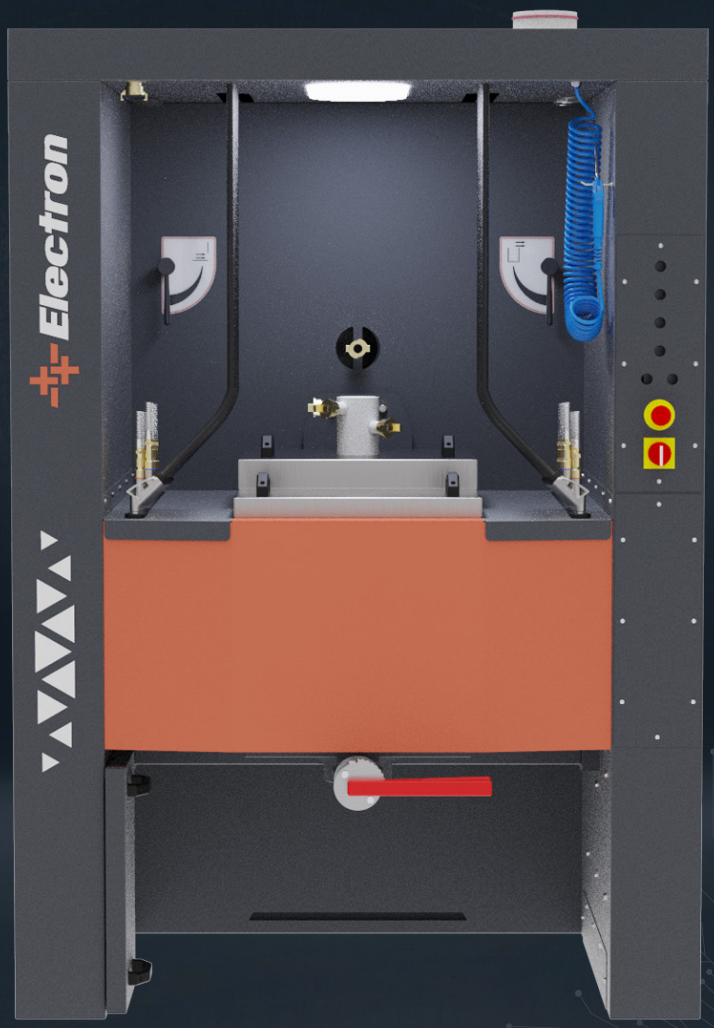
POWDER COATING EQUIPMENT USER'S MANUAL

E-FEED+3 PM1

SERIES



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Electron

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İzmir TÜRKİYE

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1. Safety Regulations

1.1. Safety Symbols

The following warnings with their meanings can be found in the Sistem Teknik Makina operating instructions. The general safety precautions must also be followed as well as the regulations in the operating instructions.

DANGER!
Electrical and moving parts pose a hazard.
Possible Consequences: Death or serious injury.

WARNING!
Improper use will damage the device or cause malfunction. Possible consequences: Minor injuries or damage to equipment.

NOTE:
Important points to note

1.2. Proper Use

- The E-FEED+3 PM1 Series (120-130) is built to the latest specification and conforms to the recognized technical safety regulations and is designed for the normal application of powder coating.
- Any other use is considered non-compliant. The manufacturer shall not be liable for damage resulting from such use; the user bears sole responsibility for such actions. If the E-FEED+3 PM1 Series (120-130) is to be used for other purposes or other substances outside of our guidelines then Electron should be consulted.
- Observance of the operating, service and maintenance instructions specified by the manufacturer is also part of conformity of use. The E-FEED+3 PM1 Series (120-130) should only be used, maintained and started up by trained personnel, who are informed about and are familiar with the possible hazards involved.
- Start-up (i.e. the execution of a particular operation) is forbidden until it has been established that the The E-FEED+3 PM130 has been set up and wired according to the guidelines for machinery (2006/42 EG). EN 60204-1 (machine safety) must also be observed.
- Unauthorized modifications to the E-FEED+3 PM1 Series (120-130) exempt the manufacturer from any liability from resulting damage.
- The relevant accident prevention regulations, as well as other generally recognized safety regulations, occupational health and structural regulations are to be observed.
- Furthermore, the country-specific safety regulations also must be observed.

Explosion Protection	Protection Type	Temp Class
 II 3D	IP54	T6 (T< 85 °C)

NOTE:
EN 60204-1 standard includes the non-mobile machines electronic machines and programmable electronic hardware and systems.

1.3. PRODUCT SPECIFIC SECURITY REGULATIONS

1.3.1. General information

The powder spraying equipment of Sistem Teknik Makina (Electron) is designed for safe use and to the latest technological specs. Electrostatic powder equipment could create dangerous situations unless it's used properly. In addition to that, there might be a danger to life and limb of the user or third party, a danger of damage to the equipment and other machinery that belongs to the user and hazards to the proper operation of equipment.

• The powder spraying equipment should only be started up and used once the operating instructions have been carefully read. Apart from any usage from the user manual, there lies a danger of damaging the equipment and loss of control of the equipment.

• Operational safety has to be observed before every start-up. Regular Servicing is the essence of working safely.

• Local legislation should be considered for the safety.

• The plug has to be disconnected before the machine is opened for repair.

• The plug and socket connections between spraying equipment should only be taken out when the power is off.

• The connection cables have to be installed in a manner that they wouldn't interfere or damage the normal machine operation. Also the local legislation should be observed for the installation.

• Only original Electron spare parts should be used, because only the original products will guarantee the equipment's explosion protection. Any damage caused by other used parts is not covered by the guarantee.

• If Electron powder coating equipment is going to be used with other devices/machinery from other manufacturers, their safety regulations should be also considered.
• • Be cautious while working in a powder/air mixture area. In the right concentration the mixture would be flammable, thus smoking is forbidden in the entire plant area.
• Rule of thumb says that any person who uses a pacemaker should NEVER enter a high voltage area or places with electromagnetic fields. Note that people with pacemakers ALSO SHOULDN'T work in powder spraying installations.

WARNING!:
We point out that the customer himself is responsible for the safe operation of the equipment! Electron is in no way responsible for any resulting damage.

1.3.2. Consciously Working Safe

Every other individual who will be working for the assembly, start-up, operation, service and repair of powder spraying equipment must have read and understood the operating instructions and the "Safety Regulations". Operators have to be appropriately trained via Sistem Teknik assembly personnel and made aware of the possible danger of powder spraying equipment and the environment.
The E-FEED+3 PM1 Series (120-130) must only be set up and used in zone 22. The spray guns are permitted in the zone 21 which is created by them but only them.
Powder spraying equipment must only be used by trained and authorized personnel. This also applies for any kind of modification to the electrical equipment, which only should be carried out by a specialist.
It is essential that the operating instructions are understood before any kind of work is done with the equipment. All the procedures have to be done according to the instructions.
Powder spraying equipment can be turned off via the main power switch or the emergency shut down procedure.

1.3.3. Safety Regulations for the Operating Firm and/or Personnel

• First of all, anything which would influence the equipment negatively should be avoided for the technical safety.
• The machine user should be well informed about no other people than trained personnel would use the machine.
• The employer has to provide an operating instruction manual for specifying the dangers for humans and the environment by handling dangerous materials, as well as all preventive measures and workplace behaviors. This "document" must be well written in an understandable form in the language that the person employed for the equipment.
• The operator is obliged to check the equipment for external damage once every shift changed at the very least. The operation characteristic changes should also be reported.
• Users should conform the satisfactory working conditions else the equipment should not be used.
• The operating firm must ensure that the users wear protective clothing like facemasks and working suits.
• The firm also guarantees the cleanliness of the workplace and proper checks for the powder spraying equipment.
• Safety devices should be always on the equipment at all costs unless the equipment is going to be maintained or cleaned. After the maintenance all the devices should be put on the equipment. The users must be trained well for this purpose.
• Powder fluidization or high voltage spray gun checks have to be done when the equipment is switched on.

EN European Standarts

2014/34/EU	The approximation of the laws of the Member States relating to apparatus and safety systems for their intended use in potentially explosive atmospheres
EN 12100	Machine safety
EN IEC 60079-0	Electrical equipment for locations where there is danger of explosion
EN ISO 80079-36	Non-electrical equipment for explosive atmospheres - Basic method and requirements
EN ISO 80079-37	Non-electrical equipment for explosive atmospheres - Non-electrical type of protection constructional safety "c", control of ignition sources "b", liquid immersion "k"

1.3.4 Product Specific Safety

This product is a constituent part of the equipment and is therefore integrated in the system's safety concept. If it is to be used in a manner outside the scope of the safety concept, then corresponding measures must be taken. The installation work to be done by the customer must be carried out according to local regulations. It must be ensured, that all components are earthed according to the local regulations before start-up.

1.3.5 Special safety regulations for E-FEED+3 PM1 Series (120-130) Powder Management Center

- The E-FEED+3 PM1 Series (120-130) is part of the plant and therefore integrated in the safety concept of the plant.
- If it is to be used in a manner outside the scope of the safety concept, then corresponding measures must be taken.

NOTE:
For further information, see the more detailed Electron safety regulations!

NOTE:
If the power supply is interrupted or if there is a power failure, powder can escape unhindered from the container and contaminate the area around the work opening.
• This area must be cleaned before every start-up

1.3.5.1. Installatıon

Installation work to be done by the customer must be carried out according to local safety regulations.

1.3.5.2. Grounding

Check the grounding of the booth and the powder management center before every start-up. The grounding connection is customer specific and is fitted on the booth base, on the cyclone and on the powder management center. The grounding of the workpieces and other plant units must also be checked.

1.3.5.3. Operating the equipment

In order to be able to operate the equipment safely, it is necessary to be familiar with the safety regulations, the operational characteristics and functioning of the various plant units. For this purpose, read the safety notes, this operating manual and the operating instructions of the plant control unit, before starting up the plant.

In addition, all further equipment-specific operating instructions, e.g. the E-FEED PM124P and all additional components should also be read.

To obtain practice in operating the plant, it is absolutely essential to start the operation according to the operating instructions. Also, later on, they serve as a useful aid on possible malfunctions or uncertainty and will make many enquiries unnecessary. For this reason, the operating manual must always be available at the equipment.

Should difficulties arise, however, your Electron service center is always ready to assist.

1.3.5.4. Inspection check

The following points are to be checked at every booth start-up:
- No foreign material in the central suction unit in the booth and in the powder suction
- Sieve machine is connected to the cyclone separator, the clamp is tightly locked
- Pneumatic conduction and powder hose are connected to the dense phase conveyor

1.3.5.5. Repairs

Repairs must be carried out by trained personnel only. Unauthorized conversions and modifications can lead to injuries and damage to the equipment. The Electron guarantee would no longer be valid.

NOTE:
We point out that the customer himself is responsible for the safe operation of the equip ment! Sistem Teknik Makina San. ve Tic. A.Ş. is in no way responsible for any resulting damage.

By carrying out repairs, the powder management center must be disconnected from the mains, according to the local safety regulations!

NOTE:
Only original Electron spare parts should be used! The use of spare parts from other manu facturers will invalidate the Electron guarantee conditions!

1.4. About this manual

1.4.1. General Information

This operating manual contains all important information which you require for the working with the E-FEED+3 PM1 series (120-130). It will safely guide you through the start-up process and give you references and tips for the optimal use of your new powder coating system.

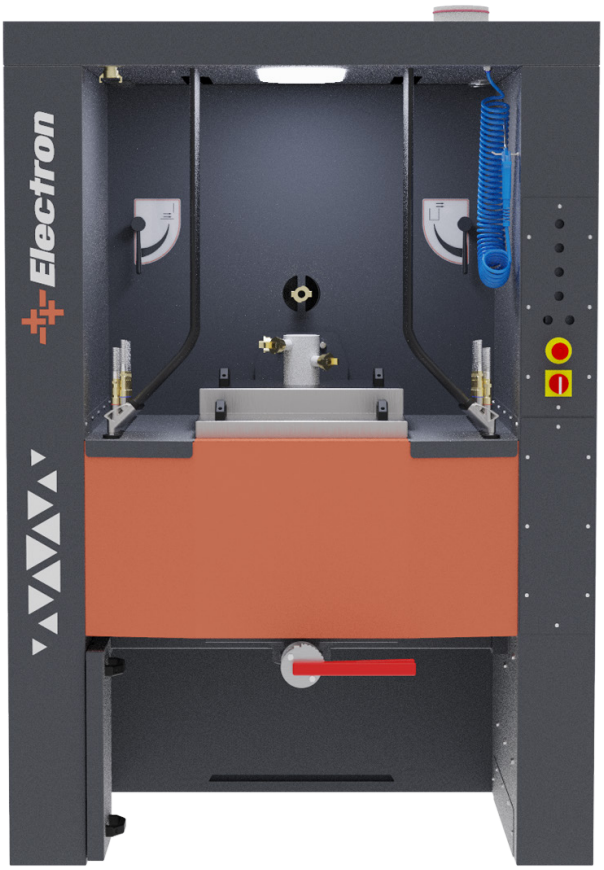
DANGER!
Working without operating instructions
Working without operating instructions may result in damage to property and personal injury if relevant safety information is not observed.
• Before working with the device, organize the required documents and read the section "Safety regulations".
• Work should only be carried out in accordance with the instructions of the relevant documents.
• Always work with the complete original document.

2. PRODUCT DESCRIPTION

2.1. FIELD OF APPLICATION

The E-FEED PM1 series (120 or 130) Powder management centers are conceived for simple and clean handling of the coating powder. It enables

automated cleaning procedure and consequently a quick color change.



2.1.1. UTILIZATION

The E-FEED PM1 series (120-130) powder management centers are suitable for use in multiple color plants as well as in single color plants.
As a part of the process controlled coating plant, the powder management center is laid out for semi-automatic operation.

CONVEYING

- Processing the powder directly from the integrated powder container (manual powder filling)
- Integrated electrical and pneumatic control units
- Powder level monitoring by level sensor

CLEANING

- Automatic internal cleaning of the pumps, powder hoses and guns.
- Supply of the recovered powder.
- The workplace and the environment remain clean.
- No own exhaust system - the powder management center does not have its own exhaust system and will be therefore connected directly to the After Filter.

2.1.2. REASONABLY FORESEEABLE MISUSE

- Use of moist powder.
- Insufficient fluidization at the suction point.
- Operation without the proper training.

3. TECHNICAL DATA

3.1. POWDER TRANSPORT

E-FEED+3 PM1 Series (120-130)	
Injector Capasity PM120 or PM130	20 Injector or 30 Injector
Recovery Capacity with E-Feed+3 HD	max. 5 kg/min

3.2. ELECTRICAL DATA

E-FEED+3 PM1 Series (120-130)	
Connected load	1x230V *
Frequency	50/60 Hz
Protection type	IP54

3.3. PNEUMATIC DATA

E-FEED+3 PM1 Series (120-130)	
Input pressure	min. 6 bar
Compressed air consumption during coating operation	15 Nm³/h
Compressed air consumption during cleaning (incl. powder container and guns)	500 Nm³/h
Compressed air consumption during cleaning of the hose to the cyclone (5/8”)	120 Nm³/h
Water vapor content of compressed air	max. 1.3 g/Nm³
Oil content of compressed air	max. 0.1 mg/Nm³

3.4. DIMENSIONS

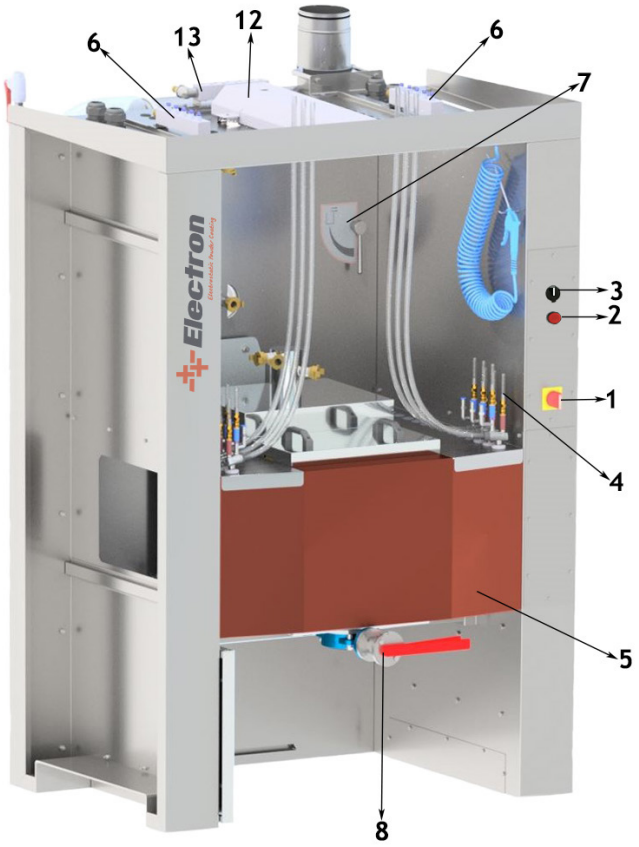
E-FEED+3 PM1 Series (120-130)	
Base area (mm)	1.300 x 1.040
Overall height (mm)	2050
Weight (kg)	approximate 310 kg

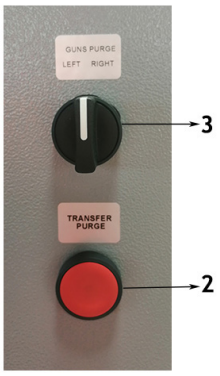
NOTE:
** Only the 110V electrical system is used on 110V models.*

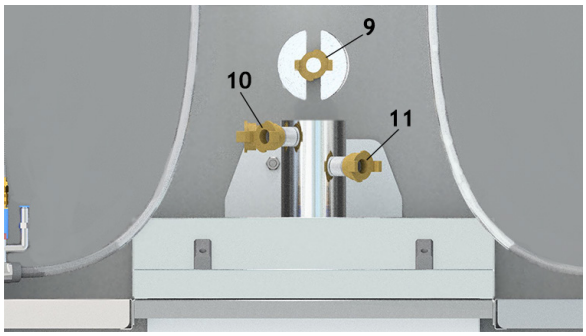
3.5. SOUND PRESSURE LEVEL

E-FEED+3 PM1 Series (120-130)	
Normal operation -1 (with out sieving)	60 dB(A)
Normal operation -2 (with sieving)	75 dB(A)
Cleaning operation mode	95 dB(A)

4. DESIGN AND FUNCTION







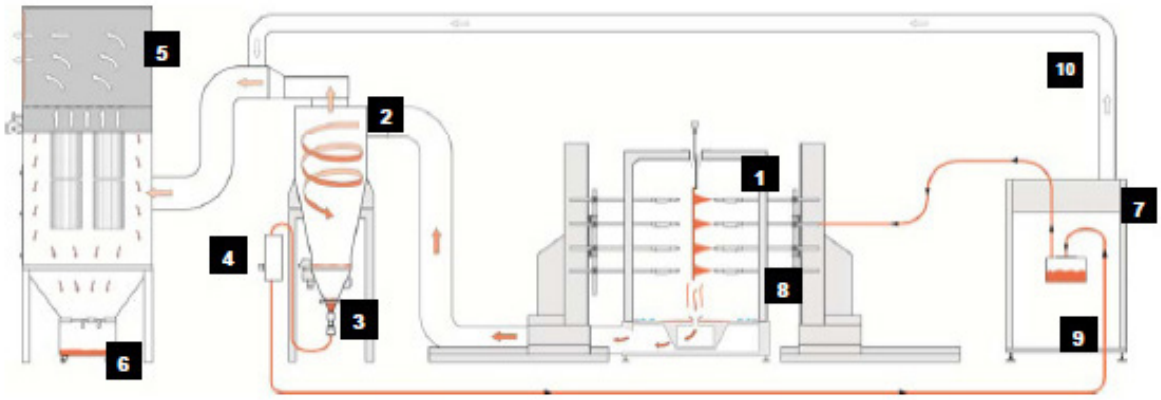
1	Main switch
2	Transfer Purge Button
3	Guns Purge left and right switches
4	Injectors
5	Powder container
6	Pneumatic parts
7	Suction flaps operating settings
8	Hand lever for emptying of the powder container
9	"Waste" connection
10	Recovery powder connection from cyclone
11	Recovery powder connection from multicolour
12	Lighting
13	Air Collector

5. POWDER FLOW IN THE PLANT

Powder Circuit

During the typical E-Feed+3 PM1 Series (120-130) (7) operation the powder is filled into the powder container and fluidized. The fluidized powder is aspirated by the injectors and fed through the powder hoses to the guns/spray nozzles (8). The powder, which does not adhere to the workpieces, will be absorbed by the exhaust air of the booth (1) and separated from the air in the cyclone separator (2).

The separated powder is cleaned by passing it through the integrated sieve (3) and fed back into the OptiCenter by the dense phase conveyor (4), where it is prepared again for coating operation.



1	Booth
2	Monocyclone
3	Sieve
4	Powder paint pump / High capacity injector (optional)
5	After Filter
6	Refuse container
7	E-FEED+3 PM1Series (120 or 130) (Powder management center)
8	Automatic guns
9	Powder container
10	Exhaust air ducting

6. STARTING UP THE E-FEED PM1 Series (120 - 130)

WARNING:
The E-FEED+3 PM1 Series (120-130) must only be installed in locations with an ambient temperature of between +20 and +40 °C, i.e. never next to heat sources (such as an enameling furnace) or electromagnetic sources (such as a control cabinet).

1. Switch on the booth.
2. Switch the powder management center with the main switch :

- The interior lighting switches on 

3. Fill the E-Feed powder container with powder: Fill with maximum 40 kg powder (approx. 70 liters fluidized powder) or the powder level must reach to a maximum of 5 cm below the exhaust air edge of the powder container; otherwise too much powder can be sucked to the waste.
4. Set the fluidizing air of the powder container with the corresponding pressure regulator.

- The powder fluidization depends on the powder type, the air humidity and the ambient temperature.
- The powder must lightly “boil”.

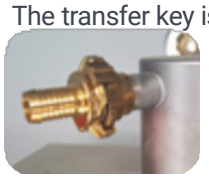
5. Set a suction adjustment. 

- Dust cloud should be absorbed slightly to not go out.

6. Start the coating procedure.

7. POWDER COATING-CLEANING SCENARIOUS

- The conveyor is set to be left empty in the booth.
- The "TRANSFER" three-position key on the control cabinet is taken to  position for continuous operation.
- The inside of the booth is cleaned by brush and the help of a cloth.
- Wait until all the powder going to the cyclone reaches the powder management center (until the powder comes out of the transfer hose) or the suction fan and the transfer are moved to the center position and closed, the bottom of the cyclone is opened and the box is emptied directly and the fan is started.
- The transfer hose at the paint center is removed from the connection on the hopper and connected to the waste suction tip.
- The transfer key is in the middle, at the powder management center, the transfer hose is removed from the connection on the hopper and connected to the waste suction tip.



- The multicolor (fresh paint supply unit) is also removed from the connection point on the powder container and cleaned separately.
- Transfer key is taken to continuous operation position. 
- The suction center of the lower part of the powder management center is taken to the maximum suction level.

- The setting of the fluidization air on the control cabinet is adjusted to “0”.
- A blank box is placed under the hopper discharge outlet under the powder management center and the discharge knob is opened and the powder inside the hopper is thoroughly drained. Cleaning the container floor should be done with soft objects such as small towels, so as not to damage the base of the embossing, the paint discharge should be stripped towards the mouth.
- The powder management center lower suction closure for normal operating position  the upper suction flap is moved to the maximum position. 
- The manual guns are placed in the parking spaces on the booth.
- In order to clean the powder path in the powder management center, all the control units in the control cabinet are put into "PURGE" mode. The operation of the devices in the cleaning mode can be found in the manual of the relevant control unit. In case of contrast color changes, it is necessary to remove the pumps from their housing and check their maintenance. (See the E-FEED+3 INJ or E-FEED V2 manual for maintenance instruction.)
- The powder container discharge cap is closed and the box under the powder management center is taken out.
- After the sieve (if any) is displaced ,it should be cleaned via air gun.
- The powder management center is cleaned thoroughly. The cleaning of the powder container should be done with the help of an air gun to allow the powder to be sucked from the suction opening. The drainage closure is also opened and cleaned with air and then closed.

- The powder man. center suction flaps are brought to normal operating level , .  
- The reciprocators are moved closer to the booth as possible and gun arms and surfaces of the guns are cleaned.
- The manual guns bodies are cleaned, the head groups are dismantled and cleaned, and the guns are hung on the hangers on the device.
- The booth doors are closed and the booth interior is cleaned. It should be done by using a 1 meter air stick, by keeping air inside and outside of the booth entrance-exit doors, inside the booth and in the suction duct to prevent dust.
- The suction channel for cleaning is opened; lid and channel cleaning is done.
- The bottom of the cyclone is opened and the sieve and cyclone complex is cleaned. For cleaning the top of the cyclone, 1 or 2-meters air sticks should be used.
- The high-capacity injector (if any) is removed, then the injector and transfer hose are cleaned.
- If E-FEED+3 HD pump is used for the recovery system under the cyclone, apply the cleaning scenario for the product. (For detailed information, see E-FEED+3 HD user manual.)
- The sieve is placed in housing to seat and the bottom of the cyclone is closed.
- The high-capacity injector and transfer hose are attached.
- The transfer is turned off by moving the "TRANSFER" switch on the unit to the center position.
- At the powder manegement center, the transfer hose is removed from the waste suction connection  and attached to the transfer connection  on the container.
- New powder coat can be loaded, the fluidization air and the transfer can be operated to start the coating procedure.

8. PACKING AND TRANSPORT INTRODUCTION

This chapter describes special precautions that must be taken during internal transport of the product.

8.1. Safety Rules

Suitable equipment (e.g. a crane) must be used when moving parts that are sometimes bulky and heavy. Components being disassembled must be adequately secured before they are detached.

8.2. Requirements On Personnel Carrying Out The Work

Use only technical personnel who are trained in operating the respective equipment (e.g. a crane). If there are any uncertain- ties, please contact Electron.

8.3. Packing Material

A suitably stable pallet must be used.

Packaged data of the product: 1400x1200 mm base area
2250 mm overall
390 kg weight

9. TRANSPORT

9.1. Data concerning goods to be transported

- The space requirements correspond to the size of the components plus the packaging
- Weight see “Technical Data”
- Points of attachment, see “Mode of transportation”

9.2. Mode of transportation

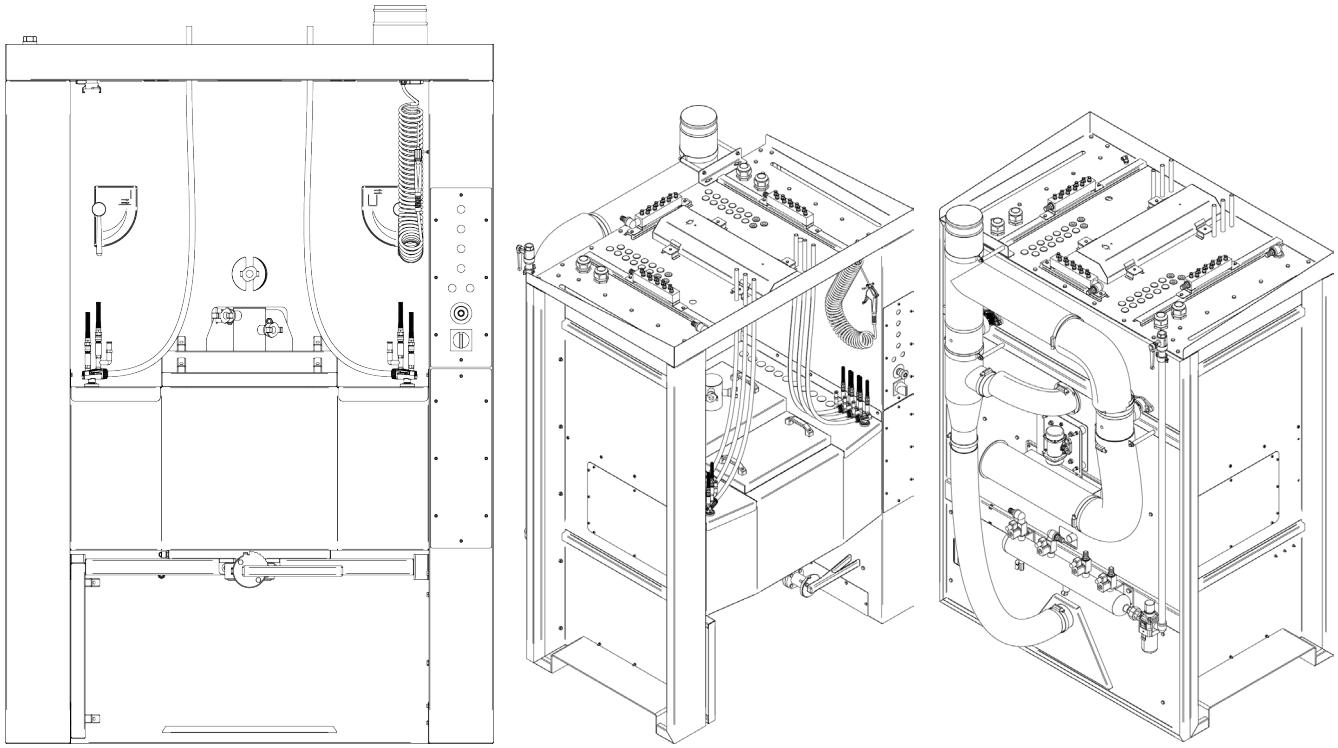
For short distances/shifts of position within the same room, parts for the booth must be transported using a forklift truck with long forks or a crane.
Therefore, the steel bolts must be loosened first.

- Transport using a crane: use the eye bolts on the roof
- Transport using a forklift: remove the lateral panels before the transport

9.3. Loading, transferring the load, unloading

Suitable lifting equipment is to be used for all procedures.

10. E-FEED+3 PM1 SERIES (120 - 130) POWDER MANAGEMENT CENTER



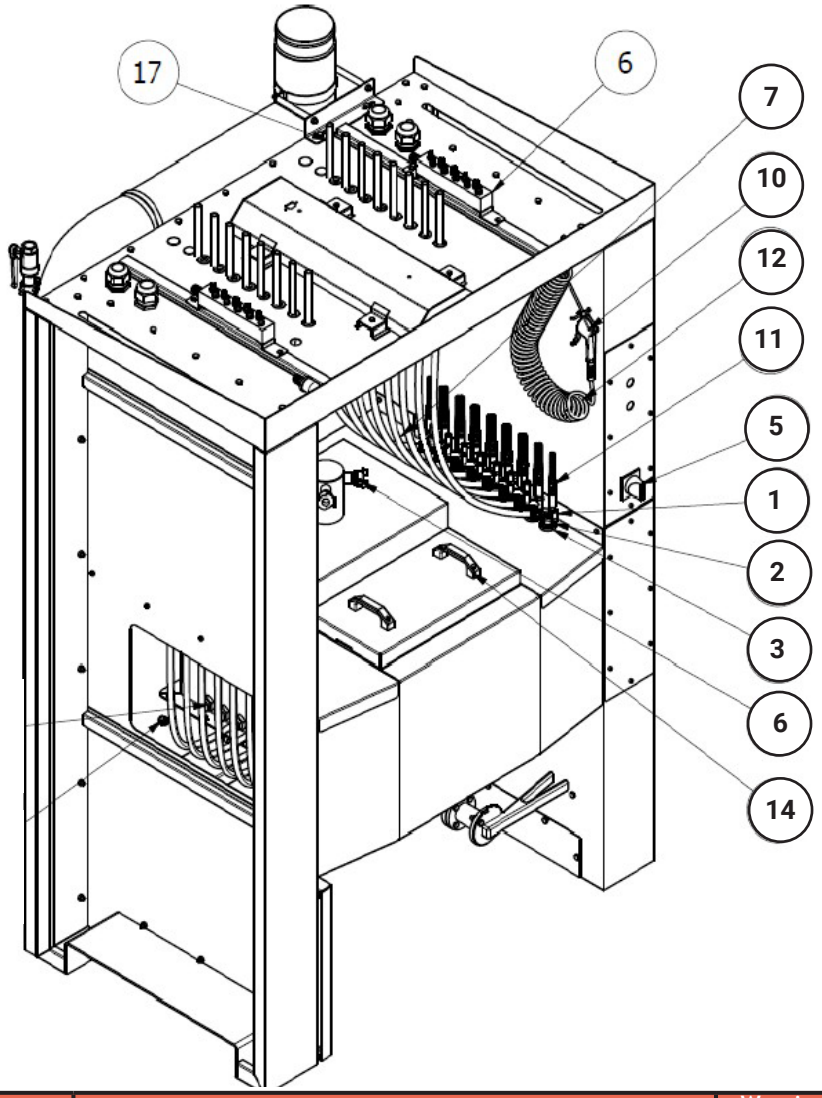
ORDER CODE	PART NAME
A05PM120+3	E-FEED+3 PM120 Powder Management Center
A05PM120+3-A110V	E-FEED+3 PM120 Powder Management Center (A110V)
A05PM120EC+3	E-FEED+3 PM120EC Powder Management Center *
A05PM120EC+3-A110V	E-FEED+3 PM120EC Powder Management Center (A110V) *
A05PM130+3	E-FEED+3 PM130 Powder Management Center
A05PM130+3-A110V	E-FEED+3 PM130 Powder Management Center (A110V)

NOTE:
The sieve module is offered as an option.!
** Designed to work without electric panel. Consultation with your sales representative.*

11. Troubleshooting

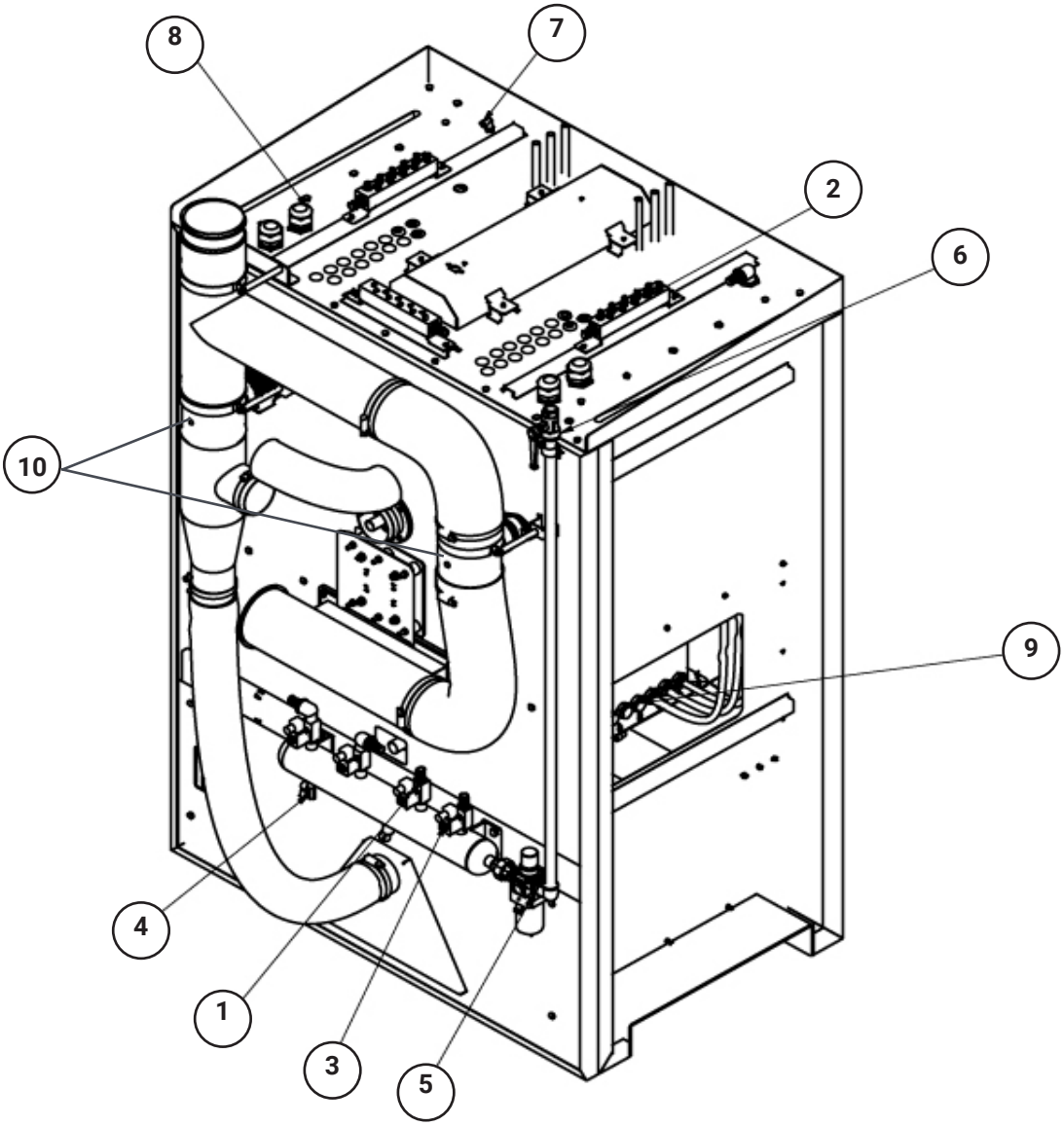
Failure	Possible Failure Reason	Solution
No coating operation possible	1. Powder container empty. 2. Powder is not properly or fluidized 3. Powder accumulation on level sensor 4. Sensor defective 5. Cable defective	1. Refill powder. 2. Adjust the fluidization correctly 3. Clean, check the powder quality • Clean the sensor • Readjust the sensor sensitivity • Check the fluidizing of the sensor if necessary, increase the fluidizing air pressure • Remove the fluidizing air hose and check it 4. Replace 5. Replace
Powder recovery pump conveying problem Powder pump does not function properly	1. Pump defective. 2. Hose clogged.	1. See corresponding operating manual E-Feed+3 HD 2. Check the recovery system 2.1. Check the level sensor 2.2. Check the cyclone funnel for powder abrasion 2.3. Contact a Electron service center
Powder pump is switched off	1. Hose clogged or connected incor- rectly	1. Check connect correctly 2. Replace (see also corre- sponding E-Feed V2 or E-Feed+3 INJ operating manual).
Lighting does not switch on	1. Circuit breaker in the electrical panel is tripped	1.1. Check the lamp 1.2. Reset the breaker (see enclosed wiring diagram) 1.3. Otherwise contact a Electron service center

12. SPARE PARTS LIST

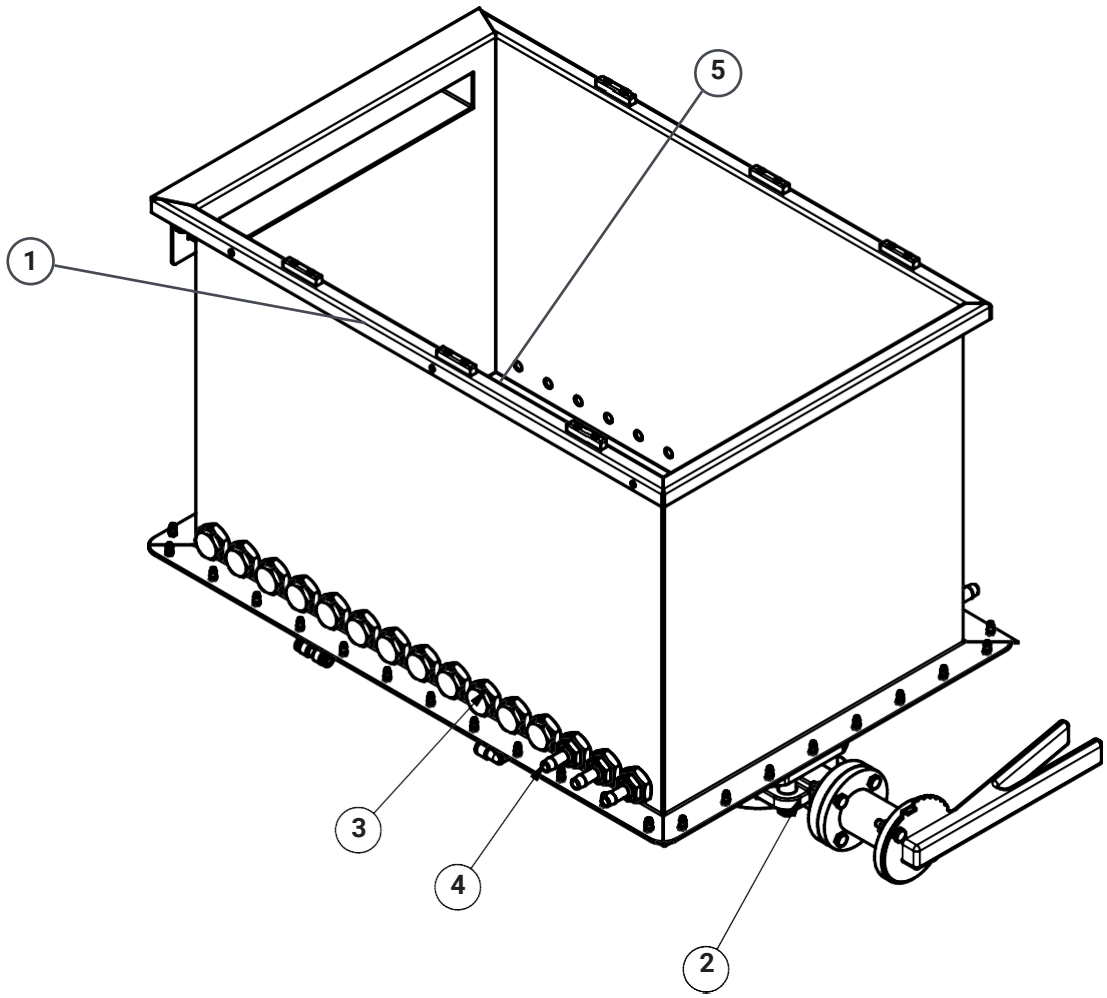


PART#	ORDER CODE	PART NAME	Wearing Part	RECOMMENDED STOCK PARTS
1.A	BO7FEEDV2	E-FEED V2 INJECTOR	✓**	✓
1.A-1*	B07FEEDV2C	E-FEED V2-C INJECTOR - CLEANING MODULE	✓**	✓
1.B *	BO7FEED+3	E-FEED+3 INJECTOR	✓**	✓
1.B-1*	B07ENJ010+3	E-FEED+3 INJECTOR CLEANING MODULE SET	✓**	✓
2	TRTM04052	INJECTOR HOUSING WITH HOSE FITTING Ø39 L47	N/A	N/A
3	TRTM04044	INJECTOR HOUSING WITH NUT Ø40 L7	N/A	N/A
4	TRTM04051	CLEANING AIR COLLECTOR 40X40X225	N/A	N/A
5	ELSL07001	SWITCH PAKO VCF0 SCHNEIDER 5,5 KW 25 A	N/A	N/A
6	PNBE02001	EUROPEAN KAPLIN FEMALE GEAR 3/4 "	N/A	N/A
7	TRTM04019	INJECTOR SLOT	N/A	N/A
8	PNHO03002	11X16 CARBON POWDER PAINT HOSE	✓	✓
9	PNRD06002	FITTING CURTAIN TRANSITION Ø8	N/A	N/A
10	PNDP03002	GUN AIR WITH 25CM NOZZLE	N/A	✓
11	PNBE01005	KAPLIN QUICK 6X8 MM SPRING BODY QUICK (016-OS5)	N/A	N/A
12	PNHO01001	UC-08050-75-BU SPIRAL HOSE-BLUE (Ø8 - 7,5 METER)	N/A	N/A
13	TRTM04062	PAINT SUCTION BLIND PLUG (PM1)	N/A	N/A
14	AKUA02003	HANDLE PLASTIC	N/A	N/A

NOTE:
** E-Feed+3 PM1 series (120 or 130) products work with both E-Feed V2 and E-Feed+3 INJ. Ask your sales representative.*
*** Please refer to the user manual for the product in question.*

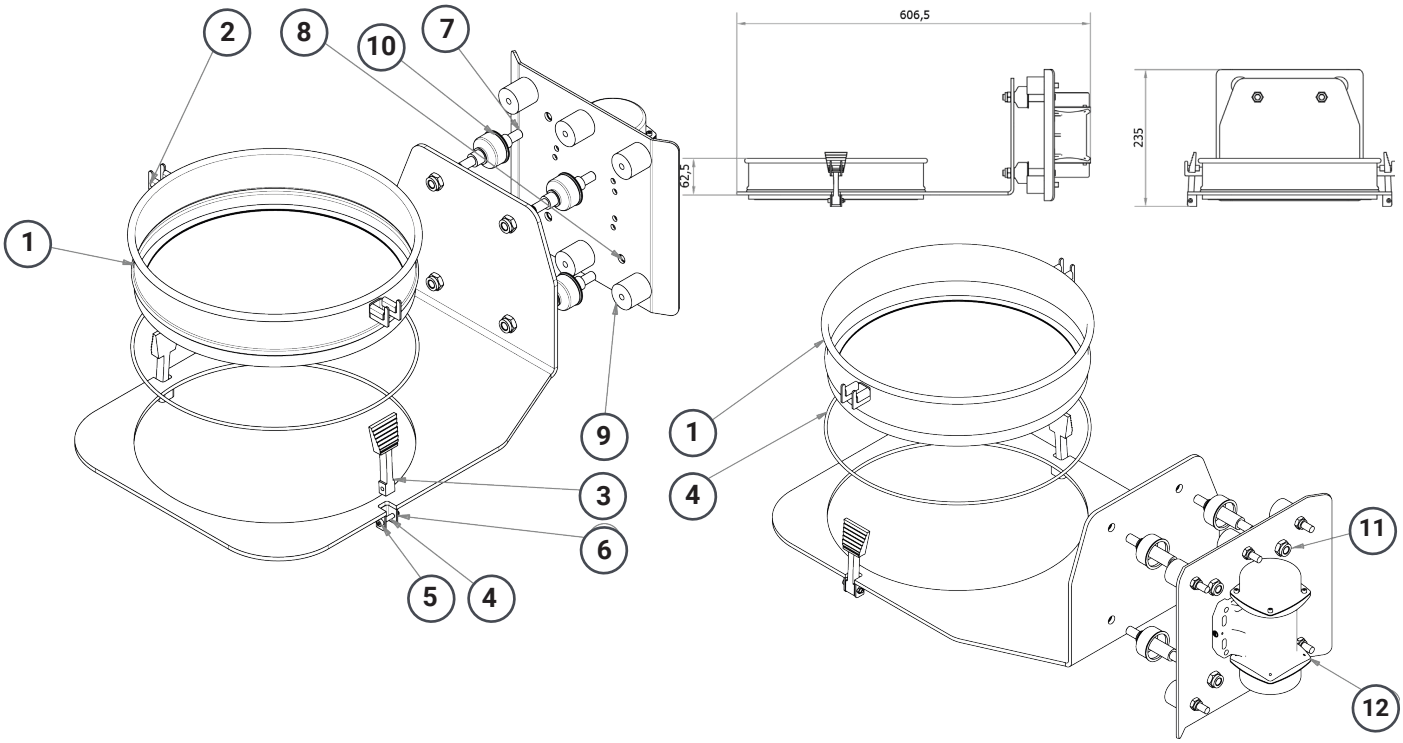


PART#	ORDER CODE	PART NAME	Wearing Part	RECOMMENDED STOCK PARTS
1	ELSN01001	SENSOR	N/A	N/A
2	TRTM04051	CLEANING AIR COLLECTOR 40X40X225	N/A	N/A
3	PNPE04004	VALF SOLENOID 3/4" T-GM 104 24V PVD	N/A	✓
4	HDHE01002	VALVE BALL MINI 1/4"	N/A	✓
5	PNPE02002	REGULATOR 3/4" FR	N/A	✓
6	HDHE01003	BALL VALVE 3/4"	N/A	✓
7	PNBE06001	FITTING CURTAIN ELBOW Ø8	N/A	N/A
8	ELKA03007	REKOR PG 36 LIK	N/A	N/A
9	TRTM04061	PAINT SUCTION HOSE FITTING (PM1)	N/A	N/A
10	TDTS04300	AİR DAMPER Ø150 SEALED GASKET	N/A	N/A



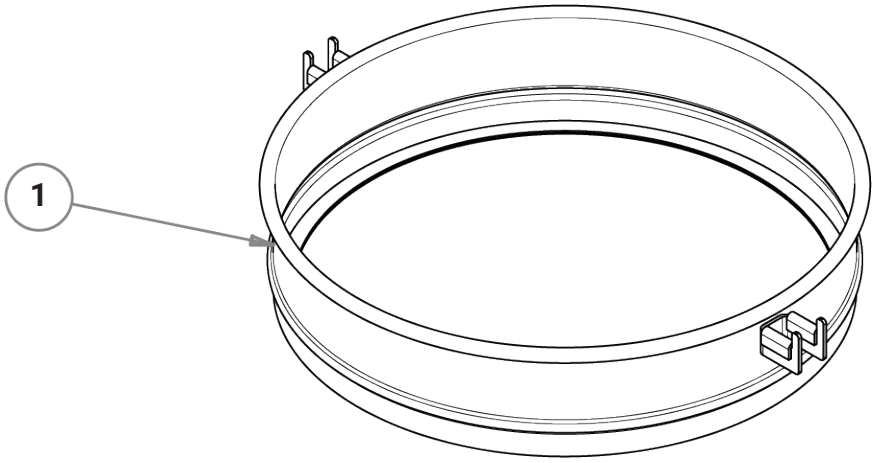
ITEM	PART NUMBER	PART NAME	Wearing Part	RECOMMENDED STOCK PARTS
1	ELSN01001	SENSOR	N/A	N/A
2	HDHE02002	VALVE BUTTERFLY WAFER	N/A	✓
3	TRTM04062	PAINT SUCTION BLADE (PM1)	N/A	N/A
4	TRTM04061	PAINT SUCTION HOSE FITTING (PM1)	N/A	N/A
5	B06CE03003	E-FEED PM1 FLUIDIZATION PLATE	✓	✓

ORDER CODE	PART NAME	Wearing Part	RECOMMENDED STOCK PARTS
B07EM10001	E-FEED PM1 SEIVING MODULE COMPLETE SET (400 MICRON)	N/A	N/A
B07EM10004	E-FEED PM1 SEIVING MODULE COMPLETE SET (250 MICRON)	N/A	N/A
B07EM10007	E-FEED PM1 SEIVING MODULE COMPLETE SET (140 MICRON)	N/A	N/A
B07EM10001-A110	E-FEED PM1 SIEVE MODUL (400 MICRON) (110V)	N/A	N/A
B07EM10004-A110	E-FEED PM1 SIEVE MODUL (250 MICRON) (110V)	N/A	N/A
B07EM10007-A110	E-FEED PM1 SIEVE MODUL (140 MICRON) (110V)	N/A	N/A



PART #	ORDER CODE	PART NAME	Wearing Part	RECOMMENDED STOCK PARTS
1	*	SIEVE	*	*
2	IZCS07002	OIL SAIL	✓	✓
3	B07KT001	PLASTIC STORAGE RUBBER HANDLE	✓	✓
4	IZOR01021	O-RİNG Ø291.7x3.5 NBR70	N/A	✓
5	ELKA07021	50 LT. PLASTIC WAREHOUSE WITHOUT INSULATION RING	N/A	✓
6	BECV03004	BOLT M4X25 IMBUS BLACK	N/A	✓
7	BESM02001	NUT M4 WITH FIBER	N/A	✓
8	TRTM04030	SIEVE CONNECTION SHAFT Ø15 L90	N/A	N/A
9	BEPL03006	M10 RONDELA COATED 2MM	N/A	✓
10	AKUA03024	VIBRATION WEDGE M8X18 30X30 MALE FEMALE NO:1	N/A	N/A
11	BEPL03005	M8 RONDELA COVERED	N/A	N/A
12	MPMT03001	MOTOR VIBRATION 220V/0,04KW VBM - 2M	N/A	N/A
12.1	MPMT03061	MOTOR VIBRATION 110V/0,04KW *	N/A	N/A

NOTE:
** Consultation with your sales representative.*

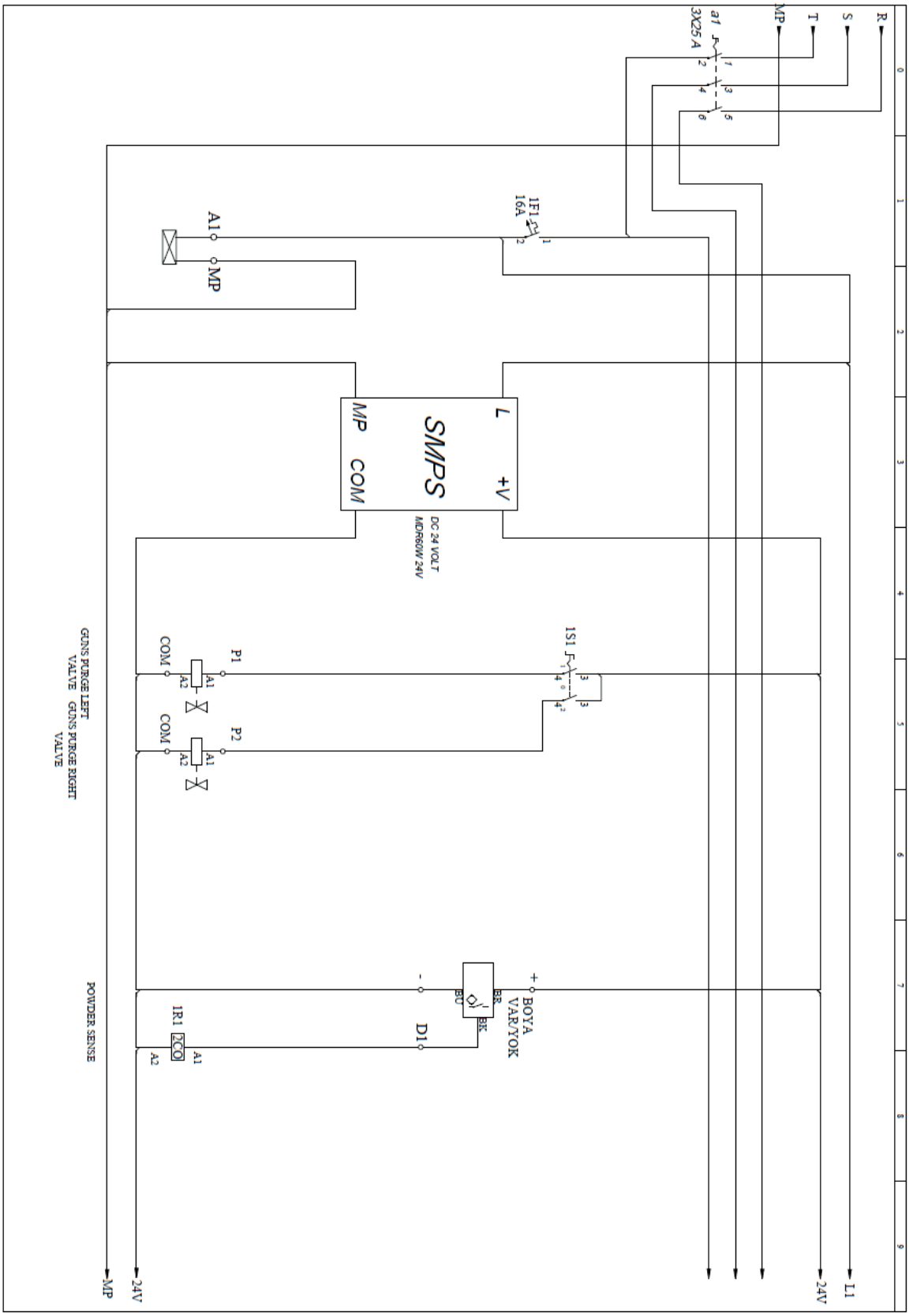


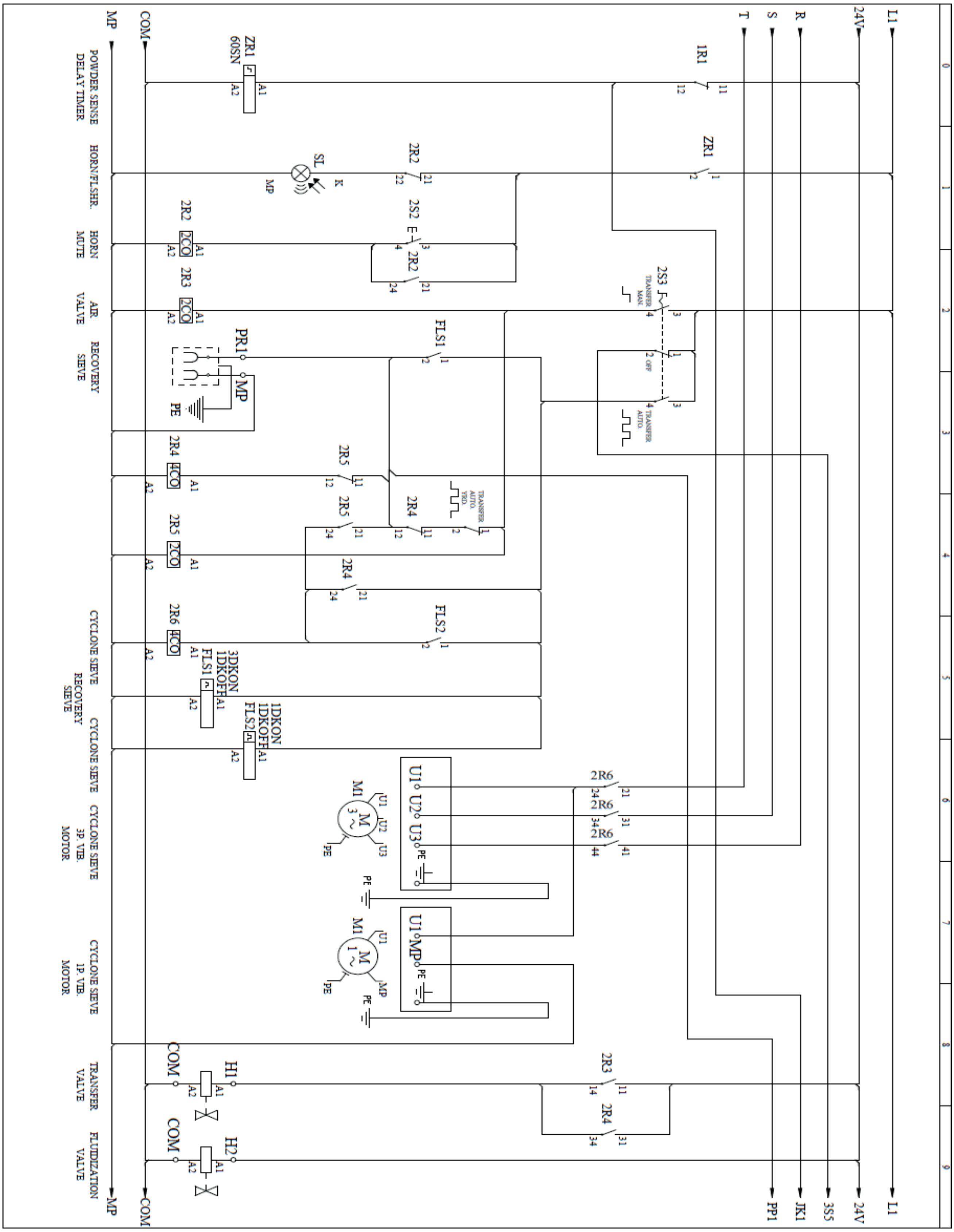
PART #	ORDER CODE	PART NAME	Wearing Part	RECOMMENDED STOCK PARTS
1.1	B07EA0002	SIEVE AISI304 Ø300mm 400 MICRON-COMPLE (PM1)	N/A	✓
1.2	B07EA0003	SIEVE AISI304 Ø300mm 600 MICRON-COMPLE (PM1)	N/A	✓
1.3	B07EA0004	SIEVE AISI304 Ø300mm 140 MICRON-COMPLE (PM1)	N/A	✓
1.4	B07EA0005	SIEVE AISI304 Ø300mm 250 MICRON-COMPLE (PM1)	N/A	✓
1.5	B07EA0006	SIEVE AISI304 Ø300mm 177 MICRON-COMPLE (PM1)	N/A	✓
1.6	B07EA0007	SIEVE AISI304 Ø300mm 210 MICRON-COMPLE (PM1)	N/A	✓
1.7	B07EA0008	SIEVE AISI304 Ø300mm 300 MICRON-COMPLE (PM1)	N/A	✓

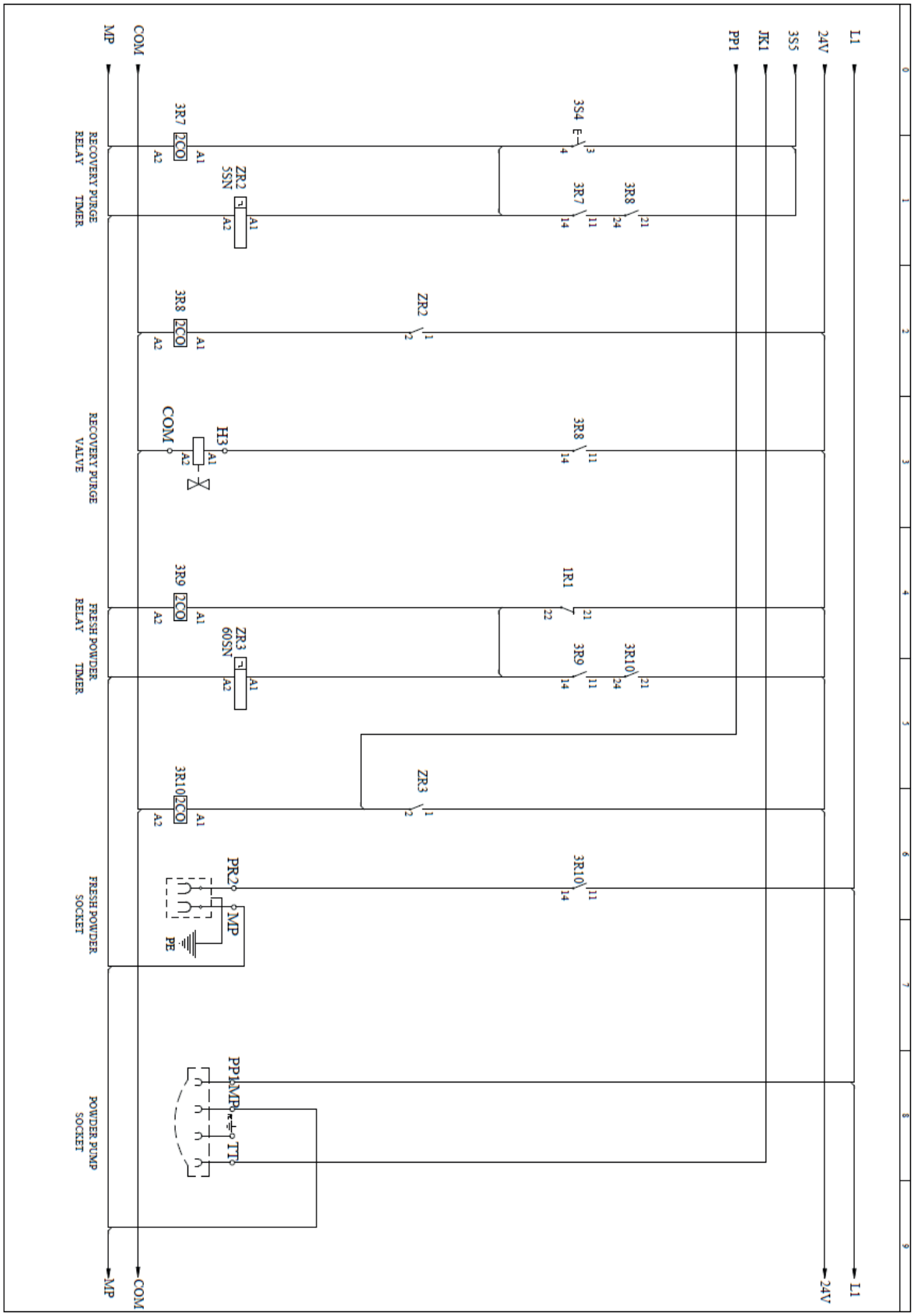
PART #	ORDER CODE	PART NAME	Sieving Performance
1.1	B07EA0002	SIEVE AISI304 Ø300mm 400 MICRON-COMPLE (PM1)	up to 4 kg/min*
1.2	B07EA0003	SIEVE AISI304 Ø300mm 600 MICRON-COMPLE (PM1)	up to 6 kg/min*
1.3	B07EA0004	SIEVE AISI304 Ø300mm 140 MICRON-COMPLE (PM1)	up to 1 kg/min*
1.4	B07EA0005	SIEVE AISI304 Ø300mm 250 MICRON-COMPLE (PM1)	up to 3 kg/min*
1.5	B07EA0006	SIEVE AISI304 Ø300mm 177 MICRON-COMPLE (PM1)	up to 1,5 kg/min*
1.6	B07EA0007	SIEVE AISI304 Ø300mm 210 MICRON-COMPLE (PM1)	up to 2,5 kg/min*
1.7	B07EA0008	SIEVE AISI304 Ø300mm 300 MICRON-COMPLE (PM1)	up to 3,5 kg/min*

NOTE:
**Sieving performance may vary depending on powder paint type. The sieve micron should not be smaller than the maximum particle size of your powder paint.*

13. ELECTRICAL SCHEMATIC




L1
24V
R
S
T
COM
MP
1R1
ZR1
60SN
ZR1
2R2
SL
2S2
2R2
2R3
2S3
TRANSFER MAN
PR1
FLS1
OFF
TRANSFER AUTO
2R4
2R5
TRANSFER AUTO YRD.
2R4
2R5
2R4
FLS2
2R6
3DKON
1DKOFF
FLS1
1DKON
1DKOFF
FLS2
2R6
U1
U2
U3
M1
M 3~
M1
M 1~
2R3
2R4
H1
H2
COM
POWDER SENSE DELAY TIMER
HORN/FLSHR.
HORN MUTE
AIR VALVE
RECOVERY SIEVE
CYCLONE SIEVE
RECOVERY SIEVE
CYCLONE SIEVE
CYCLONE SIEVE 3P. VIB. MOTOR
CYCLONE SIEVE 1P. VIB. MOTOR
TRANSFER VALVE
FLUIDIZATION VALVE
L1
24V
3S5
JK1
PP1


L1
24V
3S5
JK1
PP1
3S4
3R7
3R8
ZR2
5SN
RECOVERY PURGE RELAY TIMER
3R8
ZR2
COM
H3
3R8
RECOVERY PURGE VALVE
3R9
1R1
ZR3
60SN
3R10
FRESH POWDER RELAY TIMER
3R10
ZR3
PR2
MP
PE
3R10
FRESH POWDER SOCKET
PP1
MP
TT
POWDER PUMP SOCKET
MP
COM
24V
L1

MAIN SUPPLY 4X2,5mm TTR CABLE	⊕	R	⊕
	⊕	S	⊕
	⊕	T	⊕
	⊕	MP	⊕
	⊕	⏚	⊕
POWDER SENSE 3X0,75mm CABLE	⊕	+	⊕
	⊕	-	⊕
	⊕	D1	⊕
TRANSFER VALVE 2X0,75mm CABLE	⊕	H1	⊕
	⊕	COM	⊕
FLUIDIZATION VALVE 2X0,75mm CABLE	⊕	H2	⊕
	⊕	COM	⊕
RECOVERY SIEVE SOCKET SUPPLY 3X1,5mm CABLE	⊕	PR-1	⊕
	⊕	MP	⊕
	⊕	⏚	⊕
CYCLONE 3P. VIB. MOTOR 4X1,5mm TTR CABLE	⊕	U1	⊕
	⊕	U2	⊕
	⊕	U3	⊕
	⊕	⏚	⊕
CYCLONE 1P. VIB. MOTOR 4X1,5mm TTR CABLE	⊕	U1	⊕
	⊕	MP	⊕
	⊕	⏚	⊕
GUNS PURGE LEFT VALVE 2X0,75mm CABLE	⊕	P1	⊕
	⊕	COM	⊕
GUNS PURGE RIGHT VALVE 2X0,75mm CABLE	⊕	P2	⊕
	⊕	COM	⊕
RECOVERY PURGE VALVE 2X0,75mm CABLE	⊕	H3	⊕
	⊕	COM	⊕
FRESH POWDER SOCKET SUPPLY 3X1,5mm CABLE	⊕	PR-2	⊕
	⊕	MP	⊕
	⊕	⏚	⊕
POWDER PUMP 4X1,5mm CABLE	⊕	PP1	⊕
	⊕	MP	⊕
	⊕	⏚	⊕
	⊕	TT	⊕
LIGHTING 2X0,75mm CABLE	⊕	A1	⊕
	⊕	MP	⊕

14.Service and Maintenance Table

DATE	MAINT.TYPE -Weekly -Yearly -Service	MAINT. OR SERVICE PERSONNEL	PROCEDURE CHANGED PARTS NOTES	CONTROL SUPERVISOR

15. Product Life and Warranty

15.1. Product Life

15.1.1 E-Feed+3 PM1 Series (120 or 130)

• The economic life of E-Feed+3 PM1(120 or 130) series are approximately 10 years.
• This product life is highly dependent on the periodic maintenances and spare part changes in a timely manner. Improper maintenance will lead to lower product life.
• SİSTEM TEKNİK A.Ş. warrants supplying the needed service and the spare parts for the entire product life.

15.2. Warranty and Warranty Conditions

- The control unit is warranted for production and parts failure for 2 (two) years.
- Spare parts that are changed from the warranty are free-of-charge.
- The parts that are supplied in the system which are not produced by SİSTEM TEKNİK A.Ş. arewarranted with their own manufacturers and their own conditions.
- SİSTEM TEKNİK A.Ş. will not be held responsible for the improper usage of the machine or any unauthorized usage. These are not in the warranty.
- SİSTEM TEKNİK A.Ş. will not be held responsible for any malfunctions that may occur when grounding conditions are not met.

15.3. Operating Conditions

15.3.1 E-Feed+3 PM1 Series (120 or 130)

- Read the user manual before using the gun.
- Only legally allowed people can operate E-Feed+3 PM1(120 or 130).
- Only trained and authorized people can operate E-Feed+3 PM1(120 or 130) .
- SİSTEM TEKNİK A.Ş.'s suggested spare parts should be used at all times.
- Proper maintenance has to be done and the spare parts has to be changed in a timely manner
- The operational safety has to be assured by the customer; the operators who are not capable of working under safety rules shouldn't be operating the Control Unit.
- All the suggestions and warnings in this manual have to be carefully considered and applied.

Electron

Merkez Ofis

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