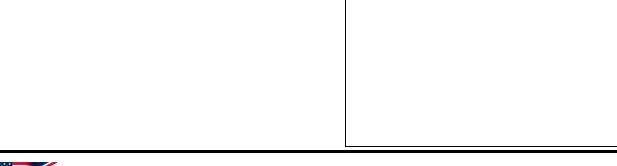
Manual Rotating Sample Divider PT 300/600











Copyright

© Copyright by Retsch GmbH Retsch-Allee 1-5 42781 Haan Germany



Table of Contents

1			tes on the manual	
	1.1		Disclaimer	
	1.2		Copyright	
2		Saf	ety	7
	2.1		Explanations of the Safety Instructions	
	2.2		General Safety Instructions	
	2.3		RepairsResponsibility of the operating company	
	2.5		Personnel qualification and target group of this manual	
	2.6		Confirmation Form for the Managing Operator	10
3		Pac	ckaging, Transport and Installation	12
	3.1		Packaging	12
	3.2		Transport	
	3.3 3.4		Temperature Fluctuations and Condensation	
	3.5		Electrical Connection	
	3.6		Transport	
	3.7		Installing the device	
	3.8		Description of type plate	
4			chnical data	
	4.1		Intended use of the device	
	4.2		Divider modules	
	4.3 4.4		Feed size	
	4.5		Motor Rotation Speed	
	4.6		Emissions	
	4.	.6.1	Noise levels	19
	4.7		Degree of Protection	
	4.8		Protective Equipment	
	4.9 4.10		Dimensions and WeightRequired Floor Space	
	4.11		Installation drawing	
5			ws of the device	
	5.1		Front view	
	5.2		Interior view	23
	5.3		Operating elements and displays	23
6		Ope	erating the device	24
	6.1	•	Opening the device	
	6.2		Closing the device	25
	6.3		Preparing the division process	26
		.3.1	Inserting the divider module	
		.3.2		
		.3.4	Connecting the dust extraction	
	6.4		Control panel – Operating the machine	
		.4.1	Start menu	
		.4.2		
	6.	.4.3	· · · · · · · · · · · · · · · · · · ·	
	6.5		Finishing the division process	34
7		Cle	aning	35
8		Mai	intenance	36
9		Ret	urn for Service and Maintenance	37



10	Disposal	38
11	Index	. 39





1 Notes on the manual

This manual provides technical guidelines for the safe operation of the device. Read this manual through carefully before installing, putting into service and operating the device. Reading and understanding this manual is essential for handling the device safely and as intended.

This manual does not contain any repair instructions. Please contact your supplier or contact Retsch GmbH directly if anything is unclear or you have questions about these guidelines or the device, or in the case of any faults or necessary repairs.

You can find further information about your device at https://www.retsch.com on the pages for the specific device concerned.

Amendment status:

The document amendment 0002 of the "Rotating Sample Divider PT 300/600" manual has been prepared in accordance with the Machinery Directive 2006/42/EC.

1.1 Disclaimer

This manual has been prepared with great care. We reserve the right to make technical changes. We assume no liability for personal injuries resulting from the failure to follow the safety information and warnings in this manual. No liability will be assumed for damage to property resulting from the failure to follow the information in this manual.

1.2 Copyright

This document or parts of it or its content may not be reproduced, distributed, edited or copied in any form without prior written permission of Retsch GmbH. Damage claims shall be asserted in the case of infringements.



2 Safety

Safety Officer

The operating company itself must ensure the following with respect to persons authorised to work on the device:

- that they have read and understood all regulations contained in the chapter on safety;
- that they are aware before they start work of all instructions and regulations for the target group related to the work;
- that they have easy access to the manual for this device at all times;
- that they have been familiarised with the safe and correct handling of the device before starting work on it, by means of a verbal introduction by a competent person and/or using this manual.

▲ Improper operation can lead to personal injuries. The operating company itself is responsible for its safety and that of its staff. The operating company itself must ensure that no unauthorised persons have access to the device.

Target group

All those operating, cleaning or working with or on the device.

This device is a modern, powerful product from Retsch GmbH and has been developed in line with the state-of-the art. The device is safe to use when operated correctly and when following the instructions in this manual.

▲ People under the influence of intoxicating substances (medications, drugs, alcohol) or who are overtired may not operate the device or work on the device.

2.1 Explanations of the Safety Instructions

The following **warnings** in this manual warn of possible risks and damage:

A DANGER

D1 0000

Risk of fatal injuries

Source of danger

- Possible consequences if the danger is ignored.
- Instructions and information on how to avoid the risk.

Fatal or serious injuries may result if the "Danger" sign is disregarded. There is a **very high risk** of a life-threatening accident or lasting personal injury. The signal word **A DANGER** is additionally used in the running text or in instructions.

A

WARNING

W1.0000

Risk of life-threatening or serious injuries

Source of danger

- Possible consequences if the danger is ignored.
- Instructions and information on how to avoid the risk.



Life-threatening or serious injuries may result if the "Warning" sign is disregarded. There is an **increased risk** of a serious accident or of a possibly fatal personal injury. The signal word **WARNING** is additionally used in the running text or in instructions.



C1.0000

Risk of injuries

Source of danger

- Possible consequences if the danger is ignored.
- Instructions and information on how to avoid the risk.

Average to slight injuries may result if the "Caution" sign is disregarded. There is an average or slight risk of an accident or personal injury. The signal word A CAUTION is additionally used in the running text or in instructions.

NOTICE

N1.0000

Type of damage to property

Source of the damage to property

- Possible consequences if the information is ignored.
- Instructions and information on how to avoid the damage to property.

Damage to property may result if the information is disregarded. The signal word **NOTICE** is additionally used in the running text or in instructions.

2.2 General Safety Instructions

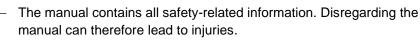


CAUTION

C2.0002

Risk of injury

Lack of knowledge of the manual





• Read the manual carefully before operating the device.

A CAUTION

C3.0015

Risk of injury

Improper modifications to the device

- Improper modifications to the device can result in injuries.
- · Do not make any unauthorised changes to the device.
- Only use the spare parts and accessories approved by Retsch GmbH!



NOTICE

Changes to the device

Improper modifications

- The conformity declared by Retsch GmbH with the European Directives will lose its validity.
- Any warranty claims will be terminated.
- . Do not make any modification to the device.
- Use spare parts and accessories that have been approved by Retsch GmbH exclusively.

0

N2.0012

2.3 Repairs

This manual does not contain any repair instructions. For safety reasons, repairs may only be carried out by Retsch GmbH or an authorised representative or by qualified service technicians.

In case of repair, please inform...

- ...the Retsch GmbH representative in your country,
- ...your supplier, or
- ...Retsch GmbH directly.

Service address:			

2.4 Responsibility of the operating company

The user of the machine (the operating company) is responsible for ensuring that every person who works on the machine has been given precise instructions on the basis of this Manual (commissioning, operation, servicing). Training for operators must cover the following points:

- Intended purpose of the machine
- Hazardous areas
- Safety provisions
- You must be satisfied that staff have the requisite qualifications
- · General instructions and actions in an emergency
- Applicable accident prevention regulations
- Personal protective clothing required
- Operation of the machine in line with this Manual
- Accepted, applicable rules governing occupational health and safety

Incorporate the PT 300/600 into your emergency planning:



- Integrate the PT 300/600 into your operating procedures regulating conduct in emergency situations.
- To prevent accidents during work processes, incorporate the PT 300/600 into your risk assessment in acc. with the German Ordinance on Industrial Health and Safety (BetrSichV).
- Take into consideration fire-fighting measures, combatting the effect of leaking substances, potential radiation, rescuing people, first-aid measures.

2.5 Personnel qualification and target group of this manual

This manual is intended for trained assembly personnel, maintenance staff and users. Training must be provided in the language of the personnel concerned so that all instructions are understood. As such the following personnel qualifications are necessary:

Assembly, commissioning, instruction, troubleshooting, servicing work, as described in this manual	Skilled technical staff as well as external service providers who speak German and the language of the operating personnel. The usual skills communicated during training, e.g. as a plant fitter, mechatronics engineer or toolmaker, are prerequisites for the assembly, commissioning and troubleshooting of the machine. Employees must be able to manage all applicable mechanical tasks and be familiar with and have experience of dealing with these.
Operation	Education/training in accordance with the above section, responsibilities of trained employees.
Servicing/repairs	They must be experienced, trained professionals, familiar with requirements and guidelines.

2.6 Confirmation Form for the Managing Operator

This manual contains essential instructions for operating and maintaining the device which must be strictly observed. It is essential that they be read by the user and by the qualified staff responsible for the device before the device is commissioned. This manual must be available and accessible at the place of use at all times.

The user of the device herewith confirms to the managing operator (owner) that he has received sufficient instructions about the operation and maintenance of the system. The user has received the manual, has read and taken note of its contents and consequently has all the information required for safe operation and is sufficiently familiar with the device.



The managing operator should for legal protection have the user confirm the instruction about the operation of the device.

I have read and taken note of the contents of all chapters in this manual as well as a safety instructions and warnings.	all
User	
Surname, first name (block letters)	
Position in the company	
Place, date and signature	
Managing operator or service technician	
Surname, first name (block letters)	
Position in the company	
Place, date and signature	



3 Packaging, Transport and Installation

3.1 Packaging

The packaging has been adapted to the mode of transport. It complies with the generally applicable packaging guidelines.

NOTICE

N3.0001

Complaint or return

Keeping the packaging

- Inadequate packaging and insufficient securing of the device can jeopardise the warranty claim in the event of a complaint or return.
- Keep the packaging for the duration of the warranty period.

3.2 Transport

NOTICE

N4.0017

Damage to components

Transport

- Mechanical or electronic components may be damaged during transport.
 The device must not be knocked, shaken or thrown during transport.
- Move the device gently during transport.

NOTICE

N5.0014

Complaints

Incomplete delivery or transport damage

- The forwarding agent and Retsch GmbH must be notified immediately in the event of transport damage. It is otherwise possible that subsequent complaints will not be recognised.
- Please check the delivery on receipt of the device for its completeness and intactness.
- Notify your forwarding agent and Retsch GmbH within 24 hours.

3.3 Temperature Fluctuations and Condensation

NOTICE

N6.0016

Damaged components due to condensation

Temperature fluctuations

- The device may be exposed to substantial fluctuations in temperature during transport. The ensuing condensation can damage electronic components.
- Wait until the device has acclimatised before putting it into service.

Temporary storage:

Also in case of an interim storage the device must be stored dry and within the specified ambient temperature range.



3.4 Conditions for the Installation Site

NOTICE

N7.0021

Ambient temperature

Temperatures outside the permitted range

- Electronic and mechanical components may be damaged.
- The performance data alter to an unknown extent.
- Do not exceed or fall below the permitted temperature range (5 °C to 40 °C ambient temperature) of the device.
- Installation height: max. 2 000 m above sea level
- Ambient temperature: 5 °C 40 °C
- Maximum relative humidity < 80 % (at ambient temperatures ≤ 31 °C)

For ambient temperatures U_T between 31 °C and 40 °C, the maximum relative humidity value L_F linearly decreases according to $L_F = -(U_T - 55) / 0.3$:

Ambient temperature	Max. rel. humidity
≤ 31 °C	80 %
33 °C	73.3 %
35 °C	66.7 %
37 °C	60 %
39 °C	53.3 %
40 °C	50 %

NOTICE

N8.0015

Humidity

High relative humidity

- Electronic and mechanical components may be damaged.
- The performance data alter to an unknown extent.
- The relative humidity in the vicinity of the device should be kept as low as possible.



3.5 Electrical Connection

A

WARNING

W2.0015

Risk to life caused by an electric shock

Connection to socket without a protective earth conductor



 Connecting the device to sockets without a protective earth conductor can lead to life-threatening injuries caused by an electric shock.

 Always operate the device using sockets with a protective earth conductor (PE).

NOTICE

N9.0022

Electrical connection

Failure to observe the values on the type plate

- Electronic and mechanical components may be damaged.
- Connect the device only to a mains supply matching the values on the type plate.

A WARNING When connecting the power cable to the mains supply, use an external fuse that complies with the regulations applicable to the place of installation.

- Check the type plate for details on the necessary voltage, frequency, and maximum external current source fuse for the device.
- The listed values must agree with the existing mains supply.
- Only use the supplied power cable to connect the device to the mains supply.

A

WARNING

W3.0005

Danger to life due to electric shock or fire

Incorrect connection to the power supply may result in parts of the housing or cables being live and in fires starting.



- Serious injuries or death due to an electric shock.
- Serious injuries or death due to fires.
- The device may only be connected by a qualified electrician.

▲ WARNING High leakage currents of > 3.5 mA alternating current can occur on the frequency converter required and used in this machine. A fixed ground connection must therefore be provided for stationary operation of the machine.

The drive on the machine is fitted with a frequency converter . In order to comply with the EMC Directive , this is equipped with a mains filter and shielded cables to the motor. If your mains connection for the machine includes a residual current device , the anti-interference circuit on the frequency converter may result in false alarms on the residual current device when it is switched on – it is always switched on when the grinding chamber cover is closed – without there being any fault on the machine or the mains installation.

In accordance with the state of the art, selected all current sensitive residual current devices are recommended for such cases. The trip current must be adequately dimensioned because short-term capacitive compensation currents (shielded cable, mains filters) can easily lead to false alarms when switched on.

In some circumstances it may be necessary to operate the machine without the residual current device, although in this case checks must be conducted to ensure that this does not contradict



any local regulations of electricity companies or other institutions as well as any applicable standards.

The following must be taken into consideration during preparation for commissioning and maintenance:

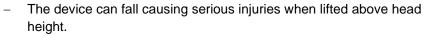
- Fixed wiring in accordance with applicable standards (1~/N/PE) must be provided in close proximity to the machine.
- The fixed wiring must have a minimum copper cross section of 3 x 2.5 mm² (L, N and PE).
- A connection must be provided for the additional protective earthing with at least 10 mm² copper.

3.6 Transport

WARNING

Risk of injury due to the device falling down

Lifting the device above head height





W4.0005

N10.0018

Never lift the device above head height!

NOTICE

Transportation lock

Transport without transportation lock, or operation with transportation lock

- Mechanical components may be damaged.
- Only transport the device with mounted transportation lock.
- Do not operate the device with built-in transportation lock.

NOTICE

N11.0017

Damage to components

Transport

- Mechanical or electronic components may be damaged during transport.
 The device must not be knocked, shaken or thrown during transport.
- Move the device gently during transport.



Fig. 1: Unscrewing the transport lock from the transport pallet



The transport lock (TS) uses four nuts to secure the machine to the pallet.

Use a 17 mm wrench to unscrew the four nuts.

3.7 Installing the device

Place the machine on a firm surface.

Only operate the PT 300/600 at an installation site with adequate lighting.

Further parameters can be found in the "Technical data" chapter.

The machine must be secured before putting it into operation.

3.8 Description of type plate

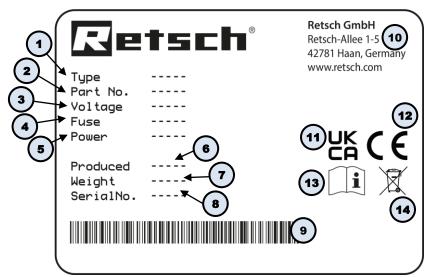


Fig. 2: Type plate

- 1 Device designation
- 2 Part number
- 3 Power version, Mains frequency
- 4 Fuse type and fuse strength
- 5 Capacity, Amperage
- 6 Year of production
- 7 Weight
- 8 Serial number
- 9 Bar code
- 10 Manufacturer's address
- 11 UKCA marking
- 12 CE marking
- 13 Safety warning: Read the manual
- 14 Disposal label
- ① In the case of queries please provide the device designation (1) or part number (2), as well as the serial number (8) of the device.



4 Technical data

4.1 Intended use of the device

A

CAUTION

C4.0005

Risk of injury

Potentially explosive atmosphere

- The device is not suitable for use in potentially explosive atmospheres.
 Operating the device in a potentially explosive atmosphere can lead to injuries caused by an explosion or fire.
- Never operate the device in a potentially explosive atmosphere!



CAUTION

C5.0006

Risk of injury

Sample material that is harmful to health

- Sample material that is harmful to health can injure people (illness, contamination).
- Use suitable extraction systems with sample material that is harmful to health.
- Use suitable personal protective equipment with sample material that is harmful to health.
- Take note of the safety data sheets for the sample material.



CAUTION

Risk of hearing loss

High sound level



- A high sound level may arise depending on the type of material and the duration of sample division. Excessive noise in terms of intensity and duration can cause impairments or lasting damage to hearing.
- Ensure you take suitable noise protection measures.
- Wear hearing protectors when there is loud or persistent noise.

Target group: User (operating company), operators

Machine type designation: PT 300/600

The PT 300/600 sample divider is used for fast, loss-free and reproducible sample division on free-flowing materials.

The dividing process takes place under dry conditions. By using the appropriate module, the PT 300/600 may be deployed both in continuous and batch processing mode.

Any other use is regarded as improper use and may result in damage to equipment or even to personal injuries.

Advantages

- Fast division of large quantities
- Adjustable vibration intensity of the feeder
- Adjustable speed
- Reproducible results
- Continuous and batch processing module available
- Parameters can be easily adjusted using the display



NOTICE

N12.0007

Range of application of the device

Long-term operation

- This laboratory device is designed for eight-hour single-shift operation with a duty cycle of 30 %.
- This device may not be used as a production machine nor is it intended for continuous operation.

4.2 Divider modules

Continuous module For 1 divided sample with rejection mechanism

Batch module Module for 4 divided samples

(7.5 / 15 litres per segment Module for 6 divided samples (5 / 10 litres per segment) Module for 8 divided samples (3.75 / 7.5 litres per segment) Module for 10 divided samples (3 / 6 litres per segment)

4.3 Feed size

- Vibratory feeder up to 30 mm.
- Vibratory feeder with splashback up to 15 mm.

4.4 Rated Power

370 W

Ensure that the voltage and frequency of your mains connection correspond to the type plate on the machine. The mains connection must at least be protected by a 16A fuse .

4.5 Motor Rotation Speed

The speed is 18 to 53 rpm.

4.6 Emissions



C6.0020

Risk of injury caused by the failure to hear acoustic signals

Loud noise during the division process

- Loud noise during the division process may lead to the inability to hear acoustic warning signals, and this can result in injuries.
- Take volume during the division process into consideration when designing the acoustic signals in the work environment.
- Where necessary, introduce additional visual signals.



4.6.1 Noise levels

Noise measurement in accordance with DIN 45635-31-01-KL3

The noise values are mainly influenced by the machine speed, the material being ground and the grinding set.

Workplace-related emissions value LpAeq = up to 75 dB(A)

Sound power level LWA = 98dB(A)

Measurement conditions:

Continuous module

Grinding material: 5000 ml sand, particle size <1 mm Sound level meter: Brüel & Kjaer 2237 Controller

4.7 Degree of Protection

- IP50

4.8 Protective Equipment

The machine can only be operated when closed. Opening the door results in the machine coming to a halt. It can only be restarted by closing the door again.

4.9 Dimensions and Weight

Height: Up to approx. 1810 mm

Width (open): 2200 mm

Depth: Up to approx. 1400 mm

Weight: Net approx. 220 kg

4.10 Required Floor Space

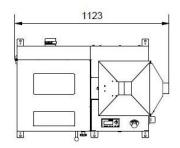
Height: Up to approx. 1810 mm

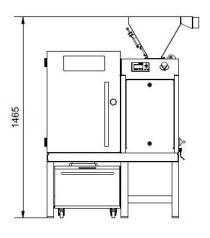
Width (open): 2200 mm

Depth: Up to approx. 1400 mm



4.11 Installation drawing





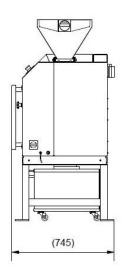
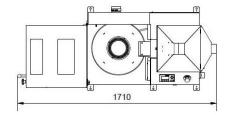
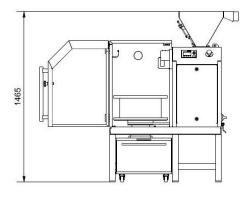


Fig. 3: PT 300 – Housing door closed





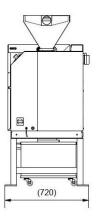
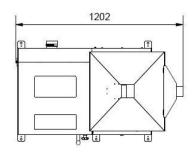
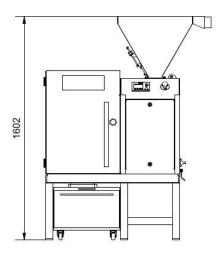


Fig. 4: PT 300 – Housing door open







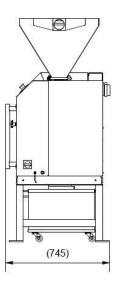
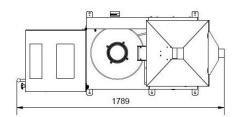
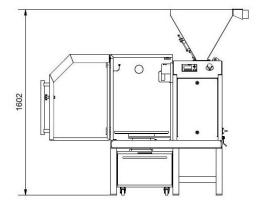


Fig. 5: PT 600 – Housing door closed





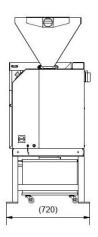


Fig. 6: PT 600 - Housing door open



5 Views of the device

5.1 Front view



Fig. 7: Front view

Element	Description	Function
A Dust extraction for hopper		For connecting a dust extraction mechanism using a special adapter.
В	Hopper	For filling the material.
С	Knurled screw for gap size adjustment	For regulating the material flow.
D	Emergency stop button	To shut the machine down immediately in an emergency.
E	Control panel	To control the machine.
F	Hand wheel	Locks the housing door.



Element	Description	Function
G	Housing door	Closes the dividing area.
Н	Electrical connection	For connecting the machine to the power supply.

5.2 Interior view

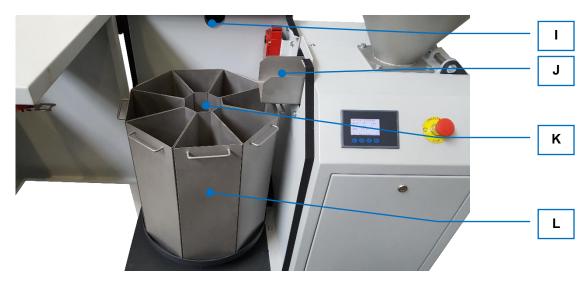


Fig. 8: Interior view

Element	Description	Function
9		To connect a dust extraction mechanism using a
	area	special adapter.
J	Vibratory feeder	Conveys the material into the dividing area.
K	Divider module	For the continuous or batch division of materials.
L	Segment	Collects the divided material.

5.3 Operating elements and displays





Fig. 9: View of the control panel

Element	Description	Function
M	Control buttons	For selecting the settings for the division process.
N	Display	Displays the control functions and parameters.

6 Operating the device



Risk of injury

Sample material that is harmful to health

- Sample material that is harmful to health can injure people (illness, contamination).
- Use suitable extraction systems with sample material that is harmful to health.
- Use suitable personal protective equipment with sample material that is harmful to health.
- Take note of the safety data sheets for the sample material.

6.1 Opening the device



Fig. 10: Opening the housing door

• Turn the hand wheel (F) anticlockwise to unlock and open the housing door (G).



C7.0006



6.2 Closing the device



Fig. 11: Closing the housing door

• Turn the hand wheel (F) clockwise to close and lock the housing door (G).



6.3 Preparing the division process

6.3.1 Inserting the divider module

NOTICE

N13.0066

Wear or damage to the machine

Operation without a divider module and overloading

- Operating the machine without a divider module may lead to increased wear or damage to the machine.
- Always operate the machine with a divider module.
- Do not overload the machine. Check the amount of material in the segments of the divider module regularly while the machine is running.



Fig. 12: Continuous divider module with one segment



Fig. 13: Batch divider module with eight segments

- Place the desired divider module (K) into the dividing area.
- Fit the relevant number of segments (L) in the divider module (K) according to the desired number of divisions of the material.



6.3.2 Inserting the vibratory feeder



Fig. 14: Hopper



Fig. 15: Inserting the vibratory feeder

- Open the housing door (G) and swing the hopper (B) to one side in order to insert the vibratory feeder (J) into the slot.
- Slide the vibratory feeder (J) as far as it will go into the slot.
- Springs at the side secure the vibratory feeder (J) in the correct position.
- Shut the hopper (B) again and close the housing door (G).



① Use the normal vibratory feeder for material with a feed size of between 15 mm and 30 mm.

The vibratory feeder with splashback is recommended for material with a feed size of less than 15 mm.



Fig. 3: Machine with inserted vibratory feeder with splashback

6.3.3 Adjusting the gap size

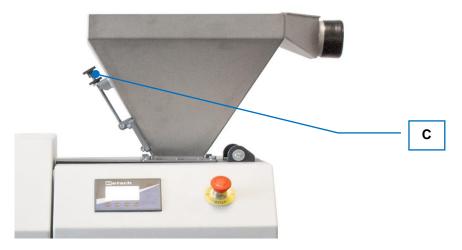


Fig. 16: Adjusting the gap size

- Using the knurled screw (C), adjust the gap size according to the feed size of the material.
- ① Adjust the gap size so that the gap is three times as big as the coarsest material particle. The material will otherwise get wedged in the hopper.



6.3.4 Connecting the dust extraction

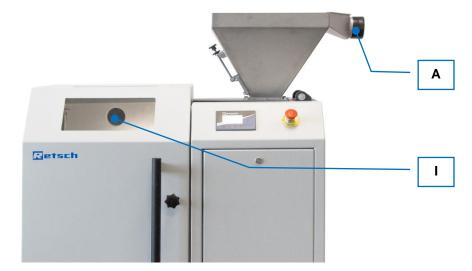


Fig. 17: Dust extraction

- Connect a dust extraction mechanism to the hopper (A) or the dividing area (I) if the properties of the material so require.
- ① A special adapter for connecting a dust extraction mechanism is available from Retsch GmbH.

6.4 Control panel - Operating the machine

6.4.1 Start menu

Press any function key.



Fig. 18: Start menu - machine is not ready for use





Fig. 19: Start menu - machine is ready for use

F1:	Start	Starts the division process.	
F2:	Stop	Stops the division process.	
F3:	Lock	Switches to ready for use.	
		"Ready" appears in the display once the housing door has been	
		locked using the hand wheel.	
		The division process can be started by pressing F1.	
F4:	Set	Opens the settings.	

6.4.2 Settings

Select F4 to go to the menu settings .

The division process can be configured using this menu.

The display then shows the following functions:



Fig. 20: Settings selection menu 1/3

Runtime (duration of the division process)			
F1:		Extends the duration of the division process.	
F2:		Shortens the duration of the division process	
	m/s	Switches between the minutes/seconds setting	
F4:	Next	Opens the next page of the menu.	



After pressing F4 the following setting appears on the display:



Fig. 21: Settings selection menu 2/3

In this menu you can specify the desired number of revolutions per minute to be implemented by the divider module.

Speed (number of revolutions of the divider module)				
F1: +1	Increases the speed.			
F2: -1	Reduces the speed.			
F3:	No function in this selection menu.			
F4: Next	Opens the next page of the menu.			

Pressing F4 displays the following setting:



Fig. 22: Settings selection menu 3/3

In this menu you can specify the vibration intensity of the vibratory feeder during the division process.



Vibration feeder (vibration strength of the vibratory feeder(
F1:		Increases the vibration intensity.		
F2:	-1	Reduces the vibration intensity.		
F3:		No function in this selection menu.		
F4:	OK	To the start menu		

After confirming, you go back to the start menu.



Fig. 23: Start menu –Starting the division process

Press F1 to start the division process.

6.4.3 Starting the division process

Once you have started the division process by pressing F1, the display initially shows the following view.



Fig. 24: Display after starting the division process



If the hopper (funnel) has been closed, confirm the safety query by pressing F1. The division process will then start.

If the hopper has not been closed, confirm the safety query by pressing F4. The division process will then not be started, and you will return to the start menu.

The display shows the following view after the division process has been started by pressing F1.



Fig. 25: Display during the division process

The display shows information about the current division process:

Speed	Speed (in rpm)	Provides information about the set speed of the divider module.
		module.
Feeder	Vibration intensity (in	Provides information about the set vibration intensity of
	%)	the vibratory feeder.
Time	Time	Provides information about the time left until the division
	(in minutes and	process has been completed.
	seconds)	

The division process can be ended at any time by pressing F2.



6.5 Finishing the division process

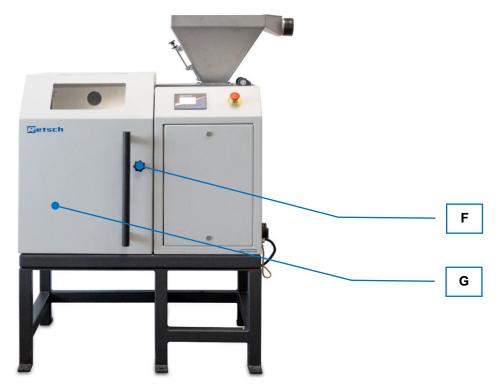


Fig. 26: Front view

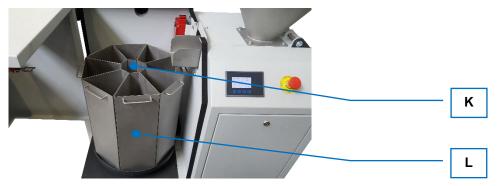


Fig. 27: Interior view

- Once the division process has finished, unlock the housing door (G) using the hand wheel (F).
- Open the housing door (G).
- Remove the segments (L) with the material individually from the divider module (K).
- ① The collecting receptacle beneath the dividing area has been filled when using the continuous divider module.



7 Cleaning

A

WARNING

W5.0003

Risk to life caused by an electric shock

Cleaning live parts with water

 Cleaning the device with water can lead to life-threatening injuries caused by an electric shock if the device has not been disconnected from the power supply.



- Only carry out cleaning work on the device when it has been disconnected from the power supply.
- Use a cloth moistened with water for cleaning.
- Do not clean the device under running water!

▲ WARNING The device must always be switched off and disconnected from the mains before accessing it for cleaning or servicing purposes.

Clean the housing of the device with a damp cloth and if necessary, with a household cleaning agent. Pay attention that no water or cleaning agent enters the interior of the device.



8 Maintenance

A

WARNING

Risk of death caused by an electric shock

Strong voltage due to capacitor discharge

- Due to capacitor discharge on the frequency convertor, the machine conducts voltage for up to **3 minutes** after it has been unplugged.
- There is a risk of touching live contacts when the machine is open. An
 electric shock can result in burns and cardiac arrythmia, or in
 respiratory failure and cardiac arrest.
- After disconnecting the mains lead, wait 3 minutes before opening the machine.

W6.0000





WARNING The device must always be switched off and disconnected from the mains before accessing it for cleaning or servicing purposes.



9 Return for Service and Maintenance



Fig. 28: Return form

The acceptance of devices and accessories of the Retsch GmbH for repair, maintenance or calibration can only be effected, if the return form including the decontamination declaration service has been correctly and fully completed.

- Download the return form located in the download section "Miscellaneous" on the Retsch GmbH homepage (http://www.retsch.com/downloads/miscellaneous/).
- ⇒ When returning a device, attach the return form to the outside of the packaging.

In order to eliminate any health risk to the service technicians, Retsch GmbH reserves the right to refuse the acceptance and to return the respective delivery at the expense of the sender.



10 Disposal

In the case of a disposal, the respective statutory requirements must be observed. In the following, information on the disposal of electrical and electronic devices in the European Community are given.

Within the European Community the disposal of electrically operated devices is regulated by national provisions that are based on the EU Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE).

Accordingly, all devices supplied after August 13th 2005 in the business-to-business area, to which this product is classified, may no longer be disposed of with municipal or household waste. To document this, the devices are provided with the disposal label.

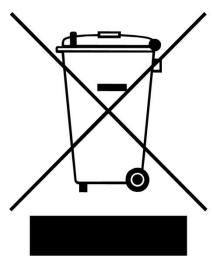


Fig. 29: Disposal label

Since the disposal regulations worldwide and also within the EU may differ from country to country, the supplier of the device should be consulted directly in case of need.

This labelling obligation is applied in Germany since March 23rd 2006. From this date on, the manufacturer must provide an adequate possibility of returning all devices delivered since August 13th 2005. For all devices delivered before August 13th 2005 the end user is responsible for the proper disposal.

Information on available accessories as well as the respective manuals are accessible directly on the Retsch GmbH homepage (https://www.retsch.com) under the heading "Downloads" of the device.

Information on wear parts and small accessories can be found in the Retsch GmbH general catalogue also available on the homepage.

In case of any questions concerning spare parts please contact the Retsch GmbH representative in your country, or Retsch GmbH directly.

11 Index

1 15A19	Explar Extern F
3	•
370W19	Feed s Finishi
Α	Freque
Adjusting the gap size29	Freque
All current sensitive14	Front
Ambient temperature	Fuse s
Amendment status6	Fuse t
Amperage16	G
Anti-interference circuit14	Con o
Assembly personnel10	Gap si Gener
В	Gener
Bar code17	
Batch divider module27	Н
C	Hand
	Hearin
Calibration38	Height
Capacity16	Hoppe
CE marking17	Housir
Cleaning	Humid
Closing the device	ı
Closing the machine26 Complaints	Inserti
Condensation12	Inserti
Confirmation form for the managing operator10	Installa
Connecting the dust extraction30	Installa
Continuous divider module27	Installa
Control buttons25	Installa
Control panel24, 30	cond
Copyright6	Installi
D	Intend
Degree of protection20	Interio
Depth20	L
Device designation	Long-t
Dimensions20	LpAeq
DIN 45635-31-01-KL320	LWA
Disclaimer6	М
Display25	Mains
Disposal39	Mains
label39	Mains
regulations39	Mainte
Disposal label17	Manua
Divider module24	Manuf
Divider modules19	Maxim
Dust extraction30	Motor
Dust extraction for dividing area24	N
Dust extraction for hopper23	
E	Noise Noise
Electrical connection14, 24	Noise
EMC Directive14	Notes
Emergency stop button24	140103
Emissions19	

Explanations of the safety instructions External fuse F	
Feed size Finishing the division process Frequency Frequency converter Front view	35 14 14 35 16
Gap size adjustment General catalogue General safety instructions	39
Hand wheelHearing lossHeightHopper	18 20 28 24
nserting the divider module	28 12 21 13
nstalling the device	18
L _ong-term operation _pAeq _WA	20
Mains connection Mains frequency Mains supply Maintenance Manual Manufacturer's address Maximum relative humidity Motor rotation speed	16 14 38 10 17 13
Noise levels Noise measurement Noise values Notes on the manual	20 20

0	Sound level meter
Opening the device26	Sound power level
Opening the device	Spare parts 39
Operating company10	Start menu
Operating elements and displays25	Starting the division process
Operating instructions10	Т
Operating the device25	Torget group 7
Operation15	Target group
Operators9	Temperature fluctuations
P	Temperature range
•	Temporary storage
Packaging12	Transport
Part number16	Transport damage
Personnel qualification and target group of this	Transport lock
manual10	Transportation lock
Power version16	Trip current
Preparing the division process27	Type plate
Protective equipment20	description
R	U
Range of application of the device19	
Rated power19	UKCA marking 17
Repair9, 38	V
Repair instructions9	Vibratory feeder24
Required floor space20	Vibratory feeder with splashback
Residual current device14	View of the control panel
Responsibility of the operating company9	Views of the device
Return12	Voltage
for service and maintenance38	W
Return device39	
Return form38	Warning7
S	Information 8
	Warranty claim 12
Safety7	Warranty claims9
Safety Officer7	Wear27
Segment24	Wear parts 39
Selection menu31, 32	Weight
Serial number	Width
Service address	Workplace-related emissions value
Settings	Υ
Shielded cable	Year of production17
Small accessories	rear or production17
Sound level18	



ROTATING SAMPLE DIVIDER

PT 300 | 41.005.xxxx

EU DECLARATION OF CONFORMITY

We, represented by the undersigned, hereby declare that the above device complies with the following directives and harmonised standards:

Machinery Directive 2006/42/EC

Applied standards, in particular:

DIN EN ISO 12100 Machine Safety - General Design Principles Electromagnetic compatibility 2014/30/EU (tested at 230 V, 50 Hz)

Applied standards, in particular:

EN 55011 Industrial, scientific and medical equipment - Radio-frequency disturbance

characteristics - Limits and methods of measurement

DIN EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC

requirements

Restriction of hazardous substances (RoHS) 2011/65/EU

Authorised person for compilation of the technical documentation:

Julia Kürten (Technical Documentation)

Furthermore, we declare that the relevant technical documentation for the above device has been prepared in accordance with Annex VII Part A of the Machinery Directive and we undertake to submit the documentation to the market surveillance authorities on request.

In the event of a modification of the device not agreed on by Retsch GmbH, as well as the use of nonapproved spare parts or accessories, this declaration loses its validity.

Retsch GmbH Haan, 09/2023

Dr. Stefan Mähler, Technical Manager

part of **VERDER**,



ROTATING SAMPLE DIVIDER

PT 600 | 41.006.xxxx

EU DECLARATION OF CONFORMITY

We, represented by the undersigned, hereby declare that the above device complies with the following directives and harmonised standards:

Machinery Directive 2006/42/EC

Applied standards, in particular:

DIN EN ISO 12100 Machine Safety - General Design Principles Electromagnetic compatibility 2014/30/EU (tested at 230 V, 50 Hz)

Applied standards, in particular:

EN 55011 Industrial, scientific and medical equipment - Radio-frequency disturbance

characteristics - Limits and methods of measurement

DIN EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC

requirements

Restriction of hazardous substances (RoHS) 2011/65/EU

Authorised person for compilation of the technical documentation:

Julia Kürten (Technical Documentation)

Furthermore, we declare that the relevant technical documentation for the above device has been prepared in accordance with Annex VII Part A of the Machinery Directive and we undertake to submit the documentation to the market surveillance authorities on request.

In the event of a modification of the device not agreed on by Retsch GmbH, as well as the use of nonapproved spare parts or accessories, this declaration loses its validity.

Retsch GmbH Haan, 09/2023

Dr. Stefan Mähler, Technical Manager

part of **VERDER**,





Copyright

© Copyright by Retsch GmbH Retsch-Allee 1-5 42781 Haan Germany