The World of Extraction

ESTA

OPERATING INSTRUCTIONS

EUROSOG – ATEX

Industrial Vacuum Cleaners

The World of Extraction ESTA

Welcome to the sphere of suction technology

Your purchase of an **ESTA** machine has been a good decision. The design of our quality products complies with the latest state of the art. **ESTA** products have been devised to provide for clean air at the workplaces at which they are applied. This results in an even more enhanced level of quality and longer machine times and, particularly, healthier working conditions. Should you have any questions pertaining to suction technology issues, please feel free to contact us at any time. Our experts will be gladly at your disposal.

Your **ESTA Absaugtechnik** Team

www.esta.com

Operating manual

CE

EUROSOG ATEX

Item No. 81.200 (EUROSOG-I-D ATEX)

Do not use this device unless you have
read the user manual and understand it.

Original version of the German operating manual
81200-08-01

Warning and safety instructions for ATEX devices and protection systems.

Warnings and safety instructions

Electrical current hazard

Note

Reference to ESTA customer service

Reference to legal regulations

Contents

1. General safety notes

Before operation, the user must be provided with information, instructions and training in using the device and on the substances for which it is to be used, including the procedure for safe disposal of the collected material.

If dust escapes or clouds up from the air outlet lamellas, if smoke develops or the turbines run loud, the device must immediately be turned off from the main switch!

Maintenance work on the device, and emptying of its dust collection bag, must only be done outside of explosive zones.

The EUROSOG is to be set up on a stable, even surface that can securely support a weight of 150 kg.

The EUROSOG must be used on a conductive surface, such as a natural surface (stone, asphalt, wood).

The device must be used only by persons who have been instructed in its handling and are explicitly authorized to use it.

In terms of safety, the device is not suitable for exhaust on running processing machines on which sources of ignition have not been securely eliminated.

The device is intended only for dry cleaning and must not be used or stored outdoors or under wet conditions.

The device is not suitable for aspiration of explosive or equivalent materials in the sense of Section 1 of the explosives act, of liquids or of mixtures of flammable dusts with liquids.

No liquids, aggressive gases, easily flammable materials or glowing particles (such as hot embers) may be aspirated.

The device may be used for exhaust only when it has been determined that no ignition sources can be aspirated. Conductive exhaust equipment (e.g., exhaust hoods on machines) and conductive parts of processing machines (e.g., devices in protection class II) that are not earthed (grounded) through the dust extractor must be earthed in some other way to prevent electrostatic charges.

Make sure that the power cable does not become damaged by being run over, compressed, pulled, etc.

The power cable must be examined regularly for signs of damage or ageing.

The device must not be used if the power cable is not in perfect condition.

Only original ESTA accessories must be used for operating the device.

When replacing the power cable and plug, make sure that the mechanical tensile strength is in compliance.

The power cable and plug must be replaced only by an appropriately trained electrical specialist.

After use, before moving the devices to another site and before cleaning, maintenance, or replacement or removal of movable parts, the device must be unplugged.
To prevent dust release when transporting the device, the intake port must be closed with the sealing plug.

To comply with the required limits, the returned volume flow must be no more than 50% of the volume flow of fresh air (room air times air replacement rate). Without any special ventilation measures (with free room ventilation) the air replacement rate = 1 1/h.

Cleaned air from the EUROSOG must be returned only to work areas from which it was exhausted.

Extension cords, coupling devices and adapters are not permitted.

According to work equipment user directive 89/655/EWG and TRGS 560, safety devices for prevention or removal of hazards must be regularly maintained and regularly inspected by an expert for safe, flawless operation.

2. Preventing mechanical hazards

All movable machine parts driven by electric motors must be covered by fixed, securely fastened protective covers that can be removed only with tools.

Residual risk:
If a covering that can only be unfastened with a tool is removed, there is risk of injury if the machine is running.

3. Preventing electrical hazards

All electrical parts must be covered by fixed, securely fastened protective covers that can be removed only with tools. The device complies with Protection Class I according to EN 60 335.

Residual risk:
If a covering that can only be unfastened with a tool is removed, a hazard is posed by electric current.

4. Preventing dust hazards

Using a one-way dust collection bag with a closable opening guarantees low-dust removal of the collected dust material.

Residual risk:
When emptying the dust collection bag, it is possible to inhale dust. Following the instructions in the “Disposal” section will minimize this hazard!

5. Intended use

This device is suitable for commercial use, such as in industrial enterprises and workshops.

In terms of safety, the device is not suitable for exhaust on running processing machines on which sources of ignition have not been securely eliminated.

In terms of safety, the EUROSOG is suitable for exhausting dry non-flammable dusts in Zone 22. This does not include dusts known to have extremely low minimum ignition energy (MIE<1mJ). Use with these dusts requires case-by-case safety considerations in connection with other measures, if necessary.

In regard to safety, dust-explosion-protected industrial exhaust devices are not suitable for aspiration of explosive or equivalent materials in the sense of Section 1 of the explosives act, of liquids or of mixtures of flammable dusts with liquids.

In terms of safety, model B1 dust extractors are not suitable for exhaust on running processing machines on which sources of ignition have not been eliminated.
Installation and operation in **dust-explosive zones 20 and 21** or **gas-explosive areas** is forbidden!

The **EUROSOG-I-D/M/B1/H2** (Order No.: 81.291) is suitable for exhausting sawdust with an exposure limit larger than 0.2 mg/m³. The purified air can be directed back into the work area. The device is intended for exhausting surface contaminants and for removing dust from individual dust sources. In the operation mode switch setting “E” for dust extractors, the EUROSOG can exhaust from processing machines whose exhaust port diameter is ≤ 50 mm. If it is smaller than the 50 mm, ESTA supplies a corresponding reduced fitting, which is placed on the machine’s exhaust port as a junction.
Dust extractors may be used for exhaust (machine exhaust) only when it has been determined that no active ignition sources can be aspirated. Conductive exhaust equipment (e.g., exhaust hoods on machines) and conductive parts of processing machines (e.g., devices in protection class II) that are not earthed (grounded) through the dust extractor must be earthed in some other way to prevent electrostatic charges.
In terms of safety, dust extractors are not suitable for exhaust on running processing machines on which sources of ignition have not been securely eliminated.

6. Technical data and description

6.2 EUROSOG-I-D (three-phase current device)

Max. airflow volume	[m³/h]	260
Connection diameter	[mm]	50
Max. Vacuum	[Pa]	20,000
Connection voltage	[V]	400
Drive output	[kW]	2.2
Filter area	[m²]	2
Dust collection container	[litres]	80
Nominal frequency	[Hz]	50
Environmental conditions	[°C]	$5 \leq \vartheta \leq 40$
Max. air humidity	[%]	Approx. 60
Dimensions	[mm]	1,050 x 670 x 1,250
Weight	[kg]	81
Max. sound pressure level*	[dB(A)]	71
Production year + Serial No.		See model plate

* The measurement surface sound pressure level was measured according to DIN EN ISO 3744 in an open area, at maximum volume flow, at a 1 m distance from the surface of the device, at a height of 1.6 m above ground. From the measurement surface sound pressure level and the device dimensions, the sound power level according to DIN EN ISO 3744 was calculated.

6.3 Functional description

Operation with three-phase current:

The EUROSOG is equipped with a three-phase asynchronous motor that is turned on and off by an all-pole main switch.

The motor uses a poly-V belt to drive a multi-level turbine. Based on the vacuum created by the turbine, air is sucked through the intake fitting on the filter housing or through a suction piece connected to the intake fitting. A permanent filter set up within the filter housing separates the dust that is in the exhausted air. The cleaned air is released from louvers on the side of the turbine housing.

A crank on the filter housing is used for cleaning the filter. The crank drives a brush strip that runs over the filter folds and in this way removes dust clogged into the folds. The removed dust is caught in the dust collection container.

For easier removal of the collected material, the upper part can be tipped backwards and the dust collection container removed from the device complete with its contents.

7. Delivery and commissioning

7.1 Delivery

At delivery, the EUROSOG is fastened to a pallet. After the protective cover and the bottom fasteners have been removed, it can be picked up with a forklift. Please use a crane.

Only persons authorized under “General safety instructions” must turn the device on.
Before setting up the cable connection between the device and the power grid, check to make sure the operating voltage shown on the model plate is the same as that of the grid.

Before set-up, the device must be plugged in and its operation tested, as is necessary every month.

Operation with three-phase current: EUROSOG-I-D
The equipment for turning the device on and off is located on the cover of the turbine housing. The device is turned on and off with the black rotary switch.

Be aware of the direction of rotation

Before commissioning, make sure that the turbine's direction of rotation is correct. Meanwhile, also look at the red light on the switch. If this lights up after the device is turned on, the direction of rotation is wrong, and the power supply's polarity must be reversed. For this purpose, the CEE plug is equipped with a phase inverter. Using a screwdriver to turn the pole pin built into the insulated part of the plug changes the motor's direction of rotation.

If the drive motor's direction of rotation is wrong, e.g., due to the wrong polarity, the drive must be reset immediately to prevent critical situations that could occur due to reduced suction performance, high surface temperature or bubbles.

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When moving the device, make sure the ground can support it and be driven over.

7.2 Commissioning

Only persons authorized under “General safety instructions” must turn the device on.
Before setting up the cable connection between the device and the power grid, check to make sure the operating voltage shown on the model plate is the same as that of the grid.

Before using the device, its operation must be tested.

The EUROSOG must be used on a conductive surface, such as a natural surface (stone, asphalt, wood).

The device must be placed on a level surface. Lock two of the device’s wheels. The industrial vacuum cleaner’s intake port has an interior diameter of 50 mm. The correct size plug connector, with a suction hose fastened to it, is inserted and locked with a locking bolt.

After connecting the suction hose to the processing machine, first set the dust extractor in motion, and then the processing machine. When switching off, follow the same procedure in reverse.

During operation, the dust extractor’s location should not be changed. Move the device only on level ground with sufficient load-bearing capacity. For the weight, see the technical data.

7.2.2 EUROSOG-I-D

The equipment for turning the device on and off is located on the cover of the turbine housing. The device is turned on and off with the black rotary switch.

Be aware of the direction of rotation!

Before commissioning, make sure that the turbine’s direction of rotation is correct. Meanwhile, also look at the red light on the switch. If this lights up after the device is turned on, the direction of rotation is wrong, and the power supply’s polarity must be reversed. For this purpose, the CEE plug is equipped with a phase inverter. Using a screwdriver to turn the pole pin built into the insulated part of the plug changes the motor’s direction of rotation.

When the direction of rotation is wrong, the device gets impermissibly hot, the airflow volume gets weaker, and the device's performance suffers. This can also damage the device.

7.3 Operation

If a function check is performed, the correct ESTA suction accessory parts must be connected for commissioning the EUROSOG. This consists of a suction hose, a handheld tube and a nozzle. The end of the suction hose, which is reinforced with a coil spring, is inserted into the intake port of the industrial vacuum. The other end is connected to the sleeve of the handheld tube or a hand-guided suction nozzle. For cleaning the floor, connect the handheld tube to the floor vacuuming attachment. The EUROSOG is now ready to operate.

The EUROSOG-I-D model industrial vacuum is also suitable for exhausting processing machines.

Setting the operating mode selector to **"E"** allows the device to be connected to a processing machine. This is done by means of an adaptor (only ESTA adaptors are permitted) that fits the special exhaust hose (50 mm dia.) and must be adapted to the port diameter of the machine producing the dust. The device should be placed as near as possible to the processing machine. The device must be placed on a level surface. Lock two of the device's wheels. The switching point on the pressure controller for the warning device may have to be adjusted to the suction line resistance. Now the EUROSOG and the connected processing machine can be started up. When switching the device off, follow the same procedure in reverse.

In "Dust removal" mode, the operating mode selector must be right at the "E" position. During operation, the EUROSOG's location should not be changed!

8. Maintenance and troubleshooting

8.1 Maintenance instructions

Maintenance work must only be done outside of explosive zones.

For maintenance by qualified personnel, the device must be opened, cleaned and inspected at the given locations, as well as possible, without any hazard being posed to maintenance personnel or other persons. Proper precautions must be taken before cleaning and removal of wearing parts. This includes locally filtered forced-air ventilation in the area in which the device is being maintained, and proper personal protective gear.

During maintenance or repair work, all soiled objects that can no longer be adequately cleaned must be disposed of. Such objects must be disposed of in impermeable dust bags in compliance with applicable regulations for disposal of such refuse.

If the EUROSOG is not needed in its location of use for a long time, it must be stored in a dry room. The temperature should not be below 5°C or above 25°C.
Before the device is placed into storage, it is recommended that it be cleaned with a damp cloth, that the filter be cleaned, and that the dust collection container be emptied.

The device must never be cleaned with flowing water.

When not being used, the device should be stored in a dry area (max. air humidity 60%, storage temperature 5°C to 30°C). Before a long storage period, the device should be emptied and cleaned as explained in this section.

For safe transport, the EUROSOG must be placed centrally on a Europallet and securely lashed to it.

If necessary, the device can be cleaned with a damp cloth. It must never be cleaned with flowing water. During maintenance by the expert, the device must be taken apart, cleaned and maintained, as well as possible, without any hazard being posed to maintenance personnel or other persons. Suitable precautionary measures include cleaning before opening, supply of locally filtered forced-air ventilation in the area in which the device is being maintained, cleaning of the maintenance area, and proper personal protective gear.

On Class M devices, the exterior must be vacuum cleaned and wiped clean with a damp cloth before being removed from the dangerous area. All machine parts should be considered contaminated if they have been removed from the danger

zone and must be handled properly to prevent dust dispersion.

The main filter must be replaced only by a person trained in handling toxic exhaust materials. Additionally, the replacement must be done in a suitable area. Persons who are not trained in regard to exhaust materials must not enter the area.

During maintenance or repair work, all soiled objects that can no longer be adequately cleaned must be disposed of. Such objects must be disposed of in an impermeable bag in compliance with applicable regulations for disposal of such refuse. Inform yourself of such regulations through your local authorities.

The operator is obligated to have maintenance performed once per year. During maintenance, the entire system is to be tested by a trained expert for correct operation. A log is to be kept of the main annual inspection in the included maintenance book. It must document the date of inspection, deficiencies determined and the name of the inspector. The date of the next inspection can be read from the test plate installed on the device.

8.2 Inspection and maintenance intervals

Regular maintenance consists of 3 intervals:

Daily inspection includes:
By the device's user

Visual inspection

- for damage to the device or its parts,
- for mechanical damage to the power cable,
- for a full dust collection container (regulations require that the container be emptied if it is more than 2/3 full).

Monthly inspection includes:
By expert maintenance personnel

Functional and visual inspection

- for filter leaks (dust trails or deposits on the air outlets),
- when available, to guarantee operation of the minimum airflow volume monitor (manometer or pressure controller). During inspection, the device's air intake must be closed.

The main annual inspection includes:
The last test by ESTA is documented on the device!
In collaboration with the ESTA maintenance service

- Flow volume measurement
- Vacuum measurement
- Current consumption measurement
- Visual check of filters
- Seal inspection

After maintenance, the device receives a new test plate as documentation.

This inspection must be done once per year.

The maintenance work must be recorded in writing in the maintenance book provided. This must make clear the equipment inspected and, if necessary, the deficiencies found, along with the name of the inspector and the date of the inspection.
If there is a malfunction, the device must be switched off immediately and the responsible maintenance service notified!

Maintenance must be performed according to accident prevention regulations. The device must be disconnected from the power supply!

According to work equipment user directive 89/655/EWG and TRGS 560, safety devices for prevention or removal of hazards must be regularly maintained and regularly inspected by an expert for safe, flawless operation.

Get the most from ESTA's maintenance service!

A maintenance contract ensures a long life and top-notch operation for your industrial vacuum.

We'll make you a great offer — just call us up:

ESTA maintenance service: +49 (0) 7307 804 - 0
ESTA replacement part service: +49 (0) 7307 804 - 0

8.3 Troubleshooting

Always use the following checklists if a malfunction is evident. Call the ESTA maintenance service right away if there is a malfunction that is not discussed in these lists. Do not perform any repairs on the device yourself if they are not explicitly specified.

Problem	Possible cause	Possible solution
Device goes off	The motor protection relay has been tripped due to low voltage, overload or wrong direction of rotation	Voltage too low Clean filter Change the connection polarity Allow to cool for 30 min.
Suction performance diminishes / or no suction	Filter clogged Suction hose clogged	Clean filter Clean the exhaust hose in an environmentally sound manner
Warning signal for low suction volume persists despite filter cleaning.	Fine dust is sucked right back to the filter. Pressure controller set too weak Dust collection container too full Filter pores clogged in main filter	Clean several times with device at rest and let the dust settle (1 min.) Change the pressure controller setting after consulting ESTA. Replace dust bag Replace filter

Only original ESTA accessories must be used for operating the device.

If dust escapes or clouds up from the air outlets, if smoke develops or the suction assembly runs loud, the device must be switched off immediately!

Before opening the switch box, make sure to pull the electrical plug! Work in the switch box must be performed only by an electrical expert or an appropriately trained person.

9. Monitoring the minimum airflow volume

On tested devices of dust classes **“M”** and **“H”**, a manometer monitors the minimum airflow volume. The filter must be cleaned when the manometer’s needle is in the red zone after the nozzle has been withdrawn.

On the **EUROSOG-I-D** industrial vacuum, which can also be used as a dust extractor for processing machines, an additional vacuum monitor is installed. In so doing, check that the exhausted airflow volume does not drop below the lower limit. This minimum airflow volume depends on the size of the intake port on the machine producing the dust. The dust extractor’s monitoring equipment (pressure switch and connected siren) must be adjusted to this minimum airflow volume.
This device measures the vacuum behind the filter. With increased dust soiling of the filter, the flow resistance increases along with the vacuum behind the filter. If the value set on the vacuum monitor is reached, a siren sounds. This means that the filter must be cleaned.

When the device is being used as a dust extractor, the operation mode switch must be right at the “E” position! Then the horn signal sounds when the airflow volume drops below the minimum!

Preset pressure controller

If the pressure controller’s preset value is too weak for operational use conditions (long exhaust distances and small tube diameters), it means that a short time after cleaning, the signalling device will be triggered again. This can be adjusted upon consultation with ESTA maintenance services.
The pressure switch must be adjusted only by an appropriately trained person. The adjustment is made with a size 6 Allen wrench. After the pressure switch has been set, the device is ready for operation again.

If the vacuum indicator is in the red zone during commissioning and the siren sounds, the suction resistance up to the processing machine is too high to reach the minimum airflow volume. In this case, the device cannot be used as intended!

10. Cleaning

The people assigned to cleaning work must be instructed on the aspirated toxic materials and wear a breathing protection mask with a class P3 particle filter, as well as protective gloves. All distractions by uninvolved persons must be prevented.



During cleaning work, all soiled objects that can no longer be adequately cleaned must be disposed of. Such objects must be disposed of in impermeable bags in compliance with applicable regulations for disposal of such refuse.

When the device's suction performance diminishes after every use, clean the filter unit.
Depending on the equipment, the need for cleaning is shown by a manometer or a warning signal.

10.1Filter cleaning

During cleaning, the intake port must be closed and the power connection shut off. To clean the filter, turn the hand crank on top of the device 60 times clockwise and 60 times counter-clockwise.

If fine dust is being exhausted, the filter needs to be cleaned more often.

After cleaning and start-up of the device, if the manometer's needle is still inside the red zone, the amount of material in the dust collection device must be checked. For this you must wait about one minute after cleaning so that the removed dust can settle. If necessary, empty the container.

If the suction performance doesn't improve after cleaning and emptying, replace the main filter or the backup filter, depending on the model.

10.2 Filter replacement

Filter replacement must be performed in a well-ventilated room or outdoors. The people assigned to this work must be instructed on the aspirated toxic materials and wear a breathing protection mask with a class P3 particle filter, as well as protective gloves. All distractions by uninvolved persons must be prevented.



After an extended operation period, the filter pores can be clogged by extremely fine dust. Even the cleaning equipment cannot remove this dust. The filter affected must then be replaced with a new one.

If possible, filter replacement must be done when there is no work going on. Used filters must be discarded in compliance with local regulations.

Before the filter is replaced, it must first be cleared of loose dust using the available cleaning system, and the power must be cut off.

10.2.1 Replacing the main filter

The main filter must be replaced only by a person trained in handling toxic exhaust materials. Additionally, the replacement must be done in a suitable area away from explosive zones. Persons who are not trained in regard to exhaust materials must not enter the area.

Under no circumstances should the filter material be damaged, because then the filtration efficiency will no longer be achieved.

Remove the crank from the cleaning device in order to loosen the threaded fastening pin. Now the crank can be pulled out. After that, loosen the clamping ring that holds the cover plate and remove the cover plate.
Pull the dust collection bag over the upper part of the vacuum.
The upper part will now tilt backwards when the locking bolt is removed.
On the underside of the filter part, six nuts are visible (M8, SW 13); remove them. Now the used filter can be pulled out of the upper part while pulling it upward against the cleaning shaft. In this way, the dust collection bag turns over the entire filter, so that no dangerous dust enters the environment. Close the dust collection bag with the supplied band so that no dust can escape.
Install the new filter cartridge with the integrated cleaning equipment by performing the same process in reverse. Additionally, the filter cartridge must be sealed at the upper side with sealing compound.

10.2.2 Replacing the backup filter (devices with the dust class **“H”** test certificate)

The backup filter is in the housing, inserted loosely around the main filter cartridge, and when the cover plate is removed, it can be taken out. It must be put into a dust collection bag.
The backup filter must be changed together with the main filter.

When installing the new “H” filter cartridge, make absolutely sure that the filter does not become damaged, since otherwise the filtration efficiency can no longer be reached.

Before installing a new filter, clean the filter housing, especially the sealing surface, with an industrial or glass cleaner.
Stubborn remains can also be removed with a scraper.

Cleaning the filter cartridge in a dismantled state by blowing it out or beating it is not permissible.

11.Disposal

The people assigned to disposal work must be instructed on the aspirated toxic materials and wear a breathing protection mask with a class P3 particle filter, as well as protective gloves. All distractions by uninvolved persons must be prevented.



11.1 Disposing of the collected dust material

After using the dust extractor, always replace the dust collection bag when it has reached the container's maximum fill height, which is identical with the lower edge of the score in the dust collection container and must always be replaced with a new one after using the industrial vacuum.

Since the ESTA company does not know what types of dust are being exhausted, it can be necessary to replace the dust collection bag before it has reached its maximum fill level (a large bulk density means heavy weight).

Before replacing the dust collection bag, lock the castors and pull off the suction hose.


Locating pin

To remove the full dust collection bag, tilt the upper part of the device in the direction of the turbine housing while removing the locating pin on the side. The locating pin rests back in when the upper part has been fully tilted.
Now turn the device back on. To remove the dust collection bag, pull it carefully upwards, press it together, and close it with the included band. Finally, remove the dust collection bag from the container, and dispose of it in accordance with local regulations.
Using the handles, the dust collection container can also be complete removed along with the locked dust bag.
When inserting a new dust collection bag, make sure that as few creases as possible lie against the upper edge. The device should be turned back on only when its upper part has been snapped shut (remove the locating pin) and the suction hose has been inserted. This is the only way to ensure that during disposal no dust passes from the filter to the environment. The device is now ready to operate again.

11.2 Disposing of the device

Before disposing of the device, empty the dust collection container, remove the filter cartridges, and dispose of both of them in compliance with local regulations.

Pack the device in a suitable manner and dispose of it in compliance with local regulations.

Due to contamination of the device with toxic dust, ESTA cannot take the device back.

12. Optional equipment

12.1 Movable dust collection container

To make transporting a heavy load of dust easier, special equipment for the dust collection container includes two rollers and two push handles.
After the dust collection container is unhitched from the upper part of the filter, lock the dust collection bag.
Then pull both grey push handles together. The dust collection container releases itself from its side locking mechanism in the chassis. Slowly pulling further on the handles slides the container from the base plate to the floor. Now it can be easily rolled to the disposal location.
After disposal, insert a new dust collection bag.
To hitch the container, roll it to the device and lean it so that the edge of the base plate (the chassis of the vacuum) stops in the middle of the container base. Pressing the container's handles toward the device slides the dust collection container on the base plate and rests it in the notches on the side walls of the chassis.
The vacuum should not be turned on until after the dust collection container has been hitched up. This is the only way to ensure that during disposal no dust passes from the filter to the environment.

12.2 Pre-separator

The EUROSOG can be equipped with an upstream separator. This collects large amounts of coarse dust, in order to prolong the life of the filter cartridge. It is available in various sizes.
The pre-separator is also an ideal addition for moving fluid-laden or very light materials.

Model	Included in delivery	Vessel size	Application
TR 1	Dolly, vessel with plastic bag insert, pre-deposition head with connection to suction assembly, dia. 50	100 litres	**Dry** heavy, coarse suction material and large amounts of dust
TR 2		200 litres	
NA 1	Dolly, vessel with screen basket, pre-deposition head with float clasp and connection to suction assembly, dia. 50	100 litres	**Wet** fluid-laden material (metal abrasions, shavings, etc.); liquid can be drained
NA 2		200 litres	
ST 1	Dolly, vessel with side connection ports, spacer and filter bag that accepts disposable filters, connection to the suction assembly, dia. 50	100 litres	**Lightweight material** large amounts of light material, mainly dust
ST 2		200 litres	

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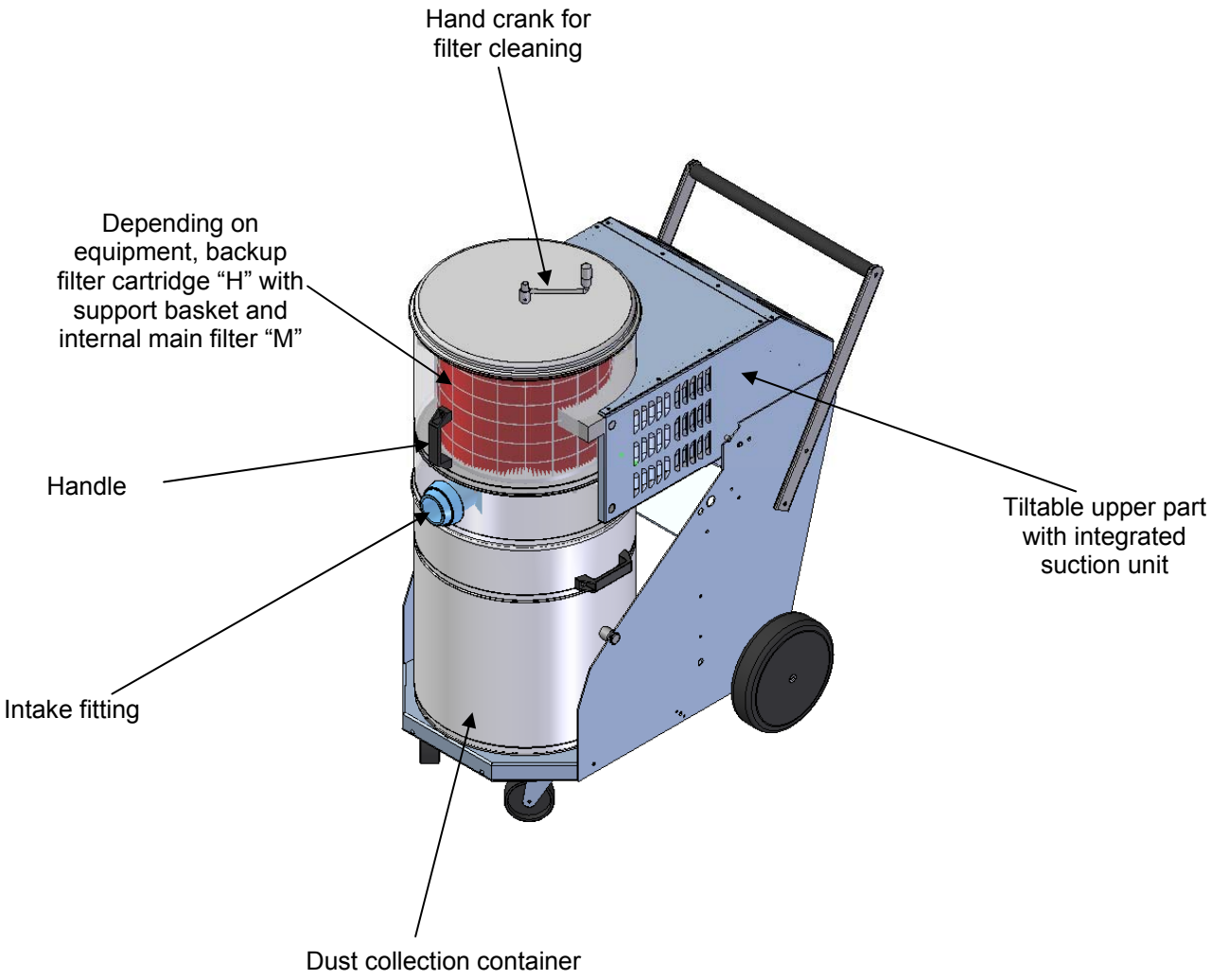
13. Device diagram

EUROSOG

The depiction can vary from the actual model.



With the model information, request the replacement parts you need from the ESTA replacement part service: +49 (0) 7307 804 - 0

14. Declaration of conformity

Name of manufacturer:	ESTA Apparatebau GmbH & Co.
Address of manufacturer:	Gotenstraße 2 - 6 89250 Senden
Mr. Mertins is authorised to compile the technical file according to Annex VII A.:	Michael Mertins Gotenstraße 2 - 6 89250 Senden

Here we explain that the design of the machine

Machine:	Dust extractor / industrial exhaust for collection, transport and elimination of non-conductive dusts and shavings from individual sources, and for suction and separation of non-conductive deposited dusts and shavings.
Series:	EUROSOG
Model / Order No.:	**EUROSOG I-D / 81200**

conforms to the applicable directives:

ATEX 94/9/EC	Devices and protection systems for intended use in explosion-endangered areas,
98/37/EC	EC Machine Directive,
2006/95/EC	EC Low Voltage Directive
2004/108/EC	EC Directive on Electromagnetic Compatibility

The device's labelling must contain the following data:

CE Ex **II 3D c tD A22 T4 X** (for non-conductive dusts)

The product has been manufactured in compliance with the following coordinated norms:

EN 12100	Safety of machinery - basic concepts, general propositions (part 1 and part 2)
EN 294	Safety of machinery, devices and systems; safety distances to prevent hazard zones from being reached
EN 349	Safety of machinery; minimum distances for preventing body parts from being crushed
DIN EN 13463-1	Non-electric devices for use in explosion-endangered areas (sections 7.4 and 11)
DIN EN 13463-5	Non-electric devices for use in explosion-endangered areas (sections 5 and 6)
DIN EN 61241-0	Electrical equipment for use in areas with
DIN EN 61241-1 / -14	flammable dust (ignition protection type 'tD')
BGR 132	Prevention of ignition hazards due to electrostatic charges (section 3.4.2.4)
DIN EN 1127-1	Explosive atmospheres - Explosion prevention (Part 1:Fundamentals and Methodology)
EN 60335	Safety of electrical appliances for household and similar use (part 1 and part 2-69)
EN 61000-6-3	Electromagnetic compatibility - Emitted interference in residential areas, commercial and business operations, as well as small enterprises
EN 61000-6-4	Electromagnetic compatibility - Emitted interference for the industrial sector
EN 61 000-3	Electromagnetic compatibility (Part 3)

National norms and technical specifications used:

VDI 3677	Filtering separators

Senden, 30 December 2010

Dr. Peter Kulitz
CEO

Notes

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