MIXXMANN

Operation manual plastering machine MIXXMANN S3 PLUS

Certificate – Сертификат – 證明書 – Certificat – 증명서 – شهادة

CERTIFICATE

No. 0D221123.BVCW76

Certificate's Holder:	Individual Entrepreneur Bereziuk Valerii 59, B. Khmelnytskogo Blvd, Rivne, Ukraine, 33027
Certification ECM Mark	Type Approved
Product:	Plastering machines
Brand:	MIXXMANN
Model(s):	S3, S3+, S5, S6, S7, S8
Verification to:	Standard: EN ISO 12100:2010, EN 60204-1:2018, EN 61000-6-1:2007, EN 61000-6-3:2007/AC:2012 related to CE Directive(s): 2006/42/EC (Machinery) 2014/35/EU (Low Voltage) 2014/30/EU (Electromagnetic Compatibility)

This document has been issued in accordance with the European Commission's note of 14 September 2022 ref. Ares (2022) 6342894 concerning voluntary certifications with a non-notified procedure.

The manufacturer has voluntarily decided to submit its documents concerning the above-mentioned product for verification. Ente Certificazione Macchine confirms that the documentation made available and immediately returned to it, as containing sensitive data, meets the essential requirements of the above-mentioned directives. The verification activity carried out exclusively concerned the technical documentation and no verification was carried out on the product. This document cannot replace the EC Declaration of Conformity. The above conformity mark can be affixed to the technical documentation in accordance with the ECM regulation on its issue and use, published on the website www.entecerma.it

Issuance date: 23 November 2022

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For online check:

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Ente Certificazione Macchine
Legal Representative
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Made in Ukraine

Plastering machines We hereby declare

Individual Entrepreneur Bereziuk Valerii

59, B. Khmelnytskogo Blvd, Rivne, Ukraine, 33027

MIXXMANN S3 PLUS

The series production meets the essential requirements of the European Directives and the harmonized standards listed below.

EU Directives: 2006/42/EC , 2014/30/EU, 2014/35/EU

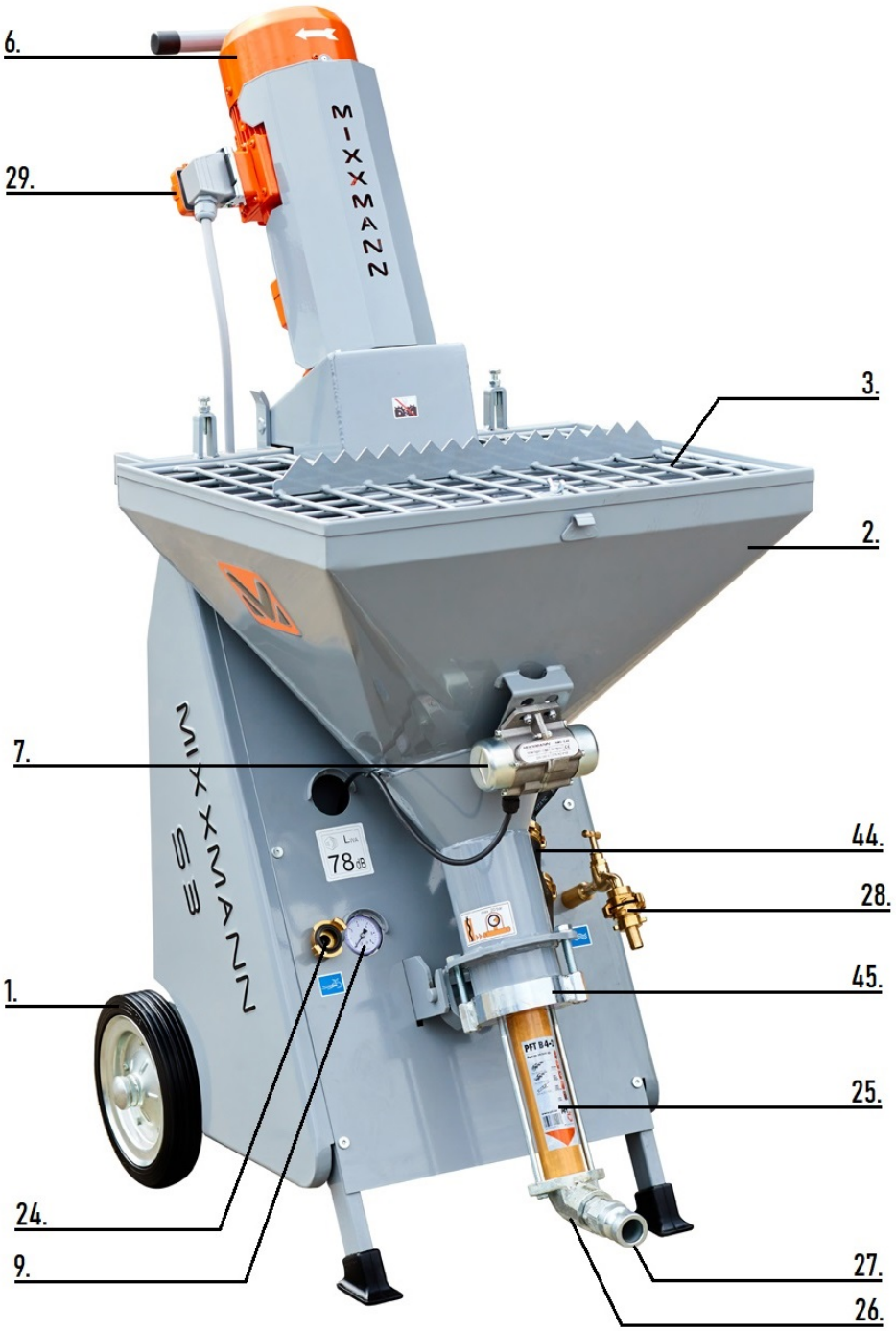
Harmonized standards: EN 60204-1:2018, EN ISO 12100:2010, EN 61000-6-1:2007,
EN 61000-6-3:2007/AC:2012

1. MAIN TECHNICAL DATA AND CHARACTERISTICS OF THE MACHINE.

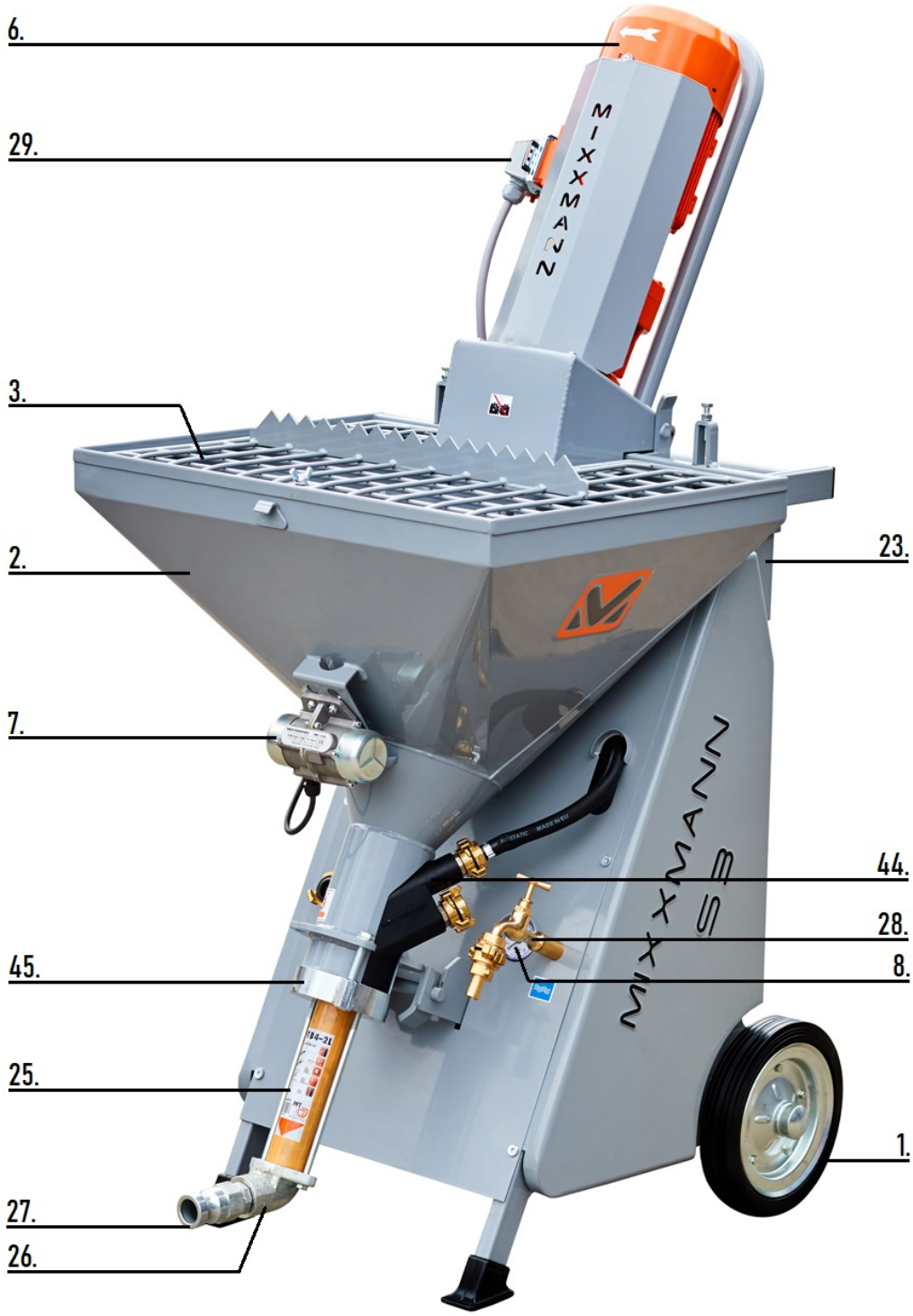
Type, model of the Machine	**MIXXMANN S3 PLUS**
Machine serial number	
Year of manufacture of the machine	
Operation purpose of the machine	**MIXXMANN S3 PLUS** plastering machine is designed for mechanical mixing, pumping and application of factory dry gypsum, lime, cement mixtures.

Dimensions:		
	Width	640 mm
	Height	1480 mm
	Length with screw pair	900 mm
	Dry mix filling height	930 mm
	Receiving hopper volume	70 liters
Weight:		
	Plastering machine weight	135 kg
Power	Screw pair motor	2.2 kW
	Water pump	0.5 kW
	Compressor	0.42 kW/ 80 l/min
Speed:	Pump drive	regular 80-490 rpm
Performance:	Depending on the composition of the mortar and type of screw pair	3-14 l/min
Electric current consumption:	Maximum	3.2 kW
Electrical protection:	Circuit breaker	16 A
Rated voltage:		230 V
Voltage control:		42 V
Feed distance:	Max. at hose diameter 25 mm	20 m
Max. solution discharge pressure:	Depending on the composition of the solution	20 bar
Noise level:		78 dB

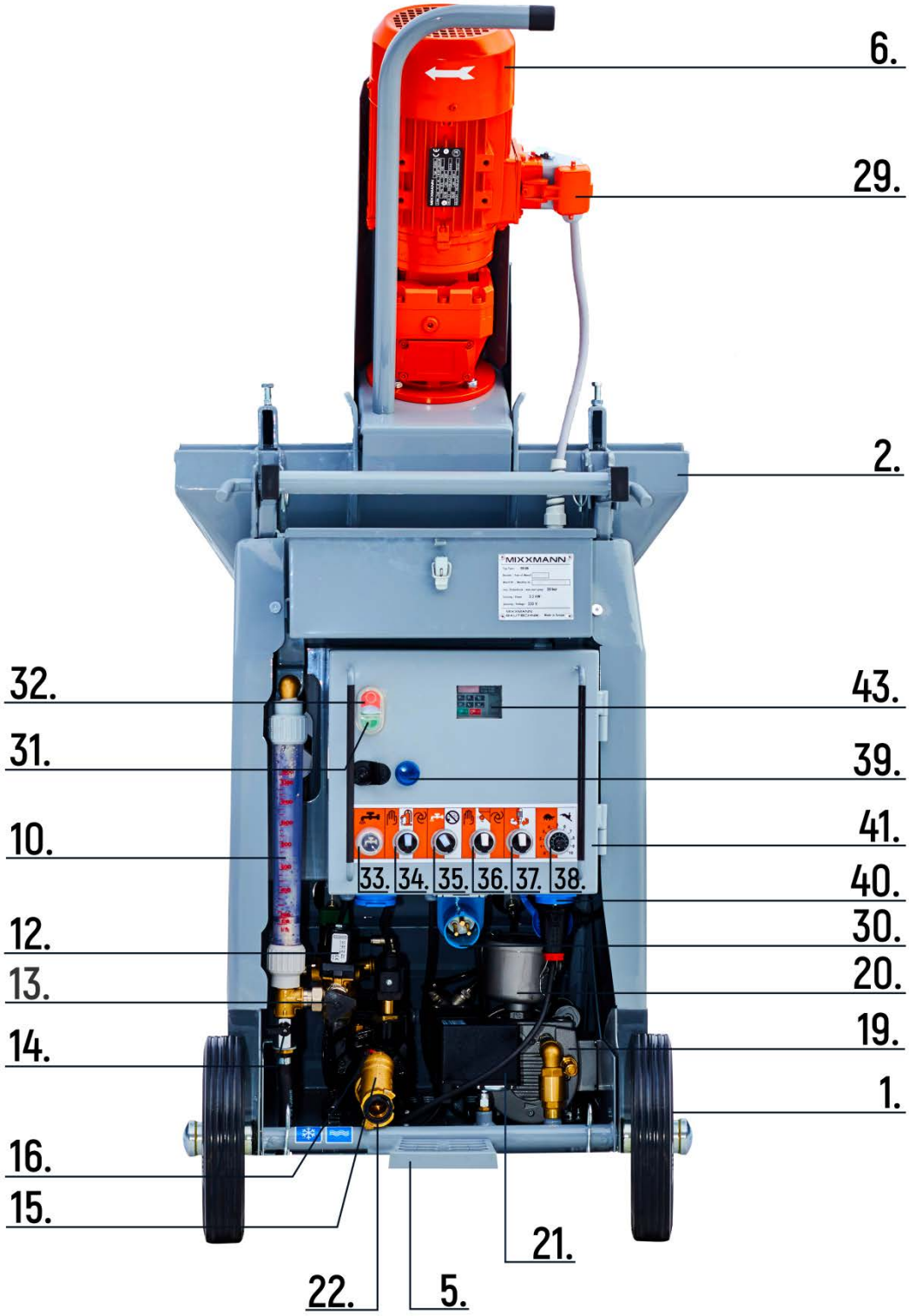
2. DESCRIPTION OF MIXXMANN S3 PLUS



MIXXMANN S3 PLUS



MIXXMANN S3 PLUS



MIXXMANN S3 PLUS

Constructive components of MIXXMANN S3 PLUS:

1. Wheel chassis.
2. Hopper – mixing tube.
3. Hopper protective grid.
4. Transport handle.
5. Transport step.
6. Screw pump electric drive.
7. Vibrator.
8. Water pressure gauge.
9. Air pressure gauge.
10. Water flow meter.
11. Water pressure reducer (adjustable).
12. Water electric valve 42 V.
13. Water supply control tab.
14. Water regulation valve.
15. Water filter.
16. Check valve.
17. Water pressure switch.
18. Water pump 230 V.
19. Air compressor.
20. Air compressor filter.
21. Manometric switch (air).
22. Entrance for connecting a water supply hose.
23. Tool box.
24. Outlet for connecting an air hose.
25. Screw pump.
26. Pressure flange B-pump.
27. Connection for mortar hose connection.
28. Tap for water selection.
29. Connector for connecting the screw pump drive power supply.
30. Connector for machine power supply 3x16 A.
31. “START” button.
32. “STOP” button.
33. Button for forced water supply to the mixing chamber.
34. Water pump mode switch.
35. Switch for turning off the water supply to the mixing camera.
36. Vibrator mode switch.
37. Switch for the operation mode of the screw pump electric drive.
38. Potentiometer for changing engine speed.
39. Water pressure control lamp.
40. Connector for compressor power supply.
41. Connector for vibrator.
42. Connector for the selection of power supply 230 V.
43. Sight glass.
44. Rubber mixing tube.
45. Top flange.

MIXXMANN S3 PLUS pictogram designation

Water pump mode switch

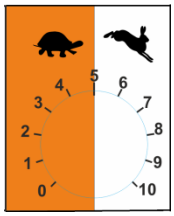
Switch of shutdown of water supply to the mixing camera

Vibrator mode switch

Connector for compressor power supply

Mode switch of the electric drive of the screw pump

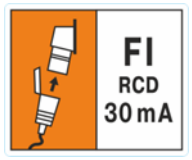
Attention! Moving parts



Engine speed controller

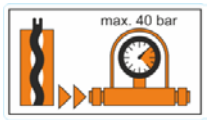
Lack of required water pressure indicator

Automatic mode



Leakage protection 30A, 3 ph x ~400V, 32A

Manual mode



Max working pressure 40 bar

START button

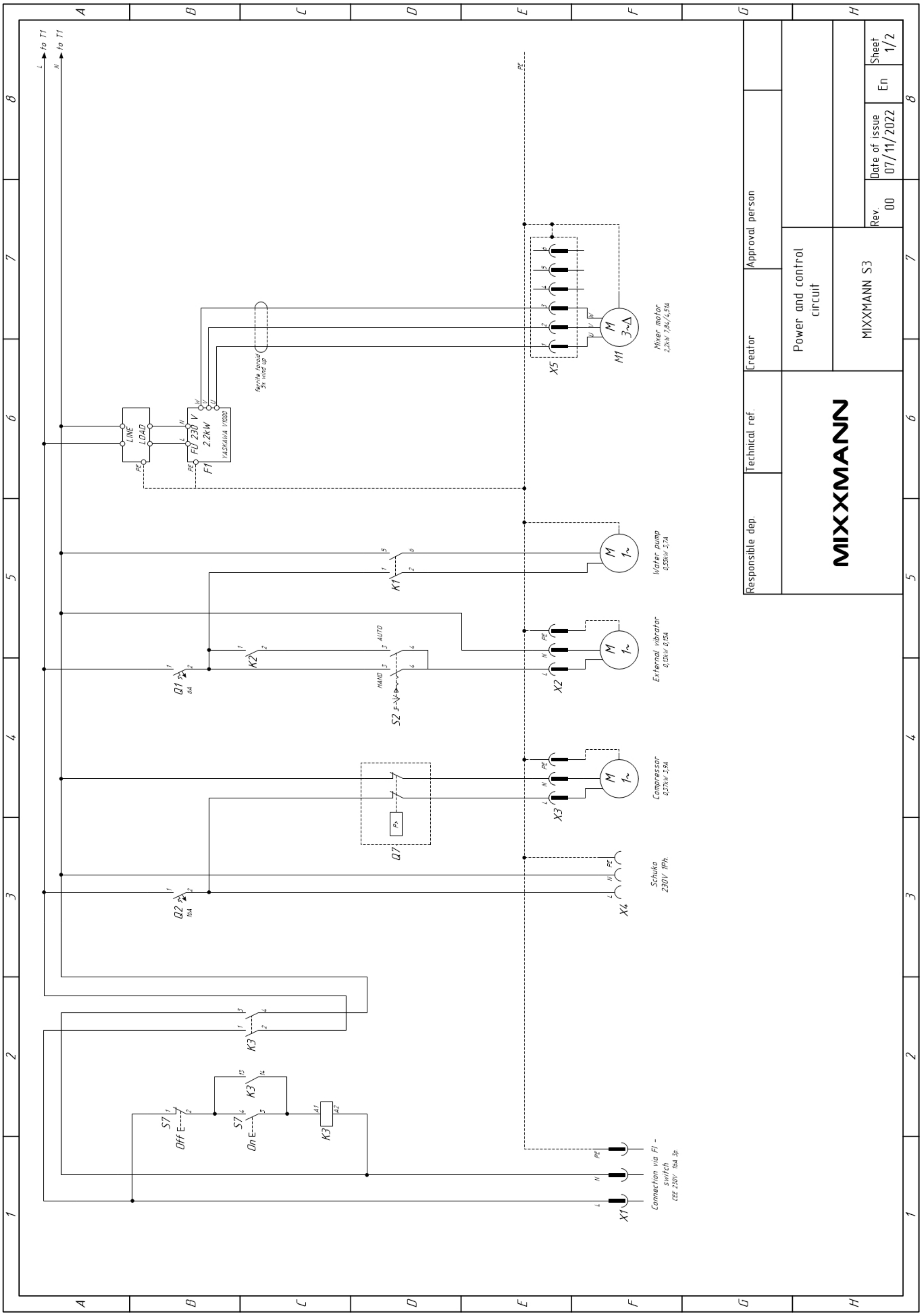
Water connection

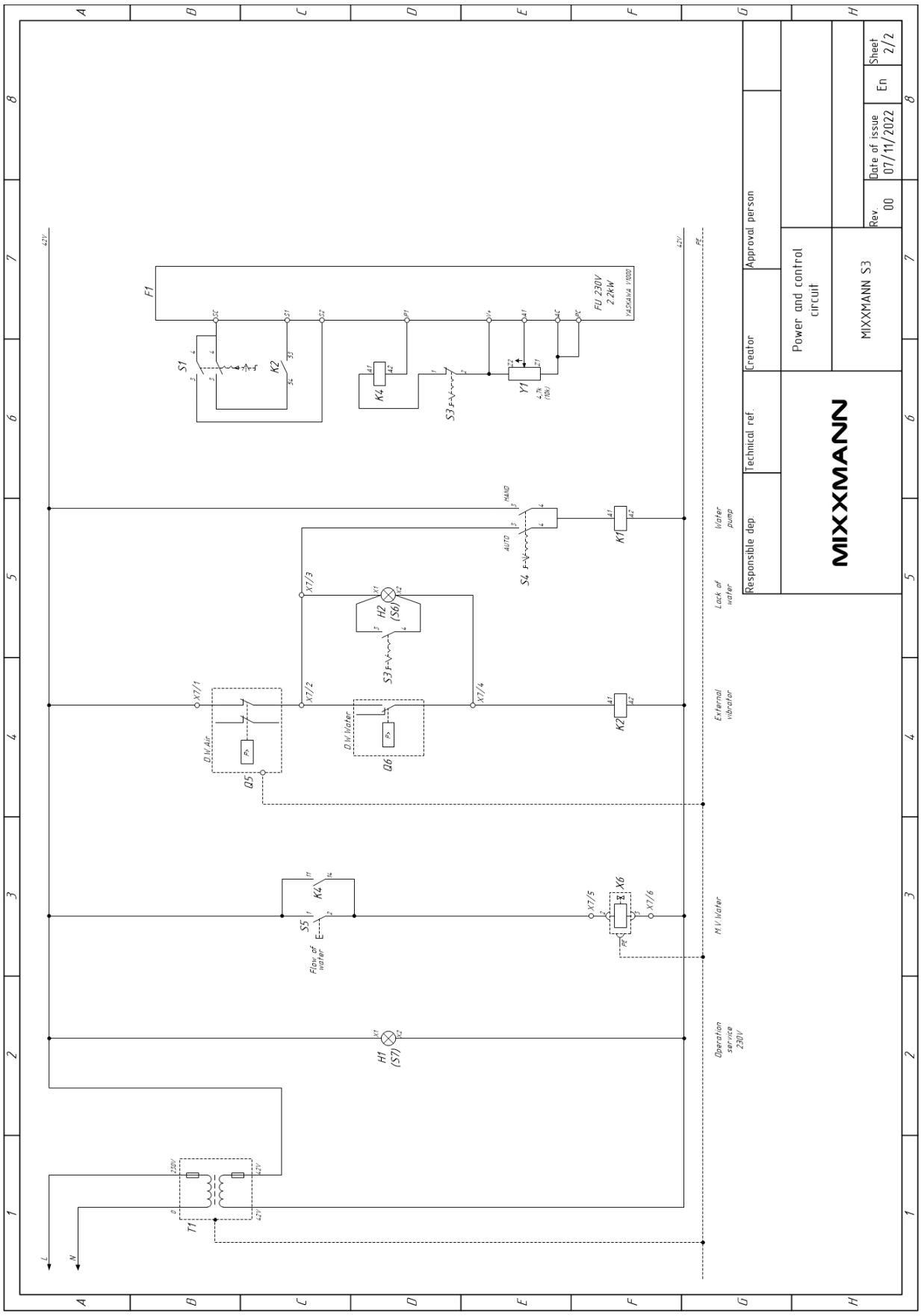
STOP button

Frost hazard, drain water

Water supply button

Air connection


Responsible dep.
Technical ref.
Creator
Approval person
MIXXMANN
Power and control circuit
MIXXMANN S3
Rev. 00
Date of issue 07/11/2022
En
Sheet 1/2
Mixer motor
Water pump
External vibrator
Compressor
Schuko 230V 1Ph
Connection via FI - switch
ferrite toroid 5x wind up
FU 230 V 2.2kW
YASKAWA V1000
LINE
LOAD
AUTO
HAND
Off
On
to T1


MIXXMANN
Power and control circuit
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En
Sheet 2/2
F1
FU 230V 2.2kW
S1
K2
K4
S3
Y1
K1
S4
H2 (S6)
Q5
Q6
K4
S5
Flow of water
X6
H1 (S7)
T1
Water pump
Lack of water
External vibrator
M.V.Water
Operation service 230V

4. PLASTERING MACHINE SUPPLY SET.

	Quantity
MIXXMANN S3 PLUS plastering machine	1 pc.
Plaster hose DN25 – 10 m – PN40	1 pc.
Air hose 11 m	1 pc.
Spraying gun NW25/40	1 pc.
Compressor, 80 l/min 230 V, 50 Hz	1 pc.
Water pump PKm65 230 V, 50 Hz	1 pc.
Mixing tube cleaning kit	1 pc.
Sponge balls	2 pc.
Power connection cable 10 m	1 pc.
Key for water pressure reducer	1 pc.
Cleaning rod for spraying gun	1 pc.
Set of additional gaskets for hose connections	1 pc.
Geka connector 3/4	2 pc.
Operation manual	1 pc.

5. GENERAL INFORMATION.

Dear user of **MIXXMANN** products, you have made a good choice.

The **MIXXMANN S3 PLUS** plastering machine is simple in terms of design and easy to operate. However, certain rules and requirements must be observed during the operation of the plastering machine. This will help to maximize the service life of wearing parts.

This operating manual must be kept at the place where the machine is used and be always available. Please read this manual before operating the machine, as we do not bear any responsibility for accidents and equipment damage caused by incorrect actions of the operating personnel.

Attention! Sources of danger!

Never put your hands into moving parts of the machine!

Always switch off the main switch before repairing or adjusting the plastering machine!

Before turning on the machine, make sure that its operation does not pose a threat to anyone!

With proper use and timely maintenance **MIXXMANN S3 PLUS** will be your reliable assistant for many years to come.

6. INITIAL INSPECTION.

The first task of the personnel responsible for starting up the new **MIXXMANN S3 PLUS** plastering machine directly on the construction site is to check its settings after the first (test) run, during which (if necessary) changes of the factory settings are possible. The equipment may not work effectively if it is not corrected immediately after the test run. A fundamentally important event is also a check by the personnel (after about two hours of machine operation) of such factory settings as:

1. Grounding the machine body.
2. Pressure developed by the screw pump, back pressure.
3. Safety valve on the air compressor.
4. Distance between mortar gun air tube and nozzle (spray).
5. Water gauge switch.
6. Air gauge switch.
7. Motor protection circuit breakers.
8. Water pressure reducer.

Attention!

As a minimum, connections and hoses must comply with the maximum supply pressure specified in the technical data of the plastering machine. The burst pressure must be at least 2.5 times exceed the working pressure.

7. TECHNICAL DESCRIPTION.

The principle of operation of the **MIXXMANN S3 PLUS** plastering machine is based on continuous preparation (mixing), supply to the place of work and application to the treated surface of mortars based on dry mixes of factory preparation (“for machine use”). It is also possible to use the machine for pumping, spraying and applying pasty materials up to 2 mm. Transportation of the material is carried out through special high-strength mortar hoses using a screw pump.

The performance of the machine is changed by adjusting the pump speed in the range from 3 to 14 l/min of ready solution.

To apply solutions to the surfaces to be treated, a mortar gun and air supplied to it from the air compressor built into the machine are used.

Oil free type air compressor. In addition to the main task, it can be used in the preparation of surfaces (cleaning, priming), and the application of ready-made compositions and paints using spray devices.

The source of water supply for mixing solutions is a water supply network with a pressure of at least 2.2 bar (at the maximum water flow for the mixture used) or, in its absence, any water tanks. In the latter case, it is necessary to use the built-in water pump to create the necessary pressure. Power supply is carried out from the electrical panel providing the following requirements: protection against currents leakage 30 mA, single-phase network 230 V.

ATTENTION!

The machine must only be used in perfect technical condition, in accordance with the regulations, in compliance with the safety rules specified in the operating manual! Faults that may affect the safety of work should be eliminated immediately.

ATTENTION!

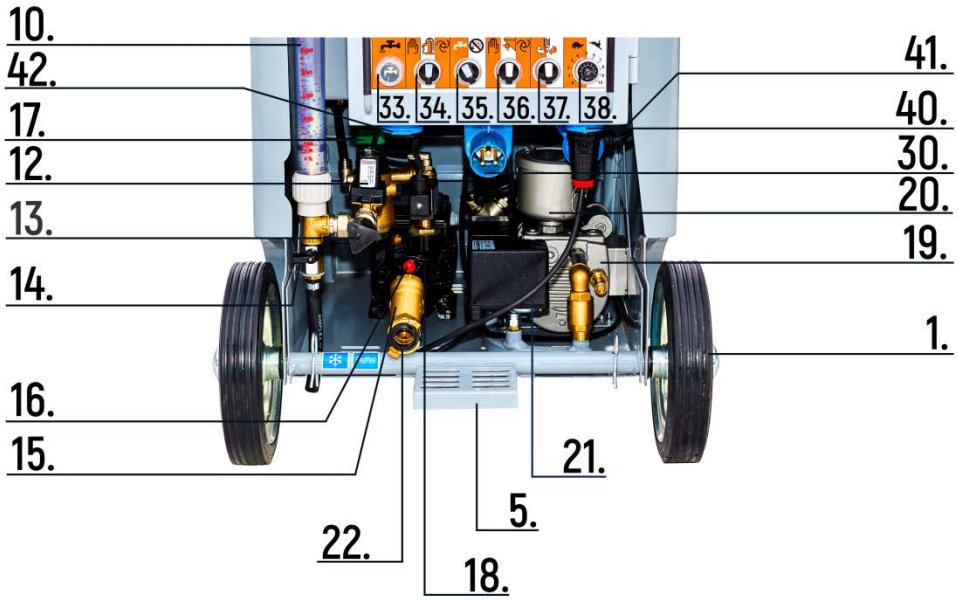
Before doing any work, wear personal protective equipment: protective work clothing, safety glasses, protective gloves, safety shoes, hearing protection.

8. CONNECTING AND OPERATING THE MACHINE.

The installation of the plastering machine should be carried out as close to the work site as possible, taking into account the convenience of dry mix delivery, water and electricity connections, weather conditions, etc.

– Before operating the machine, place it on a level and horizontal ground.

– Before starting work, make sure that the voltage and frequency of the power supply network, as well as the electrical elements of the network (connections, fuses, cable) correspond technical specifications.



– Then connect the 230 V power cable to the connector **(30.)** on the control cabinet. MIXXMANN S3 PLUS may only be connected to a building electrical cabinet with a load current of 16 A and a 30 mA RCD (Residual Current Device) that complies with the regulations. The power supply cable must comply with the version H07 RN-F 3x2.5 mm2 (in rubber insulation), with a cable length of more than 30 m, at least 3 x 4 mm2.

Never use extension cords wound on drums (coils)!

– Connect the water hose to the inlet **(22.)** on the plastering station and the water supply. The water supply network must provide a minimum water flow of at least 20 l/min. and the water pressure not less than 2 bar. If the pressure is insufficient, the indicator of lack of the necessary water pressure control lamp **(39.)** lights up. Use the built-in water pump.

If the pressure and water flow are still insufficient, it is necessary to install a clean water tank of an appropriate capacity (200-1000l) which must be constantly filled with a water pump with automatic start. In this case, a non-deformable hose with a min. 3/4" diameter must be used. Supply water to it, expel air and possible contaminants from the hose. Turn off the water supply.

Connect the water supply hose to the inlet of the water fitting **(22.)**. Close the tap of water descent on the water equipment.

Supply water to the machine, and after releasing air from the water fitting through the water intake valve, close it.

Attention!

During the preparation of the machine for operation and during operation, the protective grid must not be removed!

Load the receiving hopper **(2.)** with dry mix, breaking the bags with a special knife in the protective grid.

Actions are the following:

Connect the air hose of air outlet **(24.)**, connect the mortar gun to the other end of the mortar hose, connect the air hose to the mortar gun.

Close the air faucet on the mortar gun, turn on the compressor.

On the main switch, press the START button **(31.)** (the signal light will light up).

After that, the compressor, having created the necessary pressure in the air fittings, will turn off.

Disconnect the water supply hose from the mixing tower and lower it in a bucket.

Press and hold the water injection button **(33.)**.

Use the water regulation valve **(13.)** to adjust the consumption of the necessary amount of water to use it with a margin in the large side (up to + 10%). Wherein follow the material manufacturer's recommendations.

Turning the tap clockwise – less water, counterclockwise – more water. Visual control - by combining the upper plane of the float on the flow meter tube **(10.)** (distance between nearest marks per hour).

Connect the calibrated water supply hose to the top hole of the mixing tower.

Briefly press the water supply button **(33.)** and fill the mixing zone with it.

When starting the machine, there must be sufficient water in the mixing zone.

Pay attention to the loss of water through the lower flange – a defect (wear) of the screw pump is possible.

You can control the water level before start-up by the flow of its excess from the water pipe of the mixing tower.

ATTENTION!

Do not abuse the operation of the screw pump on the water, this is not an operating mode.

Spontaneous outflow of water from the calibrated supply hose without pressing the “water injection” button indicates clogging of the hole in the solenoid valve membrane **(12.) (the valve “does not hold”, it needs to be repaired or replaced)!**

Open the air tap on the mortar gun.

The machine is started, as soon as the mortar mixture of the required consistency begins to flow from the spray gun. You can start working.

By opening and closing the compressed air valve on the spray gun, you start and stop the station.

It is also possible to adjust the engine speed with the potentiometer **(38.)** (left position = min. rotation speed, right position = max. rotation speed).

The consistency of the mortar can be checked at the outlet of the pressure flange **(27).** If necessary, the regulation valve **(13.)** can be used to change the water flow. When changing the speed of rotation of the engine, the water flow, respectively, must also be changed.

Higher rotation speed requires more water, and vice versa. After setting the desired mortar consistency, the mortar hose can be connected.

When using the machine as a feed pump (for putties and pastes), set the mixing chamber water cut-off switch **(35.)** to the position without water. It is also necessary to use a special gun for putties and pasty materials.

To stop the station or in an emergency, press the red STOP button **(32.)**: in this case, all rotating parts of the station stop. Then unplug the power cable from the control cabinet.

9. VIBRATOR.

If the material in the hopper slides down too slowly, you can connect the vibrator **(7.)**.

Insert electrical plug of the vibrator into the vibrator connector **(41.)**, turn the switch **(36.)** to the right. The vibrator will work in automatic mode synchronously with the operation of the machine. When the switch is turned to the left, the vibrator works continuously.

10. ADDITIONAL HOPPER.

In the **MIXXMANN S3 PLUS** plastering machine, the manufacturer provides the possibility of purchasing and installing an additional dry mix hopper, which allows you to increase the hopper by an additional 90 liters. This is very convenient when small teams of 2-3 people work with the machine. This allows you significantly reduce the time required to load the dry mix and allows you to increase the daily amount of work performed by 20%.

11. SCREW MORTAR PUMP.

The manufacturer installed a screw mortar pump (stator-rotor) **B4-2L (25.)** in the **MIXXMANN S3 PLUS** plastering machine

When installing/dismantling the screw pump, make sure that:

– The START-STOP button has been switched off.

– That the new stator and rotor have time to "run in" (therefore, real pressure indicators become possible only after the first start and operation of the machine).

– Parts of the pump that do not provide the necessary discharge pressure, do not withstand back pressure – are worn out and must be replaced with new ones. Worn parts can be used in less critical work (for example, when working with cement-sand mixtures).

To install the rotor in the stator, lubricate it well with silicone grease.

It is strictly forbidden to use oils or mineral lubricants, as they can damage the stator!

NOTE:

1. The screw pump creates a working pressure of up to 20 bar.
2. The solution delivery distance depends mainly on its fluidity. Heavy and non-plastic, containing large and sharp particles mortar types have poor pumpability.
3. If the operating pressure exceeds 20 bar, the mortar hose must be shortened. This will extend the life of both the mortar hose and the screw pump.

The resource of the screw pump depends both on the plasticity of the pumped solution, the maximum fraction of the filler and its shape, and the delivery distance (the farther and higher, the greater the wear) and cannot be accurately expressed in absolute numbers.

Also, the resource of the mixing spiral during plastering is approximately equal to the resource of two screw pumps and to a greater extent depends on the accuracy of the installation of the "pump – mixing spiral" set along the geometric axis "electric motor – mixing chamber – screw pump", which eliminates the contact of the spiral with the walls of the mixing chamber and its uneven premature wear.

12. CONSISTENCY OF MORTAR.

The consistency of the mortar can be checked at the outlet of the pressure flange **(27.)**. If necessary, the water regulation valve **(13.)** can be used to change the water flow. When changing the speed of rotation of the engine, the water flow, respectively, must also be changed. Higher rotation speed requires more water and vice versa. After setting the desired mortar consistency, the mortar hose can be connected.

When applying large layers of material, in order to avoid its slipping, it is possible slightly thicken the solution. For thin layers, to facilitate the leveling of the plaster, it is allowed to make the mortar a little thinner than the norm (see the recommendations of the manufacturer of the dry mix).

At low temperatures, some components of mortar intended for machine use continue to dissolve in the mortar hose during the transportation of the mortar, taking in free water. This must be taken into account when adjusting the initial consistency of the mortar (before connecting the mortar hose). In addition, in hot weather, especially when working under direct sunlight radiation, it is necessary to take into account the reduction of the solution viability time, as in hoses and on treated surfaces due to its intense heating. Avoid such situations whenever possible.

13. SPRAYING GUNS AND NOZZLES.

Depending on the material used, the consistency of its solution, the performance of the screw pump, etc., nozzles Ø **10,12,14** are used.

Nozzles with a larger diameter give a lower ejection velocity and at the same time less rebound from the surface. Nozzles with a smaller diameter provide better atomization of the material, and as a result, a more uniform application of it to the surface to be treated.

To apply commonly used mortar mixtures, nozzles with a diameter of 10-12 mm are used.

When applying mortar to ceilings and upper walls, we recommend using **an extended mortar gun**. It is also necessary to use a special gun for putties and pasty materials.

Gap between air pipe and mortar gun nozzle.

The gap between the end of the air pipe and the nozzle must always correspond to the diameter of the nozzle hole. Adjustment is in progress. For example: Ø 12 mm of the mortar nozzle = 12 mm of the hole.

14. INTERRUPTION OF OPERATING MODE.

It is necessary to avoid interruptions in the operation of the station exceeding 20 minutes. Long breaks can lead to clogging of the hoses through which the mortar is supplied.

During pauses in work, to prevent the solution from setting in the hoses and mixing tower, pay attention to the recommendations of the manufacturer of the material used regarding its pot life.

Before interrupting work for a long time, the machine must be cleaned. An accidental interruption of work leads to the distribution of the consistency of the solution, which, however, returns to normal after a short time after the resumption of its work. Therefore, it is not necessary to adjust the water consumption every time the consistency changes – you need to wait until the consistency of the solution returns to normal by itself.

ATTENTION!

When carrying out any cleaning or maintenance work of the hopper (2.) or mixing tube (44.), observe the safety regulations, there is a danger from rotating parts!

Please note that the STOP button (32.) must be pressed before opening the mixing chamber and power must be switched off.

When the machine is running, it is imperative to first stop the machine by pressing the STOP button (32.), then disconnect the power cable from the plug (30.). Next, open the protective grid (3.), disconnect the motor connection cable (29.), tilt the engine (6.) and carry out the necessary work.

Before connecting the power cable and pressing the START button (31.), make sure that the protective grid (3.) is closed.

Activities after work, washing the machine

To clean the mixing pipe, lower the cleaner shaft with the cleaner (“crown”) down and insert into the top (head) of the pump rotor. Close the motor flange. Press the "START" button to clear the mixing chamber (easily controlled by the color of the water flowing out of it).

Stop the screw pump by pressing the red "STOP" button.

Remove the cleaning tools and replace them with a clean mixing spiral. The upper (wide) part of the mixing tower must be dry.

Close the motor flange and lock.

For cleaning the rubber mixing tube **(44.)** make sure that there is no pressure in the mortar hose, then disconnect the water supply hose to the rubber mixing chamber. Next, you need to unscrew the screws that secure the upper flange **(45.)** of the screw pump and remove the rubber mixing chamber from the hopper and clean it. After cleaning, reinstall the rubber mixing chamber and the top flange.

Be sure to follow the correct fit of the parts.

To clean the mortar hoses and the mortar pressure gauge, connect them to the water tap by inserting a water-soaked sponge ball into the hose from the side of the tap. This washing method will extend the life of the screw pair.

It is necessary to empty the hopper when changing from one type of dry mix to another (from gypsum to cement, etc.).

Removing a blockage in the mortar hose

ATTENTION!

Persons tasked with clearing blockages in the mortar hoses must, for safety reasons, wear protective glasses and stand so that the escaping solution does not enter them. Remove unnecessary people from the work area.

– Achieve a pressure drop in the hoses to 0 bar.
– Loosen the nuts on the flange to release any remaining pressure.
– Carefully disconnect the mortar hose connections and clean them.

It may be necessary to hang the hose in a vertical position and, having created pressure in its upper part with an air compressor, wash out the solution from its lower part with water pressure from a special, thinner hose, from time to time gently tapping the mortar hose with a rubber / wooden mallet.

Measures in the event of a power outage

The solution supply hoses must be flushed immediately. Connect the cleaning adapter first to the solution supply hose, then to the water tap. Open the tap and first "squeeze out" the remaining solution, and then clean the hose with sponge balls. In the absence of water pressure, hang the hoses vertically, and starting from the lower end, knock out (**carefully !!!**) the solution from them with a rubber or wooden mallet.

ATTENTION!

Before disconnecting the connectors, make sure that the hoses are not under pressure!

If there is even the slightest doubt that there is residual pressure in the hoses, it is strictly forbidden to open the mortar hoses!

Loosen the pump mounting, remove the pump, remove the rotor from the stator and rinse thoroughly. Clean the flanges or the mixer. Use a spatula and water to clean the mixing area and the mixing spiral. Assemble and equip the pump for work.

Measures in case of interruption of water supply

Using the built-in pump equipped with an inlet filter, provide the machine with clean water from the reserve tank.

15. SECURITY MEASURES.

In this section, you will find important safety instructions provided by in general. Therefore, this section is intended for the first and thorough briefing of new employees. It goes without saying that individual rules will be repeated in other appropriate places in the instruction manual.

Note

Certain types of work may require special safety regulations. You will find them only in the description of this kind of work.

Principle Rule

Use the machine only in a technically sound condition and in accordance with its intended use, keeping in mind the safety precautions and possible dangers, as well as following the instructions in the operating manual. Eliminate (instruct to eliminate) especially urgently problems that have a negative impact on safety!

1. All safety instructions must be near the machine and kept in a readable state!
2. Check the machine for visible damage at least once per shift! In case of detection of changes related to the safety of operation, take steps to eliminate them.
3. Components and parts, as well as accessories must comply with the requirements established by the manufacturer.
4. Personnel operating the machine, carrying out maintenance and inspections, as well as installation of equipment, must be qualified for the work performed. If the staff does not have the necessary knowledge, it must be properly trained and instructed.
5. Further, it is necessary to check that all the material contained in the operating manual of the machine is fully understood by the operating personnel. Persons in training should only be in the immediate vicinity of the equipment in the presence of an experienced user.

6. Connection and work with electrical equipment is carried out only by a specialist or in his presence in accordance with the instructions of the local electrical supply company.

7. The ***"START – STOP"*** process is controlled according to the instructions.

8. If the machine for maintenance or maintenance work needs to be completely de-energized, turn off the main switch, close the power board on the key, and put up a warning sign in order to avoid unexpected start-up.

9. Before washing the equipment with a jet of water, it is necessary to close carefully all openings where water ingress would be undesirable (electric motors and control unit, sensors). After washing is complete, remove protective covers.

10. Use only branded fuses with the prescribed current!

11. **While the machine is running, the control box must be closed!**

12. Even with a slight movement, the machine must be disconnected from external sources of electricity.

13. Before work, the machine must be installed on a horizontal surface and fixed from accidental movements with a standard brake.

14. The mortar hose must be protected from mechanical damage, not have "creases" and small bend radii.

15. Depressurize the mortar hoses before disconnecting them!

16. When loading with dry mix and cleaning the machine, wear safety glasses and a respirator! At the same time, unauthorized persons are not recommended to be nearby!

17. The permissible level of sound pressure from a running machine does not exceed 78 dB, otherwise wear protective headphones.

18. When applying the solution, the presence of overalls is mandatory, incl. goggles, shoes, gloves, protective cream if possible and a respirator (see dry mix manufacturer's recommendations).

19. Carry out preventive inspection of the machine once a week.

Make sure that:

– The safety devices have not been dismantled, switched off or replaced (cover of the grate of the pump feed funnel, etc.).

– Safety devices dismantled in connection with technical work were immediately installed in place upon completion of the work.

Before each start, check the safety of work. If defects are found, even if they are barely noticeable, they must be immediately eliminated. Notify the attendant if necessary. If there are defects that threaten safety during operation, stop work.

Use only faultless and transportable lines, hoses, couplings, etc. of the machine manufacturer. Feed lines are subject to wear that occurs differently depending on the pressure of the medium, its composition, the material in the feed line, etc.

The machine is built in accordance with the achievements of technology and generally accepted safety regulations. However, during its operation, there may be a danger to the life of the operator or third parties, or a negative impact on equipment and other material objects.

Intended use also includes compliance with the operating instructions, observance of the conditions for preventive inspection and maintenance, as well as their frequency.

The permissible maximum total weight must not be exceeded.

The specified scope of the machine characterizes and determines its purpose and use.

The compressor unit is used to produce compressed air, which is used for industrial purposes! It compresses (compacts) atmospheric air of normal purity to an excess working pressure and, at this pressure, moves a certain volumetric flow. Any use for other applications, in various environments

for breathing, or non-industrial pressure use, as well as exceeding or lowering the operating parameters set at the factory, such as pressure area, speed, temperature, etc. considered a violation of the intended use.

Misuse

Sleeve extension

Any application other than or outside the scope of use, such as the transportation of goods, is considered a violation of the intended use. The manufacturer is not responsible for any damage resulting from these actions. The user is solely responsible for the risk.

It is forbidden to extend the sleeves beyond the length indicated in the technical specifications.

We especially draw your attention to the fact that the manufacturer is not liable for damages resulting from improper or negligent service, maintenance or repair, or from the use of not on purpose. This provision also applies to changes, additional installations and equipment on the machine that adversely affect safety.

Do not start modifications, additional installations and modifications on the machine that adversely affect safety, without the permission of the manufacturer. This also applies to the installation and adjustment of safety devices and valves, as well as welding on load-bearing parts.

In particular, these include:

– Changing the factory-set adjustable and permissible pressure, power, and other settings.
– Safety devices may only be repaired, adjusted or replaced by qualified personnel.

All safety devices must be in working order.

Sources of danger

Do not put your hand in the moving parts of the machine under any circumstances – neither when the machine is running nor when it is turned off.

Always switch off the machine at the main switch with the STOP button **(32.)** first. Follow the instructions on the warning labels.

If the machine malfunctions, stop the machine immediately and lock it out! Get the problem fixed as soon as possible!

Before turning on the machine, make sure that no one is in danger when starting the machine!

Safety devices

Safety instructions for the pressure tank (if provided by the design of the machine).

Never dismantle safety devices or disable them as a result of changes to the machine.

Safety devices may only be repaired, adjusted or replaced by qualified personnel.

All safety and accident prevention devices (disclaimer and instruction plates, protective grilles, protective linings, etc.) must be available. They can be removed, changed or disabled. If it is necessary to dismantle the safety devices for adjustment, repair and restoration work and maintenance, they should be installed again and their performance should be checked immediately after the completion of maintenance and repair.

Staff recruitment and qualifications

When leaving the workplace, secure the machine thoroughly against accidental rollback or unauthorized use!

Only such persons as an operator, a driver can independently service the machine, carry out its maintenance or repair, **namely**:

– Having reached the allowable age limit established by law.

– Suitable for health reasons (rested, not in a state of alcohol, drug intoxication and under the influence of drugs).
– Those who have successfully passed the instruction on the maintenance of the machine and its technical inspections.
– They are expected to reliably perform the tasks assigned to them.

The machine may only be serviced or repaired by trained and authorized persons.

16. TRANSPORTATION.

Before transporting the station to another workplace, disconnect the power cable and hoses for water, air, and mortar. At the same time, make sure that no dry mix remains in the receiving hopper.

Whenever moving the machine with transport machines, use transport bolts or eyelets.

When loading and unloading the machine, impacts on protruding parts are unacceptable; parts are easily deformed.

When transporting the machine, it is worth fixing it with synthetic belts or slings to prevent the machine from moving freely during transportation.

Cover parts of the machine that may be damaged in case of rainfall, wind, cold and other circumstances during transportation.

Unloading with a crane: metal rods with a diameter of 45 mm are passed under the legs of the machine. The metal rods must be of sufficient length to prevent the cable from slipping /length 1.20 m/.

The cable must be routed in this way and deflected with wooden blocks to prevent damage to the machine.

Before lifting the station to the floor, check whether all its elements are well fixed.

Transportation: when transporting, care must be taken to ensure that the machine is not subjected to shocks or vibrations. For transportation, the machine is mounted on a wooden transportation frame. When the ground surface is even, the machine can be moved to the platform for installation on rollers.

Caution: the machine may turn over during transportation.

Cleaning: before cleaning the machine, smooth surfaces must be cleaned especially carefully with anti-corrosion agents.

After work: wash the car. Shut off the water supply. Dry the machine and hoses with an air compressor.

Then disconnect the power supply cable, and then disconnect other electrical connections. Collect hoses and cables in coils.

MIXXMANN S3 PLUS consists of the following main components:

frame with built-in control cabinet, water pump, compressor;

mixing chamber with a loading hopper, a screw pair and a motor with a gearbox.

For more convenient transportation, you can remove the motor with the gearbox and folding flange from the mixing chamber.

ATTENTION!

Always make sure that there is no pressure in hose connections before disconnecting them!

17. STORAGE OF THE MACHINE.

When preparing the machine for storage, it must be preserved.

The machine must be stored under a shed or in a dry room at a temp. -30°C + 40°C.

At sub-zero temperatures, it is necessary to drain the remaining water, or blow through the water fittings with air. Expanding water, when frozen inside the machine, can cause damage.

18. TECHNICAL MAINTENANCE.

CHECK DAILY:

1) Water purification filter at the inlet of the water filter **(15.). If it is damaged or deformed, the filter must be replaced!**

CHECK WEEKLY:

1) Compressor filter **(20.)**, if the compressor filter is very dirty, blow it out with compressed air.

The air compressor is low maintenance and does not require additional maintenance.

2) Fine filter of the water pressure reducer **(17.)**, clean if necessary (it is recommended to use a special water reducer wrench).

If it is impossible to wash the filter, or if its housing is deformed, the filter must be replaced!

3) Condition of the mixing coil and the mixing coil holder. **If necessary, feel free to replace them!**

ADDITIONAL SERVICE:

The manufacturer recommends using original mineral oil for the electric drive gearbox, which needs to be replaced after 3000 operating hours, but at least every three years.

We recommend every three months to check the oil level in the gearbox and the condition of the gland seal.

19. GENERAL TROUBLESHOOTING AND POSSIBLE SOLUTIONS.

The design of the machine is reliable and, with proper operation, ensures reliable and long-term operation of the product. However, during the operation of the machine, malfunctions may occur, the possible causes and remedies for which are indicated in the list below.

These instructions do not cover all possible parts and variations of the equipment and do not describe all situations that may arise during operation and maintenance.

Maintenance and repair of damage to the machine must be carried out by qualified personnel using appropriate equipment and accessories.

Timely troubleshooting of the machine increases its service life, improves the quality and yield of the processed material!

Malfunction	Reasons	Troubleshooting
The machine is not started **Water**	Water pressure is too low	Check the water supply pipeline, clean the dirt filters
	The pressure gauge shows less than 2.2 bar	Check the booster pump
The machine is not started **Power supply**	Power supply problems	Check the power supply cable
	The START button is not turned on	Turn on the START button
	The residual current device tripped	Reset the residual current device
	The motor protection circuit breaker tripped	Turn the motor protection switch in the control cabinet to the “on” position.
	The power contactor is defective	Replace the power contactor
	The electrical fuse is defective	Replace the electrical fuse
The machine is not started **Air**	Insufficient pressure drop in the air system when opening the air tap due to clogging of the air duct or air gun tube	Clean the air duct or tube of the air gun with a cleaning rod
	The air pressure switch is adjusted incorrectly	Adjust the air pressure switch
	The air compressor is not turned on	Turn on the air compressor
The machine is not started **Material**	Too much solidified material in the funnel or mixing chamber	Empty the funnel halfway and restart the machine
	Material in the mixing chamber or screw pair is too dry	Clean the machine
No water expense on the flow meter (flask)	The solenoid valve (diaphragm hole is clogged)	Clean the solenoid valve
	The solenoid coil is defective	Replace the solenoid coil
	The reducing valve is closed	Open the reducing valve
	The water inlet on the pump pipe is clogged	Clean the water inlet on the pump pipe
	The needle faucet is closed	Open the needle faucet
The pump motor is not started	The pump motor is defective	Replace the pump motor
	The connecting cable is damaged	Replace the connecting cable
	The plug or socket are defective	Replace the plug or socket
	The motor protection switch is defective or tripped	Replace or cancel motor circuit breaker interlock
The machine stops after a short time interval	The dirt filter is dirty	Clean or replace the filter
	The reducer filter is dirty	Clean or replace the filter
	The hose connector or water pipe are too short	Enlarge the hose connector or water pipe
	The water suction line is too long or suction pressure is too low	If necessary, connect an additional pump to increase the pressure

The machine is not turned off	The air pressure switch is adjusted incorrectly	Adjust the air pressure switch
	The air hose or seal are damaged	Replace the compressed air hose, replace seals or check the compressor
	The air valve on the mortar gun is defective	Replace the air valve
	Compressor capacity is too low	Check the compressor
	The air duct is not connected to the compressor	Connect the air duct to the compressor
Solution supply is interrupted (air bubbles)	Poor mixing in the mixing chamber	Add more water flow
	Lumps of material form and narrow the entrance to the mixing chamber	Add more water or clean or replace the mixing spiral
	The material in the mixing chamber is damp	Clean the mixing chamber
	The mixing spiral is defective	Replace the mixing spiral
	The mixing spiral holder is defective	Replace the mixing spiral holder
Permanent change of solution consistency	Water flow is too little	Increase the water flow by about 20-30 seconds by 10%, then slowly turn back
	The water pressure switch is adjusted incorrectly	Adjust the water pressure switch
	The mixing spiral is worn or defective	Replace the mixing spiral
	The water pressure reducer is adjusted incorrectly or defective	Adjust or replace the water pressure reducer
	The rotor is worn or defective	Replace the rotor
	The stator is worn or defective	Replace the stator
	The inner wall of the mortar hose is damaged	Replace the mortar hose
	The rotor is too deep in the pressure flange	Replace the pressure flange
Water arises in the mixing chamber during operation	Back pressure in the solution hose is higher than pump push	Replace the screw pair
	The rotor or stator are worn	Replace the rotor or stator
	The hose is clogged with too thick mortar	Clear the hose blockage

20. WARRANTY CARD.

Upon delivery, the dealer is obliged to transfer to the buyer the following items supplied with the plastering station:

warranty card, operation and maintenance manual containing the necessary instructions for its operation, so that he began to use it only after the operator carefully read it.

	FILLED BY THE SELLER
The model of the machine	**MIXXMANN S3 PLUS**
Year of production	
Serial number	
Buyer	
Seller	
Date of sale	

The manufacturer guarantees the correct operation of the machine provided that the consumer observes the conditions of transportation, storage and operation in accordance with the instruction manual.

The manufacturer's warranty obligations (warranty) begin after the transfer of the plastering station to the dealer/buyer. The moment of transfer of the plastering station is the date indicated in the warranty card.

The warranty refers to the repair and/or replacement of parts found to be a manufacturing defect or if it is proven that the damage or defects are due to the use of substandard materials or assembly errors in manufacturing.

Replacement of the plastering station entirely is excluded.

The manufacturer, the seller are not responsible for damage that may be caused to third parties as a result of direct or indirect use of the machine; he is also not responsible for the loss of profit due to machine downtime, whatever the cause.

The warranty period covering manufacturing defects of certain components is ***12*** months from the date of shipment or delivery to the consumer.

Warranty repairs are made only during this period.

Transportation of the product to the place of repair is carried out by the buyer independently or by the transport company at his expense, in the event that the company's specialists leave to perform repairs or replace parts directly at the buyer's, all transportation costs will be charged solely to the buyer's account based on the tariffs of the servicing company.

The warranty is void if:

1. The user allowed unauthorized work on the repair, modification or dismantling of products; they have been fitted with accessories or attachments not supplied by the manufacturer and without its permission; when replacing components, non-original spare parts were used.

2. Operation or installation of the supplied products was not carried out in accordance with the manufacturer's instructions due to mistake or negligence on the part of the user.

3. Defects caused by fasteners that are clearly loosened during operation and not tightened in a timely manner.

4. Repairs made during the warranty period will not void the warranty period.

5. The electrical connection was made in violation of the manufacturer's instructions. For example, the electrical connection was made without the use of a voltage stabilizer, as a result of which the electrical components of the plastering station were disabled.

6. If malfunctions of electric motors or a frequency converter have arisen as a result of their mechanical damage, direct exposure to water, phase imbalance of the supply voltage, overvoltage, insufficient voltage or its frequency, insufficient cooling due to their external or internal contamination.

The warranty does not apply to wear parts and elements:

- mortar or air hoses, mortar gun and their parts;
- paint-and-lacquer coating of the plastering station;
- mixing spiral, cleaner with a shaft;
- wheels;
- rubber products and sealing elements;
- taps, bypass devices for water fittings in case of improper operation;
- measuring devices (sensors, manometer, etc.) in case of incorrect operation;
- insulation of electrical equipment;
- and others in case of improper operation, such as defrosting the water system.

21. WARRANTY STATEMENTS.

Date	*Description*	*List of replaced components and parts*	*Signature*