

V. BRØNDUM A/S Nr.: A0800147

USER MANUAL

(Original) (Contry code: EU; CH; DK)



# RONDA<sup>®</sup> 1200H

# RONDA<sup>®</sup> 1200H-S Industrial Vacuum Cleaner for fine dust and dust hazardous to health

IMPORTANT! Read this manual before you operate the machine.

# List of Contents

General Description	4
Safety Precautions	
Guidelines in Connection with Disposal of the Machine	
General Safety Instructions	7
Technical Data	9
Standard Accessories	
Description of the Main Parts	11
Motor Top with Suction Motor and HEPA-Filter	11
Motor Top with Alarm and Pressure Relief Valve	11
Filter Container with Multi-Tube Filter	
Collection Container	
Applications	
Mode of Operation	14
Assembling	
Collection of Dry Dust	
Separate Exhaust	
Filter Cleaning during Operation (as needed or when the alarm beeps)	
Cleaning and Maintenance	23
Change of Filters	24
Check and Replacement of the Multi-Tube Filter (Item No. 84.67.1110)	24
Replacement of the HEPA-Filter (Item No. 84.67.5006)	24
Troubleshooting	
If the machine does not start:	
If the machine does not collect the material in a satisfactory way (alarm beeps):	
DECLARATION OF CONFORMITY	
Service and Repair	

# **RONDA 1200H / 1200H-S** Industrial vacuum cleaner for fine dust and dust hazardous to health

# **General Description**

Congratulations on your new RONDA® 1200H / 1200H-S industrial vacuum cleaner from V. BRØNDUM A/S.



Read this manual before you operate the machine.

Keep the manual readily accessible to all users.

RONDA<sup>®</sup> 1200H / 1200H-S is a heavy duty industrial vacuum cleaner developed for the collection of large quantities of fine and health hazardous dust. RONDA<sup>®</sup> 1200H / 1200H-S meets the requirements for vacuum cleaners within the industry and the construction industry today. The machine is ideal for large cleaning tasks and will typically meet the demands of craftsmen and within the industry where large quantities of fine dust and dust hazardous to health are collected.



- Self-cleaning Teflon-coated multi-tube filter (BIA dust class "M")
- Filter cleaning during operation with shock valve (back flush)
- HEPA-filter (BIA/IFA dust class "H")
- Trolley frame with large wheels
- Protection class IPX4 (IEC 60 529)
- Emptying from the bottom with collection in plastic sack, in disposable container with handle and sealing or direct in the collection container
- Static electricity dissipation
- Fulfils the requirements of EN 60 335-2-69 Annex AA for collection of dust hazardous to health in dust class "H"
- Electrical outlet with automatic start/stop
- Beeper alarm in case of too low air flow
- Soft start of motor
- Post-suction when using hand tool

RONDA 1200H-S is mounted with separate exhaust coupling. It is relatively easy to mount separate exhaust coupling on RONDA 1200H, if this is required. It is, however, necessary to send the motor top to V. Brøndum

#### A/S for alteration.

The machine cannot immediately be restored to the original RONDA<sup>®</sup> 1200H without exhaust coupling.

The user manual is to ensure a secure operation of the vacuum cleaner, and to secure that the user is in no way uncertain as to the use. The manual must be stored near the vacuum cleaner.

Does any uncertainty arise as to the use of the vacuum cleaner or the material collected, the work should be stopped until all questions have been cleared.

Pictures and drawings are for illustrative purpose and will make the understanding of the manual easier. The pictures shown may therefore be different from the actual product.

#### Safety Precautions

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with appliance.

- The machine is not approved for collection of flammable, explosive, poisonous or extremely health hazardous dust, fluids or gasses.
- DO NOT USE THE VACUUM CLEANER WITHOUT A PROPER GROUND CONNECTION. This vacuum cleaner is designed to be used with a grounding connection, in an installation with HFI or HPFI. The user is responsible for ensuring that the wall outlet is grounded. The ground connection of the plug must NOT be removed.
- RONDA<sup>®</sup> 1200H / 1200H-S 1200 is approved for collection of dust hazardous to health according to CEI/IEC 60335-2-69 Annex AA.
- The machine must be emptied after use.
- The user must ensure that the machine is adjusted to the task and that regulatory requirements are met.
- Avoid damaging the supply cord. When replacing the supply cord, only use an original supply cord as shown above (see the spare parts list). V. BRØNDUM A/S, an authorized V. BRØNDUM A/S dealer or an equally qualified person must carry out the replacement in order to avoid danger. Regularly check the mains connection for damage, such as fissures or ageing, and if damage is found, the supply cord must be replaced before further use.
- When collecting dust hazardous to health you must use a filter bag, and disposal must comply with the legal requirements for material (closed container, plastic bag etc.).
- Before any repair or maintenance operations on the machine also cleaning the plug must be removed from the power supply.
- RONDA<sup>®</sup> 1200H / 1200H-S must be connected to 230 V power supply. Make sure that the voltage and the safety fuse of the power supply correspond with the data of the date plate on the machine and the information given in this manual.
- The power outlet of the machine may only be used as described in this manual.
- Besides use in the household this machine may also be used commercially, e.g. in hotels, schools, hospitals, factories, shops, offices and rental businesses.
- Before use, operators should be provided with information, instruction and training for the use of the appliance and the substances for which it is to be used, including the safe method of removal and disposal of the material collected.
- For user servicing, the appliance must be dismantled, cleaned and serviced, as far as is reasonably practicable, without causing risk to the maintenance staff and others. Suitable precautions include decontamination before dismantling, provision for local filtered exhaust ventilation where the appliance is

dismantled, cleaning of the maintenance area and suitable personal protection.

- In the case of class H appliances the outside of the appliance should be decontaminated by vacuum cleaning methods and wiped clean or treated with sealant before being taken out of a hazardous area. All the appliance parts shall be regarded as contaminated when removed from the hazardous area and appropriate action taken to prevent dust dispersal.
- The manufacturer, or an instructed person, shall perform a technical inspection at least annually, consisting of, for example, inspection of filters for damage, air tightness of the appliance and proper function of the control mechanism. On class H appliances the appliance filtration efficiency should be tested at least annually, or more often, according to national requirements. The test method that may be used for the verification of the appliance filtration efficiency is given in AA.22.201.2. If the test will not be passed, it must be repeated with a new main filter.
- When carrying out service or repair operations, all contaminated items, which cannot be satisfactorily cleaned, are to be disposed of. Such items shall be disposed of in impervious bags in accordance with any current regulation of the disposal of such waste.
- The upper part of the motor top is a non-dust proof compartment, and when cleaning, the covers of this compartment are removed by loosening the screws fixing the covers.
- IMPORTANT! The vacuum cleaner must not be started with the covers removed.
- When the automatic start/stop is activated in connection with electrical hand tools, you must ALWAYS turn off the hand tools BEFORE you turn off the machine.
- IMPORTANT! The motor top must not be covered when the vacuum cleaner is in use.

#### Guidelines in Connection with Disposal of the Machine



The product you have purchased is subject to Directive 2002/96/EC of the European Parliament and the Council of the European Union on waste electrical and electronic equipment (WEEE) and should not be disposed of as unsorted municipal waste. Please utilize your local WEEE collection facilities in the disposition of this product and otherwise observe all applicable national requirements.

Does the safe use or maintenance of the appliance raise any questions; do not hesitate to contact either your dealer or V. BRØNDUM A/S.

#### General Safety Instructions

When using electrical equipment the necessary safety precautions must be taken in order to avoid the risk of fire, electrical shock and damage to persons. The below safety instructions are to be read and followed when the vacuum cleaner is being used.

- 1. Keep the working area clean. Slippery and greasy surfaces increase the risk of accidents.
- 2. Be aware of the surroundings. Do not expose the vacuum cleaner to rain. Do not use the vacuum cleaner in moist or wet surroundings. Do not use the vacuum cleaner near flammable gasses or liquids.
- Protect against electrical shock. Avoid bodily contact with earthed building parts, such as radiator, water pipes and the like and also electrical appliances with their own earth connection.
- 4. Keep children and unauthorized persons away from the workplace. Do not let unauthorized persons touch the vacuum cleaner or the supply cord. All unauthorized persons should be kept at a distance.
- 5. Put the vacuum cleaner away, or make it ready for transport after use. Keep the vacuum cleaner in a dry place and inaccessible to children.
- Do not use force.
  Do not use force when operating the vacuum cleaner. Do not step on the hose, or the electrical cord.
- Choose the correct tool, accessories for the task. Do not use badly proportioned or light tools for heavy tasks. Do not use tools for anything they are not intended for.
- 8. Choose suitable working clothes.
- 9. Personal protective equipment. Put on eye and/or ear protection, if necessary. Put on respirator in dusty environments.
- 10. Protect the electrical cord. Never carry the vacuum cleaner in the electrical cord. Do not remove the plug from the socket by pulling the electrical cord. Keep the electrical cord away from heating sources, oil and sharp edges.
- 11. Choose a safe working position so that there will be no risk of falling in the hose and cord.
- 12. Keep the machine and equipment in good repair. Keep the vacuum cleaner clean and dry and follow the instructions of the chapter about maintenance.
- Cut off the electricity supply when the vacuum cleaner is not in use. Remove the plug from the socket before maintenance, repair and when the vacuum cleaner is not in use.

14. If extension cords are used out of doors, they must be approved for this. If extension cords are used, the following guidelines must be observed.

Length of cord in	Cross section	
metres	<16A	<25A
Up to 20 m	Ø1,5mm <sup>2</sup>	Ø2,5mm <sup>2</sup>
20-50 m	Ø2,5mm²	Ø4,0mm <sup>2</sup>

#### 15. Show attention and be rested.

The vacuum cleaner must not be used, if the user is tired, sleepy or sick or under the influence of alcohol or drugs / medicine.

#### 16. Check for damage.

Check the vacuum cleaner for damage. Check that the shields etc. have been properly fastened. Check the electrical switches, and have an authorized service mechanic replace them, if they are damaged. Do not use the vacuum cleaner, if it cannot be started and/or stopped at the switch.

RONDA<sup>®</sup> 1200H / RONDA<sup>®</sup> 1200H-S is H-classified in accordance with the demands of EN 60335-2-69 Annex AA for collection of dust hazardous to health.

RONDA<sup>®</sup> 1200H /RONDA<sup>®</sup> 1200H-S is furthermore in accordance with the Machinery Directive (2006/42/EC).



WARNING: This appliance contains dust hazardous to health. Emptying and maintenance operations, including removal of the dust collecting means, must only be carried out by authorized personnel wearing suitable personal protection. Operate only after the full filtration system has been fitted and checked.



Advarsel. Dette apparat indeholder sundhedsfarligt stav. Tømning og vedligeholdelse, inklusive fjernelsen af støvposen, må kun foretages af en fagkyndig person, som bærer egnet personligt beskyttelsesudstyr. Tænd ikke før hele filtersystemet er installeret, og volumenstrømkontrol- ens funktion er kontrolleret.	Warning. This appliance contains dust hazardous to health. Emptying and maintenance operations, inclu- ding removal of the dust collecting means, must only be carried out by authorised personnel wearing suita- ble personal protection Operate on- ly after the full filtration system has been fitted and checked.	Mise en garde: Cet appareil contient des poussières dangereuses pour la santé. Les opérations de vidage et d'entretien, y compris l'enlévement des moyens de ramassage de la poussière, ne doivent etre effectués qu par du personnel autorisé portant des équipements de protection individuelle appropriés. Ne pas faire fonctionner sans que les systèmes de chication complets soient en place, et que la fonction de l' Indicaleur pour la vitesse d'air est vérifiée.	
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3 labels are enclosed. One in Danish, one in English and one in French.

The standard language of the label on the machine is German. Therefore the label with the language of the country in question is to be placed on the H-label, with the text as shown above.

# **Technical Data**

 $\text{RONDA}^{\circledast}$  1200H / 1200H-S is connected to 230 V power supply.

Make sure that the voltage and fuse of the power supply correspond with the data of the data plate of the machine and the data of this manual.

The survey below shows the technical data of RONDA<sup>®</sup> 1200H / 1200H-S.

A169	EU	СН	DK	
Voltage	230	230	230	Volt
Suction motor	1100	1100	1100	Watt
Power outlet, max.	2000	1200	1800	Watt
Vacuum	2550	2550	2550	mmWc
	25	25	25	kPa
Air volume, max.	54	54	54	l/sec
	194	194	194	m³/h
*Suction power, max. ((P2) based on IEC 60312)	330	330	330	W
Noise level,	< 70	< 70	< 70	dB(A)
Filter area, multi-tube filter	0.8	0.8	0.8	mź
Filter area, HEPA-filter	1.1	1.1	1.1	m²
Collection capacity (Bag/container)	25/25	25/25	25/25	I
Height	885	885	885	mm
Length	490	490	490	mm
Width	620	620	620	mm
Weight without accessories	27	27	27	kg
Container coupling	Ø 50	Ø 50	Ø 50	mm
Lenght of supply cable	8	8	8	m

\*Data of the machine with 4 metres Ø 38 mm hose



In connection with extraction from tools (dust extractor) it is necessary to ensure a sufficient rate of air renewal (L) in the room. According to the instructions from The Danish Working Environment Service, recirculation of extracted air is forbidden.

Please refer to national regulations.

#### **Standard Accessories**

RONDA<sup>®</sup> 1200H / 1200H-S is delivered with a complete set of accessories including tubes, hose and all the necessary nozzles.



You can reorder the accessories using the following product numbers:

1. 40 mm professional's set	80.33.4039
2. Plastic hose, 4 m	
3. Crevice nozzle	80.34.4000
4. Round brush	80.34.4001
5. Floor nozzle B-370	84.38.3620
6. Tubes, two straight ones and one curved	80.52.2160
7. Pyramid shaped cuff (with hose and coupling)	81.56.3810

# **Description of the Main Parts**

RONDA<sup>®</sup> 1200H / 1200H-S is designed as a Heavy Duty industrial vacuum cleaner for collection of dust hazardous to health.

Motor Top with Suction Motor and HEPA-Filter



The motor top is equipped with suction motor, an integrated handle, switches for the suction motor and the built-in automatic start-/stop.

The powerful suction motor of  $\text{RONDA}^{\circledast}$  1200H / 1200H-S is placed in the motor top.

The collection of fine dust will often generate or produce static electricity, which can be inconvenient for the work. Therefore the supply cord has a separate wire (conductor) for connection to earth. Static electricity, if any, will be diverted through this wire.



The motor top is provided with a HEPA-filter, of the finest dust class "H".

The filter holds back the fine and smallest dust particles, which have not been held back by the multi-tube filter. The filter holds back the particles larger than 0.3  $\mu$ m (0.0003 mm). The surface of the filter is 1.1 m<sup>2</sup> and is protected by a metal grating.

Motor Top with Alarm and Pressure Relief Valve



The motor top is equipped with a pressure relief valve and will beep for alarm when the air flow is too low (<20 m/sec.).

The motor top can be equipped with a separate exhaust coupling. I.e. the air will be exhausted through a hose coupling in the motor top. It will then be necessary to use a hose.

Electrical hand tools can be connected directly to the RONDA® 1200H / 1200H-S.

#### Filter Container with Multi-Tube Filter



The large multi-tube filter of the RONDA<sup>®</sup> 1200H / 1200H-S is mounted in the filter container. The multi-tube filter has been tested with quartz-dust particles, of which more than half is less than 5  $\mu$ m (5  $\mu$ m is the same as 0.005 mm). The filter holds back 99.97% of all the particles, which corresponds to an emission of 0.06 mg/m<sup>3</sup> in the purified air.

The surface of the filter is 14,000 cm<sup>2</sup> and has a fine Teflon-coating. The Teflon-coating repels the dust, which will in this way not stick so easily to the filter material.

The filter consists of a large number of tubes (channels) mounted on springs. During operation the tubes vibrate, and part of the dust sucked on to the surface of the filter will fall down in the collection container.





**Collection Container** 

The collection container is fastened to the filter

container with two large container clips. The wheels under the collection container make the emptying easier.

The collection container is provided with a black mounting ring, which will ensure that the plastic sack for collection of dust will not be sucked up against the multitube filter during operation.

The dust collection can be done in several ways, i.e.

direct in the large collection container,

in the disposable container with handle and sealing



or in the plastic sac.





**Applications** 



RONDA<sup>®</sup> 1200H / 1200H-S is a vacuum cleaner according to DIN/EN 60335-2-2 and CEI/IEC 60335-2-69 Annex AA and may only be used as such. RONDA<sup>®</sup> 1200H / 1200H-S may be used for collection of dust hazardous to health according to CEI/IEC 60335-2-69 Annex AA.

 $\rm RONDA^{\circledast}$  1200H / 1200H-S may not be used for collection of liquids or moist dust but dry dust only.

 $\rm RONDA^{\circledast}$  1200H / 1200H-S may not be used to collect flammable, explosive, poisonous or other dust, fluids or gasses extremely hazardous to health.

 $\rm RONDA^{\circledast}$  1200H / 1200H-S may only be used in dry environments and may not be used or stored outdoors or indoors under wet conditions.

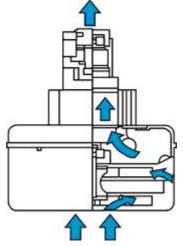
#### Mode of Operation

When the suction motor of the machine is on, the air will be led through the machine and will collect the dust particles near the nozzle mounted.

The dust particles will be sucked through the hose into the collection container, where the majority of the particles will be held pack in the filter bag and/or the multi-tube filter.

The air flow and the remaining particles, which have not fallen to the bottom of the collection container or have been held back in the filter bag or the multi-tube filter, will be carried forward to the HEPA filter.

From the HEPA filter the purified air flow will continue through the suction pump (blow through) and will be led out of the vacuum cleaner through the exhaust and noise reduction filters.



IMPORTANT! As the motor leads the cooling air through the machine, all filters MUST be mounted and intact.

IMPORTANT! Never cover up the motor top when the machine is in use.

IMPORTANT! Never collect warm or glowing materials.

IMPORTANT! Never extract from processes producing sparks.

# Assembling

- Check that the packing is intact and has no sign of damage from handling and transport.
- Unpack RONDA<sup>®</sup> 1200H / 1200H-S and check that all the parts ordered are there.



- Assemble the three parts of the tube and mount an appropriate nozzle.
- Fasten the rubber coupling of the suction hose to the tube and mount the other end of the hose in the coupling of the container.
- Check that the collection container is empty and that the multi-tube filter has been correctly mounted in the collection container. Check that the filters of the machine are intact and undamaged (see the chapter "Change of Filters").
- Before the plug is connected to the electrical main supply you must make sure that the plug and the cord are undamaged. If the cord or the plug is damaged, a professional must replace the parts.
- Connect the machine to 230 V power supply with a reliable earth connection.
- Remember to place the label onto the H-label, if the language of the user is not German.



 $\rm RONDA^{\circledast}$  1200H / 1200H-S is now ready for use. The collection is described in details in the following chapter.

# **Collection of Dry Dust**

Pull out the rear wheel frame and lean back the machine so that it is supported by the swivel wheels of the rear wheel frame.

When the vacuum cleaner has been correctly assembled and connected, it can be switched on at the red start/stop switch of the motor top.

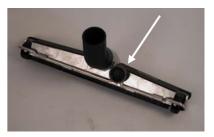
During operation the RONDA® 1200H / 1200H-S is wheeled on the big wheels and the swivel wheels of the rear



wheel frame.

The floor nozzle is suitable for collection of dust and materials from large, even surfaces. The nozzle is provided with brushes and wheels securing an optimal positioning of the nozzle on the even surface.

Gradually the brushes will be worn, and the nozzle will no longer collect in the optimum way. Adjust the height of the wheels using the knob on the nozzle so that the brushes only just touch the floor.



# Electrical Outlet with Automatic Start/Stop

RONDA® 1200H / 1200H-S is equipped with an automatic start/stop and electrical outlet. If you connect electrical



hand tools direct to the power outlet of the motor top, the RONDA<sup>®</sup> 1200H / 1200H-S will automatically be switched on and off, when the hand tools are switched on and off.

The automatic start/stop has a post-suction. Therefore the suction will continue for some seconds, after the hand tool has been switched off, before the machine will stop. The post-suction will ensure that dust and particles in the hose will be sucked into the vacuum cleaner.

of the motor top. Hand tools with a power consumption of up to

Country code EU 2000W Country code CH 1200W Country code DK 1800W

Information can be found on the data plate

can be connected to the RONDA® 1200H / 1200H-S. This corresponds to a current consumption of approx. 13 A.

#### NOTE:

If hand tool with a power consumption of more than 1100 W is connected, the total current consumption will exceed approx. 10 A, which is often the normal fuse size.

The automatic start/stop is activated with the black switch on the motor top. Then the machine is turned on with the red switch. When the automatic start/stop is activated, the machine will not start when you push the red switch. The machine will not start until the hand tool connected is started.

Set the red switch on "I" to put on the vacuum cleaner.



Automatic start/stop "I" = the automatic start/stop is activated. The vacuum cleaner will start when you use the hand tool.

Automatic start/stop "0" = the automatic start/stop is not activated. The vacuum cleaner will start when you set the main switch (red) on "I".

When the automatic start/stop is activated "I", and hand tool is connected to the electrical outlet, the machine will start when the hand tool is started.



ALWAYS TURN OFF the hand tool before you turn off the machine on the switch.

#### Separate Exhaust



If the machine is equipped with a separate exhaust coupling, a hose must be used for the air exhausted.

#### WARNING:

If no hose is used, the air exhausted may raise dust from the floor, and there may be a risk of dust exposure.

The hoses are available in varying lengths. It is recommended not to use hoses longer than 10 metres.

# Filter Cleaning during Operation (as needed or when the alarm beeps)

The multi-tube filter is cleaned during operation, i.e. while the machine is working.

- Remove the hose from the tube.
- Let the connection piece of the hose suck against an even surface, e.g. the motor top.



Vacuum will now be formed inside the machine and in the hose.

- Make full vacuum in the machine.
- Pull out the pressure relief valve.
- The valve will automatically open with a "puff".

Repeat the steps 1-3 approx. 2-3 times, when cleaning.

The difference in pressure / shock effect will clean the surface of the filter, when air is sucked through the valve in order to suppress the negative pressure in the collection container. This pressure release will reject possible deposits from the multi-tube filter.

It is recommended to leave the machine for a few minutes before emptying it, if no collection bag is used. The dust will fall to the bottom of the container, and the risk of swirling dust into the surroundings during the emptying is reduced.

NOTE: It is recommended not to "tap" on the intake as this will swirl up the dust in the container and result in blocking of the multi-tube filter. Therefore ALWAYS use the shock valve for the cleaning of the multi-tube filter during operation.

# Collection and Emptying with Collection Container, Disposable Container or Plastic Sack

Depending on the type of dust/material to be collected you can choose between three different ways to collect the dust/material. With RONDA<sup>®</sup> 1200H / 1200H-S the material can be collected direct in the collection container, in the disposable container or in the plastic sac. No matter which method is chosen the machine must be in its upright position when the collection container is removed. If the machine has been used immediately before, it is recommended to wait a few minutes before emptying it in order to allow the fine dust to fall to the bottom of the collection container.

Below you will find a more detailed description of the three methods.

Collection and Emptying with Collection Container:



If the material to be collected will not raise dust in connection with the emptying it can be collected direct in the large collection container.

- Place the mounting ring on top of the collection container.
- Push the container under the machine.
- Fasten the container with the two container clips.

Emptying the collection container:

- Loosen the two container clips fastening the collection container and remove the collection container from the filter container.
- Remove the mounting ring.
- Push or carry the container to the place for emptying.

Collection and Emptying with Disposable Container:



If the material to be collected will raise dust and is mixed with sharp objects, which may penetrate the plastic sack, it is recommended to collect and remove the material in the disposable container. The disposable container is an extra guarantee for dust free emptying if sharp objects have perforated the plastic sack.

- Place the plastic sack in the disposable container.
- Fold the upper part of the sack over the disposable container.



- Place the disposable container with plastic sack in the collection container.
- Place the mounting ring on the collection container.
- Push the collection container under the machine.
- Fasten the collection container with the two container clips.

Emptying the disposable container:



- Loosen the two container clips fastening the collection container and remove the collection container from the filter container.
- Remove the mounting ring.
- Press the cover of the disposable container on to the disposable container.
- Wrap the plastic sack around the cover and close the sack with the • binder.
- Lift the sealed disposable container out of the collection container. •

#### Collection and Emptying with Plastic Sack:





If no sharp objects are contained in the material raising dust, the plastic sack can be used for the disposal of the dust/material collected.

The plastic sack is placed in the disposable container as described in the chapter concerning collection and emptying with disposable container.

Emptying with plastic sack only:

- Loosen the two container clips fastening the collection container and remove the collection container from the filter container.
- Remove the mounting ring.
- Seal the plastic sack with the binder.
- The plastic sack and the disposable container are lifted out of the collection container.
- The plastic sack is lifted out of the disposable container and disposed of.

Reordering Plastic Sack, Disposable Container etc.

Collection container RONDA® 1200H / 1200H-S	85.79.0001
Mounting ring D-340 mm	85.68.0020
Plastic container 14 I with handle	84.64.9995
Plastic sac with binder	84.64.9996
Binder (25 items)	84.64.9992

**REMEMBER:** Always empty the machine after use.

You must make sure that the dust and material collected cannot fall out of the machine during transport.

#### **REMEMBER:**

When the machine has been used without filter bag you must take the necessary precautions against dust exposure.

Has the machine been used for dust hazardous to health, you MUST wear personal protection equipment (PPE) when emptying and handling the machine.

#### Always empty the machine after use.

Dust hazardous to Health and Asbestos Always check up on the local/national regulations in the area where the work is performed.

Always check with the local waste disposal plant how to pack/wrap the waste. It might be different from plant to plant how they want to receive the waste. Usually they want as follows: Close-fitting packing: Drum/vat with cover Plastic bag min. 100 µm.

Collection of dust hazardous to health should always be in collection bags. The collection bag must be removed from the machine and disposed of as laid down by the local waste disposal plant.

Always mark the material and waste according to the national regulations.

If the machine has been used for asbestos, the machine must be disassembled and cleaned before it is used in another clean environment.

The machine must be emptied, cleaned and packed before transport. Mark the packing according to the national regulations.

The machine must be transported in a min. 120 µm plastic bag or another tight-fitting packing.

#### **Cleaning and Maintenance**

The machine must always be emptied after use. If the machine is left with dust, there is a risk of self-ignition.

IMPORTANT! The machine must not be connected to the power supply during service and cleaning.

Read the chapter concerning safety precautions before cleaning and maintenance.

The easiest way to clean the machine is as follows:

- Clean the multi-tube filter as required. See the description of filter cleaning during operation.
- Wipe the machine on the outside with a dry or damp cloth.

#### Maintenance of the Motor Top

The motor top is made of maintenance-free parts and needs therefore no daily maintenance, apart from external cleaning and check that the supply cords and plugs are undamaged.

The easiest way to clean the motor top is with a damp cloth. Do not aim jets of water directly at the motor.

In order to avoid stop in operation it is recommended to let an authorised technician make an annual inspection of the electrical parts.

It is recommended to let an authorised service centre inspect the brushes of the suction motor after approx. 800 working hours, and if necessary replace them. In this way the life of the suction motor is prolonged.

If the brushes are not replaced before being completely worn out, the motor may seize up, and this may require a replacement of the motor.

#### Check / Maintenance of the machine

Description	Before/After use	Month/year	Hours
Check / replacement of brushes			750-800
Check of HEPA filter and machine		Yearly	
Emptying and cleaning	After use (as required)		
Check of filters and machine, generally	Before use		
Check of cord, plugs and outlet for tools	Before use		
Check of alarm (beeper)	Before use		

Reordering of filters and service parts

Brushes	81.73.176B	
Multi-tube filter	84.67.1110	
HEPA filter	84.67.5006	

#### Change of Filters

#### In General

When replacing the filters, the necessary precautions to protect the environment and the respiratory passages of the operator must be taken. This protection must be based on the tasks and the type of dust or sludge being on the surface of the filters. Before checking or replacing the filters you must clean the multi-tube filter as previously described, and you must empty the machine. The filters are to be handled in a way not causing any danger, and the safety equipment must be appropriate for the job.

Check and Replacement of the Multi-Tube Filter (Item No. 84.67.1110)

The multi-tube filter is made of a robust filter material and has a very long life. However, the filter will gradually be worn by the many large and small particles that are held back. Therefore it is necessary to check regularly if the filter is undamaged and intact. If the filter material is not intact, the multi-tube filter cannot hold back the dust particles, which will penetrate the filter and be caught by the HEPA-filter. The HEPA-filter is intended for very fine dust and will rapidly be blocked, if the multi-tube filter is damaged.

• Loosen the container clips of the motor top and remove the motor top.



- Place the motor top on a dry, clean and even surface.
- Check the top surface of the multi-tube filter for dust particles. If you can see dust particles there, it is a sign of a damaged multi-tube filter and worn filter material.

Is the multi-tube filter damaged, or have holes been worn in the filter surface, the multi-tube filter must be replaced.

A replacement of the multi-tube filter should also include a replacement of the HEPA-filter. See the next chapter.

Replacement of the HEPA-Filter (Item No. 84.67.5006)

• Loosen the container clips of the motor top and remove the motor top. Place the motor top so that the filter is easily accessible.

In order to ensure a dust-free emptying when the HEPA-filter is replaced, the following procedure must be followed:



Loosen the HEPA-filter. Use a ring spanner size 10.



Remove the self-locking nut and washer. These are to be used again. BE CAREFUL NOT TO THROW THEM AWAY.



Pull a plastic bag (100  $\mu m$  or the like) over the used filter.

Pull the filter free of the rod bolt. Do not TUG or twist the filter as this may damage the

rod bolt.



Close the bag with a cable tie. Dispose of the filter according to the national regulations.



Check the surfaces before the filter is mounted. Then mount the filter.



Mount the washer and the nut. Tighten with approx. 25 Nm.



#### **Disposal of Used Filters!**

When you dispose of the used filters you must make sure that this is done according to the national regulations.

# Troubleshooting

If the machine does not start:

- The fuses of the control circuit may have melted.
- The hand tool starts but the machine does not start  $\rightarrow$  The fuse may have melted.

The replacement must be made by V. BRØNDUM A/S, an authorized V. BRØNDUM A/S dealer or a similarly qualified person in order to avoid hazards.

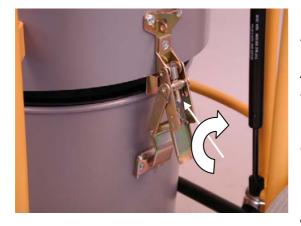
If the machine does not collect the material in a satisfactory way (alarm beeps):

- The suction hose, tube or nozzle may be blocked. *Stop the machine, and remove the blocking.*
- The collection container may be filled to overflowing. *Stop the machine, and empty the container.*
- A leak might have arisen in connection with the mounting of the motor top or the collection container. *Start the machine, and block the suction hose. Normally you will be able to hear a possible leak. Loosen the container clips of the motor top or collection container, place the motor top or the collection container correctly, and lock the clips again.*

Especially make sure that the sack is not stuck between the collection container and the filter container.



It might be necessary to adjust the container clips.



The container clips ensure that the collection container is held up against the filter container.

Adjust the clips by turning the screw of the clips. There is a small slot at the end of the screw.

*Turn the screw clockwise to tighten the clips and counter clockwise to loosen the clips.* 

• The multi-tube filter may be blocked.

Clean the multi-tube filter as described in the chapter concerning cleaning of filter during operation.

• The HEPA-filter may be blocked.

Replace the filter as described in the chapter concerning change of filters.

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# DECLARATION OF CONFORMITY

V. BRØNDUM A/S Sadolinsvej 14-16

## DK – 8600 Silkeborg

hereby declares that the following product:

Electrically operated industrial vacuum cleaner, Classified for dust class "H",

> model: RONDA<sup>®</sup> 1200H / 1200H-S

has been designed and produced in conformity with the basic requirements and other relevant conditions of the following directives:

The Machinery Directive (Directive 2006/42/EF)

The compliance has been achieved by use of the following standards:

EN 60 335-2-69

Verified compliance with standard and directive by: SLG. Dust class H by technical dust test by: SLG.

Silkeborg, June 2011

Lander

Kennet Raudszus Product- & Quality Manager

#### Service and Repair

Service and repair are free of charge within the guarantee period (invoice must be presented) provided that:

- The defect has been caused by a design fault or defective materials. (Normal wear and tear, misuse or insufficient maintenance is not covered by the guarantee.)
- No repair attempts have been made by others than V. BRØNDUM A/S or service centres approved by V. BRØNDUM A/S to carry out guarantee repairs.

Service free of charge includes replacement of defect parts and the cost for related working hours.

The machine is delivered via the V. BRØNDUM A/S dealer or direct, carriage paid, to:

V. BRØNDUM A/S Sadolinsvej 14-16 DK-8600 Silkeborg

Tlf.: (+45) 8682 4366 Fax: (+45) 8680 3363 E-mail: v@broendum.com www.broendum.com

Subject to changes.