AirWave®2

OPERATING INSTRUCTIONS

FLÖTER
VERPACKUNGS-
SERVICE GMBH

Contents

Document version 6.14.2021

Safety guidelines

Please read the safety guidelines and operating instruction closely before using the machine.

- Turn off the machine and disconnect power before opening the machine or performing any repair or maintenance work on the machine.

- Switch off the machine if it will not be used for an extended period of time.

- Do not insert any objects into the machine when it is connected to power.

- To prevent the risk of electric shock, ensure that the machine does not come into contact with liquids.

- Do not operate the machine without the covers for the machine components.

- Keep hair and loose clothing away from the film feed mechanism.

- Place the machine only on surfaces that are adequately large, stable, flat, and horizontal.

This machine is designed for safe operation in compliance with the use, instructions, and guidelines specified in these operating instruction.

All persons who use this machine must be familiar with the content of these operating instructions and must carefully follow the safety guidelines.

FLOETER shall not be responsible for damage resulting from improper use of the machine or non-observance of the safety guidelines.

Air cushion types – Type 7 filler

Our standard version – Polyethylene 20 µm
7.1-7.3 with 700 m; 7.4-7.5 with 600 m

Type 7.1 AirWave air cushion filler 100 x 210 mm
Ideal for filling small voids and for use as an intermediate layer

Type 7.2 AirWave air cushion filler 150 x 210 mm
Ideal for filling medium-sized voids and for use as an air cushion ring

Type 7.3 AirWave air cushion filler 200 x 210 mm
Ideal for filling large voids

Type 7.4S AirWave air cushion filler 130 x 280 mm
Ideal for filling large voids

Type 7.5S AirWave air cushion filler 240 x 280 mm
Ideal for filling large voids

All type 7.x are also available as Jumbo rolls with more running meters per roll,
and also in 15µm or 12µm, in pink antistatic version, in our „Heavy Duty" version made of laminated material, or as 100% biodegradable material.
Get in touch with us.

Air cushion types – Type 8 wrapper

Our standard version – Polyethylene 20µm
8.1-8.6 with 450 m; 8.3/8.4 (600mm) with 300 m

Type 8.0 AirWave wrapper 420mm 1 large chamber
1 large chamber for large volumes and for use as a top layer

Type 8.1 AirWave wrapper 420mm 2 large chambers
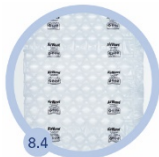2 large chambers for large volumes and for use as a top layer

Type 8.2 AirWave wrapper 420mm 2 small chambers
2 chambers for moulded components, edge protection, and wrapping

Type 8.3 AirWave wrapper 420mm 4 chambers
 4 chambers for use as an intermediate layer, wrapping, and envelope
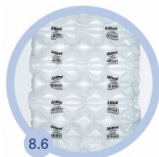
Type 8.4 AirWave wrapper 420mm 8 chambers
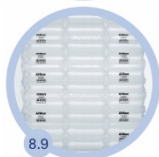8 chambers for use as an envelope and intermediate layer

Type 8.5 AirWave wrapper 420mm 7 wavy chambers
7 chambers for use as an envelope and intermediate layer

Type 8.6 AirWave wrapper 420mm cloud type chambers
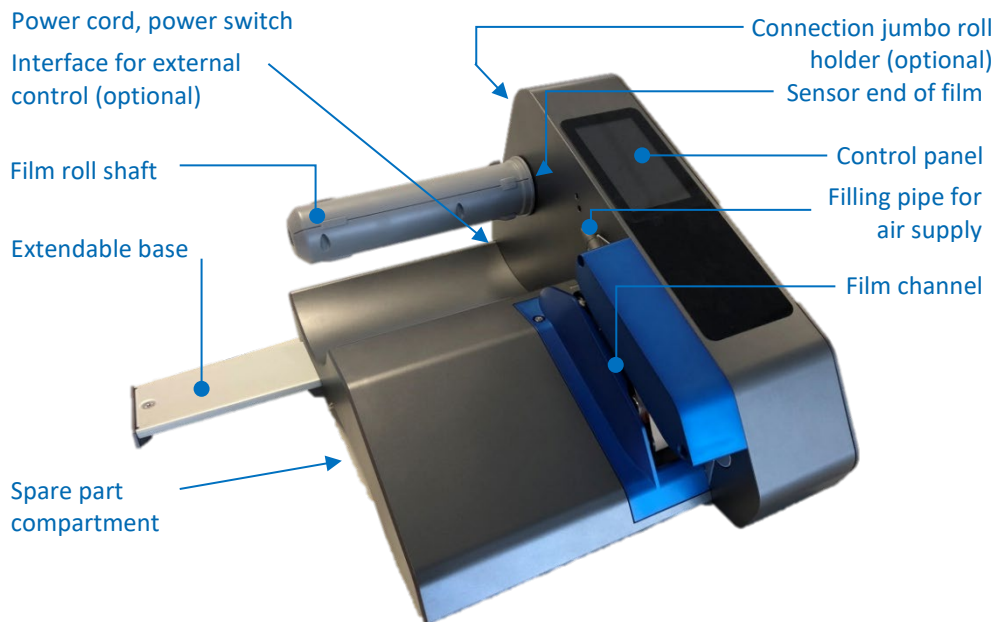4 chambers for use as an envelope and intermediate layer

Type 8.9 AirWave wrapper 420mm 3 chambers
3 chambers for use as an envelope and intermediate layer

*All type 8.x are also available as Jumbo rolls with more running meters per roll,
and also in 15 µm or 12 µm, in pink antistatic version, in our „Heavy Duty" version made of laminated
material, or as 100% biodegradable material.Get in touch with us.*

Machine overview

Power cord, power switch

Interface for external control (optional)

Film roll shaft

Extendable base

Spare part compartment

Connection jumbo roll holder (optional)

Sensor end of film

Control panel

Filling pipe for air supply

Film channel

Technical data

Power supply:	115-240 V; 50-60 Hz
Power consumption:	200 W
Production speed:	20 m / min resp. 10 m / min
Weight:	6,25 kg
Color:	Standard: anthracite / blue (individual on request)
AirWave2 dimensions (l / w / h):	413 / 316 / 232 mm (extendible base 150mm)

Recommended settings

Cushion Type	Recommended Temperature [°C]			Recommended Air Volume			Blowing Time		
	8m/min	12m/min	20m/min	8m/min	12m/min	20m/min	8m/min	12m/min	20m/min
	°C	°C	°C						
PE (20µm) / ClimaFilm (20µm):									
7.1	180-200	235-250	250-270	20-35	30-45	30-50	0	0	0
**8.3	180-200	235-250	250-270	60-70	70-90	80-95	0	0	-0,1

All other settings for Floeter air cushion chains and mats can be found here:

SETTINGS
AirWave 2

Accessories and spare parts

Power cord (1 pcs)

Hex key (3 pcs)

Teflon belt (1 pcs)

Knife (1 pcs)

Fuse (1 pcs)

Film guide pins (2 pcs)

Initial operation

Switch on machine
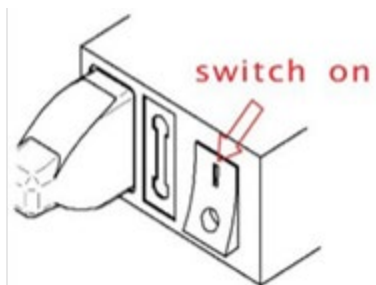
Connect power to the machine and switch on the machine.

The start screen will appear automatically after approximately 3 seconds on the display.

Insert film roll

**Please rotate the spindle anti-clockwise (about 1/2 turn) to unlock the core holder. To load and also to unload a film roll.**
Turn clockwise to lock.
Please note that the roll sits all the way on the spindle.

Load the roll of film onto the film roll shaft.
Please note the side of air fill channel of the film.
The channel must be on the side closest to the machine.

Guide the air fill channel of the film onto the air nozzle. Slide the film on the air nozzle a few more cm forward in direction of sealing unit.
That will simplify the next step.
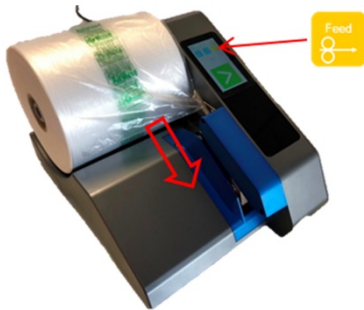
Pull the film above the air nozzle and through the film channel and press the "IN/OUT button" while pulling the film all the way through.

The corner of the film can be cut at an angle to make it easier to fit the film over the air nozzle.
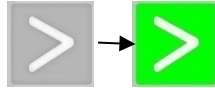
Operating instruction

Use the touch display to set the sealing temperature, film length, and air volume.

Start, Stop function
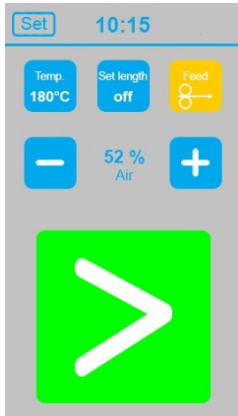
Once machine is powered on the sealing unit starts heating up. When set target temperature is achieved „Start panel" change color.
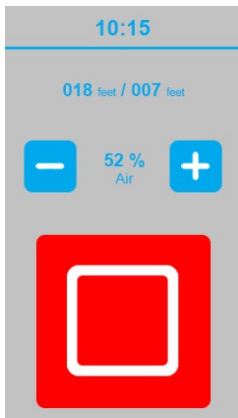
and machine is ready to use.

When a roll of film is loaded and all settings are correct,

touch to start the production of air cushions.

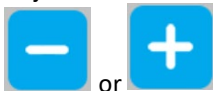During production of air cushions display show Stop panel.

Touch to stop production of air cushions

Adjust air volume

Adjust air volume of the air cushions between 0 and 100, by touching

or at touch display.

The air volume can be adjusted before production of air cushions at start screen and also during air cushion production at stop screen.

Please see recommended settings for adequate air volume for the different cushion types.

Adjust seal temperature

Adjust seal temperature by touching temperature panel [Temp. 180°C]

Touch [−] or [+] to adjust target temperature.

Then touch [ESC] to close setting page and return to start screen. The machine starts heating or cool down until set temperature.

Please have a little patience. Air cushion production can only start when target temperature is achieved.

If you touch [>] during heating up or cooling down process the machine will get in waiting position and will start air cushion production by itself once target temperature is achieved.

Please see recommended settings for the different cushion types.
To change displayed unit, please see "advanced settings".

Preset film length

The length of the air cushion film you want to produce can be preset in meters, as needed. This value is set to 0 by default, which tells the machine to produce air cushions continuously.

To set requested length of air cushion strand, touch [Set length off] at start screen.
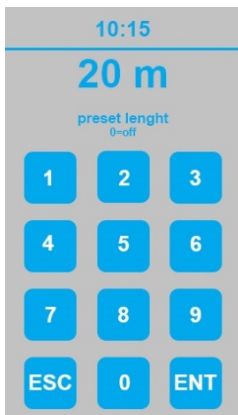
Enter the requested length

Touch [ENT] to confirm and return to start screen

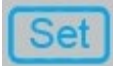Touch [ESC] to discontinue and return to start screen without changed setting.

Please note that preset length will be kept until delete or new adjustment.

To change displayed unit, please see "advanced settings".

Preset function – quick selection

Five presets with temperature, air volume, running speed and Blowing time are possible for a quick selection. Programming can be done at programming level.
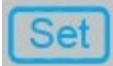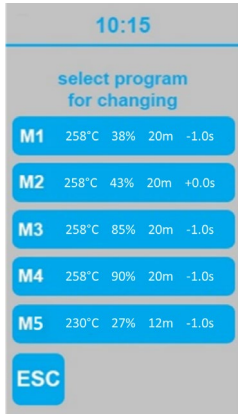
Touch **Set** at start screen to get to the screen for selecting program
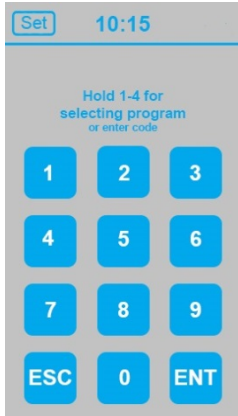
For **quick selection of a preset** touch assigned number (1, 2, 3, 4, or 5) and keep in touch until return to start screen. Settings will automatically be transferred in start screen

Factory-adjusted: M1 for type 7.1 PE-Film 20µm; M2 for type 8.3 PE-Film 20µm

To **program or change a preset** enter "4-5-6" and touch

ENT

Select one program by touching M1, M2, M3, M4 or M5 to get to the corresponding programming level.

Touch **ESC** to return to start screen with without any changes.

To change displayed unit, please see "advanced settings".
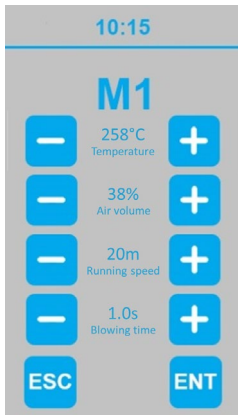
At programming level touch **—** or **+** to adjust temperature, air volum, running speed or blowing time.

When all settings are done, touch **ENT** to continue changes and get back to program quick selection page.

Touch **ESC** to return to program quick selection page without any changes.

Lock function

Control panel can be locked, to prevent setting changes by unauthorized person.

Touch [Set] at start screen to get to the screen for entering code.
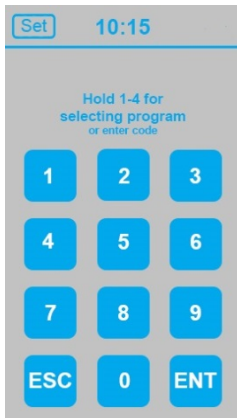
Enter code "1-2-3", touch [ENT] to confirm and return to start screen

Touch [ESC] to return to start screen without lock function.

A little padlock symbol show that touch display is locked.

If so, it is only possible to

feed film [Feed], start [>], or stop [■] air cushion production.

Temperature, air volume or production length is not possible to change. Therefore display needs to be unlocked. Touch "SET" enter code and touch "ENT" to confirm and return to start screen.

Change the knife

You can easily change the knife for AirWave2 yourself.

Step 1: Switch off the machine and disconnect power

Always switch off the machine before opening it.

 Disconnect power to the machine by removing
 the power cord completely from the machine.

Allow the machine to cool down!

You must follow this step. It is for your safety.
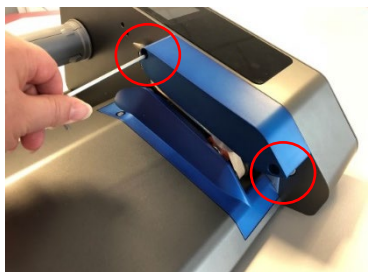
Step 2: Remove cover

Undo both screws of upper cover with appropriate hex key and remove cover

Step 3: Remove the knife

Undo the locating screw with the provided hex key.

Remove the blade bracket.

Caution!!
Even used blades are extremely sharp!

Step 4: Change blade

Undo the little screw which fixes the blade with the provided hex key.
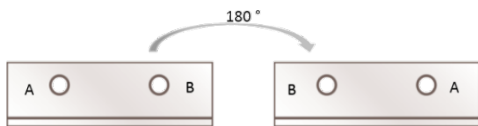
Turn around the blade one time 180° or apply a new one if both sides were already used.

Fix the blade with the corresponding screw.

Step 5: Insert the knife

Insert the knife into the slot at the machine

and fix it with the screw.

Remount the upper cover and fix it with the screws with provided hex key.

Change the Teflon belt

You can easily change the Teflon belts at AirWave2 yourself.

Step 1: Switch off the machine and disconnect power


Always switch off the machine before opening it.

Disconnect power to the machine by removing the power cord completely from the machine.

Allow the machine to cool down!

You must follow this step. It is for your safety.

Step 2: Remove covers
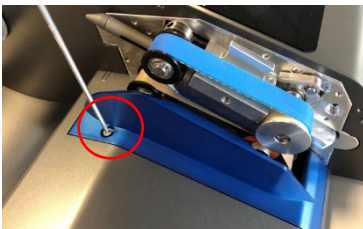
Undo both screws of upper cover with appropriate hex key and unscrew lower cover with provided hex key and remove it.

Step 3: Loosen transport rolls
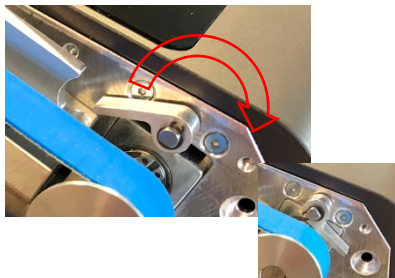
Turn the tension lever to move the transport rolls apart.

Step 4: Release Teflon belts

Push the lower of the two guiding rollers to the right against the spring to release the tension for the lower Teflon belt.

Remove the slackened Teflon belt from the rollers.

Step 5: Insert new Teflon belts.

Place the new Teflon belt over the left transport rollers

And press the roll again to the right against the spring until the Teflon belt can be placed on the right roll.
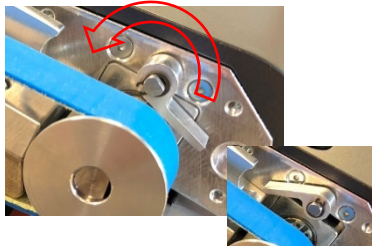
Step 6: Tension the belts

Turn the tension lever back to the left to press the transport rolls against each other.

Step 7: Close the machine covers
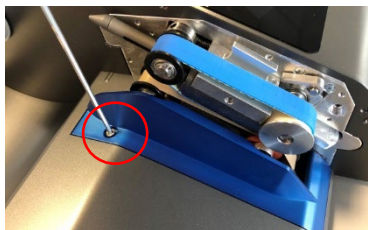
Fit the covers of the Teflon belts and screw it with the prepared hex key.
Lower cover first and then the upper one.

Now you can reconnect the power cord and switch on the machine.

Change the transport belt

You can easily change the transport belt at AirWave2 yourself.

Step 1: Switch off the machine and disconnect power

Always switch off the machine before opening it.



Disconnect power to the machine by removing the power cord completely from the machine.

Allow the machine to cool down!


You must follow this step. It is for your safety.

Step 2: Remove upper cover

Undo both screws of upper cover with appropriate hex key and remove cover

Step 3: Loosen transport rolls
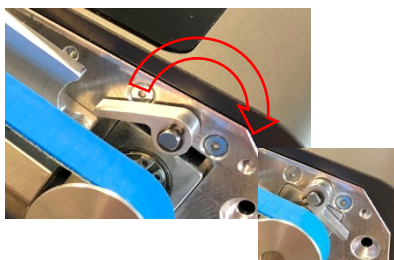
Turn the tension lever to move the transport rolls apart.

Step 4: Release transport belt

Push the upper left guiding rollers to the right against the spring to release the tension for the transport belt.

Remove the slackened transport belt from the rollers.

Step 5: Insert new transport belt

Place the new transport belt over the right transport rollers

now press the left roll to the right against the spring until it is possible to place the transport belt on the left roll.

Step 6: Tension the belts
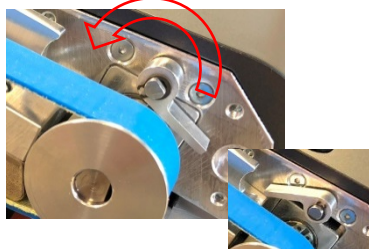
Turn the tension lever back to the left to press the transport rolls against each other.

Step 7: Close the machine covers
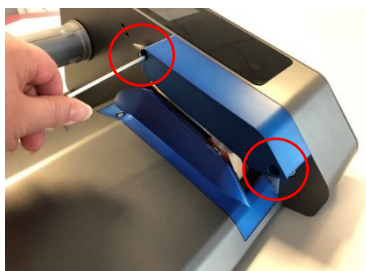
Fit the upper cover and screw it with the prepared hex key.

Now you can reconnect the power cord and switch on the machine.

Film guide pins

For a more effective air volume or better film guide for the film Types
8.3 - 8.5 use the two guiding pins.
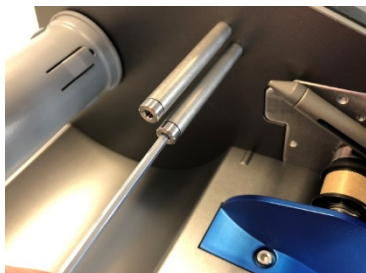
Screw the pins at the machine casing with the prepared hex key

Thread the film through the pins and over the airpipe.
Start production.

Error codes

The AirWave2 has an integrated diagnostic program. In the event of an error, an error description will appear on the display and indicate the cause of error. This information will help you to correct the error:

Error film
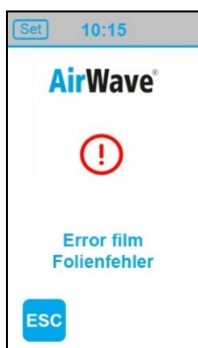
Roll of film is empty or film is misthreaded

Error electric

Please contact our Floeter Service if this Error occurs repeatedly or if it would not be possible to reset.

Error heating

Please contact our Floeter Service if this Error occurs repeatedly or if it would not be possible to reset.

Options and expandability

Please contact your sales advisor for further information.

Distance controlled production by Bluetooth connection.
With tablet or smartphone
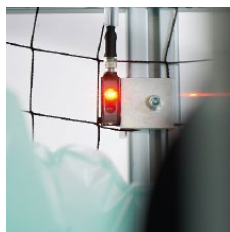
Fully automated control by the installation of a filling level sensor.
Optimal for overhead compartment or mobile air cushion storage.

Start-/Stop function with foot pedal.
For a production on demand. Even if you have no free hand or if machine is inaccessible.

AirWave 1/2 Jumbo big roll holder
for bigger rolls

AirWave 1/2 Overhead Solution
For an automated air cushion stockage in ideal working height

AirWave 1/2 Rolling basket
always brings your air cushions to the ergonomically correct working height. Locally flexible.

AirWave 1/2 mobile table solution
Bring your machine to the ideal working height.
(compatible with Docking station)

AirWave 1/2 Docking station
For a decentralized consumption with mobile rolling
container completely independent of machine position.

AirWave1/2 coiler unit (420/600mm)
For the production of endless rolled sheets of the cushion
mats

Advanced settings

To change advanced settings touch [Set] at start screen.

Enter code "1-3-5", continue with [ENT] and choose desired submenu.

Submenu in Level 135	meaning	Factory setting	Choices
Running speed	Production speed	12 m/min	- 8, 12 or 20 m/min With Jumbo roll holder: - 12JR m/min - 20JR m/min
External control	Start/Stop with connected ext. tool	Deactivated	- External sensor - Foot pedal - Large roll coiler - Deactivated
Delay time ext. sens.	Delay time sensor reaction	0	Off/0 - 99 sec
Foil detection sensor	Foil detection sensor	Roll holder	- Roll holder - Jumbo roll holder - Airpipe - All deactivated
Standby time	Resting time until machine starts cooling	20 min	Off/0 – 99 min
Units	Imperial or metric units	°C & Meter	- °C - °F - Meter - Feet
Time	Time of day	24 h	- am/pm - 24 h hh : mm
Date	Date	mmdd	- mmdd - ddmm
Communication	Internal section	-	- -
Start delay time	Delay "Start" via display	0	0 – 99 sec
Blowing time	Blower starts before/after film transport	0.0	0 : Motor & blower same time – : Blower before motor (0,1 - 1,0 sec) + : Blower after motor (0.1 - 1.5 sec)

Maintenance & Cleaning

The AirWave2 is a low maintenance machine.
Mechanically claimed parts can show traces of abrasion after certain operating time.
Furthermore there can occur contamination or residues at the AirWave2.

Our recommendation at regular intervals:

1)   Check Teflon belts and replace as the circumstances require

2)   Check blue transport belt and replace as the circumstances require

3)   Check red and white transport rolls regarding contamination and grip clean or replace if necessary

4)   The gear wheels always need to be sufficiently greased

5)   Check knife, see the cutting of the film, if necessary turn 180° or replace

6)   If necessary clear the machine of contamination and residue of film. Consider also knife slot at air pipe, sealing block and other areas of the machine.

Warranty

AirWave2 has a 12-month manufacturer's warranty that covers all electronic and mechanical components. The warranty period starts automatically when you purchase the machine.
In the event of damage, please contact our back office (please see contact below).
If the machine needs to be send back to us, please follow the steps discussed with our service team.
Your machine will be returned to you immediately once the repair is finished.
If you need a replacement machine, the warranty period will continue from the receipt date of the first machine. The warranty will not be extended.

The scope of the warranty does not include the following:

- Damage resulting from improper use of AirWave2:

- This includes, in particular, damage caused by using unsuitable films or inserting foreign objects into the machine's transport belts.

- Wear and tear caused by regular use

- Wearing parts, in particular, Teflon transport belts, knifes, and transport rollers

- Damage caused by machine downtimes

Contact:

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Declaration of Conformity

The machine AirWave2 and it´s equipment is compliant with the relevant harmonized standards listed according to EG-Regulations 2006/42/EG, the European EMC Directive 2014/30/EU and LVD Directive 2014/35/EU. The compliance was verified by an independent specialized certifying company.

Support and Service

If you need support, advice or do you have any questions?

We are here for you: www.floeter.com/en/support

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