 4 pcs O-Ring Silicone 3131 2 pcs O-Ring Silicone 3024

ITEM P/N:	Pcs	Description
	2	VALVE G3/8"-10 SPECIAL INCLUDED: 2 pcs O-Ring Silicone 1.3 x 1.5
10012	4	STOPPER G1/8'' - SPECIAL
10013	1	TIMER T1- NEA 430 INCLUDED: 2 pcs Fittings
10014	1	TIMER T2- NEA 430 INCLUDED: 2 pcs Fittings
10015	1	TIMER T3- NEA 430 <i>INCLUDED:</i> 2 pcs Fittings
10016	1	TIMER T4- NEA 430 INCLUDED: 2 pcs Fittings

ITEM P/I	N:	Pcs	Description
10017		1	PV1- NEA 230   430 <i>INCLUDED:</i> All Fittings
10018		1	PV2- NEA 230   430 <i>INCLUDED:</i> All Fittings
10019		1	PV3- NEA 230   430 <i>INCLUDED:</i> All Fittings
10020		1	PV4- NEA 230   430 <i>INCLUDED:</i> All Fittings
10021	Manager	2	MUFFLER - NEA 230   430
10022		2	COMPASS GENERATOR BRASS NEA 230   430 INCLUDED: All Fittings

ITEM P/N:	Pcs Description
10023	2 VACUUM GENERATOR- NEA 230   430
10024	2 VACUUM GEN. ASSEMBLY NEA 230   430 <i>INCLUDED:</i> All Fittings
10025	1       REGULATOR SUPPLY - NEA 230   430         INCLUDED:         All Fittings
10026	1       REGULATOR PINCH VALVES         NEA 230   430         INCLUDED:         All Fittings
10027	1       REGULATOR TRANSPORT - NEA 430         INCLUDED:         All Fittings
	2 SPRING - NEA 230   430 INCLUDED: Ground wire

ITEM P/N:	Pcs	Description
	1	BODY BASE ASSEMBLY - NEA 230   430
10030	1	COVER - NEA 430
10031	1	MANIFOLD - NEA 230   430 <b>INCLUDED:</b> All Fittings
10032	All	KIT O-RING SILICONE - NEA 230   430
	All	KIT FITTINGS - NEA 430

ITEM P/N:	Pcs	Description
10034	4	PINCH VALVES BLACK NO CONDUCTION NEA 230   430 <b>INCLUDED:</b> 2pcs O-Ring Silicone 3024 2pcs Filter brass Sinterized 1pcs Sheath's mounting
10035	4	PINCH VALVES GREY - FOOD & PHARMA USE - NEA 230   430 INCLUDED: 2pcs O-Ring Silicone 3024 2pcs Filter brass Sinterized 1pcs Sheath's mounting
10036	4	PINCH VALVES BLU - STANDARD - NEA 230   430 <i>INCLUDED:</i> 2pcs O-Ring Silicone 3024 2pcs Filter brass Sinterized D7 1pcs Sheath's mounting
	1	BODY PINCH VALVES ASSEMBLY NEA 230   430 P/N 10005-34 (with PINCH VALVES - P/N 10034) P/N 10005-35 (with PINCH VALVES - P/N 10035) P/N 10005-36 (with PINCH VALVES - P/N 10036) <b>INCLUDED:</b> 2pcs O-Ring Silicone 3024

ITEM P/N:	Pcs	Description
	1	BODY IN-OUT ASSEMBLY - NEA 230   43 for NEA 10001-34 <i>INCLUDED:</i> 2 pcs O-Ring 130 6 pcs threaded screw M5x50 6 pcs ring for M5 6 pcs grover for M5 2 pcs in brass fitting G1/2"-16 P/N 10003
	1	BODY CYCLONE VALVE ASSEMBLY - NEA 230   430 INCLUDED: 2 pcs VALVE G3/8"-10 SPECIAL P/N 10011 2 pcs O-Ring Silicone 1.3 x 1.5 1 pcs Ciclone Gasket 2 pcs O-Ring Silicone 3131 6 pcs screw M5 4 pcs O-Ring Silicone 123 All fittings
10039	1	TUBE POLYETHYLENE CLEAR Ø16/12 M† 50 - NEA 230   430
10040	1	ADAPTOR ANTISTATIC TUBE ø int. 12 mm <i>INCLUDED:</i> 2 pcs adaptor antistatic tube brass
10044	2	FITTING G1/2"-16 SPECIAL INOX for NEA 10001-35 2 pcs fitting G1/2"-16 INOX

### **DECLARATION OF CONFORMITY**

**Model:** Dust pump NEA 430, high capacity transfer pump (High-density powder, low-density air)

### Applicable directives:

94/9 / EC (ATEX equipment for use in potentially explosive atmospheres) 98/37 / EEC (Machinery)

Standards used for Compliance:

EN13463-1 EN1127-1 EN12100-1 EN13463-5

#### Principles:

This product was manufactured in accordance with good engineering practice. The specified product complies with the directives and standards described above.

Mark flammable atmosphere: Ex II 3 D c T6

Verne Technology srl declines any responsibility for damages to people, animals or things for the use of NEA 430 P/N 10001-\_\_ not foreseen or that do not respect the international and national standards of the country of use.

The products and materials presented in this manual are susceptible to changes or modifications at any time.

Note: The year of equipment manufacture appear in the serial number. "PL00161" it means the product was manufactured in 2016, "1" at the end indicate the tranche of the year.

Date: September 1, 2016

Verne Technology S.r.l. CEO Carlo Perillo

Cente Ch

