## USER'S MANUAL GEBRAUCHSANWEISUNG

(Original) Last edited: 20/09/21





# RONDA<sup>®</sup> 80H 35L & 25L

Vacuum Cleaner for Chimney Sweeps for vacuuming ash Staubsauger für Schornsteinfeger für das Aufsaugen von Asche

## **IMPORTANT!**

Use only for dry dust. Read this manual before you start using the vacuum cleaner

**WICHTIG!** Nur für trockenen Staub. Vor der Verwendung des Saugers, bitte die Gebrauchsanweisung lesen. V. BRØNDUM A/S 40.80.0218

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## Industrial vacuum cleaner for fine, health hazardous dust in connection with chimney sweeping and vacuuming of ash.

## **General description**

Congratulations on your new RONDA® 80H 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> 80H is an industrial vacuum cleaner developed for the collection of very fine and health hazardous dust RONDA<sup>®</sup> 80H meets today's requirements for vacuum cleaners regarding filtering. Well suited for vacuuming health hazardous dust from chimney sweeping and for vacuuming ash.

- Filter cleaning during operation with back flush valve
- HEPA filter (BIA/IFA dust class "H")
- Satisfies the demands of EN 60 335-2-69 Annex AA, for collection of health hazardous dust in dust class "H"
- Visual alarm in case of too low air flow

## Safety

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.

- IMPORTANT! The vacuum cleaner must not be started with covers removed.
- IMPORTANT! The motor top must not be covered when the vacuum cleaner is in use.

Please read the Safety Instructions which were delivered with the machine together with this user manual.

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.

## **Guidelines Regarding the 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.

## Technical data

RONDA<sup>®</sup> 80H is connected to 230 V power supply.

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

The survey below shows the technical data of RONDA<sup>®</sup> 80H.

	EU	СН	DK	
Voltage	230	230	230	Volt
Suction motor	1100	1100	1100	Watt
Power outlet, max.	-	-	-	Watt
Vacuum	2450	2450	2450	mmH <sub>2</sub> O
	24	24	24	kPa
Air volume, max.	54	54	54	l/sec
	194	194	194	m³/h
Air volume, max. measured*	42 / 152	42 / 152	42 / 152	l/sek / m³/h
Filter area, pre-filter	0.11	0.11	0.11	m <sup>2</sup>
Filter area, HEPA	1.1	1.1	1.1	m <sup>2</sup>
Collection capacity (bag / container)	14/16	14/16	14/16	I
Height	715/625	715/625	715/625	mm
Length	430	430	430	mm
Width	450	450	450	mm
Weight without accessories	11/10	11/10	11/10	kg
Container coupling	Bayonet	Bayonet	Bayonet	mm
Length of supply cable	8	8	8	m
Noise	<70	<70	<70	dB(A)
Machine pressure level: uncertainty K <sub>pA</sub> =3dB (Measured only as machine)				
Max. Sound Power Level L <sub>WA</sub> = uncertainty K <sub>WA</sub> =3dB (Measured with hose, pipes and floor accessory)	<85	<85	<85	dB
Vibration	≤ 2,5	≤ 2,5	≤ 2,5	m/s2

\* Data of the machine with 3 metres standard hose

#### **Standard Accessories**

RONDA<sup>®</sup> 80H is delivered including a 3 meter flexible hose.



#### Applications

RONDA<sup>®</sup> 80H is a vacuum cleaner in accordance with DS/EN 60335-2-2 and CEI/IEC 60335-2-69 Annex AA class H and may only be used as such.

RONDA<sup>®</sup> 80H may be used for collection of dust hazardous to health according to CEI/IEC 60335-2-69 Annex AA dust class **H**.

RONDA<sup>®</sup> 80H may **not** be used for collection of fluids or moist dust.

RONDA<sup>®</sup> 80H may **not** be used for collection of flammable, explosive, poisonous or extremely health hazardous dust types, fluids or gasses.

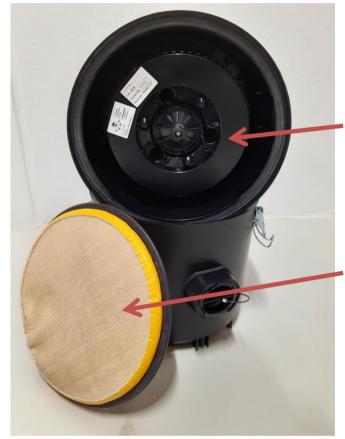
RONDA<sup>®</sup> 80H may only be used in dry environments and may not be used or stored outdoors or indoors under wet conditions.

The capacity of a vacuum cleaner to suck vacuum depends on the air. Theoretical the suction capacity will fall when the vacuum cleaner is used at altitudes. The suction capacity of the vacuum cleaner will be constant from 0 to approx. 800 m above sea level. From 800 to 2000 m the suction capacity will theoretically fall to approx. 75%. It is not recommended to use the vacuum cleaner at more than 2000 m above sea level, as the cooling and the suction capacity will be considerably reduced.

#### **Description of the Main Parts**

RONDA<sup>®</sup> 80H is designed as a handy and compact industrial vacuum cleaner for collection of fine and health hazardous dust, soot and ash.

#### Motor Top with Suction Motor and HEPA Filter



The motor top is equipped with suction motor, an integrated handle, and switches for the suction motor.

Suction motor of  $\ensuremath{\mathsf{RONDA}}^{\ensuremath{\mathbb{R}}}$  80H is located in the motor top.

The motor top is fitted with a HEPA filter in dust class "H".

The filter holds back the fine and smallest dust particles, which have not been held back by the pre- 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>.

The pre-filter is placed right below the HEPA filter and will protect the HEPA filter in case of a leak in the collection bag.

The pre-filter can easily be pulled off, in case it remains in the upper part when removing the motor top.



Motor Top with Alarm and Chock Valve

The motor top is equipped with a chock valve (back-flush) and a light for warning in case of too low air flow (<20 m/s).



#### **Collection Container and Collection Bag**

Inside the collection container the collection bag is placed. The material is collected into the collection bag, which facilitates the emptying and disposal of the vacuumed material. When vacuuming very fine dust, it is not possible to fill the collection bag entirely.

Use a collection bag for collection of the vacuumed material. When collecting health-hazardous dust, you must pay attention to the requirements as to disposal of the collected material (i.e. closed collection system such as plastic bag or container). The demands as to packing of the collected material may vary – contact the local authorities and waste management institution for further information.

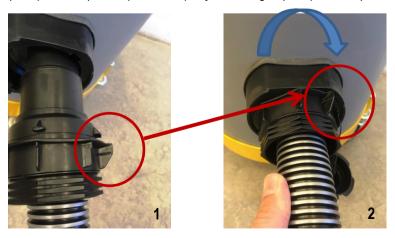


Place the collection bag in the holder **before** the hose coupling is mounted.

Push the flange of the bag into the slit of the holder.

#### Insert the hose AFTER the collection bag has been placed.

Insert the coupling in the machine and turn to the right to lock. When the coupling is mounted, the small pointer of the coupling (see picture 1) must point obliquely to the right (see picture 2).



#### **IMPORTANT:**

#### When changing the collection bag, the hose must be removed <u>before</u> turning off the machine.

So do not turn off the vacuum cleaner, until the hose has been removed. This is to avoid any remaining dust in the hose.



The container is equipped with a plug/stopper for the coupling which is to be used during transport and whenever the machine is not operating.

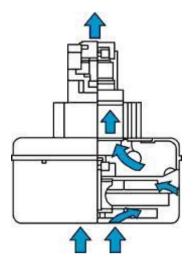
#### Mode of Operation

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 back in the collection bag and/or the pre- 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 collection bag or the pre-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.



$\mathbf{\Lambda}$	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.
<b>∠•</b> ∖	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> 80H and check that all the parts ordered are there.
- Check that the collection container is empty and that the filters have been correctly mounted in the collection container. Check that the filters of the machine are intact and undamaged (see the chapter "Change of Filters").
- Insert a collection bag (see the chapter "Collection Container and Collection Bag")
- 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. Only an original cord may be mounted.
- Connect the machine to 230 V power supply.
- Remember to place the label onto the H-label, if the language of the user is not German.

RONDA<sup>®</sup> 80H is now ready for use. The collection is described in details in the following chapter.

#### **Collection of Dry Dust**

When the machine has been correctly assembled and connected, it can be switched on and off at the start/stop switch of the motor top. The machine has been equipped with a warning lamp indicating when the air flow is too low for collection. This warning lamp has to be checked before use:

Block the intake at the end of the hose, and the warning lamp will light up. Unblock, and the lamp will switch off.

#### Cleaning the pre-filter during operation (as needed or when the warning lamp lights)

Block the intake / hose so that full vacuum is created inside the machine.

1. Block the intake / block the hose. Take hold of the flap of the shock valve.

2. Pull the flap of the shock valve while the machine is blocked and running (do not tug the valve).

3. When the power grows bigger than the influence from the vacuum, the valve will automatically open with a "puff". Let go of the valve.

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

The difference in pressure / the shock effect will clean the surface of the filter, when air is drawn through the valve in order to suppress the negative pressure in the collection container and the hose, and will reject possible deposits from the pre-filter.

The pressure relief valve will close. This method gives an effective cleaning of the pre-filter.

It is recommended always to leave the machine for a few minutes before emptying it, if the machine is being used without collection bag. 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: Do not "tap" on the intake as this will swirl up the dust in the container and result in blocking of the prefilter. Therefore ALWAYS use the shock valve for cleaning of the pre-filter during operation.



## Emptying

With the RONDA<sup>®</sup> 80H the vacuumed material must be collected in a collection bag.

- Loosen the four container clips attaching the motor top to the collection container and remove the motor top.
- Place the motor top on a dry and clean surface.
- The collection bag is removed from the container coupling.
- Close the collection bag.
- Now you can dispose of the collection bag.

**REMEMBER:** Disposal of dust hazardous to health must take place in accordance with the national regulations.

- Place a new collection bag in the collection container.
- Slide the flange of the collection bag into the bag holder.
- Put the pre-filter and motor top in place.

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

#### Failing to do so may lead to self-ignition of the machine.

You must make sure that the dust and material collected cannot fall out of the machine during transport: place the plug/stopper in the container coupling.

## **REMEMBER:** If the machine has been used for dust hazardous to health you MUST wear personal protection equipment (PPE) when emptying and handling the machine.

#### **Reordering Collection Bags**

#### **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.

Read the chapter about safety precautions before cleaning and maintenance.

The easiest way to clean the machine is as follows:

- The pre-filter is cleaned as required (see the relevant chapter)
- 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 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 top.

In order to avoid stop in operation and also to make sure that the safety of the vacuum cleaner is intact, it is recommended that the electrical parts are inspected annually by an authorized technician.

It is recommended to have an authorized service centre inspect the suction motor after approx. 700 working hours!

#### Check / maintenance of the machine

Description	Before/After use	Month / year	Hours
Check / replacement of motor			700
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 and plug	Before use		
Check of alarm (lamp)	Before use		

Reordering filters and service parts:

Pre-filter	84.67.3049
HEPA filter	84.67.5036
Collection bags	84.64.0053

IMPORTANT! The machine must be disconnected from the power supply during service and cleaning.

#### **Changing Filters**

#### In General

When replacing the filters, the necessary precautions to protect the environment and the respiratory passages of the operator must be taken. The nature and scope of these precautions must be based upon the type of tasks that the vacuum cleaner has been used for, and how harmful the dust on the surface of the filters is. Before checking or replacing the filters, you must clean the pre-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 pre-filter (item no. 84.67.3049)

The pre-filter is made of a robust filter material. However, the filter will gradually be worn by the many large and small particles that are held back. Therefore it is necessary to regularly check if the filter is undamaged and intact. If the filter material is not intact, the pre-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 pre-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 flat surface.
- Inspect the top surface of the pre-filter for dust particles. If there are many visible dust particles there, it is
  a clear sign that the pre-filter is damaged and worn.

A damaged or worn pre-filter must be replaced.

A replacement of the pre-filter should also include a replacement of the HEPA filter.



#### Replacement of the HEPA Filter (Item no. 84.67.5036)

Loosen the four 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 replacing the HEPA filter, the following procedure must be followed:



BE CAREFUL not to throw away the nut, washer and seal. These are to be used again.





#### How to remove the HEPA filter:

Remove the nut fastening the HEPA filter. Use a size 10 ring spanner.



Pull a plastic bag (100 µm or the like) over the filter.

Pull off the filter from the bracket so the O-ring and the base are released.

Remove the O-ring and base. Both are to be disposed of with the used filter.

Close the bag with a cable tie. Always dispose of the filter in accordance with the national regulations for the material collected.







#### How to mount the new HEPA filter:

- Apply some moisture or lubricant to the O-ring before mounting.
- Push the filter down over the bracket until it is on the adapter ring, in one workflow.
- Do not pull the filter, as this will release the O-ring and locking ring from their position.
- Fit seal, washer, and end with locking nut.
- Tighten with approx. 25nM.





#### **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 collect the material in a satisfactory way (alarm lamp):

- The suction hose, tube or nozzle may be blocked. Stop the machine, and remove the blocking.
- The collection container or the collection bag may be filled to overflowing. Stop the machine and empty the container. See the chapter about emptying.
- A leak might have arisen in connection with the mounting of the motor top. Start the machine and block the suction hose. Normally you can hear a possible leak. Loosen the container clips of the motor top, place the motor top correctly and lock the clips again.
- The collection bag may be blocked. If you collect very fine dust, the collection bag may block before it is completely full. Replace the collection bag.
- The pre-filter may be blocked. Clean the pre-filter as described in the chapter about cleaning of filter during operation.
- The HEPA filter may be blocked. Replace the filter as described in the chapter about change of filters.

The replacement of spare parts 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.

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## DECLARATION OF CONFORMITY

V. BRØNDUM A/S Sadolinsvej 14 DK – 8600 Silkeborg

hereby declares that the following product:

Electrically operated industrial vacuum cleaner, classified for dust class "H".

Model: RONDA<sup>®</sup> 80H

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

Machine Directive (Directive 2006/42/EU)

EMC-Directive (Directive 2014/30/EU)

ROHS-Directive (Directive 2011/65/EU - COMMISSION DELEGATED DIRECTIVE (EU) 2015/863 31 March 2015)

The compliance has been achieved by use of the following standards: EN 60335-1 EN 60 335-2-2 EN 60 335-2-69

Dust class H verified by technical dust test performed on equivalent design by: SLG

Silkeborg, December 2020

Kennet Vallø Product- & Quality Manager

#### Service and Repair

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

- The defect has been caused by a construction defect 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 handed in via the V. BRØNDUM A/S dealers or is sent directly, carriage paid, to:

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

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

Subject to changes.