
MANUAL AND INSTRUCTION

WESTBO CARL 120



Westbo of Sweden

Building notification

Before installation of the fireplace and construction of a chimney, it is a demand to do a building notification. For piece of advise, contact your local authorities.

When receiving the stove

When the stove is received it is important to check the goods to see that the stove is not damaged during the transport. Damages should be notified to the freight company immediately.

Inspection of the smoke pipe

A good piece of advice by doing the installation to existing chimney is to contact the chimney sweeper before installation. The chimney sweeper can recommend eventual need for chimney renovation. After the stove is installed, it must be inspected by a chimney sweeper before use.

Combustible or non-combustible wall

The stove does not need a combustible wall. It is approved for placement 250 mm from back to combustible wall. By placement to non-combustible wall (fire wall) 50 mm is valid.

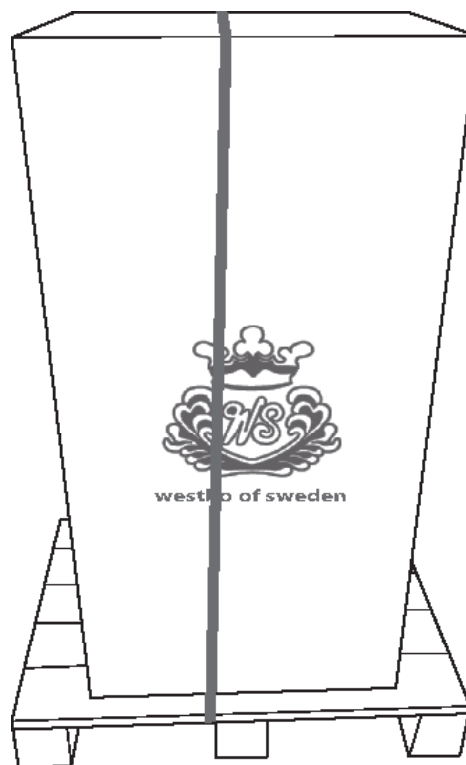
Floor protection

The floor protection prevents the floor in front of the stove from sparks. Check your local regulations by your domestic authorities. The floor protection could consist of 0,7 mm metal sheet, glass, tiles, natural stone etc.

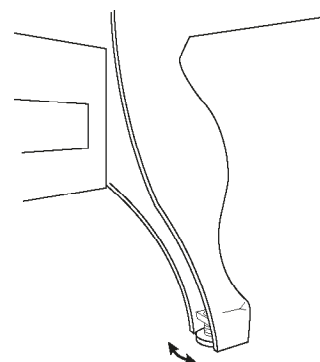
Please read this folder carefully and also the instruction from the chimney sweeper before the assembling starts.

Good luck with your new Westbo Carl 120

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Cut the strap and remove the carton.



The Westbo Carl has adjustable feet.



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Preparation of the stove

Cut off the strap that holds the cardboard in place around the stove. Lift off the cardboard box and check that the stove is undamaged.

Transport damage must be reported direct to the transport company.

Lift the stove off the pallet. The top plate is placed under the stove.

The feet are adjustable and could be adjusted if the level differs on the surface. Check this before doing the measurements for hole making. Proceed to the next step.

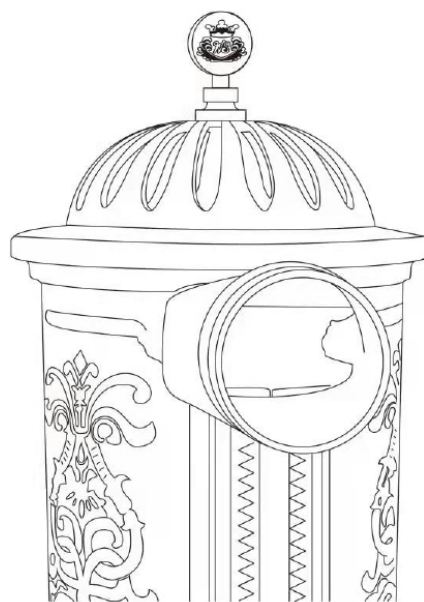
Connection to new chimney

Follow the instructions from the chimney supplier.

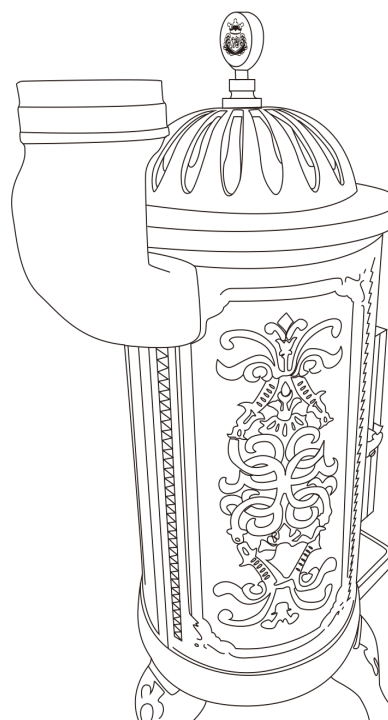
The stove can only be connected backwards in the original version, as optional it can be connected upwards.

Connection to existing chimney

Before starting interventions in the smoke channel, it is important to let an expert check and inspect. This to be sure that it is dense and properly dimensionated for the stove.



Westbo Carl 120 could be connected to the back as original. Top connection can be purchased as extras. Adapter is 150 mm in diameter.



Change of front glass

Open the cover and remove the brackets in the corners inside the stove.

The seal between the glass and the door must be checked.

In some cases it needs to be replaced.

Make sure that it is tight between the glass and the door.

See picture 1.



Picture 1

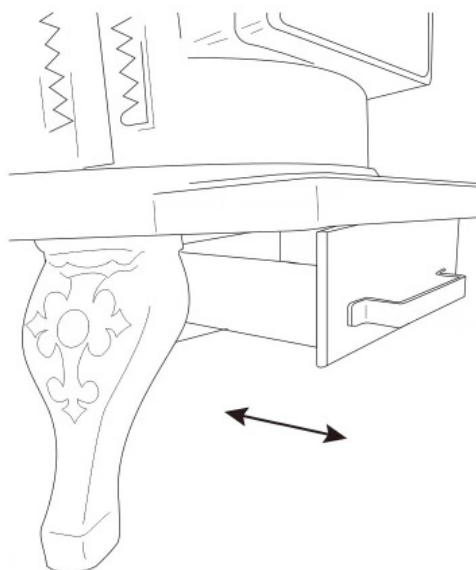
Emptying the ashes

Pull out the ash tray and put the ashes in a non-combustible container.

See picture 2.

NOTE!

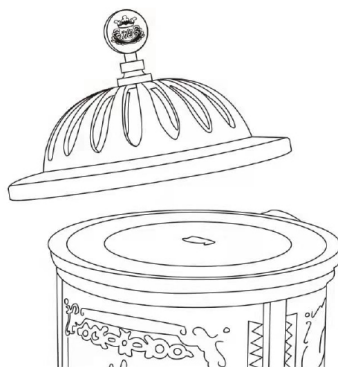
The ashes could contain embers for several days after finished firing.



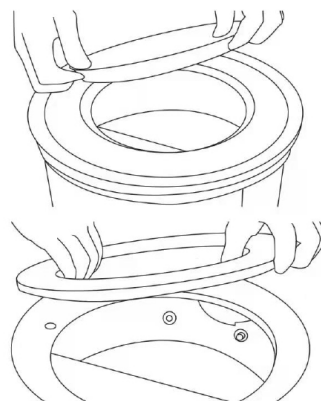
Picture 2



Use this fitting instruction if the vermiculite details needs to be changed.



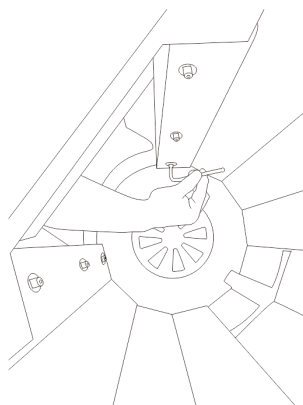
1. Remove the crown.



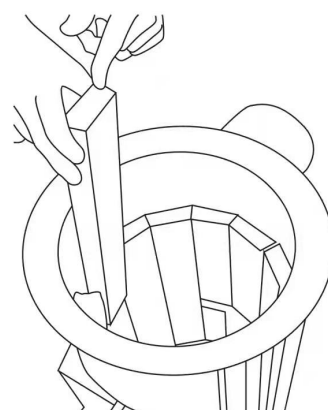
2. Remove the cooking plate and the ring.



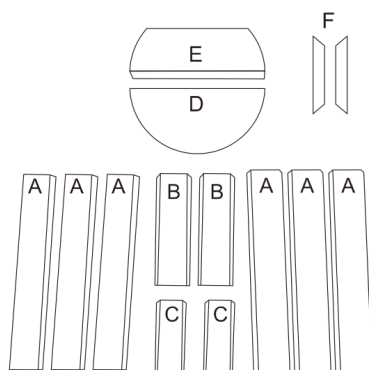
3. Remove the deflector in steel and the parts on the side (F), the front smoke shelf (E) and finally the rear smoke shelf (D).



4. Remove the three screws on each side and pull the sheets towards the front side of the stove.



5. Lift the vermiculite. (A) Then all will be released.



- A. Vermiculite, long
- B. Vermiculite medium
- C. Vermiculite, short
- D. Smoke shelf, rear
- E. Smoke shelf, front
- F. Smoke shelf, side



How to use the stove

Air controls

The stove is equipped with a handle for air supply to the combustion.

Emptying the ashes

The ash box is placed under the gap. See picture 2 on previous side.

Open the grate with the handle in the grate. Use brush and tool to get the ashes down in the box.

Never empty ashes in a combustible vessel, use a sheet metal vessel with a tight lid instead. There can be embers left in the ashes a long time after finished firing.

Cleaning

There are special detergents for cleaning the glass hatch at your retailer. Do not use abrasive detergents. The sheet metal plate is cleaned by a damp cloth.

Smell

At the first firing, a certain smell might occur. This due to the coating on the sheet metal is burnt off.

The smell disappears after a couple of bonfires.

Fire up

We recommend that you use fire starters that you find at your dealer. By using them it will be a quick fire of the wood and a cleaner combustion.

Never use ignition fluid.

By the first fire the handle for air supply should be completely open. When the handle is pulled to the right it will be open, and when pulling it to the left the damper is closed. See picture 3.

Use approximately 2 kilo wood logs (small wood logs) and add two or three fire starters on top and fire up. Let the door on the stove stand half open.

Close the door when the fire starts. By doing this it will be a quick flashover of the fire which minimizes soot coating on the glass.

Continuous firing

It is important to have a correct temperature in the stove to get the most out of your product.

When the stove is used in the right way, the smoke should not be visible.

Adjust the supply air slider relative to the chimney draft.

It should burn well, if it is strangled too much, there is a risk of soot coating in the fireplace as well as soot on the glass.

Note!

It is important to get a quick flashover of the wood, do not close the glass hatch before the wood has started to burn.

If the fire is smoldering it could in worse cases cause a gas explosion, which could damage your stove.

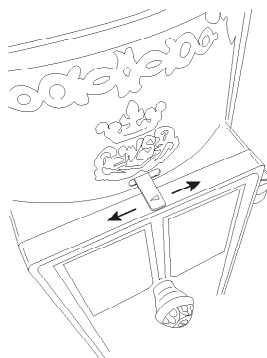
When firewood is replenished, carefully open the glass hatch so that smoke rashes are avoided. Never fill up the firewood as long as it burns well.

Recommended amount of wood

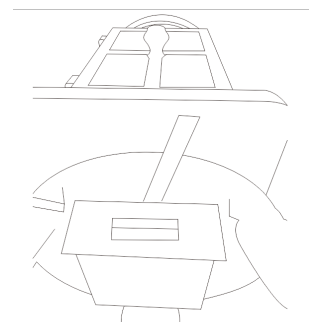
We recommend 1,5-2 kilo of wood. The maximum allowable amount of wood is about 2 kg per hour for dry chopped fire wood.

Chimney fire

In case of chimney fire, all doors and air controls must be closed. If necessary contact the authorities. After an eventual fire, the chimney must be inspected by the chimney sweeper.



Picture 3



Picture 4



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Preparation

We recommend a diameter of 6-10 centimetre and that the wood logs are 6 centimetre shorter than the fireplace. This will help the air to circulate in the best possible way. If the diameter is bigger, the wood logs must be splitted. Wood logs that are splitted will dry better.

Storage

The splitted wood logs should be stored for 1-2 years before usage. If the wood is put in piles it will dry faster. Before use, store the wood in room temperature. Please keep in mind that the wood during Autumn and Winter absorbs moist from the air.

Moisture

To avoid environmental problems and to get the best fueling economy, the wood logs must be dried before use. They should contain maximum 21% moisture. Best performance of the wood logs is achieved by a moisture level of 15-18%. A simple test is to beat two wood logs against each other. If a numb sound occurs, the wood contains too much moist.

By using moist wood logs, large amount of the heat will be used to evaporate the water. The stove will therefore not be warm. This is of course uneconomic and there will be soot on the glass hatches, inside the stove and in the chimney. The environment will also be contaminated.

What is correct amount of wood logs?

How much is a kilo of wood? Or how do you handle the wood in a correct way? There are literature to buy regarding wood knowledge. It is a good thing to acquire a little more knowledge on the subject than what we communicate here.

It is absolutely forbidden to fire:

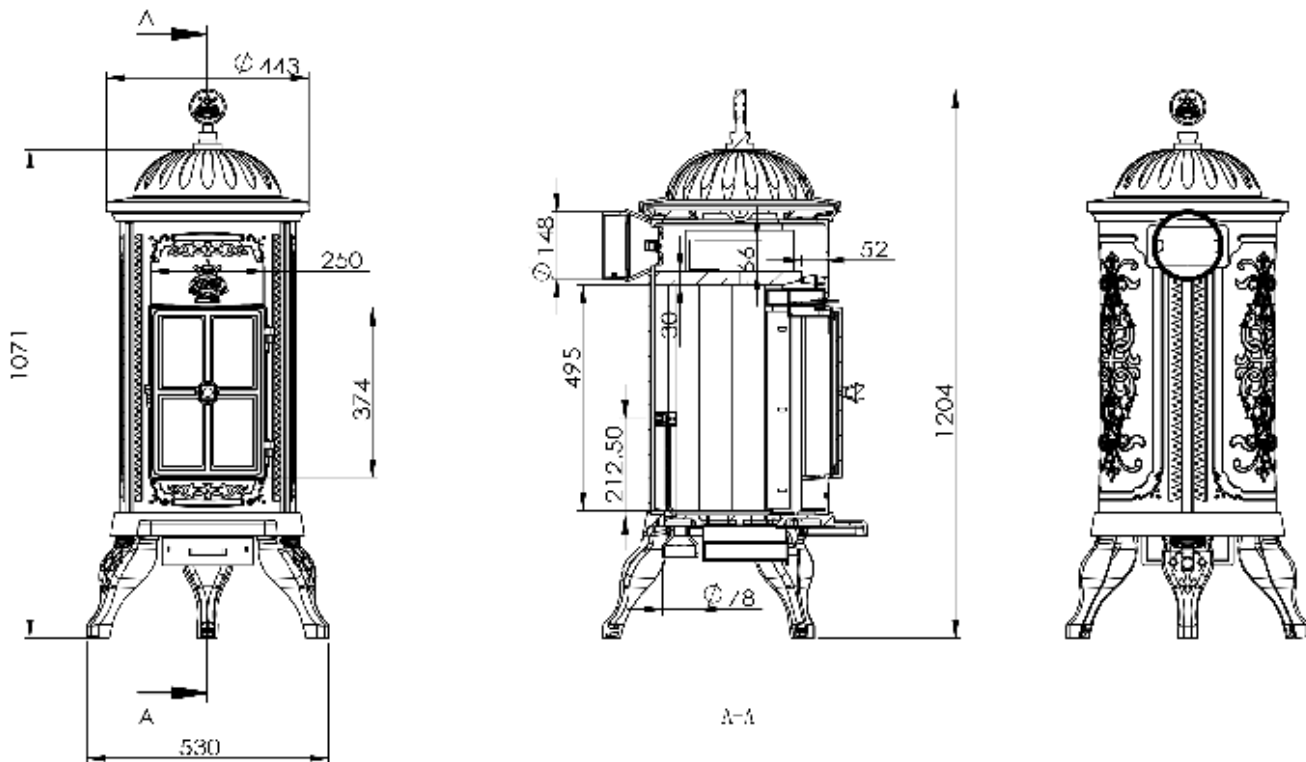
Painted, pressure-treated or glued wood. Neither is chipboard, plastic, or treated paper suitable to fire. The substances contained in these products are harmful both to the environment and to the stove. Even the chimney can be attacked if you use material mentioned above.

Simply put, fire only clean wood logs.

Calorific wood value

The calorific wood value varies between wood species. On some you need to put a bit more wood into the fireplace to get the same amount of heat like other wood species. In our firing instructions, we calculate with birch wood, which has a very good calorific value and is the type of wood we recommend. By burning oak or beech, keep in mind that these types of wood have a higher calorific value than birch. Wood logs must also be reduced so the stove won't be damaged. Pine and spruce have higher calorific value than birch.

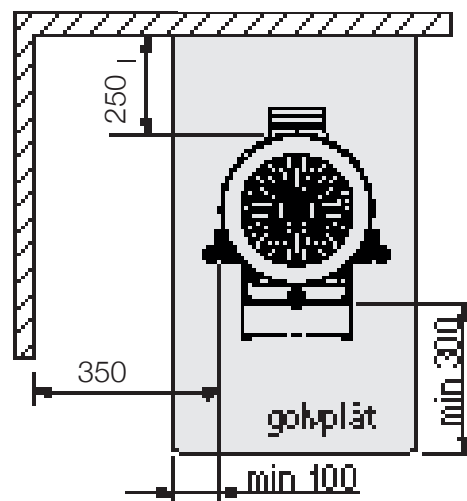




Technical data

| | |
|-----------------------------------|-----------------------|
| Weight | 135 kg |
| Height | 1204 mm |
| Width | 443 mm |
| Deep | 443 mm |
| Smoke channel | 150 mm |
| Material | Gjutjärn |
| Medium power | 5,7 kW |
| Efficiency | 83% |
| Distance to combustable wall/side | 250 mm/350 mm |
| CE-approved | According to EN 13240 |

Distance to combustable wall



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WARRANTY

Westbo of Sweden has a 10 year stove casting warranty and a 1 year warranty concerning natural wear and tear of articles of consumption such as firebricks, vermiculite, grates, glass, handles and rope seal.

The warranty is only valid if the stove has been used in a proper way according to the instructions and will not be valid if any extreme or careless handling has occurred like overheating, wrong fuel or too much wood etc.

Westbo of Sweden is obligated to provide new parts/stove if any defects covered by the warranty occurred, but takes no responsibility for removal or installation costs for the exchange.

The warranty covers only the product and the buyer is not entitled to compensation for any personal or property damage.

Yours sincerely
Mattias Gunnarsson
Managing director

**Declaration of performance according regulation (EU) 305/2011
2022-05-31**

| No. | Essential characteristics according regulation (EU) 305/2011 | Statement by the manufacturer |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Unique identification code of the product-type | Freestanding roomheater „Carl 120“ |
| 2 | Intended use(s) | Roomheater without hot water supply |
| 3 | Trademark and contact address of the manufacturer | Westbo of Sweden AB Industrigatan 8, S-333 75 Reftele, Sweden |
| 4 | Contact address of the authorized representative | Mattias Gunnarsson Westbo of Sweden AB Industrigatan 8, S-333 75 Reftele, Sweden |
| 5 | System(s) of assessment and verification of constancy of performance of the construction product | System 3 |
| 6 | Notified laboratory performed the determination of the product-type under system 3 and issued the test report | Rhein-Ruhr Feuerstätten Prüfstelle GmbH, NB-No.: 1625, test report no. RRF – 40 21 5758 |
| 7 | Harmonized technical standard | EN 13240:2001 /A2:2004/AC:2007 |
| 8 | <u>Essential characteristics</u> | <u>Performance</u> |
| | Fire safety | pass |
| | Reaction to fire | A1 acc. EN 13501-1 |
| | Distance to combustibles | Minimum distances (d) to combustible materials Back (d) = 250 mm Side (d) = 350 mm Ceiling (d) = --- mm Floor (d) = 0 mm Window in the front (d _P) = 1000 mm Window in the front (d _L) = 400 mm Window in the front (d _F) = 450 mm |
| | Risk of burning fuel falling out | pass |
| | Cleanability | pass |
| | Emission of combustion products | pass CO < 0,08 % / < 1000 mg/m ³ |
| | Flue gas temperature at nominal heat output in the measurement section | 211°C |
| | Flue gas outlet temperature at nominal heat output | 247°C |
| | Surface temperature | pass |
| | Electrical safety | not applicable |
| | Release of dangerous substances | NPD |
| | Maximum operating pressure | not applicable |
| | Mechanical resistance (to carry a chimney/flue) | NPD |
| | Thermal output/Energy efficiency | pass |
| | Nominal space heat output | 5,7 kW |
| Nominal room heat output | 5,7 kW | |
| Nominal water heat output | not applicable | |
| Efficiency | η = 83 % | |
| 9 | The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. | |

Signed in responsibility of the manufacturer

Mattias Gunnarsson

Name

Reftele, 2022-05-31

Place and date

Sign / stamp

Product fiche
according to Regulation (EU) 2015/1186

| Roomheater Carl 120 | |
|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supplier's name or trademark | Westbo of Sweden AB Industrigatan 8 S-333 75 Reftele, Sweden |
| Supplier's model identifier | Carl 120 |
| Energy efficiency class of the model | A+ |
| Direct heat output (kW) | 5,7 |
| Indirect heat output (kW) | --- |
| Energy efficiency index (EEI) | 110 |
| Useful energy efficiency at nominal heat output (%) | 83,0 |
| Specific precautions that shall be taken when the local space heater is assembled, installed or maintained | <ul style="list-style-type: none"> - Please read and follow the manual and instructions! - Distances to combustible materials and fire protection must be observed! - Sufficient combustion air must be able to flow into the fireplace! |

Characteristics when operating with the preferred fuel

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|------------------------------------------------|-------------|--------|------|------------------------------------------------------------------|-----------------|--------|------|
| Heat output | | | | Useful efficiency (NCV as received) | | | |
| Nominal heat output | P_{nom} | 5,7 | kW | Useful efficiency at nominal heat output | $\eta_{th,nom}$ | 83,0 | % |
| Minimum heat output (indicative) | P_{min} | [N.A.] | kW | Useful efficiency at minimum heat output (indicative) | $\eta_{th,min}$ | [N.A.] | % |
| Auxiliary electricity consumption | | | | Type of heat output/room temperature control (select one) | | | |
| At nominal heat output | e_{lmax} | [N.A.] | kW | single stage heat output, no room temperature control | yes | | |
| At minimum heat output | e_{lmin} | [N.A.] | kW | two or more manual stages, no room temperature control | no | | |
| In standby mode | e_{lsb} | [N.A.] | kW | with mechanic thermostat room temperature control | no | | |
| | | | | with electronic room temperature control | no | | |
| | | | | with electronic room temperature control plus day timer | no | | |
| | | | | with electronic room temperature control plus week timer | no | | |
| | | | | Other control options (multiple selections possible) | | | |
| | | | | room temperature control, with presence detection | no | | |
| | | | | room temperature control, with open window detection | no | | |
| | | | | with distance control option | no | | |
| | | | | | | | |
| | | | | | | | |
| Permanent pilot flame power requirement | | | | | | | |
| Pilot flame power requirement (if applicable) | P_{pilot} | [N.A.] | kW | | | | |

| | |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| Contact details | Westbo of Sweden AB Industrigatan 8 S-333 75 Reftele Sweden Tel. +46 371 23330 info@westbo.net www.westbo.net |



Reftele 2022-05-22

Mattias Gunnarsson