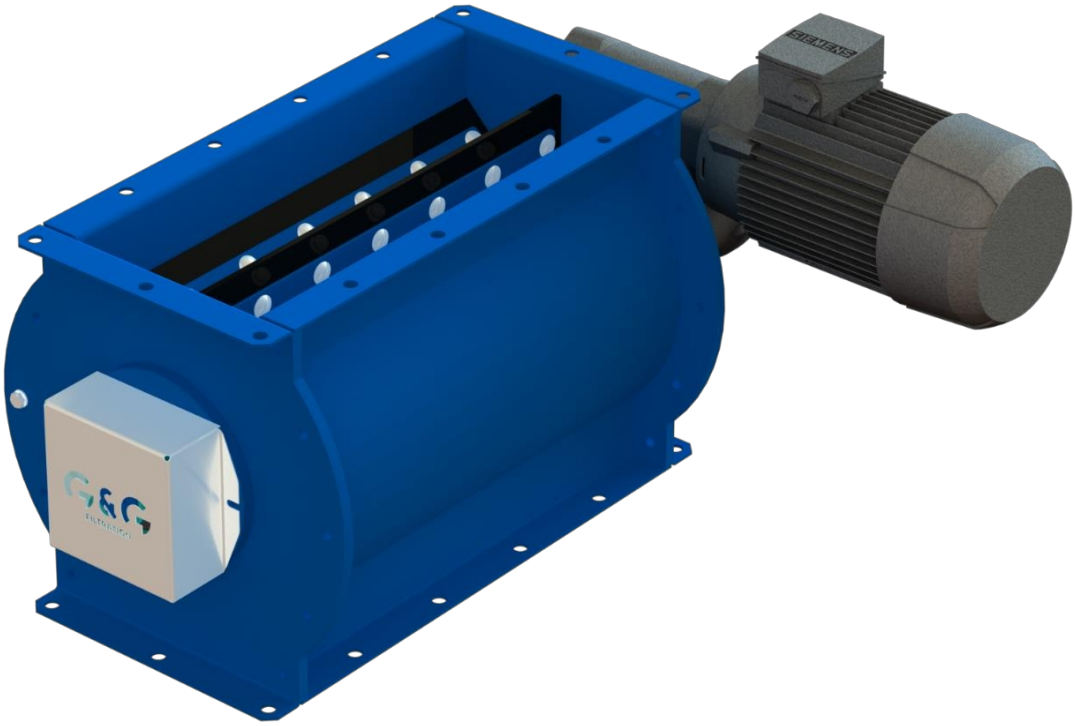
G&G FILTRATION



ROTARY FEEDERS
RPGG 20x50-EX

Manual for use

CE

CZ

Document number: *RPGG 20x50-EX*
Manual version: *v4*
Date created: *02.04.2023*

CONTENTS

ABOUT THE INSTRUCTION

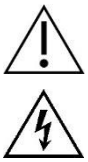
PURPOSE OF NSTRUCTION

The instructions are intended for the operator of the equipment and all persons who come into contact with it.
contact during **installation**, **operation and maintenance**.

PLATINUM INSTRUCTIONS

These instructions are valid for all supplied **G&G-RP** rotary feeders.
The differences in types are listed in the technical data.

SYMBOLS USED IN INSTRUCTIONS

SYMBOL	IMPORTANCE
	These symbols have the meanings of " **WARNING**" and " **WARNING**" and indicate facts that may cause serious injury to the user and/or damage to the equipment. They also draw attention to an important instruction, feature, procedure or matter that must be followed during n and maintenance of the equipment to comply with or take note of.
	
	The symbol draws attention to an important action that must be followed but which does not endanger health or cause damage to the product.
	The symbol highlights useful information related to the device essories.
	The symbol is a reference to another chapter in this manual.

IMPORTANT NOTICES

Please read these instructions carefully. Follow the instructions in this manual to ensure not only ease of use, but also optimum use and longevity of the equipment.

Do not operate the equipment until you are thoroughly familiar with all the instructions, prohibitions and recommendations contained in this manual.

The illustrations used in this manual do not necessarily correspond to reality; they are intended to describe the main principles of the device. However, the texts, drawings, photographs and other elements shown here are protected by copyright. Any misuse or unauthorized copying is punishable.

The manual must be considered as part of the equipment and must not be separated from it. Therefore, keep it for future reference.

RELATED DOCUMENTATION

In addition to these instructions, further documentation is available from the manufacturers of the installed components and is included with the equipment. A full list of documentation is provided in the **MANUFACTURER DOCUMENTATION** section
AND SUBCONTRACTORS.

CONTACT US MANUFACTURER

In practice, there are also unforeseen situations that could not be included and described in this manual. Therefore, always contact the manufacturer if you are unsure of the procedure:

G&G filtration CZ, s.r.o.
Hrubínova 1903/9
664 51 Šlapanice
Czech Republic

T: +420 725 745 300
E: vesely@ggf.cz
W: www.ggf.cz

1 | DELIVERY

PACKAGING AND DELIVERY CONTENT

The equipment is delivered as one complete unit, mounted on a standard shipping pallet. It is wrapped with suitable foil and the areas susceptible to damage are secured with paper reinforcement.

Upon receipt of the equipment, check for damage to any part or packaging and report any damage to the carrier immediately. In addition, check that the delivery is complete and that it agrees with the order or packing slip. Report any shortcomings immediately. contractors.

The following is included:

- transport pallet
- complete equipment according to the operator's specification
- a delivery note indicating the exact configuration of the equipment
- instructions for use
- manufacturers' manuals for selected components
- connecting screws

HANDLING OF THE VAN

Use a forklift or lifting device with adequate lifting capacity to handle the packed equipment. The weight of the equipment supplied is indicated in the technical data sheet.

Lift the load with the lifting device and transport it to the designated unpacking or storage location.

The delivered equipment may only be transported in the position in which it was stored by the manufacturer. Under no circumstances may it be transported in any other position - there is a risk of serious damage to the components.

We recommend that the lifting equipment and load are handled by persons who are qualified to do so.

STORAGE BEFORE UNPACKING

If you are not going to unpack and install the equipment immediately after delivery, store it under the following conditions:

- store the equipment in its original packaging in dry areas, protected against weathering that could cause damage to the packaging and deterioration
- do not dismantle the device from the pallet and do not tip it on its side or lean it in an inclined position
- Do not place any other objects or materials on top of the packaged equipment

Recommended storage site characteristics:

Temperature:-5 °C to +50 °C
Humidity :<60%
Air cleanliness: Dust-free
environmentOther: Dry storage areas

Unpacking and transporting the equipment to the installation site is described in t h e chapter INSTALLATION AND REPLACEMENT.

2 | TECHNICAL INFORMATION

PURPOSE OF THE DEVICE

RPGG rotary feeders are designed as stand-alone devices, intended for transport of loose or fibrous dust. The most common applications include:

- removal of dust from filtration systems
- removal of materials from storage silos
- dosing of materials into pneumatic transport
- closure of the snail transport route

RPGG rotary feeders can also be used as a protective system to separate the explosion hazardous zone from the non-explosion hazardous zone. Depending on the design, they can be used in hazardous areas **Zone 20**, **Zone 21** and **Zone 22** - see the section EXPLOSION OF EXPLOSION ZONES for an explanation.

Their design and properties make them suitable for use in various industries, including the food industry.

More precise specification of individual versions is given in the chapter DESCRIPTION AND FUNCTIONS.

IMPROPER USE OF EQUIPMENT

RPGG rotary feeders must not be used for purposes or under conditions other than those specified above. Furthermore, it is forbidden to operate them with components other than those with which they were supplied.

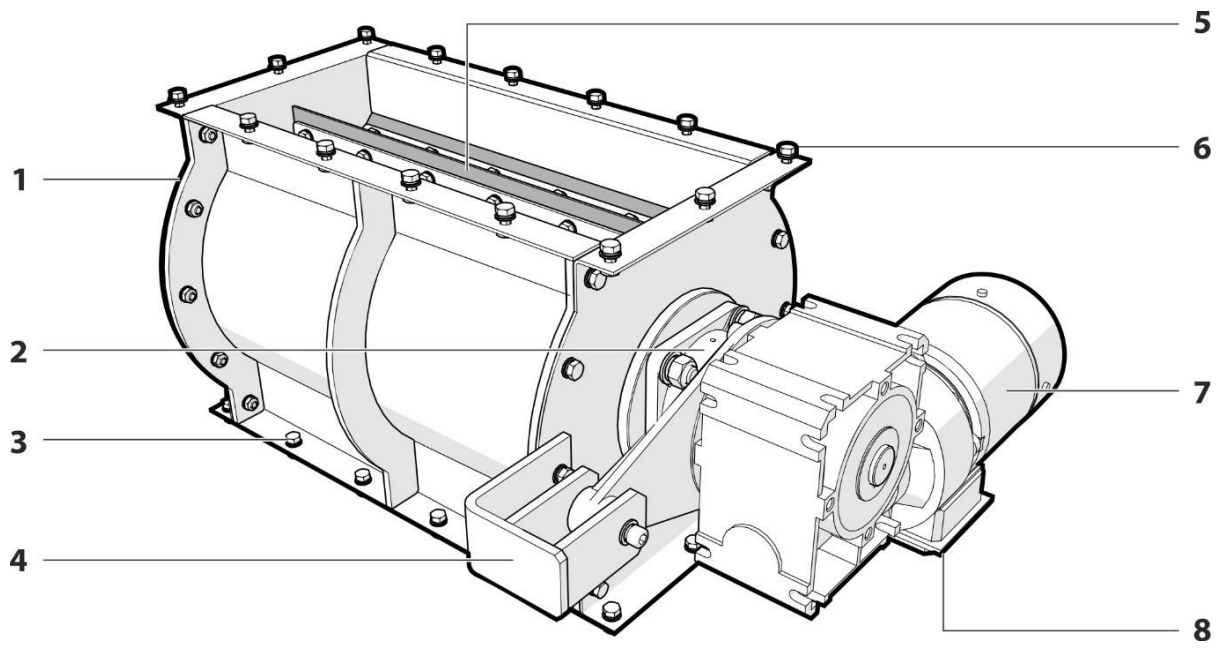
Rotary feeders must not be operated in a range other than that specified in this manual.

Improper use of the feeder includes installation and maintenance by an untrained or unauthorized person, operation with a malfunction or defect, and operation with disassembled or modified covers.

If it is found that the equipment has been installed or serviced by an untrained or unauthorized person, or has been used for purposes other than those for which it was originally intended, or has been operated in violation of applicable standards, general regulations, end user's internal regulations, or in violation of this manual, all warranties on this facility.

MAIN PARTS

The illustration below is a sample model of a rotary feeder.
The supplied models consist of the same components, differing only in the shape of the casing and the motor mount.



1	*Cabinet*	*4*	*Electric motor holder*	*7*	*Electric motor with gearbox*
2	*Bearing (front)*	*5*	*Rotor*	*8*	*Engine terminal block*
3	*Fastening screws*	*6*	*Fastening screws*		

DESCRIPTION AND FUNCTIONS

RPGG rotary feeders consist of a housing, a rotor and an electric motor with the transmission. A speed sensor can be added as an option.

Construction

The cabinet consists of front and rear side panels with a bearing and left and right shells. **Rotor**, mounted on the shaft by means of bearings located outside the conveyed material space, it is equipped with **blades** with flexible endings. This ensures tightness and separates the two independent pressure environments. In the case of protective systems, the blades thus prevent the transmission of the dangerous effects of explosions, pressure waves, flames and sparks. The rotary motion of the rotor is provided by an **electric motor with gearbox and clutch**. The material to be transported is uniformly carried in the direction of free fall.

Run cycling

The rotary feeder is cycled by the technology operator of the conveying system in which the feeder is installed.

Working conditions

RPGG rotary feeders are designed for the conveyance of loose or fibrous dust with a maximum particle size of 50 mm.

The temperature of the material to be conveyed must be between **-20 °C and +55 °C**. The rotary feeder can **be installed** in an environment with a temperature range of **-20 °C to +40 °C**. The **filling of the** rotary feeder is designed to be 50% of the total volume of the feeder.

Version **RPGG** rotary feeders are available in **A**, **B**, **C**, **D** and food grade versions.

Version **A**:
Rotary feeder in normal design, with sealing vanes, with standard clutch, gearbox and standard motor.

Version **B- ATEX - protective system**:
Rotary feeder type RPGG 200x200-EX ... RPGG 300x600-EX with rotor with polyurethane blades is a protective system designed as a blast-resistant design. It prevents the transmission of blast effects such as pressure waves, flames and sparks up to the maximum permissible blast pressure $_{pexmax}$ in both directions of a divided space containing a hazardous atmosphere of combustible industrial dusts, excluding metallic dusts. Combustible dust is described by the explosion parameters $KSt_{,max}$, MIE and MIT. The minimum thickness of each fixed blade is 6 mm, the minimum thickness of each adhesion blade is 4 mm and the thickness of each polyurethane (PLASTON A90 material) blade is 6,5 mm. The polyurethane rotor blades must not create any clearance between the rotor (8 blades) and the rotary feeder housing. The minimum radial and axial overlap of the polyurethane blades is given in the table below. The rotary feeder type RPGG 20x50-EX shall function as a protection system according to the requirements given in the table below:

Type / size	$_{KStmax}$ * [Bar.m.s]$^{-1}$	$_{pexmax}$ [Bar]	Maximum rotor speed [ot.min]$^{-1}$	Minimum overlap PU blades [mm]	
				Radial	Axial
RPGG 200x200-EX	200	0,90	14	27	15
RPGG 200x300-EX		0,70	19		
RPGG 200x400-EX					
RPGG 200x500-EX					
RPGG 300x300-EX		0,60	15		
RPGG 300x400-EX					
RPGG 300x500-EX					
RPGG 300x600-EX					

for $_{Kstmax}$ = 200 Bar.m.s^{-1} ... MIE ≥ 13 mJ; MIT ≥ 430 °C (dust cloud)

Design **C- ATEX - non-electrical equipment**:
Inside of the rotary feeder type RPGG 20x50-EX corresponds to EPL Da, outside of the device corresponds to EPL Db or EPL Dc. The rotor speed of the feeder as a non-electrical device only shall be < 1 m/s. Feeders in version C can discharge bulk materials up to a maximum temperature of +55 °C. The feeder shall be equipped with sealing vanes, clutch and motor with gearbox, which shall meet the requirements of the relevant safety standards.

Version **D**:
Rotary feeder as a protection system + non-electrical device for explosion hazardous environment, is a combination of design B and C.

Food grade:
Rotary feeder in food-grade design that can be combined with all versions A to D.

EXPLANATION OF EXPLOSIVE ZONES

Zones of explosiveness for the money

ZONE 20
A space in which an explosive atmosphere consisting of a cloud of animal dust is in the air continuously, for a long time, or frequently. The occurrence of an explosive atmosphere is
> 1 000 hours/year.

ZONE 21
An area in which the occasional occurrence of an explosive atmosphere consisting of a cloud of animal dust in the air is likely. The occurrence of an explosive atmosphere is
> 10 hrs/year and < 1000 hrs/year.

ZONE 22
An area in which the formation of an explosive atmosphere consisting of a cloud of animal dust in the air is unlikely, and if an explosive atmosphere is formed, it will be present only rarely and only for a short p e r i o d of time. The occurrence of an explosive atmosphere is
< 10 hrs/year.

TECHNICAL DATA

MODEL ROTARY FEEDER	*Flange dimension*		*Height*	*Rotor diameter*	*Shaft diameter*	*Number of rotor blades*	*Rotor speed*	*Motor power input*	*Maximum transport*	*Rated transport capacity 75 %*
	mm	**mm**	**mm**	**mm**	**mm**	**ks**	**min^{-1}**	**kW**	**m /hr^3**	**m /hr^3**
RPGG 20-20	200	200	360	300	45	8	14	0,75	4,4	3,3
RPGG 20-30	200	300	360	300	45	8	13	0,55	6,1	4,6
RPGG 20-40	200	400	360	300	45	8	13	0,55	8,2	6,2
RPGG 20-50	200	500	360	300	45	8	13	0,55	10,2	7,7
RPGG 30-30	300	300	500	440	45	8	14	0,75	15,7	11,8
RPGG 30-40	300	400	500	440	45	8	13	0,55	19,5	14,6
RPGG 30-50	300	500	500	440	45	8	13	0,55	24,4	18,3
RPGG 30-60	300	600	500	440	45	8	13	0,55	29,2	21,9

CONNECTION TO THE MAINS

Transmission: 400 V / 50 Hz

A detailed description of the electrical network parameters is given in the instructions prepared by the electric motor manufacturer and included in the delivery of the rotary feeder.

TYPES TRANSMISSION

Transmission P085BR10C0-TB3	Value	Unit
Engine speed	1400	rpm
Output speed	21	rpm
Output torque	289	Nm
Power input	0,97	kW
Voltage	230/400| 50 Hz	V

Transmission SK9012.1AZD- 80SPTF	Value	Unit
Engine speed	1420	rpm
Output speed	13	rpm
Output torque	406	Nm
Power input	0,55	kW
Voltage	230/400| 50 Hz	V

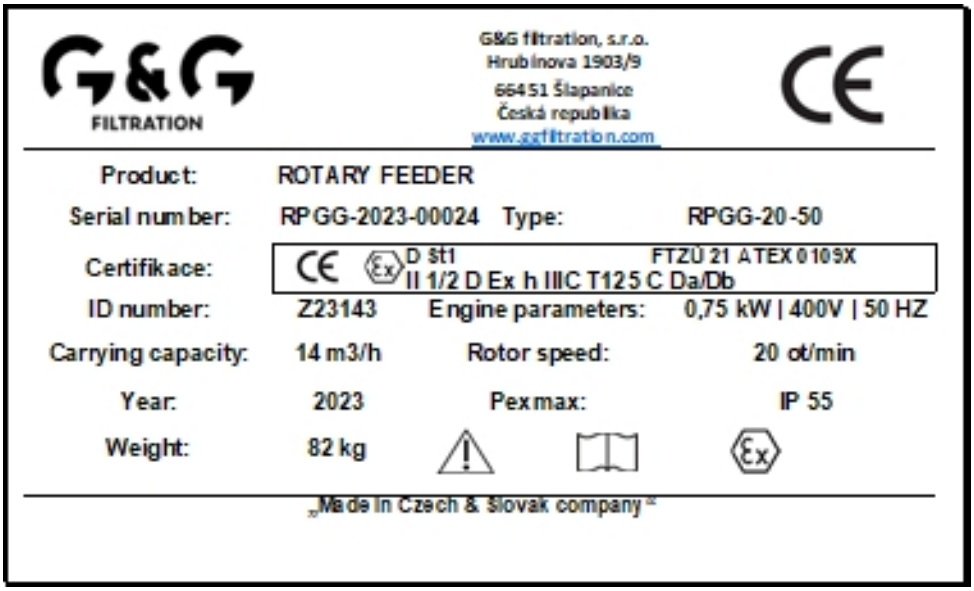
NOISE

Sound pressure level LpA: 63 dB(A)

The sound pressure level LpA is measured at a distance of 1 m from the device when connected to the technology on both sides. However, the measured value does not include contributions from the surrounding machinery, so in case of higher overall noise levels, we recommend that people working in the vicinity of feeders use hearing protection.

LABELS ON EQUIPMENT

Example of a nameplate - ATEX version



Other labels

Direction of rotation

Danger of injury

The device is designed for operation in an environment with explosion hazard

SUBSCRIPTIONS ABOUT THE AGREEMENT

Declaration of conformity is supplied in separate documentation, delivered with the rotary
feeder. In the case of the product in ATEX version (RPGG 20x50-EX) it will be delivered
EU Declaration of Conformity.

3 | SAFETY INFORMATION

GENERAL NFORMATION

It is primarily the responsibility of the operator to ensure their personal safety when operating the equipment
a person designated by the operator. The manufacturer of the equipment is not responsible for personal injury or damage to the equipment and environmental damage caused b y not being used and operated in accordance with the instructions for use and applicable safety regulations.

The rotary feeder is designed in accordance with international standards and regulations applicable to the manufacture of such equipment. The electrical components of the feeder comply with international regulations on protection against dangerous contact voltages. All the electrical elements either have the appropriate enclosure as prescribed by the standard or are located in enclosures which meet the enclosure requirements.
regulation of these standards.

OBLIGATIONS OF THE OPERATOR

The company implementing the rotary feeder in its technology, or the rotary feeder operator, must ensure the following:

- must clearly define the scope of responsibilities and competencies of the personnel designated
  for mounting and connecting the rotary feeder to the conveyor technology
- before putting the equipment into operation, ensure that all those who come into contact with it can thoroughly familiarise themselves with the contents of the instructions for use
- must ensure that the spatial arrangement of the installation does not endanger the operation
  and the activity of transport technology operators
- must take care to protect the health of workers installing the equipment and assign t h e m appropriate personal protective equipment (PPE)

STAFF REQUIREMENTS

Qualification of personnel for the installation of the rotary feeder:
Training in mechanical engineering - a knowledgeable person, i.e. a person with the appropriate technical education, training and/or experience to recognise and avoid the hazards that may occur when handling and installing a rotary feeder.

Qualification of personnel to connect the electrical system to the parent control system of the transport technology:
Education in the field of electrical engineering according to the relevant legislation of the country of the operator, knowledge of the control system of the transport technology used.

Dress code:
During the assembly of the rotary feeder, the designated personnel must use appropriate personal protective equipment according to general regulations, internal regulations and the nature of the work to be performed, such as fireproof and dielectric work
Suit, work boots with reinforced steel toe, gloves, helmet, safety glasses, ear protectors, etc.

PROHIBITED ACTIVITIES

- it is forbidden to modify the equipment in any way without the manufacturer's knowledge
- it is forbidden to remove or damage the labels on the equipment
- it is forbidden to allow maintenance and servicing by persons who are not competent to maintain and service this type of equipment
- it is forbidden to use the equipment if it is found to be defective

RESIDUAL RISKS

The equipment and its parts are designed so that, when used properly, they will operate in
in perfect technical condition did not endanger the health of workers and did not cause economic damage to surrounding facilities. Nevertheless, during installation and maintenance of the equipment, situations may arise which are a source of danger to the user if he is not aware of them and does not observe the principles of safe work. These hazards are so-called residual risks - they are risks that remain even when all preventive and protective measures have been considered and implemented.

HAZARD: Electric shock during installation, maintenance or servicing of electrical parts of the equipment. Electric shock when persons touch parts that have become live due to a fault in the electrical equipment.

PROTECTION: Wiring, maintenance and servicing of electrical parts of the equipment must only be carried out by designated and properly trained personnel with appropriate qualifications.

HAZARD: Crushing of body parts or bumping while handling the equipment during installation. Injury due to slips, trips and falls of persons on edges or other parts of the equipment during installation or maintenance.

SAFETY: Always pay the utmost attention to the work you are doing and follow safety regulations. Wear the prescribed personal protective equipment. Make sure that any person involved in installation or maintenance is familiar with each step of the installation.

DANGER: Burn on parts of the equipment that get hot during operation. temperature.

PROTECTION: Do not touch the device until the temperature has dropped properly. There is a risk of burns. Wear protective gloves.

HAZARD: Explosion due to non-compliance with the maximum temperature of filtered particulates in the case of explosive dusts or mixtures.

PROTECTION: Before using a rotary feeder in an explosive environment, it is essential to become familiar with the nature of the solid contaminants and to follow the recommendations of the manufacturers of these substances for explosion or auto-ignition protection.

SPECIAL CONDITIONS USES - ATEX

The rotary feeder type RPGG 20x50-EX is designed for transporting combustible industrial dusts, except for metal dusts with the parameters specified in chapter 2 TECHNICAL INFORMATION.

- Design pressure *of* rotary feeder type RPGG 20x50-EX: 1 Bar.
- Maximum temperature of the conveying medium $_{Tmedium}$ for RPGG *x*-EX: ≤ 55 °C.
- Maximum holidays Speed of the rotor of the feeder Type RPGG 20x50-EX only as a non-electrical device with EPL Da/Db or EPL Da/Dc :<1 m/s.
- The rotary feeder must be installed in operation in such a way as to prevent creeping discharges on the outer surfaces of the feeder.
- After connecting the rotary feeder to the user's technology, the correct conductive connection of the feeder to the user's technology must be checked before the device is started for the first time.
- The user must supply a device which, in the event of detection of an explosion, ensures automatic and immediate stopping of the rotary feeder
- Explosion detection equipment and automatic and immediate stop of the feeder is not covered by this certificate.
- If a coating system is to be applied to the internal parts of the rotary feeder (rotor, body), it must be tested for a breakdown voltage of 4 kV. In the case of repair of the coating system, the existing coating must be completely sanded off and a new coating of the maximum thickness defined by the manufacturer of the coating system must be applied. The existing coating system MUST NOT be overcoated!

AFTER THE EXPLOSION:

In the event of a n explosion, the rotary feeder must be removed from the technology and checked by the manufacturer.

DURING REGULAR INSPECTIONS:

In the event of damage to any of the sealing vanes or measurement of minimum radial or axial overlap of the sealing vane (see chapter 2 TECHNICAL INFORMATION), replace it according to the procedure in chapter 5 MAINTENANCE.

4 | INSTALLATION AND COMMISSIONING

WORKING ENVIRONMENT

To maintain proper operation of the feeder, the following environment must be provided:
- altitude up to 2 000 m
- relative humidity in the workplace 20-80 % without condensation
- ambient temperature -20 °C to +40 °C
- explosion-free working environment around the rotary feeder

OPERATIONAL SPACE

When selecting the installation location, take into account the dimensions of the device as specified in the technical data. Ensure that the chosen location provides sufficient space for the safe installation of the equipment on the transport technology and for any subsequent maintenance or
Service.

AVAILABILITY

When unpacking, proceed as follows:

1 Remove the screws securing the device to the pallet and remove the packaging material.

Dispose of used packaging material according to the operator's internal regulations.

2 Visually check that no parts of the device have been damaged during transport. Report any defects to the supplier or carrier as soon as possible.

Rotary feeders are delivered without preservation, so there is no need to unpack them unpreserve.

INSTALLATION

1 Check that the prepared flanges on your conveyor technology dimensionally match the rotary feeder housing (especially the spacing for the screws).

2 Apply commercially available silicone sealant or sealing tape to the flanges of your transport technology on both sides of the holes. Allow the sealant to dry for approximately 30-45 minutes. Follow the sealant manufacturer's instructions.

3 Rotate the feeder and slowly and carefully place it between the flanges of the technology. Take care not to damage the applied sealing layer.

During installation, the rotary feeder can be left on the transport pallet and picked up on site using a forklift.

If the rotary feeder can only be lifted by a lifting device (crane, etc.), screw the lifting lugs into the holes in the corners of the feeder housing.

When lifting the feeder, follow the relevant standards and the operator's internal regulations. Always use personal protective equipment such as work boots when handling the equipment.
with reinforced tip, protective gloves and protective helmets.

4 Screw the flanges to the rotary feeder housing with the screws provided.

CONNECTION TO THE ELECTRICAL NETWORK

Before connecting to the mains, check that the mains supply has the correct parameters to ensure the rotary feeder's performance. Check that the mains voltage and frequency corresponds to the information on the electric motor's label. Ensure that the supply cable is not live.

Wiring should be done according to the instructions for the electric motor, see MANUFACTURER AND SUBCONTRACTOR DOCUMENTATION. The wiring diagram for the electric motor is also shown in the motor terminal cover.

The wiring must comply with the applicable standards in the country of the operator and varies individually according to the system in which the rotary feeder is integrated.

In any case, the equipment must be earthed and all parts must be conductively connected.

Unexpected start-up must be prevented for the equipment according to the applicable national standards of the country
operator and shall be equipped with a lockable shut-off device.

There must be an emergency stop button within reach of the operator.

PRE-COMMISSIONING CHECKS

Check:
- Tightness of connecting flanges
- that the feeder is connected to the technology by both flanges so that fingers or objects cannot be inserted into the feeder rotor area during operation
- Correctness of the direction of rotation of the electric motor

CONSUMPTION

The operation of the rotary feeder is dependent on the control system of the conveying technology
and launch depends on how it is integrated into your transport technology.

Therefore, this manual does not describe how to start the rotary feeder.

5 | MAINTENANCE

Always turn off the rotary feeder first and allow the hot surfaces to cool before performing any maintenance or inspection. We also recommend securing the feeder against unexpected start-up.

If the rotary feeder discharges hazardous substances, always use appropriate personal protective equipment according to the nature of the hazardous substance.

MAINTENANCE OF MECHANICAL PARTS

MONTHLY:

Check the bearings (1) and the rotor shaft (2) for abnormal sounds or noise, overheating or discolouration.

- *In the event of malfunction, ensure that the bearing or shaft bearing elements are replaced.*

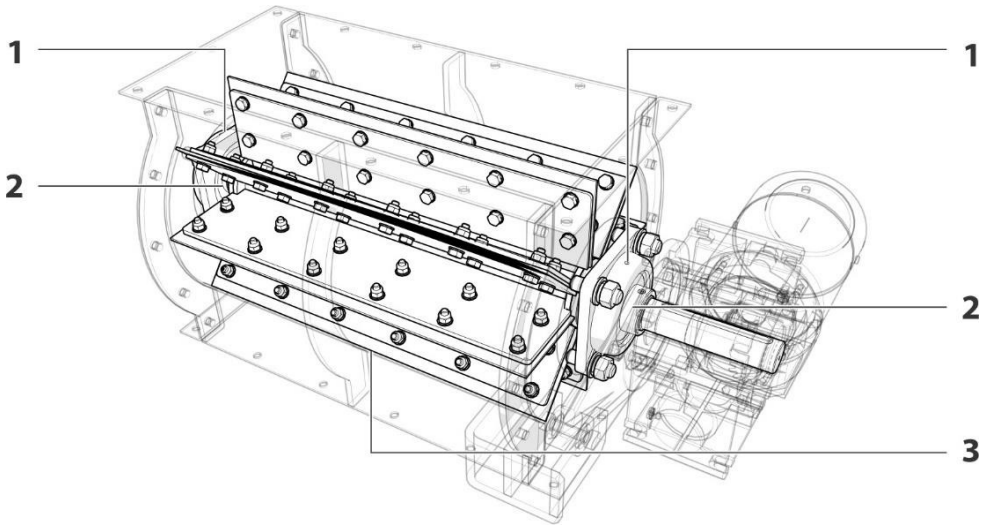
Add grease to the bearings (1).

- *Use **PM-LV2 EP** grease or equivalent.*

QUARTERLY:

Check the rotor sealing vanes (3) for leaks and damage.

- *Measure the clearance between the housing liner and the sealing blade, which must be **0 mm**. Also check if any blade is visibly damaged. In case of damage, replace the blade according to the procedure in the chapter REPLACEMENT OF SEALING BLADES.*



HALF YEAR:

Clean the entire rotary feeder with a broom or industrial vacuum cleaner so that no dust or dirt remains on it.

For equipment intended for ZONE 22 and ZONE 21, it must be ensured that the layer of settled dust never exceeds the permissible thickness of 5 mm! Regular cleaning must be prescribed and observed
layers of settled dust.

Check the coupling between the gearbox and the rotary feeder.

- *Check by looking through the holes in the clutch cover. The clutch cover must not show signs of deformation.*

Check and lubricate the gearbox

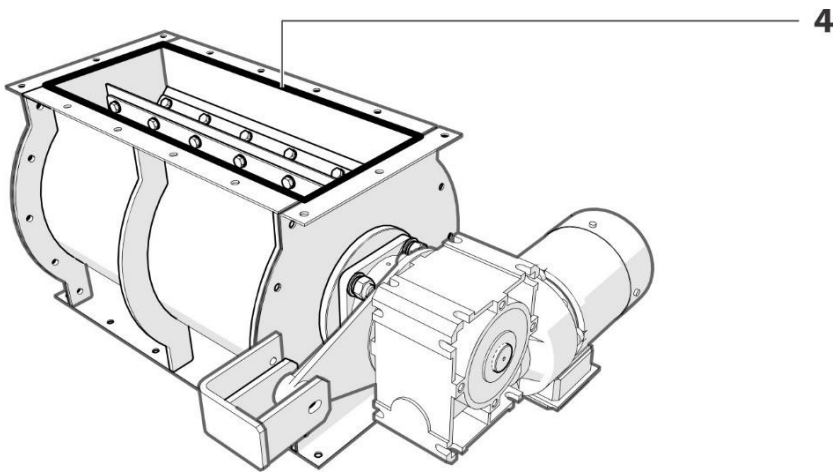
- *Follow the instructions in the separate instructions provided by the manufacturer and which is included in the delivery.*

ANNUALLY:

Check the tightening of the connecting screws and the tightness of the rotary feeder

with the flanges of your transport technology.

- *Tighten all fixing screws. In case of leaks in the connection flanges, the screws must be unscrewed, the defective gasket (4) replaced and the flanges screwed back together*.



Perform all maintenance and inspections only when the rotary feeder is at rest and after the hot surfaces have cooled down. We also recommend securing the equipment against unexpected start-up.

If the rotary feeder discharges hazardous substances, always use suitable personal protective equipment according to the nature of the hazardous substance.

MAINTENANCE OF ELECTRICAL PARTS

Periodically or according to the operator's internal regulations**, check that all connectors are inserted and that the screws of electrical connections and terminals are tightened**. Perform these checks with the main switch of the transport technology switched off.

Regularly **check the insulation condition of all cables and the grounding condition**. In the event of any damage, contact electrical maintenance personnel immediately.

Check the electric motor according to the manufacturer's instructions in a separate manual. The instructions are included in the delivery of the rotary feeder.

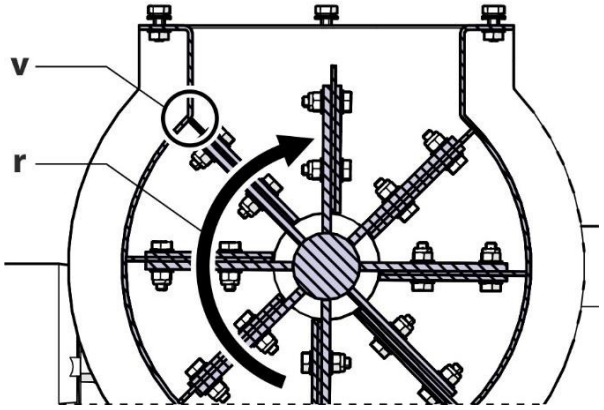
Maintenance of the electrical parts of the equipment may only be carried out by persons who are properly trained and qualified.

REPLACEMENT OF SEALING BLADES

If any of the sealing vanes are damaged or if the minimum radial or axial overlap of the sealing vane is measured (see chapter 2 TECHNICAL INFORMATION), replace it as follows:

1. Remove the clutch cover.
2. Remove the gearbox and engine. Unscrew the mounting screws and remove the gearbox and engine from the clutch.
3. Remove the clutch jaws from the rotor shaft. First remove the clutch wreath and then loosen the jaw retaining screw. Pull the jaw off the rotor shaft (use a puller to do this). Finally, remove the tongue from the rotor shaft
4. Remove the rear sidewall of the cabinet (further away from the drive). First loosen the retaining bolts of both UCF bearings, remove the sidewall bolts and remove the sidewall including the bearing from the rotor shaft.
5. Pull the rotor out of the housing and place it on a flat pad.

6 Remove the screws of the damaged seal blade and remove the blade.
7 Insert the new blade and attach it with screws. Note the correct direction of rotation (r)
and the clearance (v = 0 mm) between the housing and the blade.



8 The assembly procedure is the reverse of the disassembly procedure up to point 1.

Improper installation of the seal blade affects the tightness of the rotary feeder and the Torque value. Incorrect mounting will cause:
- *rotary feeder leaks (feeding, purging)*
- *deformation and destruction of the clutch wreath*
- *overloading of the gearbox and motor and thus loss of motor current protection*

EXCHANGE OF A WREATH CLUTCHES

If the wreath is damaged, replace it as follows:
1 Remove the clutch cover.
2 Dismantle gearbox a engine. Unscrew the mounting screws and remove the gearbox and engine from the clutch.
3 Remove the clutch jaws from the rotor shaft. Remove the wreath and insert a new one.
4 The assembly procedure is the reverse of the disassembly procedure up to point 1.

REPLACEMENT PARTS

If you need to replace any part or assembly, please contact **G&G filtration, s.r.o.**, or the company that implemented the rotary feeder, to after agreement, arranged delivery and assembly of the required component.

Recommended spare parts for two years of operation: Sealing blade 1 set
Wreath clutch .....1 piece
UCF bearing .....2 pieces

LIFE

Due to the nature of the working conditions, which vary for each application, it is not
it is possible to generally determine the lifetime of a rotary feeder. The following list indicates the expected minimum lifetime of selected components in operating hours for single-shift operation:

Parts subject to abrasion.....2 000 to 4 000 h
Rotating parts.....approximately 4 000 h
Placement of rotating and sliding parts..approximately 4 000 h
Sealing elements .....approximately 4 000 h

DEMONTAGE AND LIKVIDATION

When disassembling the device, follow the steps opposite to those described i n t h e INSTALLATION AND REPLACEMENT chapter.

Due to the nature of the working conditions, which vary from application to application, it is not possible to determine the service life of a rotary feeder in general. However, before disposing of the rotary feeder and its parts, render them unusable.

When disposing of parts of the equipment, the instructions of the manufacturers of the individual components must be followed, as well as the relevant national regulations on waste disposal. We recommend that the individual components of the equipment be disposed of at a place that is suitable for this purpose.
specialized.

6 | DOCUMENTATION OF THE MANUFACTURER AND SUBCONTRACTORS

ADDED DOCUMENTATION

The following manufacturer's documentation is supplied with this rotary feeder and subcontractors:

- delivery note (handed over on delivery)
- declaration of conformity
- manufacturers' manuals for selected components
- electrical documentation
- production documentation (drawings, etc.)

7 | WARRANTY CONDITIONS

WARRANTY CONDITIONS

The manufacturer guarantees its product for 24 months from the date of delivery or handover and acceptance.

THE WARRANTY COVERS:
- hidden defects in the material
- demonstrable design defects

Defects covered by the warranty must be reported in writing to the manufacturer's service department.

Special cases may be decided only after discussion, inspection and assessment by the manufacturer's side.

THE WARRANTY DOES NOT COVER DEFECTS CAUSED BY:

- mechanical damage

- negligent handling

- by unprofessional intervention

- by connecting or reconnecting to the wrong type or voltage of electricity

- normal mechanical wear and tear, etc.

Other warranty conditions can be agreed in the contract.

8 | LIST OF MAINTENANCE TASKS

G	Rotary powder feeder						
č.	Action	Nature	Priority	Daily	Quarterly	Annually	As required
G1	Feeder function check - rotor rotation	Ú	1	X			
G2	Checking bearings - unusual play, sound, temperature	Ú	1		X		
G3	Lubrication of feeder bearings	Ú	1		X		
G4	Visual inspection of all feeder sealing strips	Ú	1		X		
G5	Checking the oil level in the feeder gearbox	Ú	1		X		
G6	Checking the coupling between the gearbox and the rotor	Ú	1		X		
G7	Checking the tightening of bearing bolts, housing, gearbox, feeder mounting	Ú	1		X		
G8	Inspection of the connection pipe, pipe integrity	Ú	2		X		
G9	Checking motor current draw under operating conditions	Ú	2		X		
G10	Physical inspection of all rubber sealing strips of the feeder, replacement of strips	Ú	1			X	
G11	Physical inspection of the feeder jacket	Ú	1			X	
G12	Inspection and repair of corroded parts of the feeder surface with paint	Ú	2			X	

M - measurement
Ú - action of the technician P - OPERATION

1 - necessary
2 - suitable
3 - recommended

9 | LIST OF STANDARDS USED

Standard number	Date of issue	Description
EN 1127-1 ED.3 (389622)	04/2020	Explosive atmospheres - Explosion prevention and protection - Part 1: Basic concept and methodology
EN 60079-0 ED.5...(332320)	12/2018	Explosive atmospheres - Part 0: Equipment - General requirements
EN ISO 80079-36 (389641)	09/2016	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres Basic methods and requirements
EN ISO 80079-37 (389641)	09/2016	Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres Non-electrical types of protection by safe construction ˝c˝, guarding of initiating sources ˝b˝, liquid shutter ˝k˝
EN 15089 (389697)	09/2009	Explosion separation systems

10| SPARE PARTS LIST

C	Rotary feeder	
č.	***Parts***	***Type of part***
C1	**Engine with gearbox**	**SK9012.1AZD-80SPTF**
C2	**Bearing**	**UCF 209**
C3	**Guffer**	**50x68x10 NBR**
C4	**Rails**	**PLASTON A90, T.6 mm**

FILTRATION

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