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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 http://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:

**DANGER**

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 **DANGER** is additionally used in the running text or in instructions.

**WARNING**

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.

**CAUTION**

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 **CAUTION** is additionally used in the running text or in instructions.
NOTICE

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
Risk of injury
Lack of knowledge of the manual
  – The manual contains all safety-related information. Disregarding the manual can therefore lead to injuries.
  • Read the manual carefully before operating the device.

CAUTION
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.
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 all safety instructions and warnings.

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**

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**

Damage to components
Transport

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

**NOTICE**

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**

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

- Installation height: max. 2 000 m above sea level
- Ambient temperature: 5 °C – 40 °C

**NOTICE**

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.**

- 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 $L_F = -(U_T - 55) / 0.3$:

<table>
<thead>
<tr>
<th>Ambient temperature</th>
<th>Max. rel. humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 31 °C</td>
<td>80 %</td>
</tr>
<tr>
<td>33 °C</td>
<td>73.3 %</td>
</tr>
<tr>
<td>35 °C</td>
<td>66.7 %</td>
</tr>
<tr>
<td>37 °C</td>
<td>60 %</td>
</tr>
<tr>
<td>39 °C</td>
<td>53.3 %</td>
</tr>
<tr>
<td>40 °C</td>
<td>50 %</td>
</tr>
</tbody>
</table>

**NOTICE**

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

**WARNING**
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**
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.**

**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.

**WARNING**
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 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
- The device can fall causing serious injuries when lifted above head height.
- 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**
Damage to components
Transport
- Mechanical or electronic components may be damaged during transport.
- The device must not be knocked, shaken or thrown 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

![Type plate diagram]

Fig. 2: Type plate

1 Device designation
2 Year of manufacture
3 Article number
4 Serial number
5 Manufacturer’s address
6 CE mark
7 Disposal sign
8 Barcode
9 Voltage
10 Supply frequency
11 Output
12 Current
13 Number of fuses
14 Fuse design and fuse rating
4 Technical data

4.1 Intended use of the device

**CAUTION**

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**

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
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 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

⚠️ CAUTION
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 $L_{pAeq} = \text{up to 75 dB(A)}$
Sound power level $L_{WA} = 98\text{dB(A)}$

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

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>Up to approx. 1810 mm</td>
</tr>
<tr>
<td>Width (open)</td>
<td>2200 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>Up to approx. 1400 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>Net approx. 220 kg</td>
</tr>
</tbody>
</table>

4.10 Required Floor Space

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>Up to approx. 1810 mm</td>
</tr>
<tr>
<td>Width (open)</td>
<td>2200 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>Up to approx. 1400 mm</td>
</tr>
</tbody>
</table>
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
### Views of the device

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Dust extraction for hopper</td>
<td>For connecting a dust extraction mechanism using a special adapter.</td>
</tr>
<tr>
<td>B</td>
<td>Hopper</td>
<td>For filling the material.</td>
</tr>
<tr>
<td>C</td>
<td>Knurled screw for gap size adjustment</td>
<td>For regulating the material flow.</td>
</tr>
<tr>
<td>D</td>
<td>Emergency stop button</td>
<td>To shut the machine down immediately in an emergency.</td>
</tr>
<tr>
<td>E</td>
<td>Control panel</td>
<td>To control the machine.</td>
</tr>
<tr>
<td>F</td>
<td>Hand wheel</td>
<td>Locks the housing door.</td>
</tr>
<tr>
<td>G</td>
<td>Housing door</td>
<td>Closes the dividing area.</td>
</tr>
<tr>
<td>H</td>
<td>Electrical connection</td>
<td>For connecting the machine to the power supply.</td>
</tr>
</tbody>
</table>

#### 5.2 Interior view

![Interior view of the device](image)

**Fig. 8:** Interior view

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Dust extraction for dividing area</td>
<td>To connect a dust extraction mechanism using a special adapter.</td>
</tr>
<tr>
<td>J</td>
<td>Vibratory feeder</td>
<td>Conveys the material into the dividing area.</td>
</tr>
<tr>
<td>K</td>
<td>Divider module</td>
<td>For the continuous or batch division of materials.</td>
</tr>
<tr>
<td>L</td>
<td>Segment</td>
<td>Collects the divided material.</td>
</tr>
</tbody>
</table>
5.3 Operating elements and displays

![View of the control panel](image)

**Fig. 9: View of the control panel**

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Control buttons</td>
<td>For selecting the settings for the division process.</td>
</tr>
<tr>
<td>N</td>
<td>Display</td>
<td>Displays the control functions and parameters.</td>
</tr>
</tbody>
</table>
6 Operating the device

![Image of the device]

**CAUTION**

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](image)

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

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
Operating the device

Fig. 13: Batch divider module with four segments

Fig. 14: 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.
- Place the cover (O) over the segments (L).
6.3.2 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).

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.
6.3.3 Adjusting the gap size

- Using the knurled screw (C), adjust the gap size according to the feed size of the material.

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

- Connect a dust extraction mechanism to the hopper (A) or the dividing area (I) if the properties of the material so require.

⚠️ 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.

![Start menu – machine is not ready for use](image)

**Fig. 20:** Start menu – machine is not ready for use

![Start menu – machine is ready for use](image)

**Fig. 21:** Start menu – machine is ready for use

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F1:</strong> Start</td>
<td>Starts the division process.</td>
<td></td>
</tr>
<tr>
<td><strong>F2:</strong> Stop</td>
<td>Stops the division process.</td>
<td></td>
</tr>
<tr>
<td><strong>F3:</strong> Lock</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>F4:</strong> Set</td>
<td>Opens the settings.</td>
<td></td>
</tr>
</tbody>
</table>
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:

![Settings selection menu 1/3](image)

**Fig. 22: Settings selection menu 1/3**

<table>
<thead>
<tr>
<th>Function (F1)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1: +1</td>
<td>Extends the duration of the division process.</td>
</tr>
<tr>
<td>F2: -1</td>
<td>Shortens the duration of the division process.</td>
</tr>
<tr>
<td>F3: m/s</td>
<td>Switches between the minutes/seconds setting.</td>
</tr>
<tr>
<td>F4: Next</td>
<td>Opens the next page of the menu.</td>
</tr>
</tbody>
</table>
After pressing F4 the following setting appears on the display:

![Fig. 23: Settings selection menu 2/3](image)

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

<table>
<thead>
<tr>
<th>Speed (number of revolutions of the divider module)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F1: +1</td>
<td>Increases the speed.</td>
</tr>
<tr>
<td>F2: -1</td>
<td>Reduces the speed.</td>
</tr>
<tr>
<td>F3:</td>
<td><em>No function in this selection menu.</em></td>
</tr>
<tr>
<td>F4: <strong>Next</strong></td>
<td>Opens the next page of the menu.</td>
</tr>
</tbody>
</table>

Pressing F4 displays the following setting:
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)

<table>
<thead>
<tr>
<th>F1:</th>
<th>+1</th>
<th>Increases the vibration intensity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2:</td>
<td>-1</td>
<td>Reduces the vibration intensity.</td>
</tr>
<tr>
<td>F3:</td>
<td></td>
<td>No function in this selection menu.</td>
</tr>
<tr>
<td>F4:</td>
<td>OK</td>
<td>To the start menu</td>
</tr>
</tbody>
</table>

After confirming, you go back to the start menu.

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.

![Display after starting the division process](image)

**Fig. 26**: Display after starting the division process

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

Confirm the safety query by pressing F4 if the hopper has not been closed. 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.
The display shows information about the current division process:

<table>
<thead>
<tr>
<th>Speed</th>
<th>Speed (in rpm)</th>
<th>Provides information about the set speed of the divider module.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeder</td>
<td>Vibration intensity (in %)</td>
<td>Provides information about the set vibration intensity of the vibratory feeder.</td>
</tr>
<tr>
<td>Time</td>
<td>Time (in minutes and seconds)</td>
<td>Provides information about the time left until the division process has been completed.</td>
</tr>
</tbody>
</table>

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

- 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).

⚠️ The collecting receptacle beneath the dividing area has been filled when using the continuous divider module.
7 Cleaning

**WARNING**

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

**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 arrhythmia, or in respiratory failure and cardiac arrest.

- After disconnecting the mains lead, wait 3 minutes before opening the machine.

**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. 30: 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.

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 (http://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.
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ROTATING SAMPLE DIVIDER
PT 300 | 41.005.xxxx
PT 600 | 41.006.xxxx

EU DECLARATION OF CONFORMITY
Herewith we declare, represented by the signatory, that the above mentioned device complies with the following directives and harmonized standards:

Machinery Directive 2006/42/EC
Applied standards, in particular:
DIN EN ISO 12100 Safety of machinery

EMC Directive 2014/30/EU
Applied standards, in particular:
DIN EN 55011 Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement

Low Voltage Directive 2014/35/EU
Applied standards, in particular:
DIN EN 61010-1 Safety requirements for electrical equipment for measurement, control and laboratory use

Authorized person for the compilation of technical documents:
Stefan Drechsler (technical documentation)

Furthermore, we declare that the relevant technical documentation for the above mentioned device has been compiled according to Annex VII Part A of the Machinery Directive, and we undertake to submit this documentation on request to the market surveillance authorities.

In case of a modification of the device not previously agreed with Retsch GmbH, as well as the use of unauthorised spare parts or accessories, this declaration will lose its validity.

Retsch GmbH

Dr. Alexander Mühlig, Technical Director

Haan, 08/2019

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