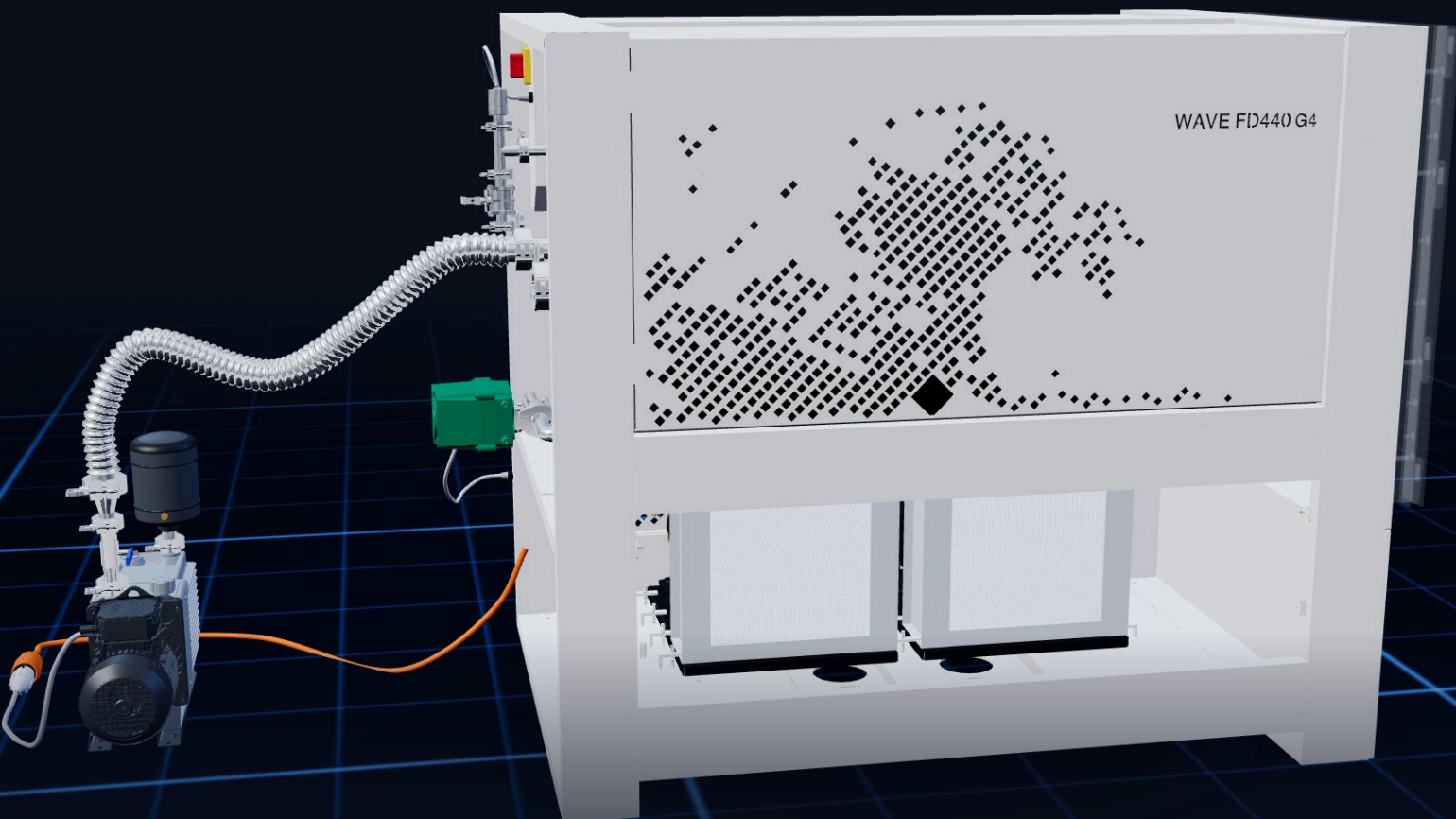




WAVE FD 440 · INSTALLATION GUIDE

Installation & first start-up

Version with oil pump

CONTENTS

- 1 Mount the sensor unit
- 2 Place & connect the oil pump
- 3 Connect pump to chamber
- 4 Mount the evacuation valve
- 5 Blank flange & room probe
- 6 Switch on power
- ✓ Test cooling and vacuum
- ? Check in this order



VIDEO GUIDE

All steps as a video – scan the QR code or open:

wave.cc/en/know-how/installation

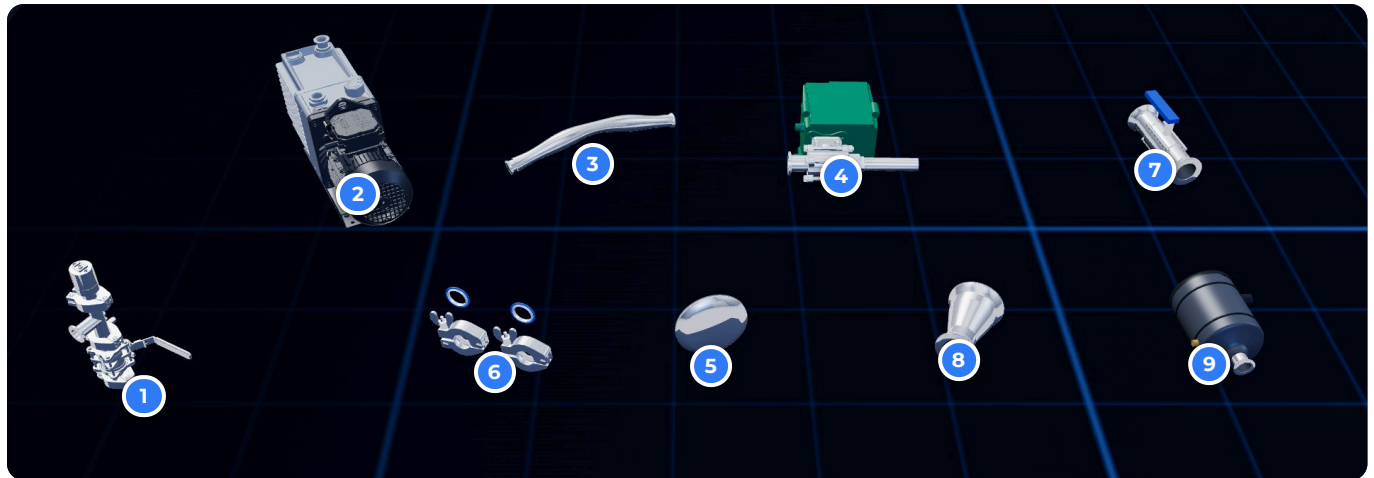
Please also observe the safety instructions in the user manual.

WAVE

IN THE BOX

What you need

All parts are included in the delivery. No tools required.



- | | | |
|--------------------------------------|-------------------------|----------------------------|
| 1 Sensor unit (vacuum gauge + lever) | 2 Oil pump | 3 Bellows hose |
| 4 Evacuation valve (green) | 5 Blank flange | 6 Centering rings + clamps |
| 7 Ball valve for the pump | 8 Reducer KF 25 → KF 40 | 9 Oil mist filter |

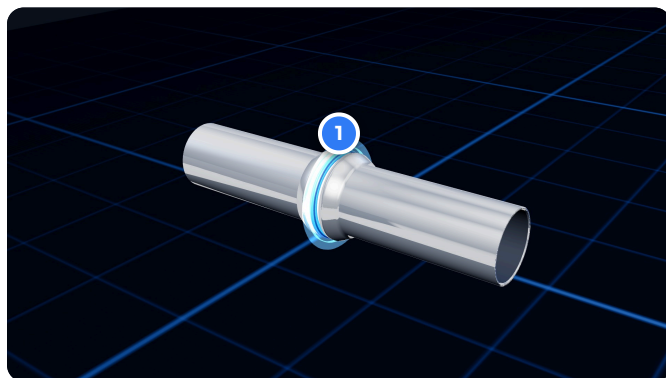
PREPARATION

Set up the machine

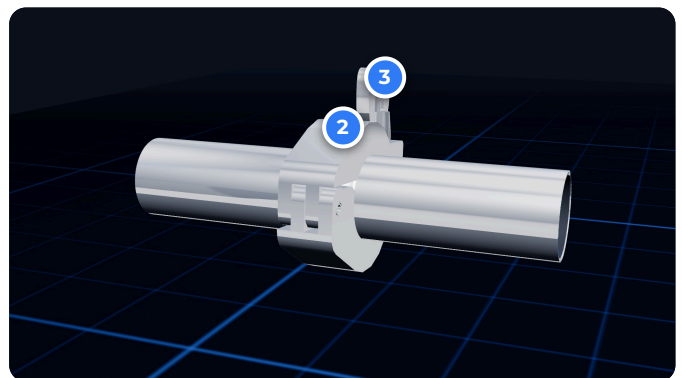
- 1 Level, dry floor – check with a spirit level
- 2 Lock the castors
- 3 Room 15–22 °C, rear side freely accessible

BASICS

How every joint seals



- 1 Centering ring between the two flanges
- 2 Put the clamp around, wing nut hand-tight
- 3 Without a centering ring the joint leaks

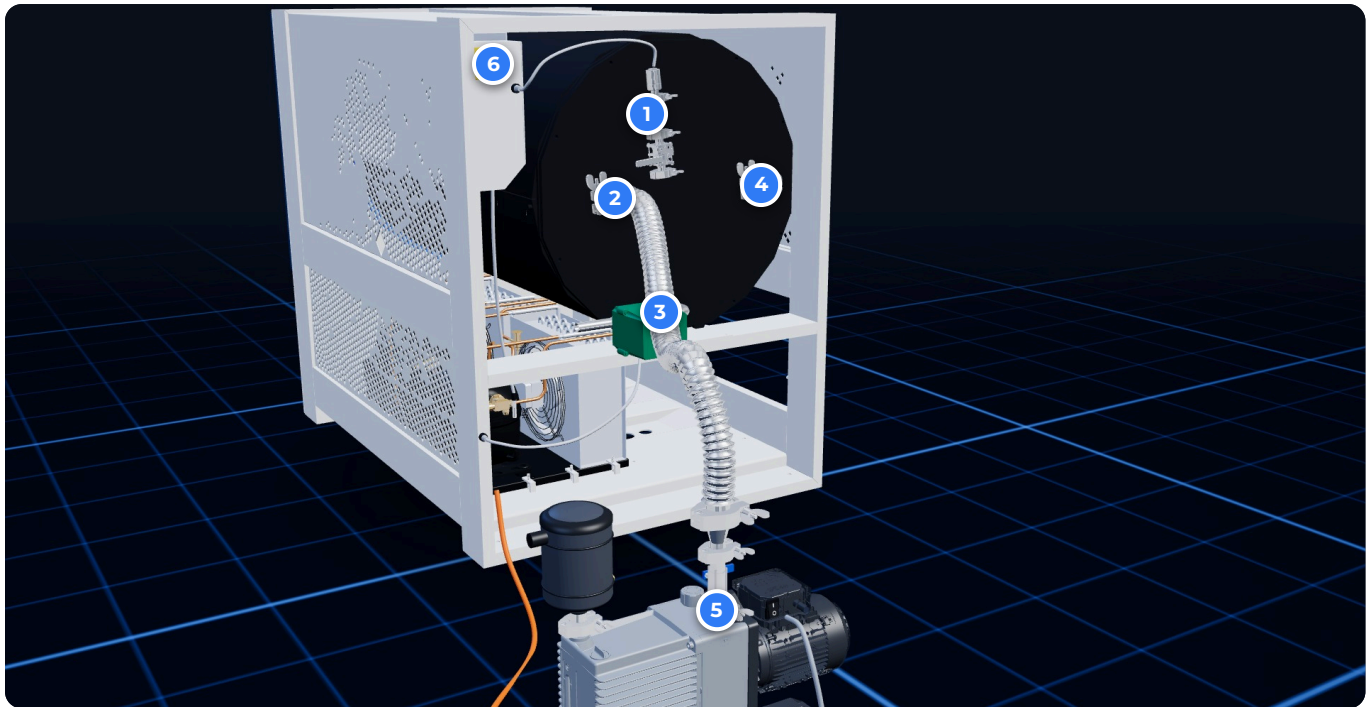


- 1 Centering ring with O-ring
- 2 Clamp
- 3 Wing nut: hand-tight

OVERVIEW

All connections at a glance

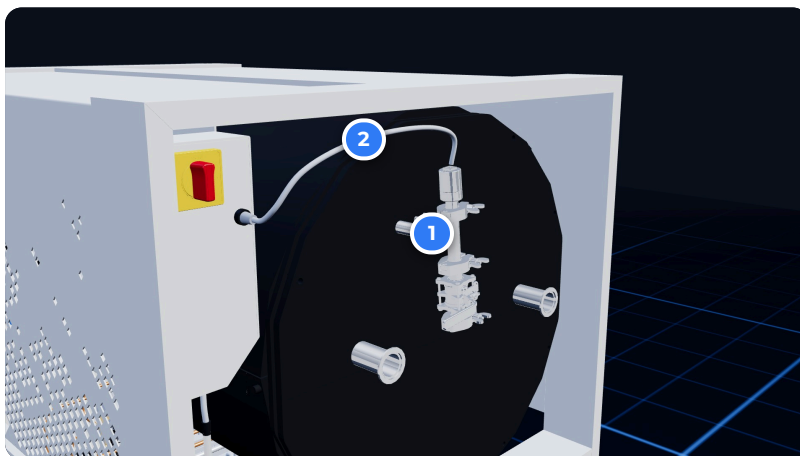
Rear of the machine after installation



- | | | |
|--------------------------------------|------------------------------------|----------------------------|
| 1 Sensor unit (vacuum gauge + lever) | 2 Bellows hose → Left port (KF 40) | 3 Evacuation valve (green) |
| 4 Blank flange | 5 Oil pump | 6 Main switch |

STEP 1 / 6

Mount the sensor unit

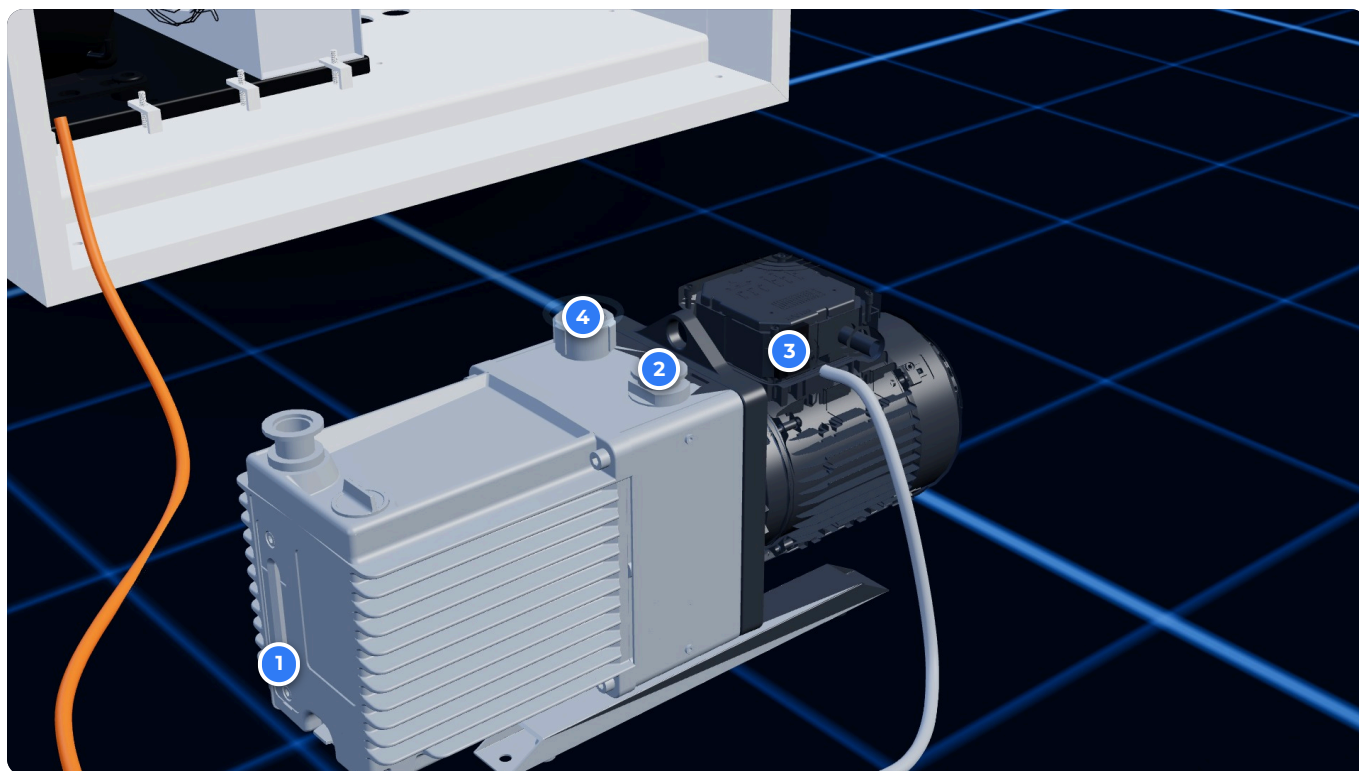


- | |
|---|
| 1 Top port (KF 16) |
| 2 Sensor cable |
| 1 Centering ring onto the top port |
| 2 Fit the sensor unit, close the clamp |
| 3 Plug in the sensor cable and screw it tight |

Lever on the sensor unit: in line = open · across = closed – **For vacuum: always across (closed)**

STEP 2 / 6

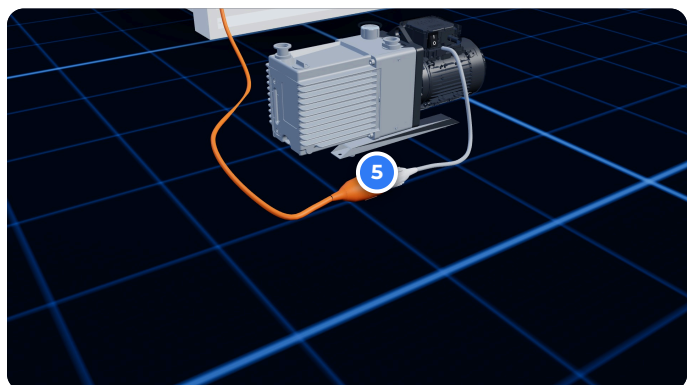
Place & connect the oil pump



- 1 Place the pump level behind the machine
- 2 Check the oil level in the sight glass
- 3 Remove the transport cap from the pump inlet
- 4 Plug the pump into the machine's Schuko coupler
- 5 Switch on the pump: switch to I (ON)
- 6 Gas ballast on top of the pump to ON

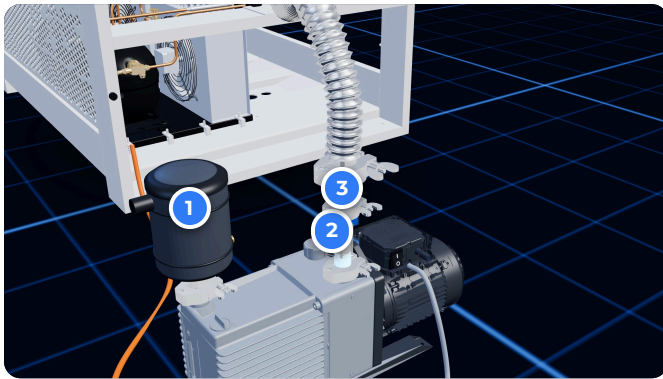
- 1 Oil level: between MIN and MAX
- 2 Remove transport cap
- 3 Pump switch: I
- 4 Gas ballast: ON
- 5 Schuko coupler (cable from the machine) + Pump plug

Switch on the pump: I = ON
Gas ballast: Turn to ON

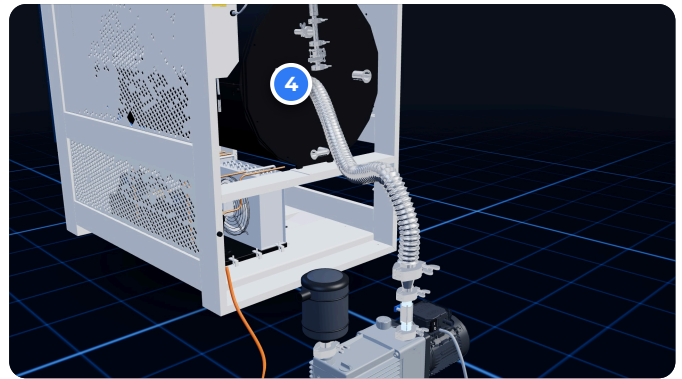


STEP 3 / 6

Connect pump to chamber



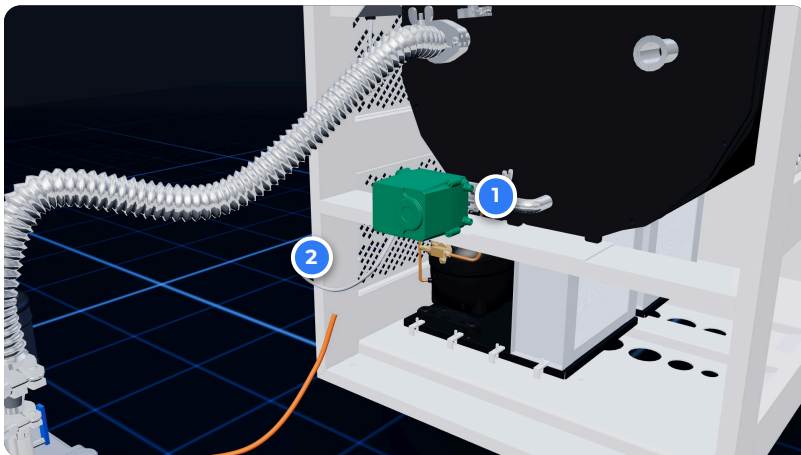
- 1 Oil mist filter onto the rear port (ring + clamp)
- 2 Ball valve onto the front port = pump inlet
- 3 Reducer KF 25 → KF 40 onto the ball valve
- 4 Bellows hose: left chamber port (KF 40) → reducer
- 5 Lever in line = open, across = closed



- 1 Oil mist filter (rear port)
- 2 Ball valve (front port)
- 3 Reducer KF 25 → KF 40
- 4 Left port (KF 40)

STEP 4 / 6

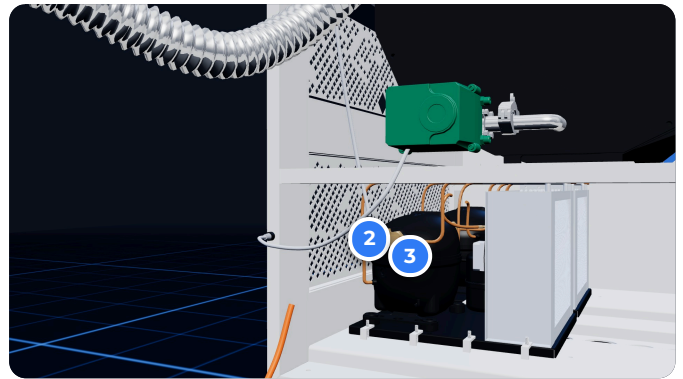
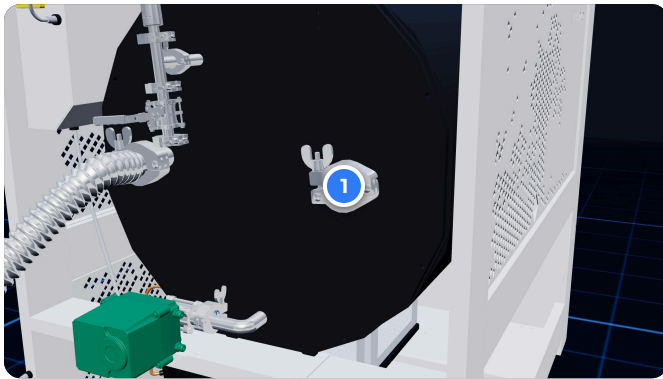
Mount the evacuation valve



- 1 Bottom port
 - 2 Valve cable
- 1 Green valve onto the bottom port
 - 2 Actuator must sit free – otherwise turn the valve 90°
 - 3 Plug the valve cable into the machine

STEP 5 / 6

Blank flange & room probe

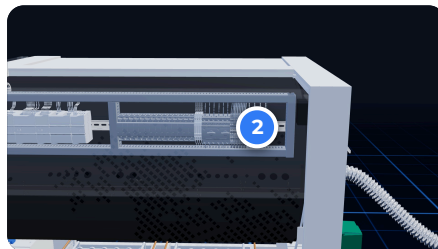
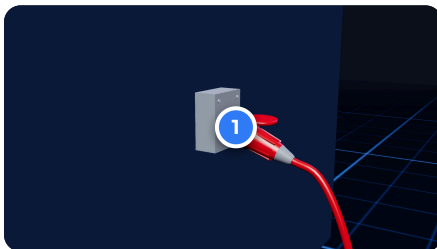


- 1 Right port: centering ring + blank flange + clamp
- 2 The room temperature probe is fixed to the machine
- 3 Place it near the compressors – it measures the room temperature there

- 1 Blank flange
- 2 Room temperature probe
- 3 Compressors

STEP 6 / 6

Switch on power



- 1 Plug in CEE 400 V / 16 A
- 2 Open the control cabinet: RCD on the far right to ON
- 3 Yellow main switch at the rear to ON
- 4 Controller starts, front display lights up

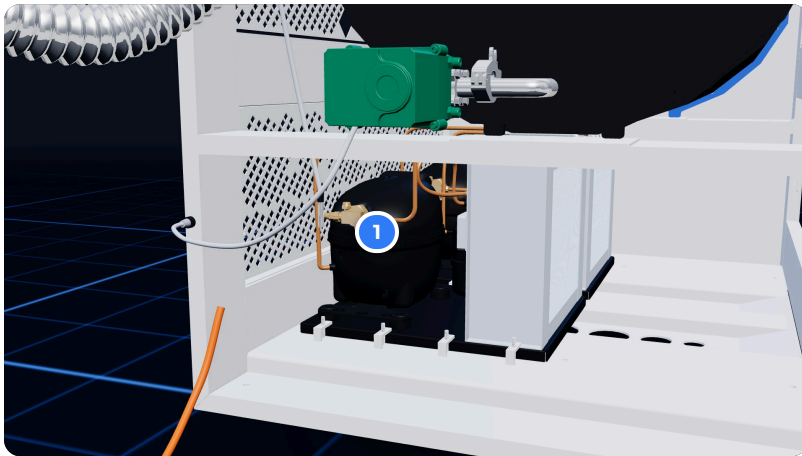
- 1 CEE 400 V / 16 A
- 2 RCD (far right)
- 3 Main switch

RCD: Switched off for shipping

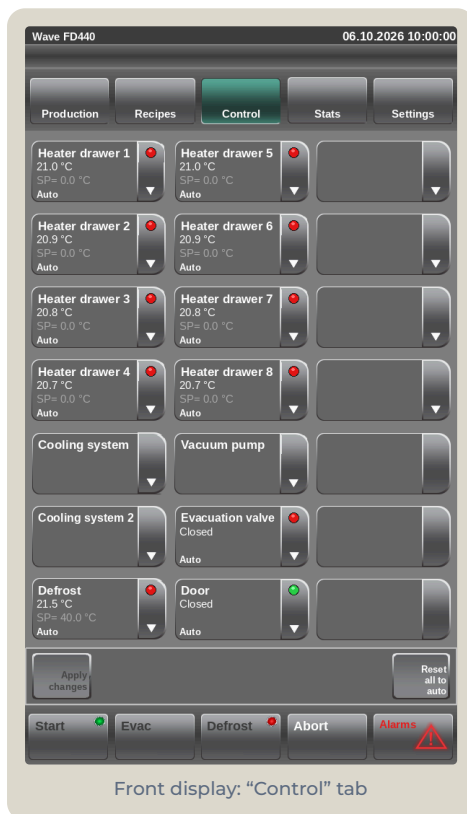
FIRST CHECK

Test cooling and vacuum

First wait 20 minutes



- 1 Compressors: warm?
- 1 Machine is switched on – do not start anything
- 2 After 20 minutes: compressors must be warm
- 3 Only then switch on the cooling



- 1 Control → Cooling system → Go to on → Apply changes
- 2 Then switch on cooling system 2 the same way
- 3 Pre-cool for 20 minutes
- 4 Sensor lever across (closed) · Evacuation valve closed · Door shut · Pump ball valve open
- 5 Control → Vacuum pump → Go to on → Apply changes

Target: below 1 mbar in approx. 20 minutes

VACUUM NOT REACHED?

Check in this order

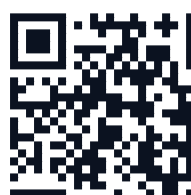
- 1 Open every clamp: centering ring in place and centred?
- 2 Sensor lever fully across (closed)? Pump ball valve open?
- 3 Evacuation valve closed? If not, set ON for 30 min to charge, then OFF
- 4 Door seal clean, press the door lightly at start
- 5 Switch the pump off briefly: hissing? That is the leak

Still no vacuum? Then check the pump itself: vacuum test – video also at wave.cc/en/know-how/installation

DONE

Ready for the first drying run

Questions? Your WAVE team is happy to help · wave.cc



VIDEO GUIDE

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