Artikelnummer Betriebsanleitung: **1745 9201**
Article number operating instructions:

PFEUFFER

Operating instructions

Riffle type sample divider

3 litre – container type 1 *5 litre – container type 2* *10 litre – container type 3*

Pfeuffer GmbH
Flugplatzstraße 70
97318 Kitzingen
GERMANY

Phone: +49 9321 9369-0
Fax: +49 9321 9369-50

info@pfeuffer.com
www.pfeuffer.com

Revision 3/11.11.2020
Translation of the original operating instrucions

These operating instructions form part of the riffle type divider and must be available to the operating personnel at all times. They are intended for the owner of the system, the operating personnel and the specialists who are responsible for transport, installation, setup, commissioning, maintenance, cleaning, dismantling and disposal.

The Pfeuffer GmbH has prepared and reviewed these Operating Instructions with the greatest care. However, no guarantee is made for its completeness or accuracy.

Subject to technical modifications.

Table of contents

Translation

In the event of delivery of subsequent sale to the countries of the European Economic Area (EEA), the operating instructions must be translated into the corresponding language of the country of use.
In the event of discrepancies in the translated text, the original operating instructions (German) must be used for clarification, or the manufacturer must be contacted.

Operating instructions in electronic format

The original operating instructions (German) and translations of the original operating instructions can be requested as PDF files by e-mail: doku@pfeuffer.com
Specifying the correct type designation and serial number is important for further processing!

1 Introduction

Designated use

The riffle type divider is used to divide samples of grain-type crops, agricultural seeds, granules, flours and powders into representative subsamples.

Riffle type dividers have an even number of riffle chambers that alternately exit into two different collection containers. The sample is divided 1:1 in each pass. Riffle type dividers vary by the number of gaps and the spacing of the gaps. As a rule, they are suitable for smaller samples with a volume of up to 18 liters.

The riffle type divider is portable.

Private use of the riffle type divider is not allowed.

NOTICE	The riffle type divider has been exclusively designed for the aforementioned purpose. Any other use beyond this definition or conversion of the system without written consultation with the manufacturer is regarded as not in accordance with the designated use. The manufacturer will not be liable for any damage resulting from this. The risk is the responsibility of the owner alone. The riffle type divider is only allowed to be taken into operation if it can be ensured that all safety devices are functioning. **Filling liquid and sticky products is prohibited!** **The riffle type divider is not suitable for dividing abrasive materials such as sand or soil samples!** The products to be used in accordance with the designated use of the riffle type divider are obtained by the owner of the riffle type divider. Correct treatment of these materials and the associated risks are exclusively the responsibility of the owner. The owner must provide information about dangers and disposal.

The designated use also includes complying with the operating instructions as well as the maintenance and servicing conditions as defined in these operating instructions.

Structural features of the danger notes

The operating instructions from Pfeuffer GmbH contain instructions that you must comply with for your personal safety as well as to avoid damage to property.
The instructions for your personal safety are highlighted by a warning triangle.

Comply with the following categories of danger notes and explanations of symbols:

Pictogram	SIGNAL WORD
	Type of danger and its source. Possible consequence of failure to comply. ⇨ Measure to guard against the danger.

	DANGER
	This is a warning about a highly dangerous situation that will lead to serious or fatal injuries.

	WARNING
	This is a warning about a dangerous situation that may result in serious or fatal injuries.

	CAUTION
	This is a warning of a possibly dangerous situation that will lead to slight or moderate injuries.

NOTICE	This is a warning about harmful situations for the product and/or environment.

Pictograms in the operating instructions

	Notes of particular importance and/or additional information		Warning

2 Safety

NOTICE	Inappropriate operation will invalidate the warranty.

Obligations on the owner

In the European Economic Area (EEA), national implementation of the framework directive 89/391/EEC and corresponding individual directives, in particular the directive 2009/104/EC concerning the minimum health and safety requirements for the use of work equipment by workers at work, as amended, are to be observed and adhered to.

In addition, he/she must comply with the local legal requirements on:

- Safety of personnel (accident prevention regulations)
- Safety of work equipment (protective equipment and maintenance)
- Product disposal (waste legislation)
- Material disposal (waste legislation)
- Cleaning (cleaning agents and disposal)
- Hazardous substances (in Germany TRGS 555 apply)
- Environmental protection regulations.

General safety notes

The safety equipment and safety notes described in these operating instructions must be complied with.

⇨ Do not allow the riffle type divider to get wet during transport, storage, cleaning and operation.

⇨ Make sure that the riffle type divider is only operated when in correct working order.

⇨ Only use genuine spare parts and accessories.

3 Technical data

Selection of gap width

The maximum grain size should be 1/3 to 2/3 of the gap width of the dividing head.

Examples:

Gap width:	Grain size:
29.0 mm	10-19 mm
28.2 mm	9-19 mm
19.2 mm	6-13 mm
19.1 mm	6-13 mm

Gap width:	Grain size:
15.2 mm	5-10 mm
14.5 mm	5-10 mm
10.3 mm	3-7 mm
9.8 mm	3-6 mm

Container types

Container type 1 is supplied with 2 identical collection containers; it has a closed attached container and is optimal for halving the initial sample quantity.

Container type 2 is supplied with 3 identical collection containers. It has an attached container with an opening for insertion and for quick repositioning of the collection container. In addition, it has a flap which opens just before the highest point and reduces dust.
The closed design is therefore particularly suitable for multistage dividing of dusty samples, flours, granulates and powders.

Container type 3 is supplied with 3 identical collection containers. It has an additional flap for alternative use with or without collection container.

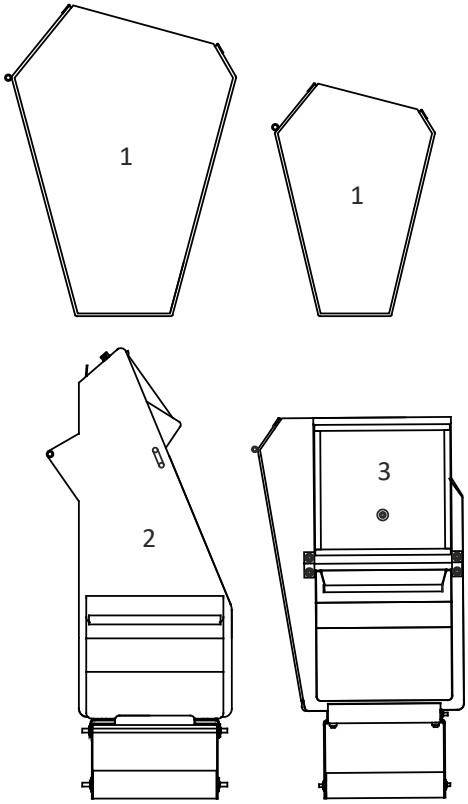
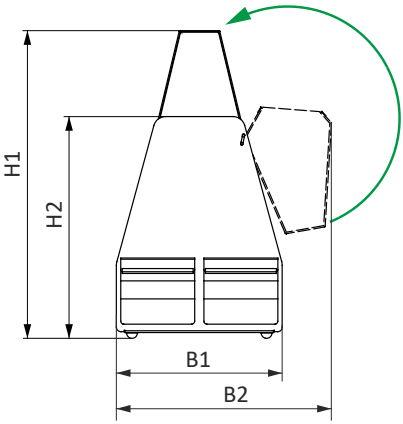


Figure 1: Container types

Dimensions

Model 3 or 5 liter



Model 10 or 18 liter

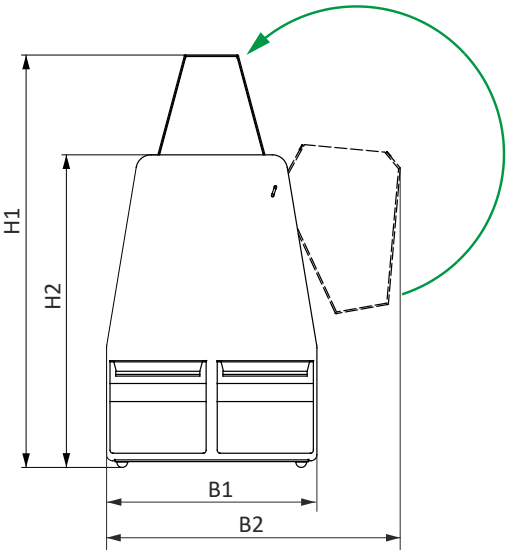


Figure 2: Dimensions height and width

Article no.	max. sample size	Container type	No. of gaps	B1 mm	B2 mm	D mm	H1 mm	H2 mm
1745 0020	3 liter	1	10	280	360	200	510	370
1745 0021	3 liter	1	18	280	360	200	510	370
1745 0022	5 liter	1	18	280	360	360	510	370
1745 0023	3,5 liter	2	18	280	420	360	650	370
1745 0019	5 liter	1	34	280	360	360	510	370
1745 0024	3,5 liter	2	34	280	420	360	650	370
1745 0025	10 liter	1	10	350	490	290	685	520
1745 0018	10 liter	3	10	350	540	290	880	520
1745 0026	10 liter	1	18	350	490	290	685	520
1745 0027	10 liter	3	18	350	540	290	880	520
1745 0028	18 liter	3	18	350	540	525	880	520
1745 0029	18 liter	3	34	350	540	525	880	520

Dimensions rounded

Dimensions

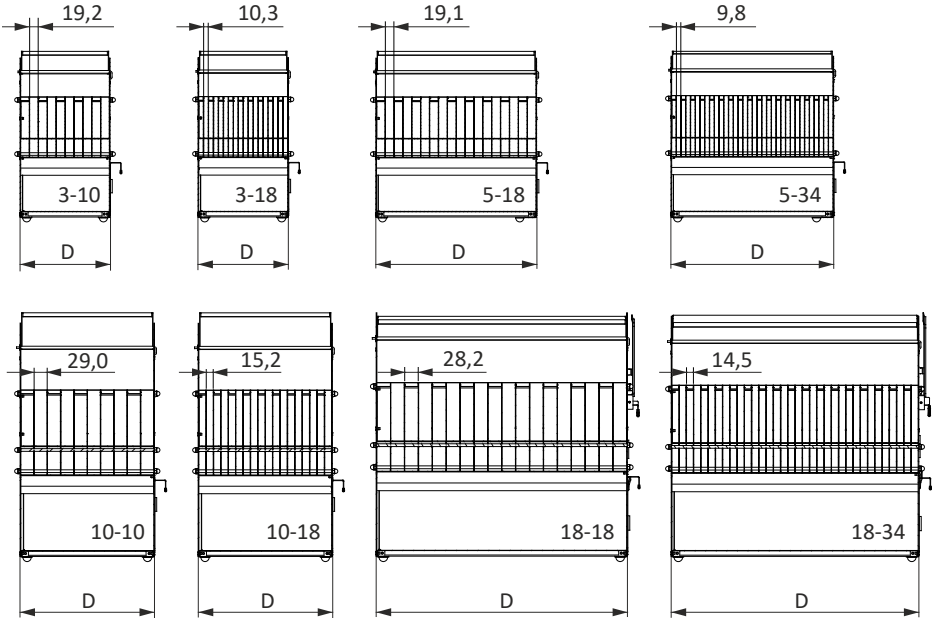


Figure 3: Dimensions length and number of gaps, gap width

Article no.	max. sample size	Container type	No. of gaps	Gap width mm	Weight kg
1745 0020	3 liter	1	10	19.2	8.0
1745 0021	3 liter	1	18	10.3	8.5
1745 0022	5 liter	1	18	19.1	13.0
1745 0023	3,5 liter	2	18	19.1	13.0
1745 0019	5 liter	1	34	9.8	13.5
1745 0024	3,5 liter	2	34	9.8	13.5
1745 0025	10 liter	1	10	29.0	15.0
1745 0018	10 liter	3	10	29.0	15.0
1745 0026	10 liter	1	18	15.2	15.5
1745 0027	10 liter	3	18	15.2	15.5
1745 0028	18 liter	3	18	28.2	23.6
1745 0029	18 liter	3	34	14.5	24.0

4 Delivery, transport and storage

Scope of delivery

The standard scope of delivery to the owner comprises:

1. Riffle type divider with feed container
2. Collection container (number depends on the model)
3. Operating instructions

Transport and packaging

Systems, machines and devices from Pfeuffer GmbH are carefully tested and packaged prior to dispatch, however it is not possible to exclude the risk of damage during transport.

Incoming check

⇨ Check for completeness with reference to the delivery note.

In case of damage

⇨ Check the delivery for damage (visual inspection).

In case of complaints

If the delivery suffered damage in transit:

⇨ Keep the packaging (to allow it to be checked subsequently by the forwarding company, or for sending back).

⇨ Immediately inform the supplier or Pfeuffer GmbH.

Intermediate storage

The freight packaging of the riffle type divider and the accessory/replacement parts is configured for a storage duration of up to six months from delivery.

⇨ Do not place any heavy objects on the packaging.

Storage conditions

Enclosed and dry room.

⇨ Keep the original packaging.

Packaging for return delivery

⇨ If possible, use the original packaging and the original packaging material. If neither is available any longer, request new packaging from Pfeuffer GmbH.

5 Operation

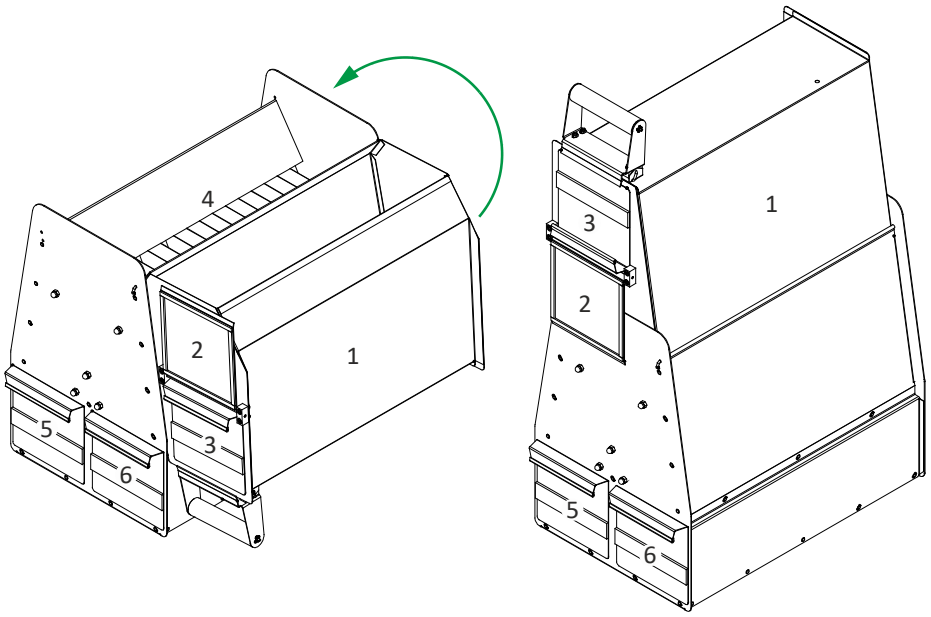


Figure 4: Riffle type divider 18 liter, 18 gap with container type 3

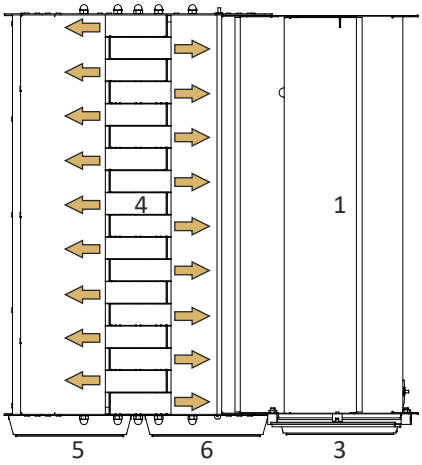


Figure 5: Riffle type divider top view – sample distribution, dividing head with 18 gaps

Item	Designation
1	Feed container (here type 3)
2	Flap for 3rd collection container
3, 5, 6	Collection container
4	Dividing head with gaps (riffle)

⇨ Open the feed container.

⇨ Fill the initial sample into the feed container. Ensure that the sample material is evenly distributed in the feed container.

⇨ Turn the feed container down with one swift movement.

(If sample material is lost due to the swing, a stop bar is available, see **chapter 7** for article number.)

The initial sample is poured into the dividing head and distributed evenly through the riffles (gaps) in a ratio of 1:1 into the two collection containers.

⇨ If the sample quantity in the collection containers is still too large, repeat the dividing process until the desired test quantity (sub sample) has been reached.

Make sure that the opposite collection container does not overflow.

1st divison: 50.0 % **:** 50.0 %
2nd division: 75.0 % **:** 25.0 %
3rd division: 87.5 % **:** 12.5 %

⇨ Clean and check the riffle type divider after each sample change for adhering residues, see **chapter 6.**

CAUTION

Dust warning

Due to the nature of the samples, visible cereal dust will be released into the surroundings during sample division.

⇨ Check whether inhaling large quantities might lead to irritation or illnesses of the respiratory passages, and if so then take appropriate measures.

6 Cleaning and maintenance

NOTICE	Inappropriate operation will invalidate the warranty.

Cleaning

NOTICE	Do not use any sharp objects or tools for cleaning. Only use objects that are expressly intended for this purpose. During cleaning work, wear personal protective equipment according to the company health and safety regulations.

⚠ CAUTION

Dust warning

Due to the nature of the samples, visible cereal dust will be released into the surroundings during cleaning.

⇨ Check whether inhaling large quantities might lead to irritation or illnesses of the respiratory passages, and if so then take appropriate measures.

Cleaning and maintenance intervals:
aesd = after each sample division
od = on demand

Cleaning	Rectification	Interval
Sample divider, complete	With an industrial vacuum cleaner	**aesd**
All containers	After vacuuming with a clean, dry and lint-free cloth. Clean with a damp cloth in case of heavy contamination.	**aesd**
Surface	With a clean, dry and lint-free cloth. Clean with a damp cloth in case of heavy contamination.	**od**

NOTICE	Be careful not to leave any residue in the riffles (gaps), collection containers, or feed container that can contaminate the next sample. Do not clean with compressed air as flying sample components may contaminate other samples.

Pfeuffer GmbH recommends that the riffle type divider should be given a complete clean before a lengthy period without use (e.g. at the end of the harvest) so as to ensure the machine will continue to remain ready to use.

Maintenance

The riffle type divider is maintenance-free.

7 Spare parts and accessories

NOTICE	We draw your attention to the fact that we will not check or release any spare parts and accessory parts which we have not supplied. In some circumstances, the installation and/or use of such products could therefore have a negative impact on the specified structural properties of the riffle type divider. Pfeuffer GmbH shall not be held liable or any damages resulting from the use of non-original parts and non-original spare parts. Standard parts can be purchased from specialist shops.

For the riffle type divider 3 and 5 liters there is a stop bar available to raise the wall opposite the feed container. The stop bar prevents the sample material from jumping over when it is filled into the dividing head.
The stop bar can be fastened with a blind rivet or with an axle and clamping disc (like the feed container).

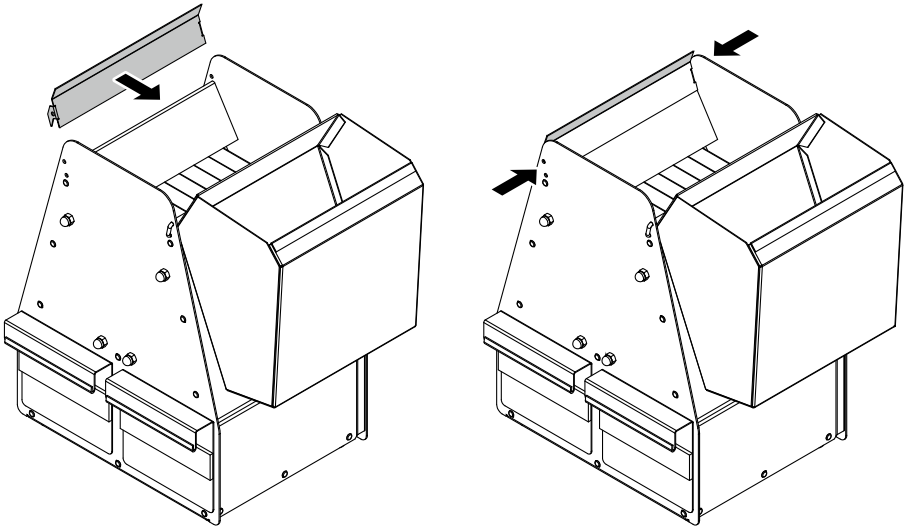


Figure 6: Installation stop bar

Product	Article no.
Stop bar 3 liter	3341 0340
Stop bar 5 liter	3341 0540

8 Disposal

The riffle type divider must be disposed of in accordance with the statutory local environmental regulations