



Mixing & Cleaning

GEBR. RUBERG

MASCHINENFABRIK

ORIGINAL – SINCE 1848

RUBERG

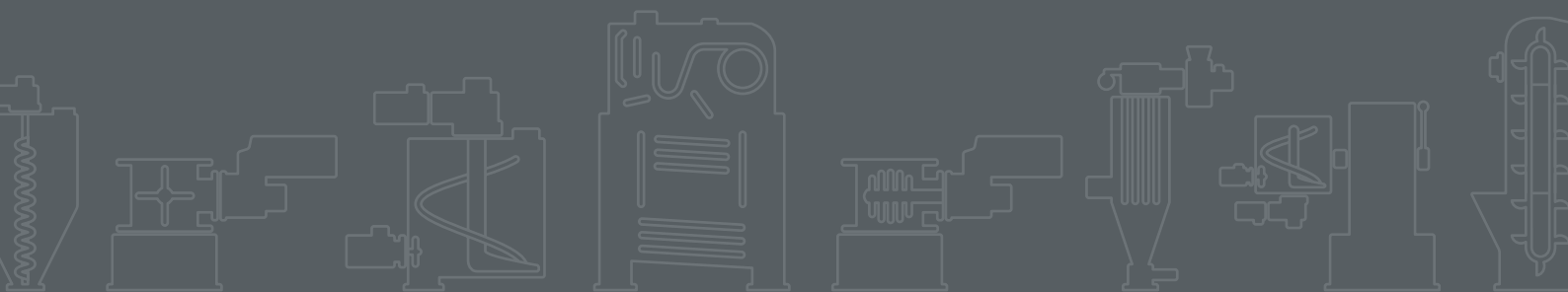
Aspirator, Separator &
Universal Precleaner

- Aspirator | RV & RVS series
- Separator | RS series
- Universal precleaner | RUV series

Technical data sheet and product overview

Areas of application:

- ▶ Food
- ▶ Animal feed



RESEARCH | DEVELOPMENT | DESIGN | ENGINEERING | SERVICE

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ASPIRATOR & SEPAR





ATOR & PRECLEANER



Aspirator | RV & RVS series



RVS RV RUBERG

Pure and clean
for grain, rapeseed
and legumes

RUBERG aspirators are ideally suited for use in silos, warehouses, mills, malt houses, breweries and seed processing plants. Take advantage of our expertise and state-of-the-art technology in the field of preliminary and main cleaning of grain, oilseeds, legumes, malt, coffee, etc. We have a wide

range of different performance classes as well as accessories and services for you. Of course, we also create or optimize the interface to your plant equipment and other peripherals.

Series

► RV 40 - RV 60

Standard version, cleaning throughput: 40 - 60 t/h
2 coarse grain screens, 4 grain screens, 3 screen fractions

► RVS 40 - RVS 60

High performance version, cleaning throughput: 40 - 60 t/h
1 large coarse grain screen, 4 grain screens, 2 sand screens, 3 changeover flaps, 4 screen fractions

► RVS 65 - RVS 100

High performance version, cleaning throughput: 65 - 100 t/h
2 large coarse grain screens, 4 to 5 sand screens, to 5 grain screens, 3 changeover flaps, 4 screen fractions

► RVS 90 - RVS 300

High performance version, cleaning throughput: 90 - 300 t/h
to 8 large coarse grain screens, 6 to 20 sand screens, to 20 grain screens, 3 changeover flaps, 4 screen fractions

► RVS 90 MULTI - RVS 300 MULTI

High performance version, cleaning throughput: 90 - 300 t/h
no screen change for 4 crops, 4 to 8 large coarse grain screens, 6 to 20 sand screens, 6 to 20 grain screens, 5 changeover flaps, 4 screen fractions

There are 11 scales of throughput available, from 40 t/h to 300 t/h.

Risers and separators can be used in recirculation or exhaust mode.

Thanks to a wide range of designs and options, RUBERG aspirators can be excellently integrated into existing and new plants.

Equipped with proven screen combinations, grain, rape-seed, legumes, oilseeds, seeds, nuts, coffee, millet, rice, spices and other products can be reliably cleaned.

In sorting operations, for example malting barley, malt, or seeds, clear fractions are achieved at high throughputs thanks to particularly large screening areas.



Aspirator | RV & RVS series

Mode of operation

The product to be cleaned enters the large pre-distributor of the air section through one or more inlet pipes. The polygon effect of the feed roller, together with the feed flap, directs a predefined product flow across the entire machine width. The product falls freely over a sheet metal cascade by an ascending air stream. Air volume and air speed are adjusted manually or automatically so that light particles such as dust, husks, straw particles, shrivelled grains, etc. are carried upwards by the air flow. In the integrated expansion chamber, the particles fall out again at lower air velocity and are discharged laterally by a screw conveyor.

► Recirculation mode

The air is accelerated by internal fans and fed back to the vertical air sifter in a circuit (see detailed explanation on page 8).

► Exhaust air mode

The particles are fed with all the air into external filters and separated there. From the vertical air sifter, the crop now falls onto the screen decks, and are guided in full machine width over e.g. coarse, grain and sand screens. Product feed on the slightly inclined screens is achieved by the circular oscillating motion of the entire screen deck. Product distributors and baffles ensure optimum utilization of the available screening area. Up to 4 fractions can be separated in one operation.



RV

► RVS series

Consistently high quality cleaning performance is achieved by the RVS series with optional changeover flaps. With crop rotation, such as rapeseed and barley, there is no need for screen changes. No reduction in throughput due to the option of manual or automatic switch setting.

► Affix MULTI

The affix "MULTI" indicates that there are additional changeover flaps between the vertical air sifter and the screening unit (machine top or bottom section). The product stream is divided here a second time and fed to the upper or lower screen stack of the screen deck. By inserting different screens, it is possible to clean different types of crop without changing the screen.



& RVS

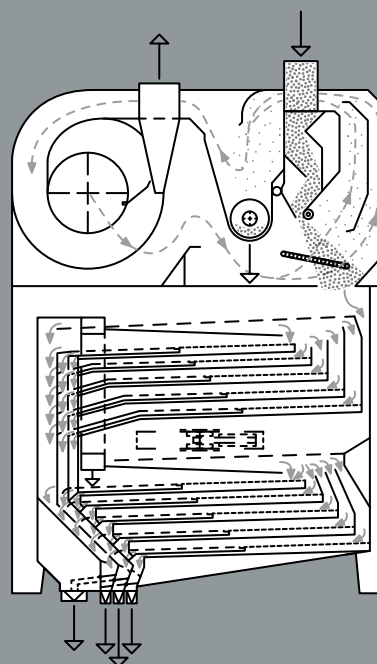
Aspirator | Design variants

RUBERG aspirator ► Recirculation mode

This mode of operation represents the most common application in grain cleaning.

The product to be cleaned enters the large pre-distributor of the air section through one or more inlet pipes. The polygon effect of the feed roller, together with the dosing flap, directs a predefined product flow over the entire machine width. The product falls freely over a sheet cascade by an ascending air stream. Air volume and air speed are adjusted manually or automatically so that light particles such as dust, husks, straw particles, shrivelled grains, etc. are carried upwards by the air flow. In the integrated expansion chamber, the particles fall out again at lower air velocity and are discharged laterally by a screw conveyor.

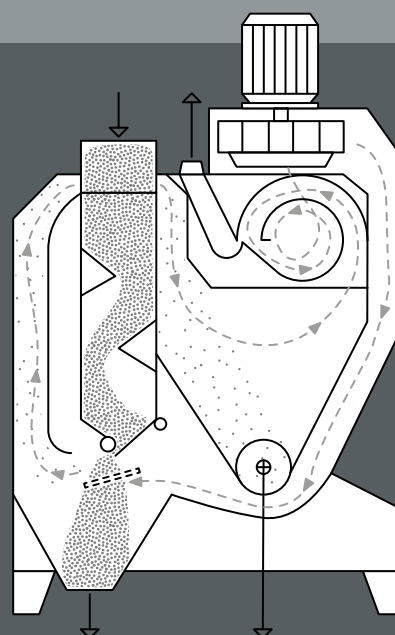
In recirculation mode, the air is accelerated by internal fans and fed back to the vertical air sifter in a circuit.



RUBERG ► Air aspirator

In this type of construction, only air cleaning operations are carried out.

Inlets and inlet distributors feed the product to be cleaned into the pre-distributor. The polygon effect of the feed roller together with the feed flap guides a product curtain over the sheet cascades. The product curtain is flowed through by rising air. Dust and light particles are picked up and carried through baffles to the expansion chamber. There, the air velocity is reduced, coarse particles fall out and are transported out of the machine laterally by a screw conveyor. In the further course, the air enters the blower separator. There, dust and fine particles are led to the outside and separated with low exhaust air into an external nozzle filter. The remaining air is re-accelerated in the blower room by "inline" fans and thus circulated.



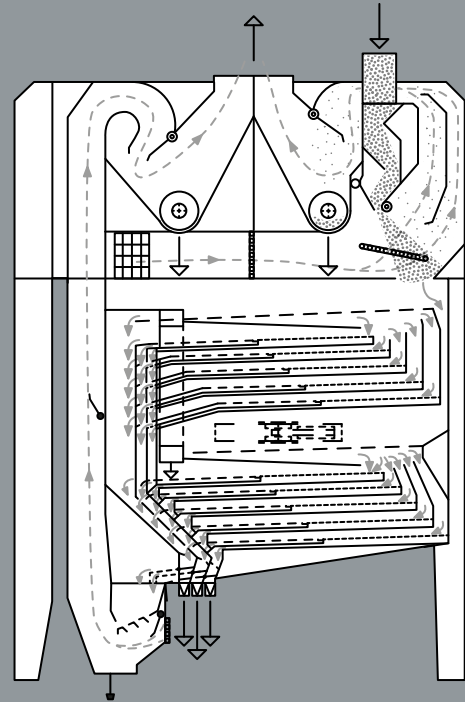
RUBERG air aspirators are available air circulated or exhaust air driven and with a wide range of accessories.

RUBERG aspirator ► Exhaust air mode

Increasing environmental influences cause in some areas higher levels of mycotoxins (residues of toxic metabolites), as they can occur especially in humid and warm weather during the flowering period of rye and wheat.

To avoid re-contamination when cleaning such types of crop, exhaust air operation is a reliable application. These machines are essentially characterized by the airflow in the vertical air sifter. Thus, 100% fresh air is supplied and the exhaust air loaded with dust and particles is absorbed by an external nozzle filter.

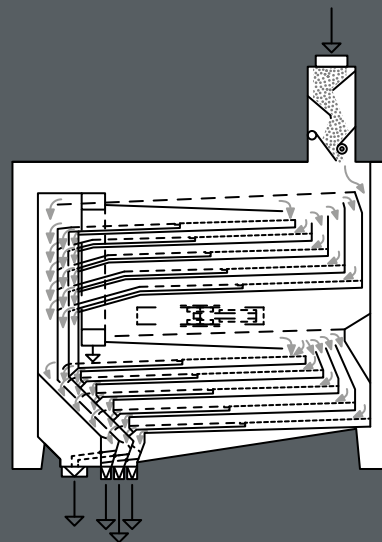
All RUBERG aspirators and outlet aspirators are available for exhaust air operation.



RUBERG ► Screening unit

This version is particularly suitable for already pre-cleaned products or those with a low dust content or light particles. The RUBERG screening unit particularly impresses here with its qualitatively and quantitatively high screening performance.

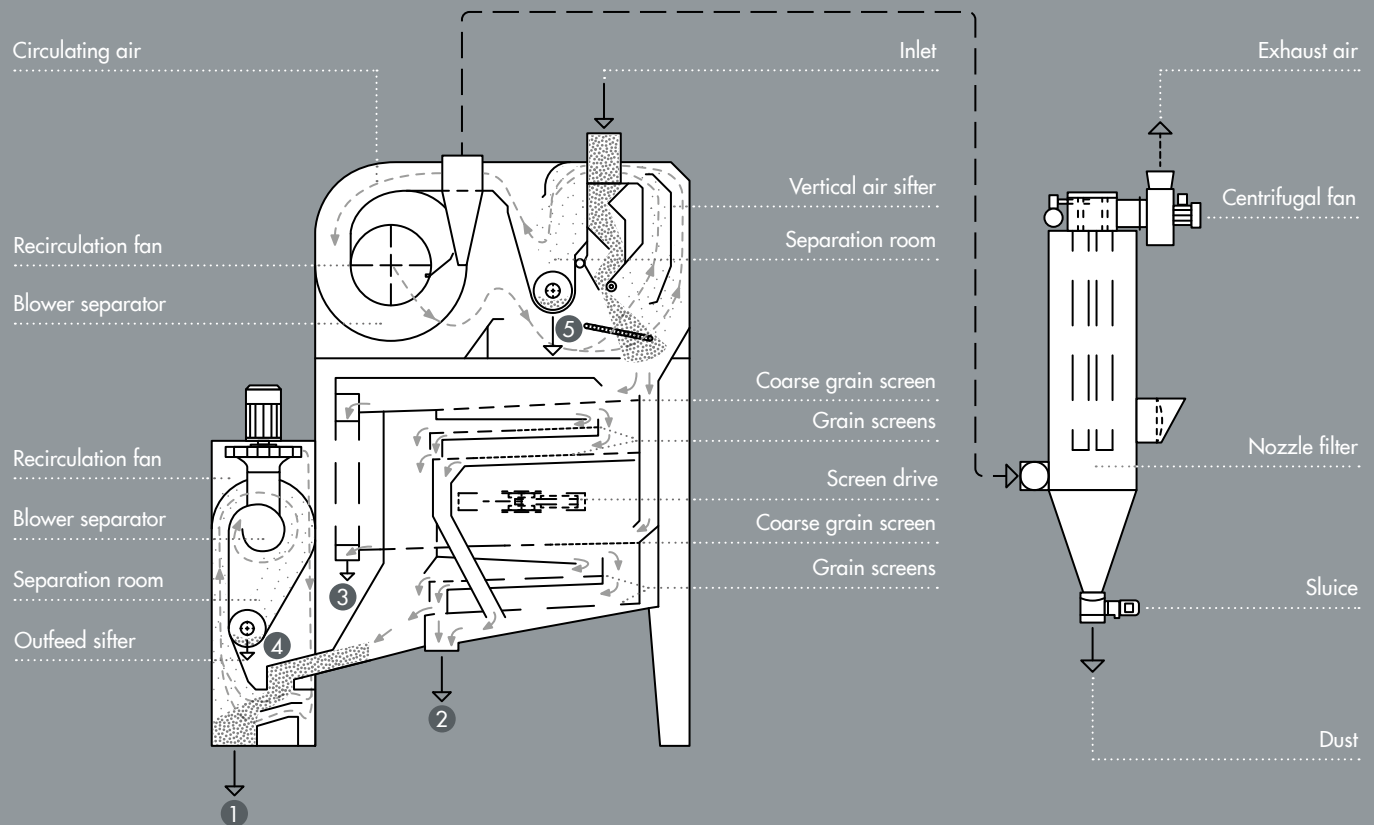
A frame contains a circularly oscillating screen suspended from flexible rods. On it there is a resonating inlet distributor, which guides the product onto the screen deck. It is passed through the full width of the machine, for example over coarse grain screens, grain screens and sand screens. The feed of the slightly inclined sand screens is achieved by the circular oscillating movement of the entire screen stack. Product distributors and baffles ensure optimum utilization of the available screening area. In this screening system, up to four fractions can thus be sorted in a single operation.



RUBERG screening units are available in power classes from 20 t/h - 300 t/h as well as with a wide range of accessories.

Aspirator | RV 40 - RV 60 series

Work and flow diagram



Aspirator performance data (recirculation mode)

Type	Output in t/h						Motor outputs in kW without outlet aspiration				
	Rye, wheat $y = 0.75$ max. 18 %	Winter barley $y = 0.65$ max. 18 %	Brewing barley $y = 0.65$ max. 18 %	Rape-seed $y = 0.60$ max. 14 %	Peas, beans $y = 0.70$ max. 18 %	Corn $y = 0.75$ max. 18 %	Recirculation fan kW	Screen box drive kW	Discharge screw and feed roller kW	Exhaust air fan kW	Sluice kW
RV 40	40	35	35	25	30	30	5.5	1.5	0.55	2.2	0.55
RV 60	60	52	52	30	50	50	7.5	1.5	0.55	2.2	0.55

- ❶ 1. Good grain variety
- ❷ 2. Small grain variety
- ❸ Coarse grain
- ❹ Light waste
- ❺ Light small grain

RV 40 - RV 60

A powerful grain cleaner, compact and sophisticated in its design for throughputs up to 60 t/h. It is equipped with 2 coarse grain screens and 4 grain screens. Light particles

and dust are separated in the upper part (the vertical air sifter). This is followed by fractionation into coarse grain, good grain and small grain in the screening unit.

External dimensions

Screens

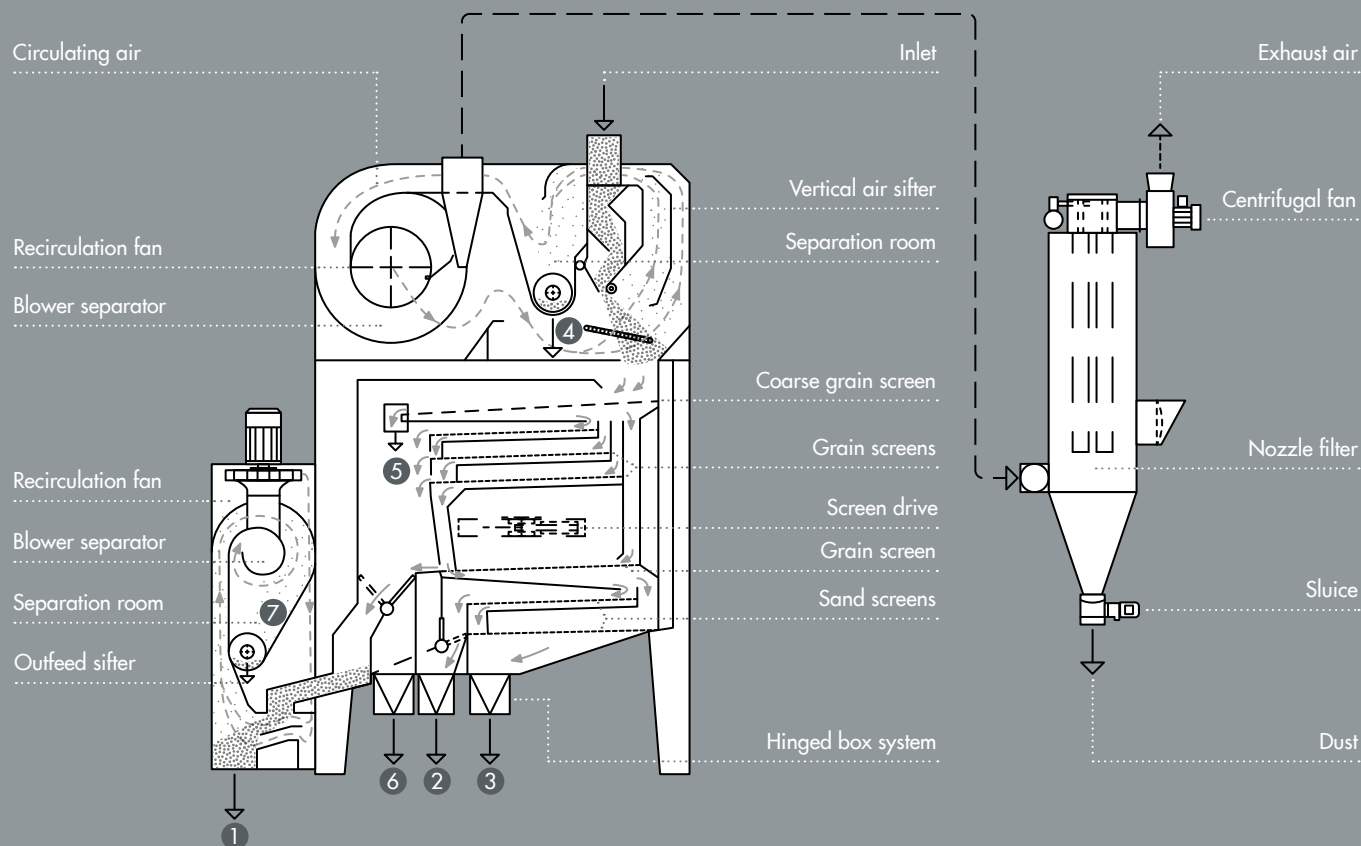
Type	Outer dimension of the machine without outlet aspiration			Number of screens			Screening area in m²			
	Length in mm	Width in mm	Height in mm	Coarse grain screens	Grain screens	Sand screens	Coarse grain screens	Grain screens	Sand screens	Total screen area
RV 40	1900	1840	2550	2	4	-	3.00	6.00	-	9.00
RV 60	1900	1840	2550	2	4	-	3.00	6.00	-	9.00

RVS 40 - RV 60

Strong and robust performance for continuous operation up to 60 t/h.
Sophisticated technology is the result of generations of experience.

Aspirator | RVS 40 - RVS 60 series

Work and flow diagram



Aspirator performance data (recirculation mode)

Type	Output in t/h						Motor outputs in kW without outlet aspiration				
	Rye, wheat $y = 0.75$ max. 18 %	Winter barley $y = 0.65$ max. 18 %	Brewing barley $y = 0.65$ max. 18 %	Rape-seed $y = 0.60$ max. 14 %	Peas, beans $y = 0.70$ max. 18 %	Corn $y = 0.75$ max. 18 %	Recirculation fan kW	Screen box drive kW	Discharge screw and feed roller kW	Exhaust air fan kW	Sluice kW
RVS 40	40	35	35	40	30	30	5.5	1.5	0.55	2.2	0.55
RVS 60	60	52	52	50	50	50	7.5	1.5	0.55	2.2	0.55

- 1 1. Good grain variety
- 2 2. Small grain variety
- 3 3. Sand, small grain variety
- 4 4. Light waste
- 5 5. Coarse grain
- 6 6. Coarse rapeseed
- 7 7. Light small grain

RVS 40 - RVS 60

A high-performance grain cleaner, compact in its design and sophisticated for throughputs up to 60 t/h. It is equipped with 1 extra large coarse grain screen, 4 grain screens and 2 sand screens. All cereal crops as well as rapeseed, corn, peas, beans, etc. can be cleaned here. Light particles and dust are separated in the upper part (the vertical air sifter). In the screening unit, fractionation

into coarse grain, good grain, small grain, and very small grain follows. Due to built-in changeover flaps, the machine can be operated without changing the screen and without loss of power, e.g. when feeding barley and rapeseed. For example, when cleaning rapeseed, the output is nearly as high as for heavy cereals.

External dimensions

Screens

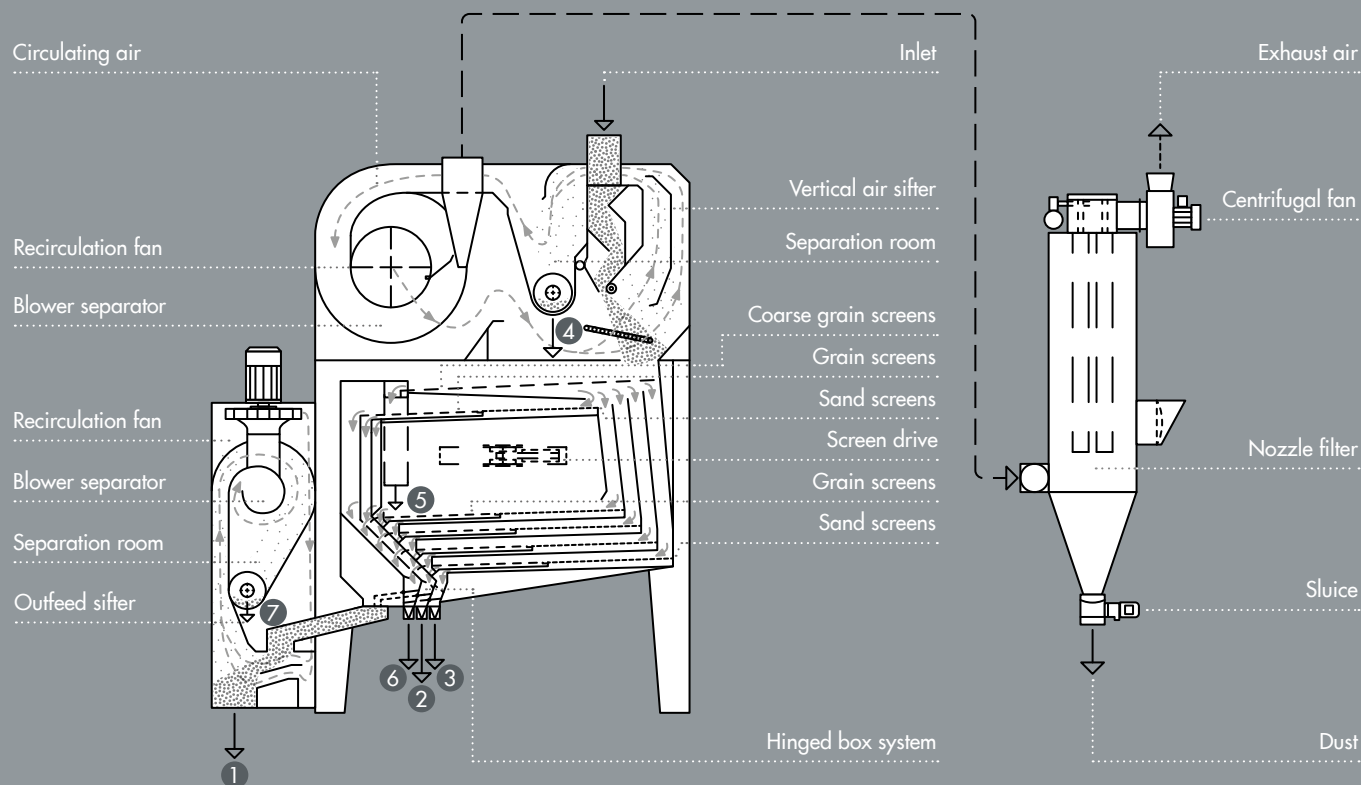
Type	Outer dimension of the machine without outlet aspiration			Number of screens			Screening area in m²			
	Length in mm	Width in mm	Height in mm	Coarse grain screens	Grain screens	Sand screens	Coarse grain screens	Grain screens	Sand screens	Total screen area
RVS 40	1900	1840	2850	1	4	2	2.25	6.00	3.00	11.25
RVS 60	1900	1840	2850	1	4	2	2.25	6.00	3.00	11.25

RVS 40 - RVS 60

Compact and sophisticated performance for use in barley, malting barley, oats, rye, rapeseed, etc. without screen change, up to 60 t/h

Aspirator | RVS 65 - RVS 100 series

Work and flow diagram



Aspirator performance data (recirculation mode)

Type	Output in t/h						Motor outputs in kW without outlet aspiration				
	Rye, wheat $y = 0.75$ max. 18 %	Winter barley $y = 0.65$ max. 18 %	Brewing barley $y = 0.65$ max. 18 %	Rape-seed $y = 0.60$ max. 14 %	Peas, beans $y = 0.70$ max. 18 %	Corn $y = 0.75$ max. 18 %	Recirculation fan kW	Screen box drive kW	Discharge screw and feed roller kW	Exhaust air fan kW	Sluice kW
RVS 65	65	56	56	52	55	55	11.0	2.2	0.55 + 0.55	3.0	0.55
RVS 80	80	69	69	64	70	70	11.0	2.2	0.55 + 0.55	3.0	0.55
RVS 100	100	86	86	80	85	85	11.0	2.2	0.55 + 0.55	3.5	0.55

- ① 1. Good grain variety
- ② 2. Small grain variety
- ③ 3. Sand, small grain variety
- ④ 4. Light waste
- ⑤ 5. Coarse grain
- ⑥ 6. Coarse rapeseed
- ⑦ 7. Light waste

RVS 65 - RVS 100

A high-performance grain cleaner, compact in its design and sophisticated for throughputs up to 100 t/h. It is equipped with 2 extra large coarse grain screens, 4 to 5 sand screens and 4 to 5 grain screens. Since the smallest particles are removed at an early stage by the sand screens, the sorting efficiency of the grain screens is particularly high. Changeover flaps on the machine floor allow numerous combinations of additional fractionation without changing screens, as the crop is recombined in sections.

All cereal crops as well as rapeseed, corn, peas, beans, etc. can be cleaned here. Light particles and dust are separated in the upper part (the vertical air sifter). In the screening unit, fractionation into coarse grain, good grain, small grain, and very small grain follows. Internal switch setting allows the machine to be run, for example, when feeding barley and rapeseed, without changing the screen and without loss of power. For example, when cleaning rapeseed, the output is nearly as high as for heavy cereals.

External dimensions

Screens

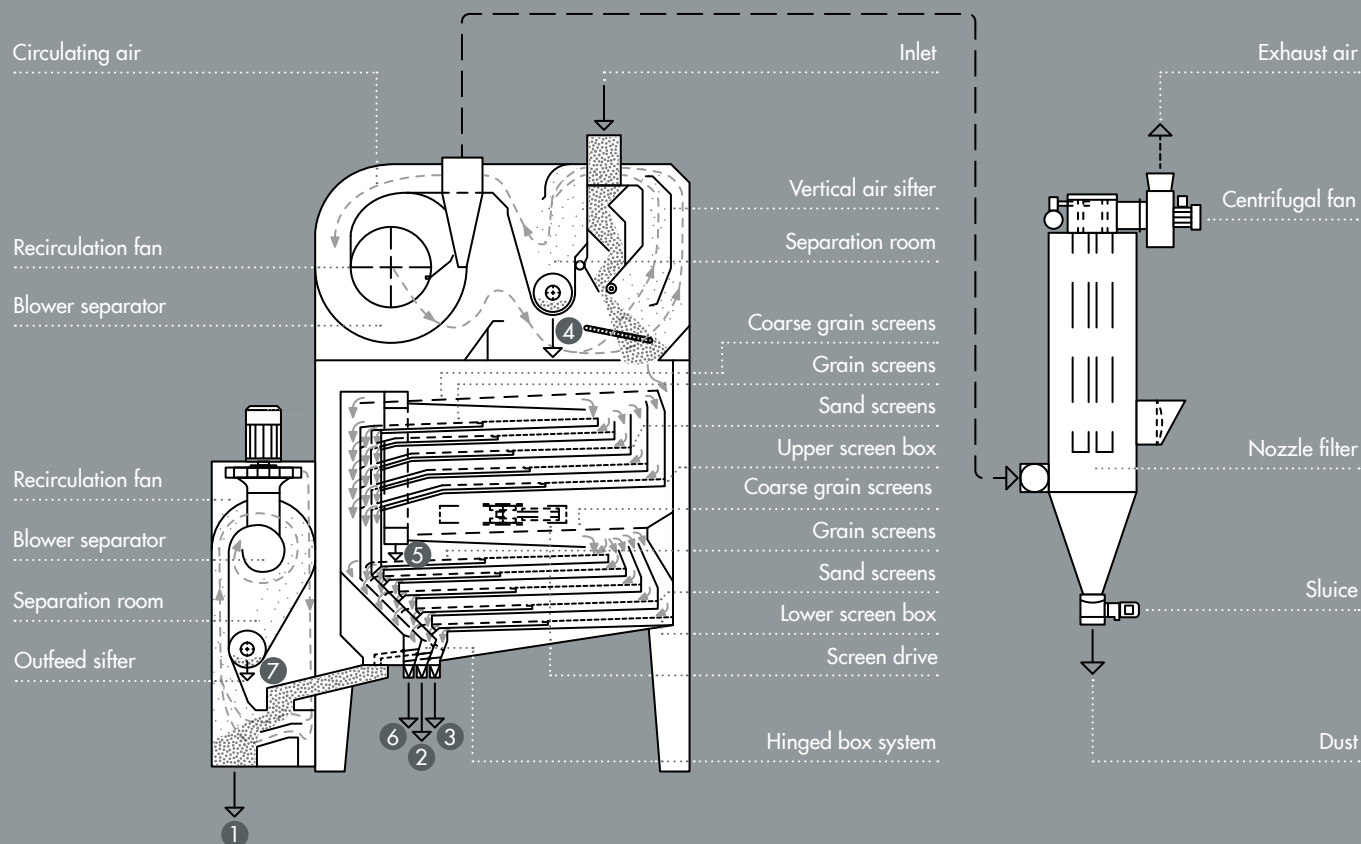
Type	Outer dimension of the machine without outlet aspiration			Number of screens			Screening area in m²			
	Length in mm	Width in mm	Height in mm	Coarse grain screens	Grain screens	Sand screens	Coarse grain screens	Grain screens	Sand screens	Total screen area
RVS 65	2965	1960	3350	2	4	4	3.00	6.00	6.00	15.00
RVS 80	2965	1960	3350	2	5	5	3.00	7.50	7.50	18.00
RVS 100	2965	1960	3350	2	5	5	3.00	7.50	7.50	18.00

RVS 65 - RVS 100

Compact and sophisticated performance for use in barley, malting barley, oats, rye, rapeseed, etc. without screen change, up to 100 t/h

Aspirator | RVS 90 - RVS 300 series

Work and flow diagram



Aspirator performance data (recirculation mode)

Type	Output in t/h						Motor outputs in kW without outlet aspiration				
	Rye, wheat $y = 0.75$ max. 18 %	Winter barley $y = 0.65$ max. 18 %	Brewing barley $y = 0.65$ max. 18 %	Rape-seed $y = 0.60$ max. 14 %	Peas, beans $y = 0.70$ max. 18 %	Corn $y = 0.75$ max. 18 %	Recirculation fan kW	Screen box drive kW	Discharge screw and feed roller kW	Exhaust air fan kW	Sluice kW
RVS 90	90	75	75	75	75	75	11.0	3.0	0.55 + 0.55	3.0	0.55
RVS 120	120	100	100	90	105	105	15.0	3.0	0.55 + 0.55	4.0	0.55
RVS 150	150	130	130	120	135	135	18.5	3.0	0.55 + 0.55	5.5	0.55
RVS 180	180	150	150	150	150	150	2 x 11.0	4.0	0.75 + 0.75	7.5	0.55
RVS 240	240	210	210	180	210	210	2 x 15.0	5.5	0.75 + 0.75	11.0	0.55
RVS 300	300	260	260	240	270	270	2 x 18.5	5.5	0.75 + 0.75	11.0	0.55

- ① 1. Good grain variety
- ② 2. Small grain variety
- ③ 3. Sand, small grain variety
- ④ 4. Light waste
- ⑤ 5. Coarse grain
- ⑥ 6. Coarse rapeseed
- ⑦ 7. Light small grain

RVS 90 - RVS 300

A high-performance grain cleaner, compact in its design and sophisticated for throughputs up to 300 t/h. It is equipped with 4 or 8 extra large 20 sand screens and 6 to 20 grain screens. The sorting efficiency of the grain screens is particularly high in this case, since the smallest particles are removed at an early stage by sand screens. From size RVS 180 upwards, 2 screen decks operate side by side and achieve an unsurpassed high screening performance due to their extremely large screening surface. Changeover flaps on the machine floor allow numerous combinations of additional fractionation without changing screens, as

the crop is recombined in sections. All cereal crops as well as rapeseed, corn, peas, beans, etc. can be cleaned here. Light particles and dust are separated in the upper part (the vertical air sifter). In the screening unit, fractionation into coarse grain, good grain, small grain, and very small grain follows. Internal switch setting allows the machine to be run, for example, when feeding barley and rapeseed, without changing the screen and without loss of power. For example, when cleaning rapeseed, the output is nearly as high as for heavy cereals.

External dimensions

Screens

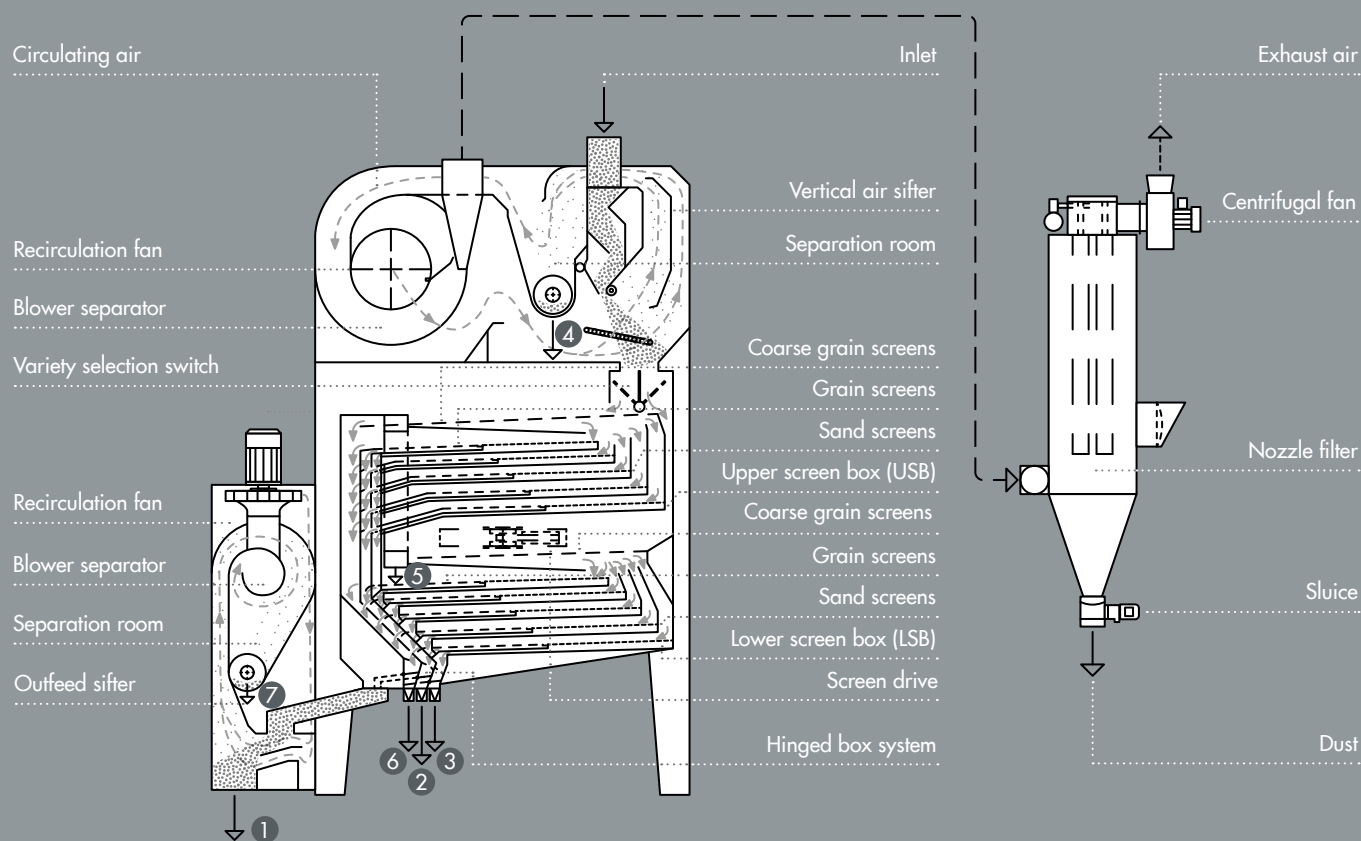
Type	Outer dimension of the machine without outlet aspiration			Number of screens			Screening area in m²			
	Length in mm	Width in mm	Height in mm	Coarse grain screens	Grain screens	Sand screens	Coarse grain screens	Grain screens	Sand screens	Total screen area
RVS 90	2965	1960	3700	4	6	6	6.00	9.00	9.00	24.00
RVS 120	2965	1960	4000	4	8	8	6.00	12.00	12.00	30.00
RVS 150	2965	1960	4300	4	10	10	6.00	15.00	15.00	36.00
RVS 180	2965	3490	3700	8	12	12	12.00	18.00	18.00	48.00
RVS 240	2965	3490	4000	8	16	16	12.00	24.00	24.00	60.00
RVS 300	2965	3490	4300	8	20	20	12.00	30.00	30.00	72.00

RVS 90 - RVS 300

Compact and sophisticated multi-variety performance for use in barley, malting barley, oats, wheat, rye, rapeseed, etc. without screen change, up to 300 t/h

Aspirator | RVS 90 MULTI - RVS 300 MULTI series

Work and flow diagram



Aspirator performance data (recirculation mode)

Typ	Output in t/h						Motor outputs in kW without outlet aspiration				
	Rye, wheat $y = 0.75$ max. 18 %	Winter barley $y = 0.65$ max. 18 %	Brewing barley $y = 0.65$ max. 18 %	Rape-seed $y = 0.60$ max. 14 %	Peas, beans $y = 0.70$ max. 18 %	Corn $y = 0.75$ max. 18 %	Recirculation fan kW	Screen box drive kW	Discharge screw and feed roller kW	Exhaust air fan kW	Sluice kW
RVS 90 MULTI	90	75	75	75	75	75	11.0	3.0	0.55 + 0.55	3.0	0.55
RVS 120 MULTI	120	100	100	90	105	105	15.0	3.0	0.55 + 0.55	4.0	0.55
RVS 150 MULTI	150	130	130	120	135	135	18.5	3.0	0.55 + 0.55	5.5	0.55
RVS 180 MULTI	180	150	150	150	150	150	2x 11.0	4.0	0.75 + 0.75	7.5	0.55
RVS 240 MULTI	240	210	210	180	210	210	2x 15.0	5.5	0.75 + 0.75	11.0	0.55
RVS 300 MULTI	300	260	260	240	270	270	2x 18.5	5.5	0.75 + 0.75	11.0	0.55

- ① 1. Good grain variety
- ② 2. Small grain variety
- ③ 3. Sand, small grain variety
- ④ 4. Light waste

- ⑤ 5. Coarse grain
- ⑥ 6. Coarse rapeseed
- ⑦ 7. Light small grain

Variety selection switch

Flap position I: Product runs on LSB

Performance = 50 %

Flap position II: Product runs on USB

Performance = 50 %

Flap position III: Product runs on USB and LSB

Performance = 100 %

RVS MULTI

RVS 90 MULTI - RVS 300 MULTI

This high-performance grain cleaner has a compact and sophisticated in its design for throughputs up to 300 t/h. It is equipped with 4 to 8 extra large coarse grain screens, 6 to 20 sand screens and 6 to 20 grain screens. Since the smallest particles are removed at an early stage by the sand screens, the sorting efficiency of the grain screens is particularly high. From size RVS 180 upwards, 2 screen decks operate side by side and achieve an unsurpassed high screening performance due to their extremely large screening surface. By flipping the grade selection flap, the upper screen deck can be operated at 50%, the lower

screen deck at 50%, or both screen decks together at 100% throughput, allowing cleaning of a range of crop types without changing screens. Changeover flaps on the machine floor allow numerous combinations for feeding the individual fractions separately or back together again in partial areas. All cereal crops as well as rapeseed, corn, peas, beans, etc. can be cleaned here. Light particles and dust are separated in the upper part (the vertical air sifter). In the screening unit, fractionation into coarse grain, good grain, small grain, and very small grain follows.

External dimensions

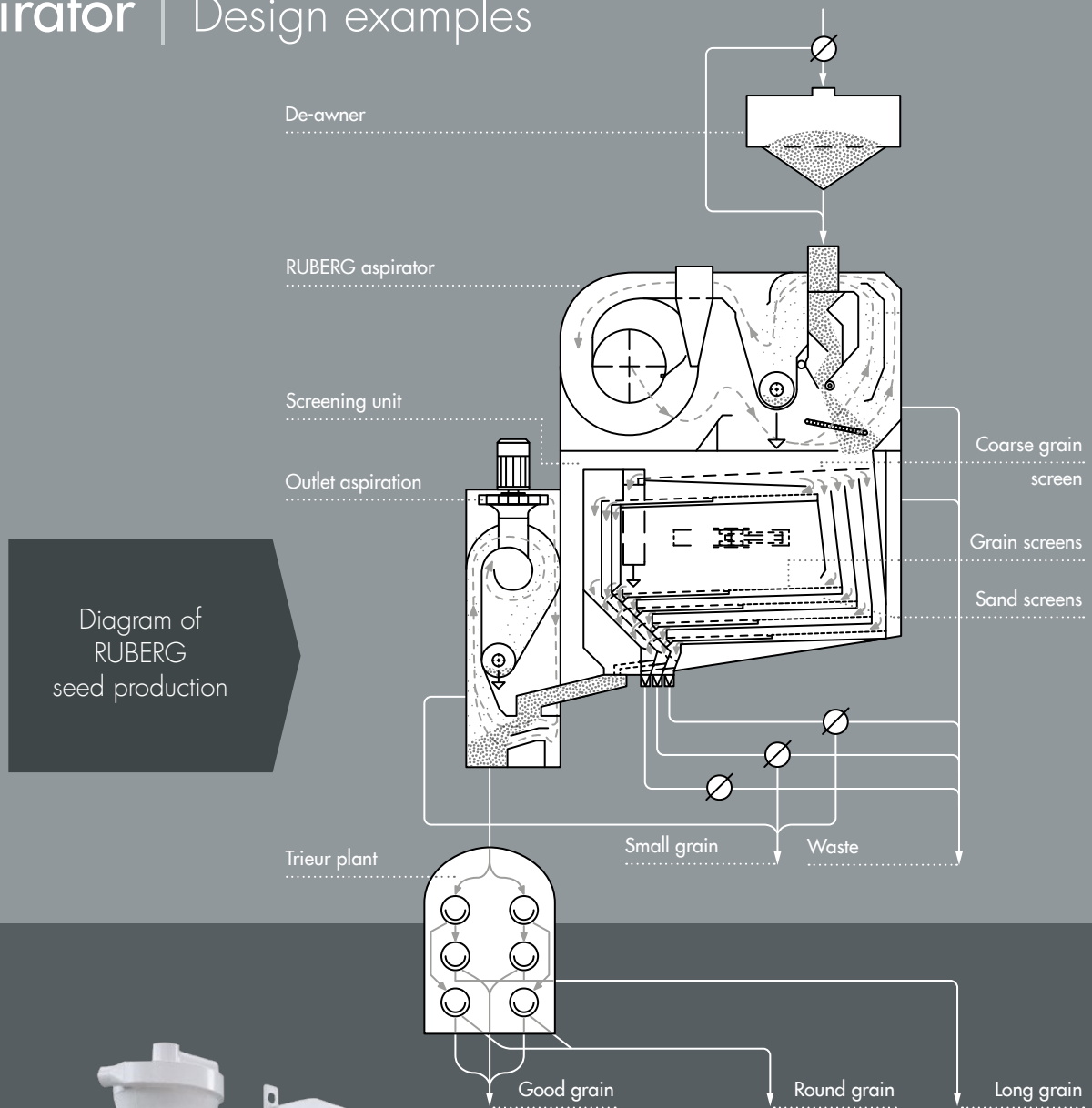
Screens

Type	Outer dimension of the machine without outlet aspiration			Number of screens			Screening area in m²			
	Length in mm	Width in mm	Height in mm	Coarse grain screens	Grain screens	Sand screens	Coarse grain screens	Grain screens	Sand screens	Total screen area
RVS 90 MULTI	2965	1960	3700	4	6	6	6.00	9.00	9.00	24.00
RVS 120 MULTI	2965	1960	4000	4	8	8	6.00	12.00	12.00	30.00
RVS 150 MULTI	2965	1960	4300	4	10	10	6.00	15.00	15.00	36.00
RVS 180 MULTI	2965	3490	3700	8	12	12	12.00	18.00	18.00	48.00
RVS 240 MULTI	2965	3490	4000	8	16	16	12.00	24.00	24.00	60.00
RVS 300 MULTI	2965	3490	4300	8	20	20	12.00	30.00	30.00	72.00

RVS 90 MULTI - RVS 300 MULTI

Compact and sophisticated multi-variety performance for use on a wide range of crops, without screen change, up to 300 t/h

Aspirator | Design examples



RUBERG
Aspirator for
seed production

EXAMPLES

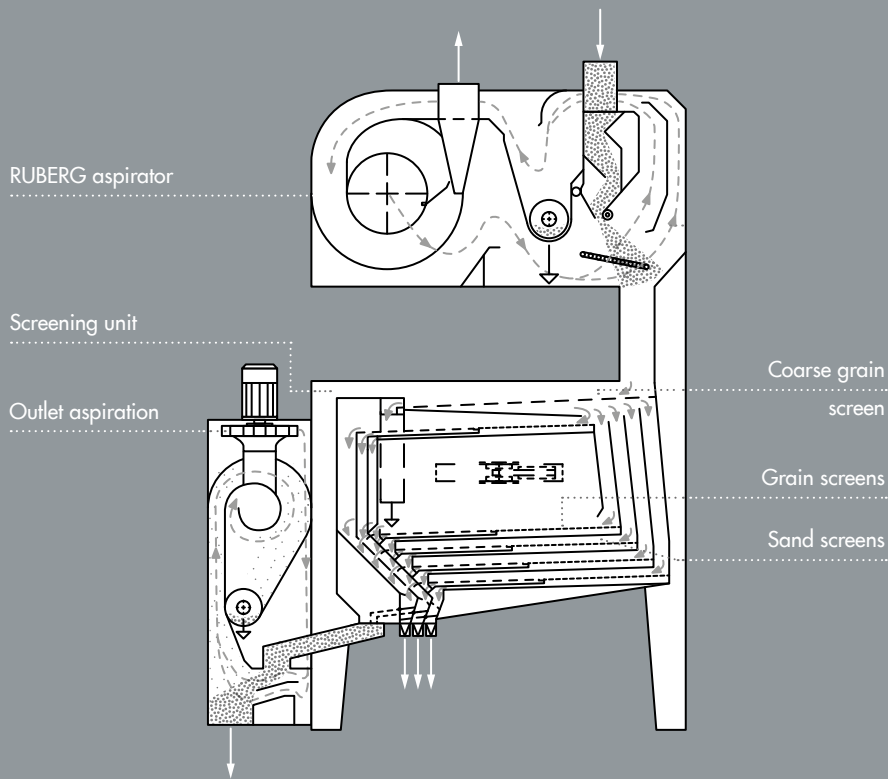


Diagram of a divided RUBERG aspirator (2 floors)

RUBERG Aspirator with vertical air sifter and coarse grain screen



Aspirator | Accessories for more performance and comfort

Air flap control

The circulating air volume in the vertical air sifter is controlled by an air vane in the blower compartment. The air volume setting determines the particle size to be separated. Optimal adjustment of the air quantity is possible by visual control directly at the machine. The air flap control is via an electrically operated servomotor and is part of the basic equipment of all RUBERG aspirators.

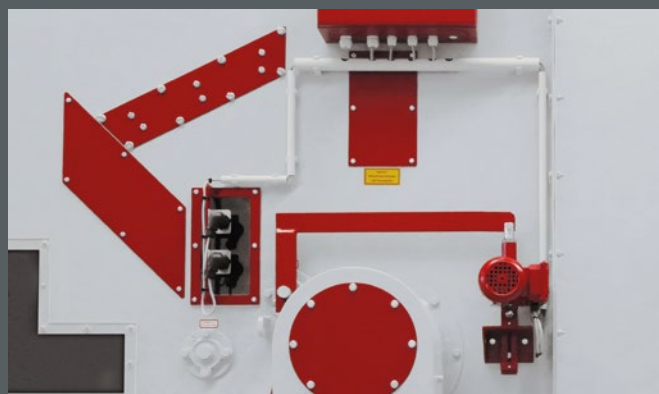


Inlet control

From the pre-distributor of the vertical air sifter, a predefined product flow is directed to the plate cascade depending on the back pressure of the feed flap. The pressure load of the feed flap depends on the type of crop and can be adjusted by changing the lever arms.

Automatic infeed

The product level in the pre-distributor should be between the minimum and maximum values for optimum power distribution. Automatic adjustment of the feed flap pressure is recommended for changing crop types and fluctuating feed rates. The RUBERG automatic infeed system performs this control at any time, regardless of the type of crop and its condition. It prevents backpressure in the inlets, avoids operating errors and optimizes cleaning quality.



Control of the patented grain feeder

Air volume adjuster

The air volume adjuster controls the actuator of the air vane. Located in the central control room, it works in parallel with the control panel on the machine. This allows for quick remote adjustment. The digital indicators are assigned to the corresponding crop types and deliver exactly reproducible results. The air volume adjuster with control panel on the machine is part of the basic equipment of all RUBERG aspirators.



Changeover flaps

RUBERG aspirators have various changeover flaps, ensuring a wide range of performance and flexibility. By setting points outside the machine, they are used for internal product guidance. The changeover flaps are available with manual operation only, with manual operation and position indicators, or with fully automatic adjustment units.



Manual adjustment of the 3 flaps



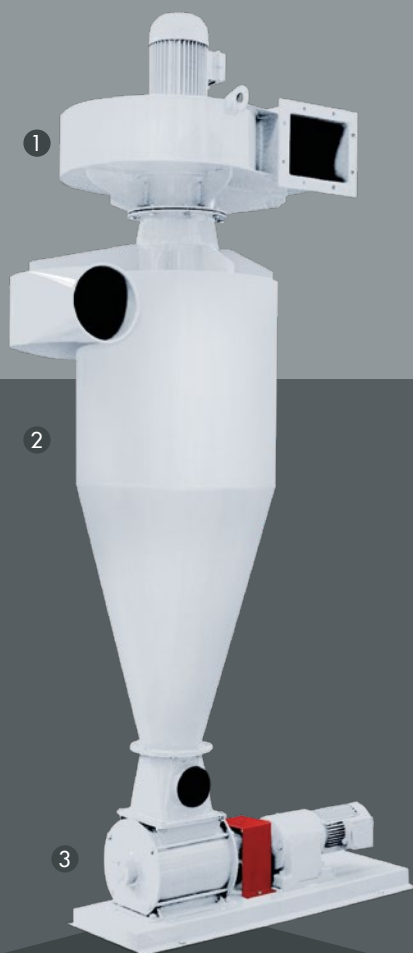
Electro-pneumatic adjustment of the 3 flaps

Aspirator | Exhaust air purification

Environmental regulations as well as operational and process engineering tasks are examples of the requirements for the treatment of exhaust air from RUBERG aspirators. RUBERG high-performance dust collectors for minimum environmental requirements and RUBERG nozzle filters for very high collection efficiencies, together with fans, discharge sluices and extensive accessories, are the perfect complement to all RUBERG aspirators. They are available as compactly joined units, as modular components and in ATEX versions. We will be happy to design, manufacture

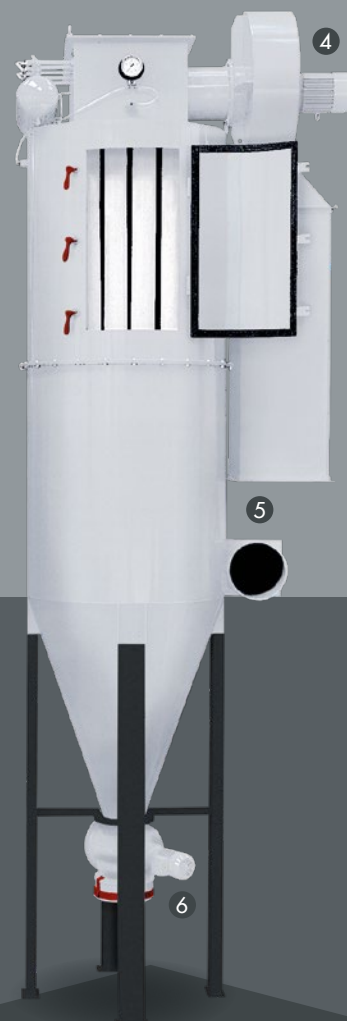
and install your new equipment or replace or modernize your existing equipment. Take advantage of our knowledge and many years of experience.

► See also our separate brochure on RUBERG nozzle filters.



RUBERG high efficiency dust collector

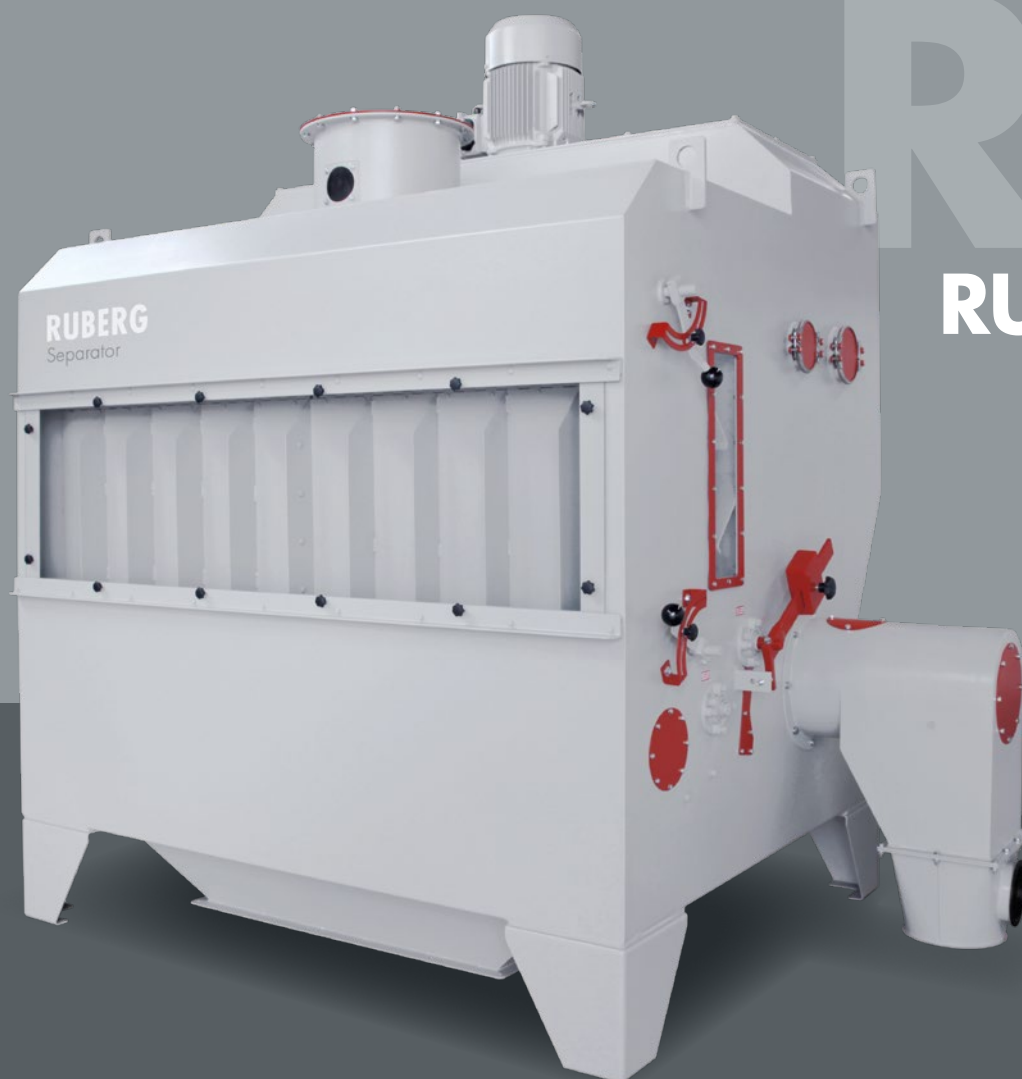
- 1 Low-maintenance low-pressure fan in sheet steel design with directly coupled impeller, with flanged connections.
- 2 High-performance dust collector in sheet steel design, with flanged connection openings and inspection cover.
- 3 Discharge sluice with highly flexible and replaceable sealing lamellas, housing and rotary lock made of solid grey cast iron, with directly coupled gear motor.



RUBERG nozzle filter

- 4 Low-maintenance low-pressure fan in sheet steel design with directly coupled impeller, with flanged connections.
- 5 RUBERG nozzle filter, in compact sheet steel design, with inspection and maintenance door, pneumatic row cleaning, round, smooth filter bags, compressed air reservoir and automatic filter control. Depending on the desired degree of separation, RUBERG nozzle filters for use together with RUBERG aspirators have filter areas from 10 to 37 m². Rupture discs, explosion-proof attachments, extensive accessories and ATEX versions are available.
- 6 Discharge sluice with highly flexible and replaceable sealing lamellas, housing and rotary lock made of solid grey cast iron, with directly coupled gear motor.

Separator | RS series

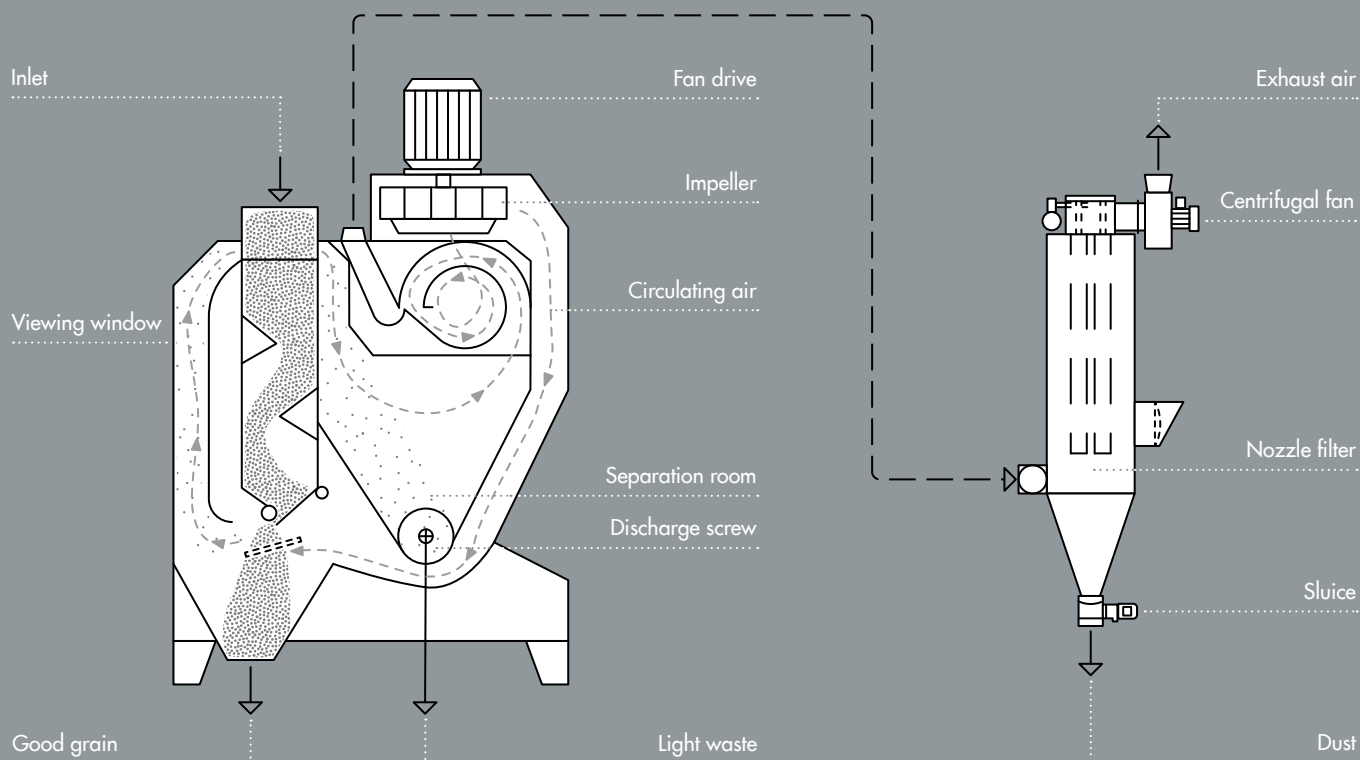


RS
RUBERG

User-friendly and powerful
recirculating air cleaning

The RUBERG separator is an effective, reliable and easy-to-maintain solution for cleaning cereals, oilseed crops and legumes in recirculation mode.

Work and flow diagram



Different machine widths are provided according to the throughput rate in order to achieve the best possible results. In a sturdy sheet steel construction, the RUBERG separator offers space-saving and user-friendly benefits. Inlets and inlet distributors feed the product to be cleaned into the

pre-distributor, where a product curtain is created by the feed flap and feed roller. Dust and light particles are picked up by the rising air stream and carried into the separation chamber. They are then transported out of the side of the machine by a screw conveyor.

Performance data

Type	Output in t/h						Engine power in kW	
	Rye, wheat $y = 0.75$ max. 18 %	Winter barley $y = 0.65$ max. 18 %	Brewing barley $y = 0.65$ max. 18 %	Rapeseed $y = 0.60$ max. 14 %	Peas, beans $y = 0.70$ max. 18 %	Corn $y = 0.75$ max. 18 %	Circulating air fan	Discharge screw and feed roller
RS 1000	125	110	110	110	110	125	11.0	0.55 + 0.55
RS 1500	185	165	165	165	165	185	15.0	0.75 + 0.55
RS 2000	250	220	220	220	220	250	18.5	0.75 + 0.55
RS 3000	400	330	330	330	330	400	22.0	0.75 + 0.75

Universal precleaner | RUV series



RUV

RUBERG

powerful
and versatile

To increase efficiency in the pre-cleaning of grain and legumes as well as in the sorting of granular products from other industrial sectors, we have developed the new

RUBERG universal precleaner of type RUV. More flexibility and increased throughput are its features.

Mode of operation

Interlinked changeover flaps direct the products to the appropriate screening sections. Generously dimensioned flow channels offer excellent performance, especially for moist products with high levels of foreign matter.

Manually adjustable distribution flaps enable the RUBERG universal precleaner to extract up to 4 fractions from the raw material. Electro-pneumatic damper drives increase the degree of automation of the machine.

Guided aspiration of the inlet cascades and the outlet cascades in the exhaust air system increases the cleanliness of the products.

In addition, our vertical air sifters offer the familiar advantages of reduced raw air volumes, which is why you can get by with correspondingly smaller exhaust air and filter technology.

Design variants

► Variant 1

Screening unit with inlet aspiration in exhaust air system

► Variant 2

Screening unit with inlet and outlet aspiration in the exhaust air system

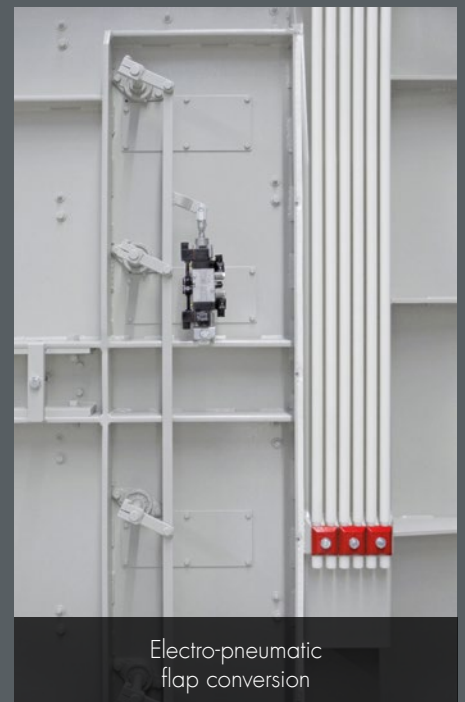
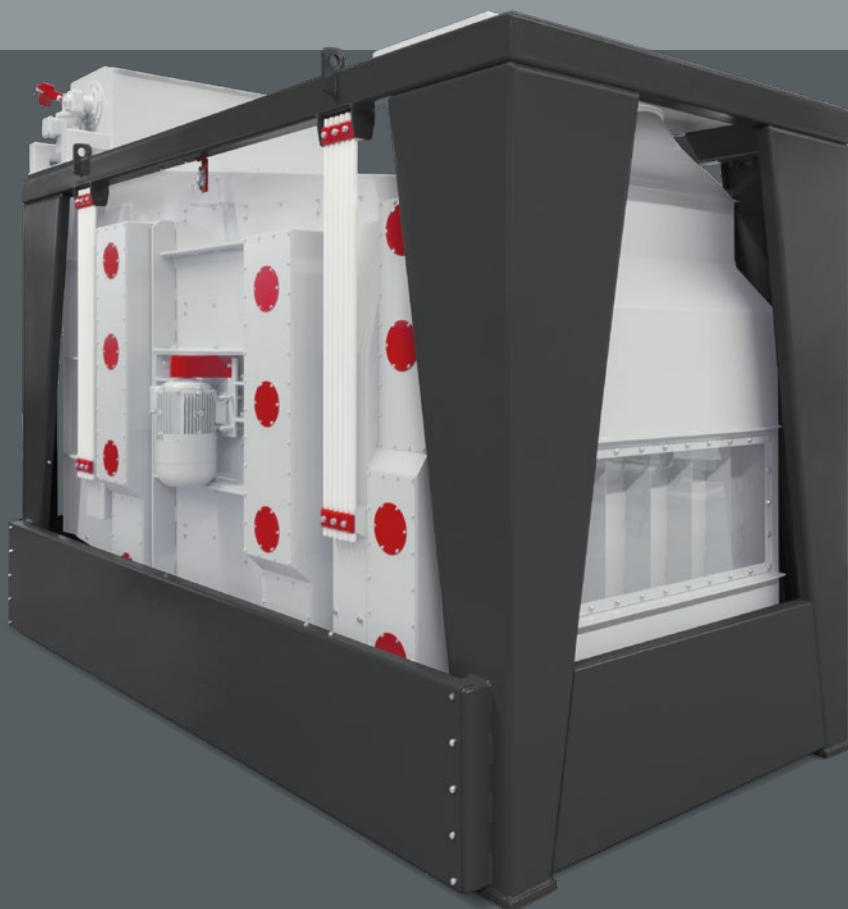
► Variant 3

Screening unit with inlet aspiration in recirculation system

► Variant 4

Screening unit with inlet aspiration in recirculation system and outlet aspiration in exhaust system

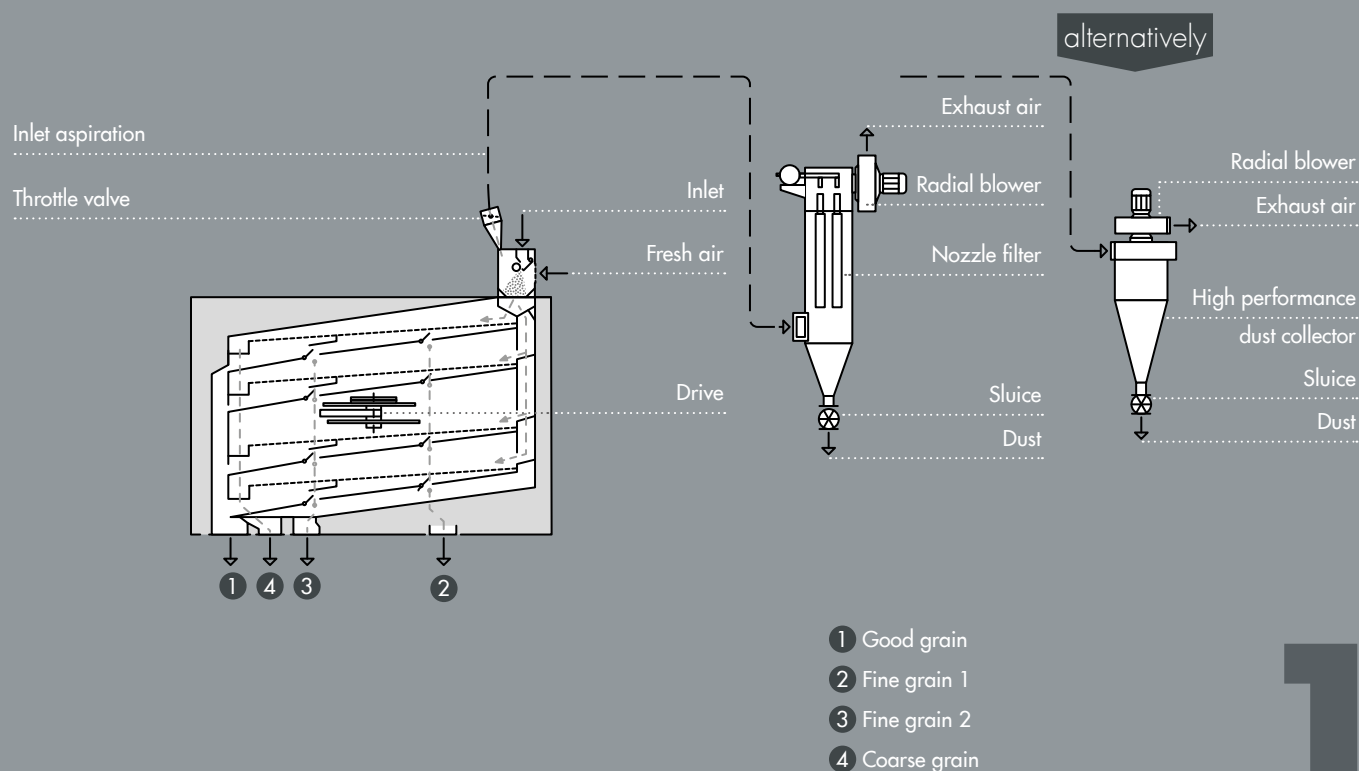
All variants are characterized by the perfectly matched combination of air compartment and screening unit. These machines therefore meet the highest demands, e.g. for the pre-cleaning of grain with throughputs from 100 to 600 t/h. Flexible adjustment options deliver best results in fine cleaning with throughputs from 35 to 400 t/h.



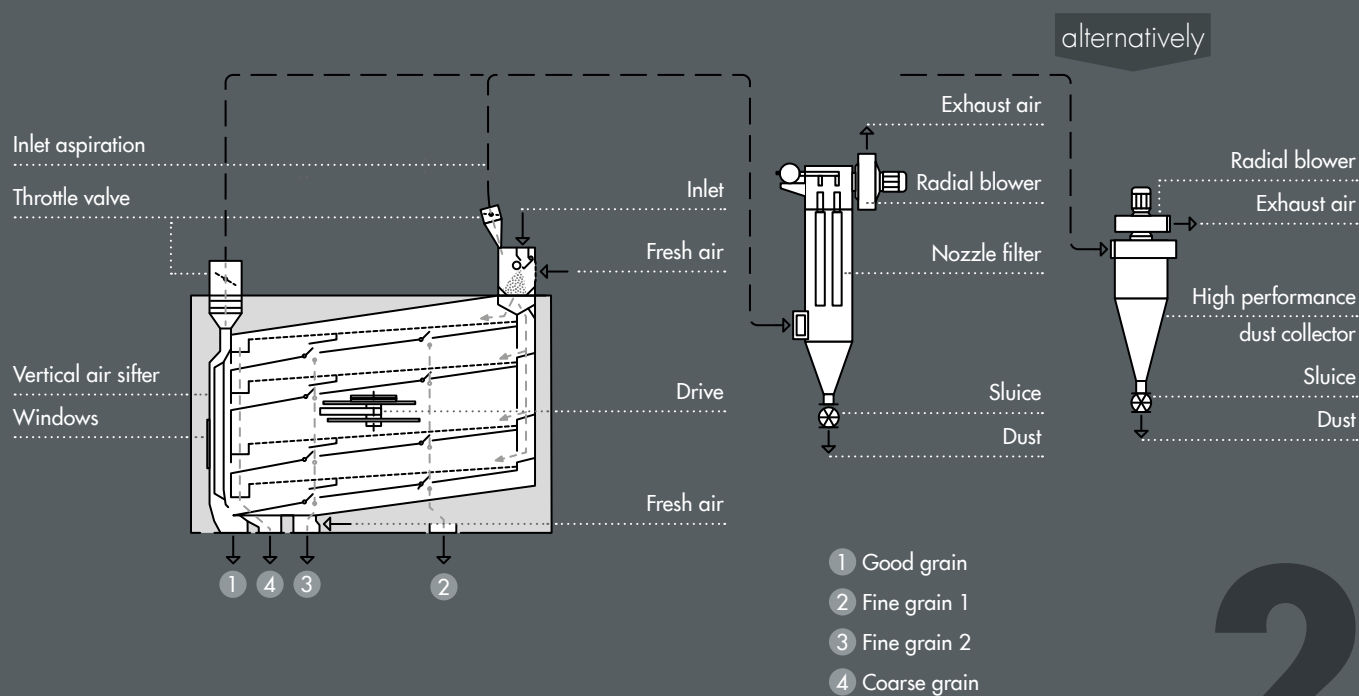
Electro-pneumatic
flap conversion

Universal precleaner | Design variants

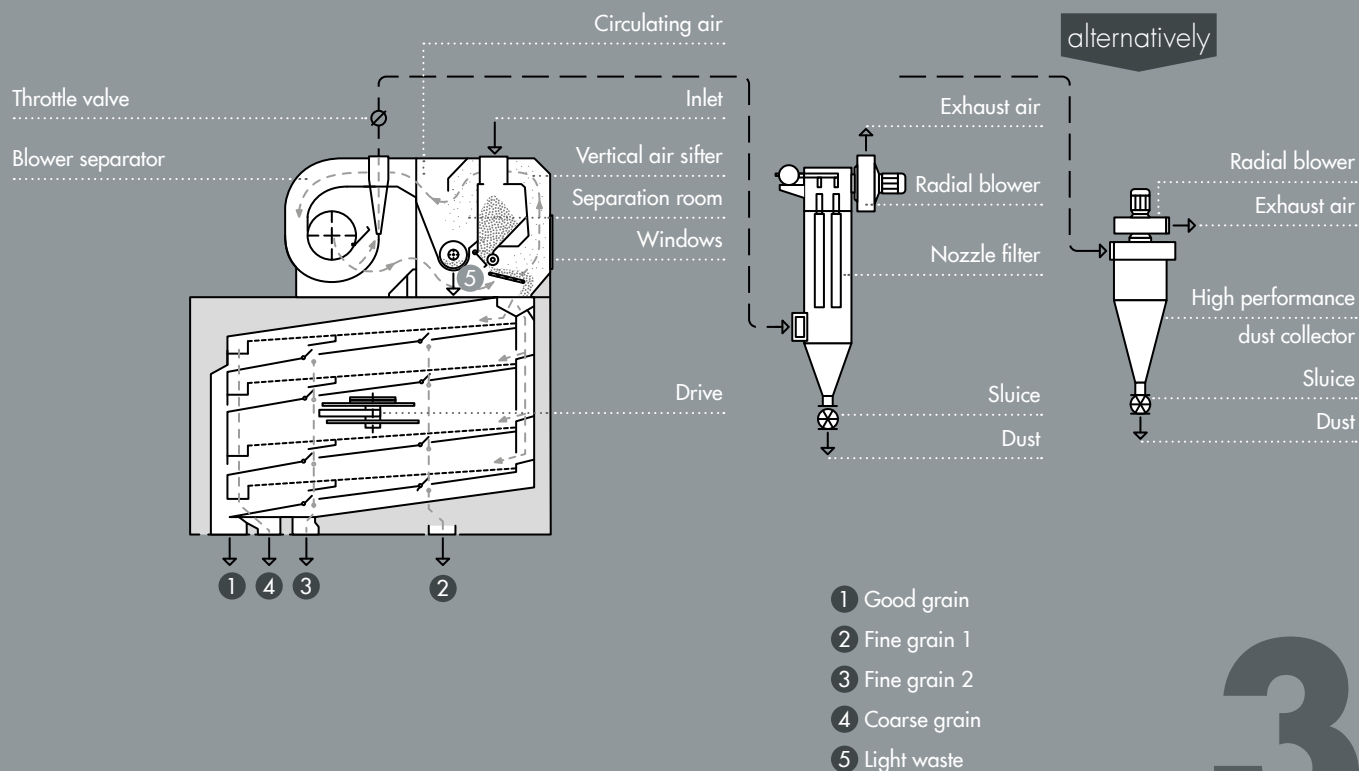
Variant 1 | Screening unit with inlet aspiration in exhaust air system



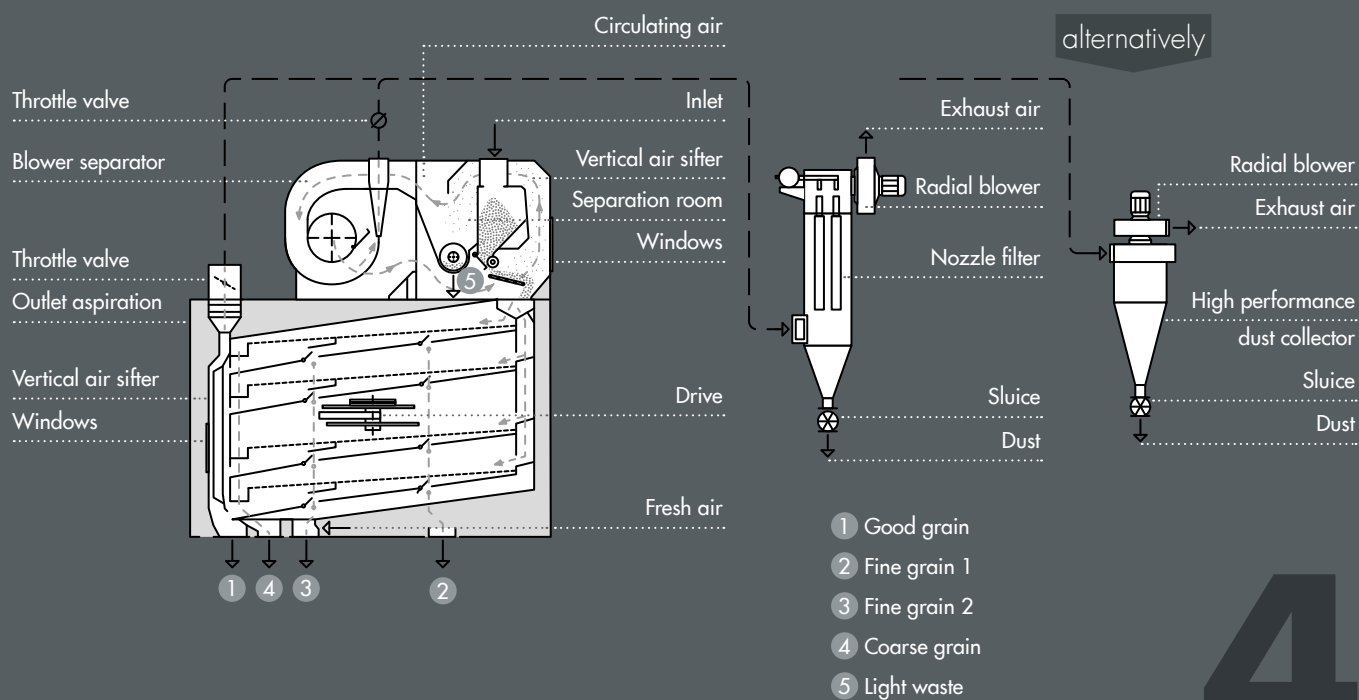
Variant 2 | Screening unit with inlet and outlet aspiration in exhaust air system



Variant 3 | Screening unit with inlet aspiration in recirculation system



Variant 4 | Screening unit with inlet aspiration in recirculation system and outlet aspiration in exhaust air system



Universal precleaner | Performance data and dimensions

Performance data when used with 3 coarse grain screens

Type	Output in t/h									Screening area in m²	
	Rye, wheat y = 0.75 max. 18 %	Winter barley y = 0.65 max. 18 %	Brewing barley y = 0.65 max. 18 %	Rape-seed y = 0.60 max. 14 %	Peas, beans y = 0.70 max. 18 %	Corn dry y = 0.75 max. 18 %	Corn wet y = 0.75 max. 35 %	Sun-flowers y = 0.40 max. 16 %	Paddy y = 0.55 max. 18 %	Coarse grain Total screen	Total screen area
RUV 100	105	90	90	85	85	100	50	75	30	4.5	4.5
RUV 200	200	175	175	160	170	200	100	150	60	9.0	9.0
RUV 400	400	340	340	320	320	400	200	300	180	18.0	18.0
RUV 600	600	520	520	480	500	600	300	600	360	36.0	36.0

Performance data when used with 2 coarse grain screens and 1 fine grain screen

Type	Output in t/h									Screening area in m²		
	Rye, wheat y = 0.75 max. 18 %	Winter barley y = 0.65 max. 18 %	Brewing barley y = 0.65 max. 18 %	Rape-seed y = 0.60 max. 14 %	Peas, beans y = 0.70 max. 18 %	Corn dry y = 0.75 max. 18 %	Corn wet y = 0.75 max. 35 %	Sun-flowers y = 0.40 max. 16 %	Paddy y = 0.55 max. 18 %	Coarse grain Screen area	Fine grain Screen area	Total screen area
RUV 100	70	60	60	45	50	70	35	50	20	3.0	1.5	4.5
RUV 200	140	120	120	110	115	140	70	100	40	9.0	3.0	9.0
RUV 400	280	240	240	220	230	280	140	200	120	12.0	6.0	18.0
RUV 600	400	350	350	320	330	400	200	400	240	24.0	12.0	36.0

Performance data when used with 1 coarse grain screen and 2 fine grain screens

Type	Output in t/h									Screening area in m²		
	Rye, wheat y = 0.75 max. 18 %	Winter barley y = 0.65 max. 18 %	Brewing barley y = 0.65 max. 18 %	Rape-seed y = 0.60 max. 14 %	Peas, beans y = 0.70 max. 18 %	Corn dry y = 0.75 max. 18 %	Corn wet y = 0.75 max. 35 %	Sun-flowers y = 0.40 max. 16 %	Paddy y = 0.55 max. 18 %	Coarse grain Screen area	Fine grain Screen area	Total screen area
RUV 100	35	30	30	28	30	35	18	25	10	1.5	3.0	4.5
RUV 200	70	60	60	55	60	70	35	50	20	3.0	6.0	9.0
RUV 400	140	120	120	110	120	140	70	100	60	6.0	12.0	18.0
RUV 600	200	170	170	135	170	200	100	200	120	12.0	24.0	36.0

PERFORMANCE A

External dimensions of the machines

Type	Outer dimension of the exhaust air machine inlet aspiration only			Outer dimension of the exhaust air machine with inlet and outlet aspiration			Outer dimension of the air circulation machine with inlet and outlet aspiration		
	Length in mm	Width in mm	Height in mm	Length in mm	Width in mm	Height in mm	Length in mm	Width in mm	Height in mm
RUV 100	3440	1960	2500	3750	1960	2500	3750	2220	2400
RUV 200	3700	1960	3010	4020	1960	3010	4020	2290	3260
RUV 400	3830	2070	4150	4140	2070	4150	4140	2260	4200
RUV 600	4000	2070	4440	4300	2070	4440	4300	2260	4490

ND DIMENSIONS

RUBERG Technology Centre

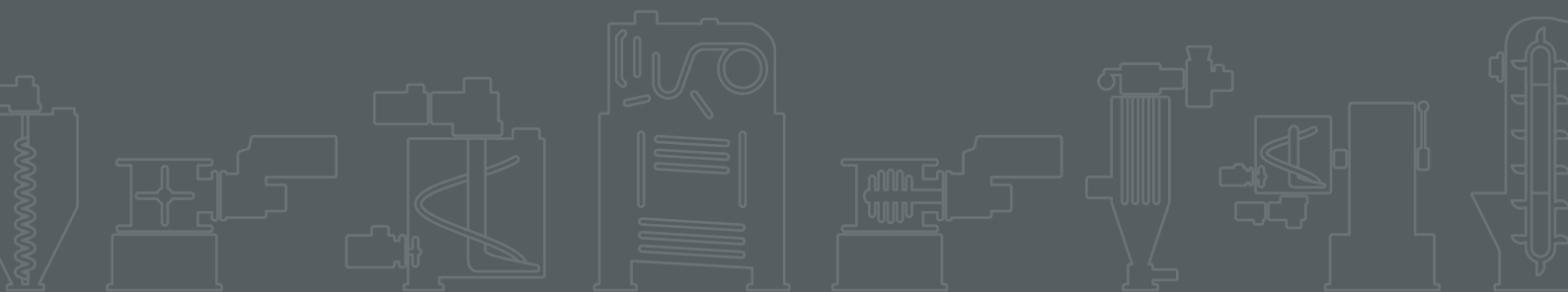


GEBR. RUBERG

MASCHINENFABRIK

ORIGINAL – SINCE 1848

Would you like more information about these RUBERG machine types? – Contact us, we will be happy to advise you!



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