

# flowbot ONE



2020

A guide  
to your pipetting cobot

# Table of contents

A user-friendly interface .....	4
FAQs .....	6
Benefits .....	7
Overview of flowbot ONE .....	8
Article: A helping hand in the lab .....	10
Specifications .....	12
User story: Unilabs .....	14
Your journey .....	16
Your labware - Our robot .....	17
Catalogue .....	18



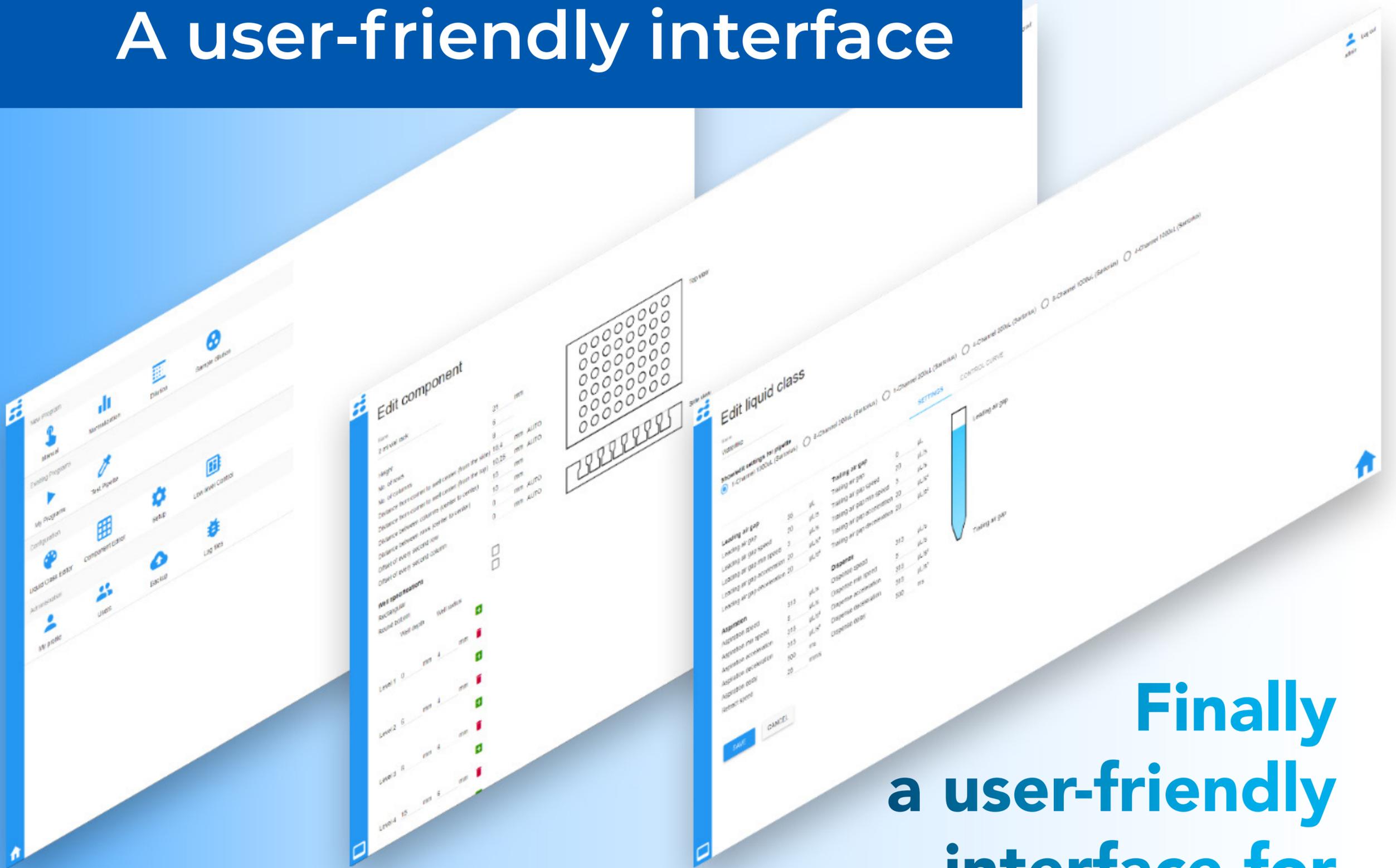
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*We have increased our productivity  
by 40% after automating with  
flowbot ONE*

– Dana Svraka, Medical Laboratory Technologist at Unilabs, Copenhagen

Read more on page 14

# A user-friendly interface



## Mission:

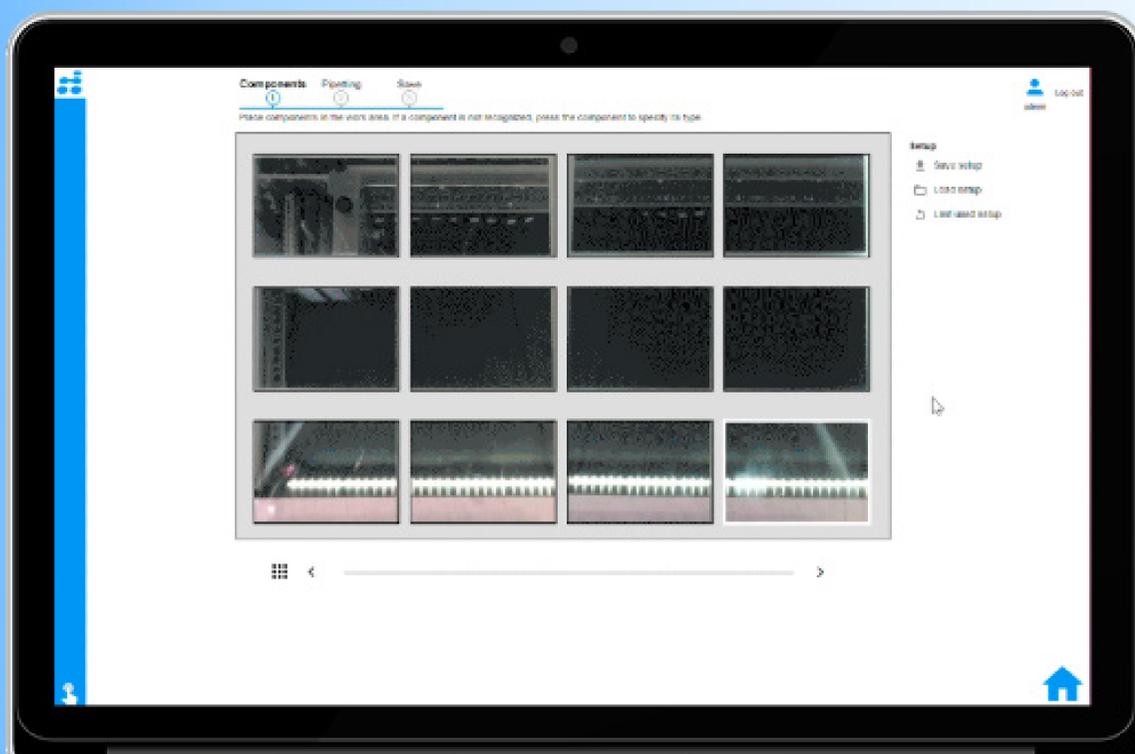
We have designed the user interface to be as intuitive as possible. This means no need for extensive programming or any previous experience with pipetting robots.

All the features needed for a flexible and reliable solution are available and always at hand while setting up programs.

Finally  
a user-friendly  
interface for  
automating  
your  
pipetting!



# Learn to use it in 1 hour



## Some key features:

- Share programs with other users
- Create your own liquid classes
- Create your own components
- Preview programs before run
- Time estimate while setting up programs
- Log files - both PDF and CSV

...and much more

**You can always book a demo!**  
**Reach us here:**  
[sales@flow-robotics.com](mailto:sales@flow-robotics.com)

# FAQs

## Frequently asked questions about flowbot ONE

- **How many pipette modules does flowbot ONE have?**  
2 pipette modules. One module can be a 1-channel, 4-channel or 8-channel pipette.
- **Can the pipette modules be exchanged?**  
Yes, you can buy more than 2 pipette modules and then exchange these in the robot.
- **Can programs be reused?**  
Yes, as soon as a program is saved, it can be reused and edited. It can be shared, so all users of the robot can execute the program.
- **Can a locked program be copied for a second version of the program?**  
Yes.
- **What maintenance are required?**  
No daily maintenance. Only wiping off o-rings in the pipette modules a few times a year.

# Benefits

**Set up  
programs in  
minutes**

**Increased  
reproducibility**

**Increased  
productivity**

**Short  
implementation  
time**

**High degree  
of flexibility**

**Learn to use  
it in 1 hour**

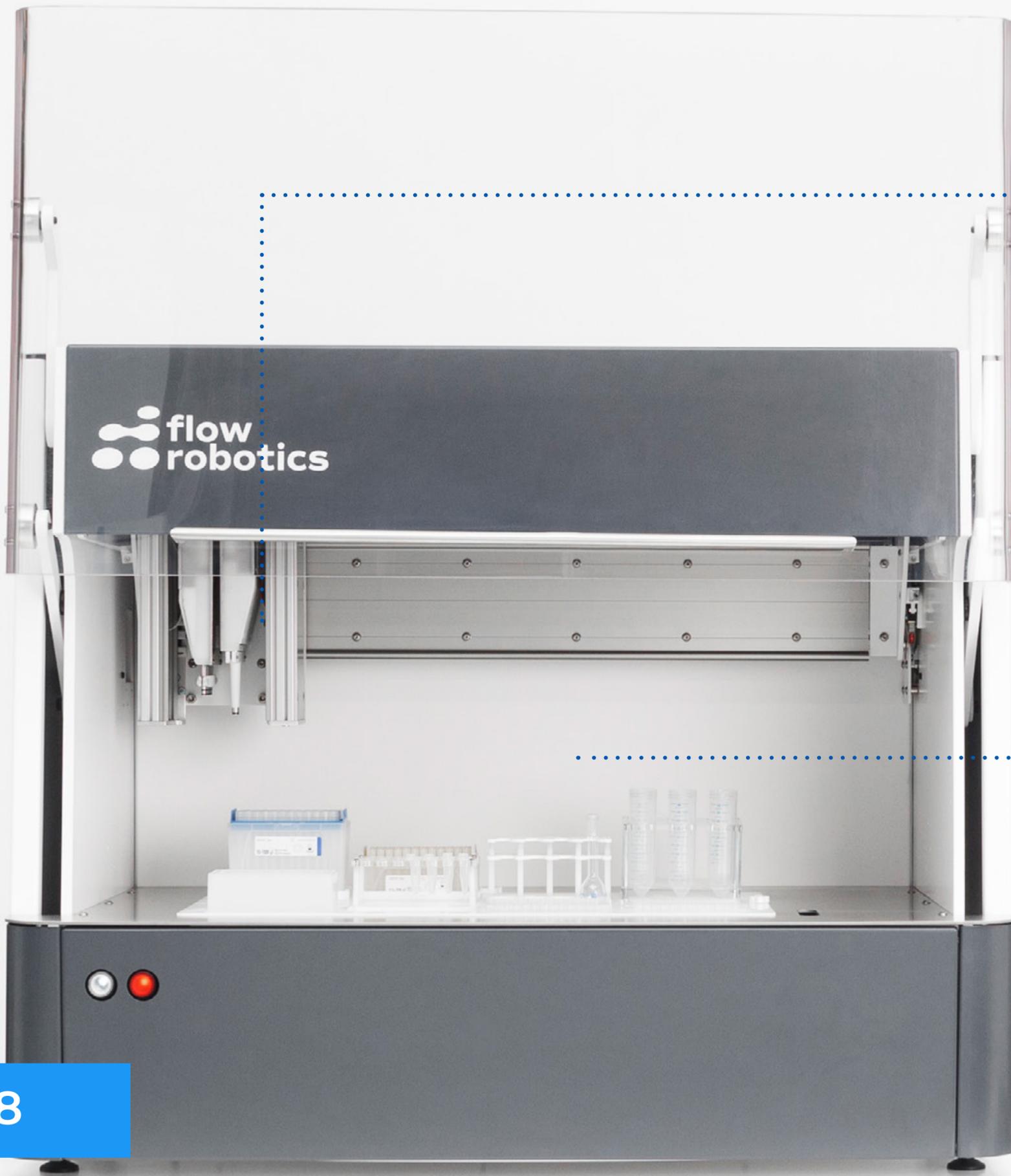
**Improve  
the work  
environment**

**Elimination of  
mistakes**

**High degree  
of reliability**

made in Denmark

# Overview



## Dimensions

W100cm x D60cm x H80cm (closed)

W100cm x D60cm x H110cm (open)

## Capacity

**12** positions (SBS format)

# flowbot ONE

**2 pipette modules**

**Volume ranges**

1-20 $\mu$ L or 2-200 $\mu$ L or 10-1000  $\mu$ L

1-20 $\mu$ L  
2-200 $\mu$ L  
10-1000 $\mu$ L

**Pipette channels**

1 channel, 4 channel and 8 channel

1 4 8

**Tip detection**

Pipette modules automatically detect if tips are on or not

**Wifi**

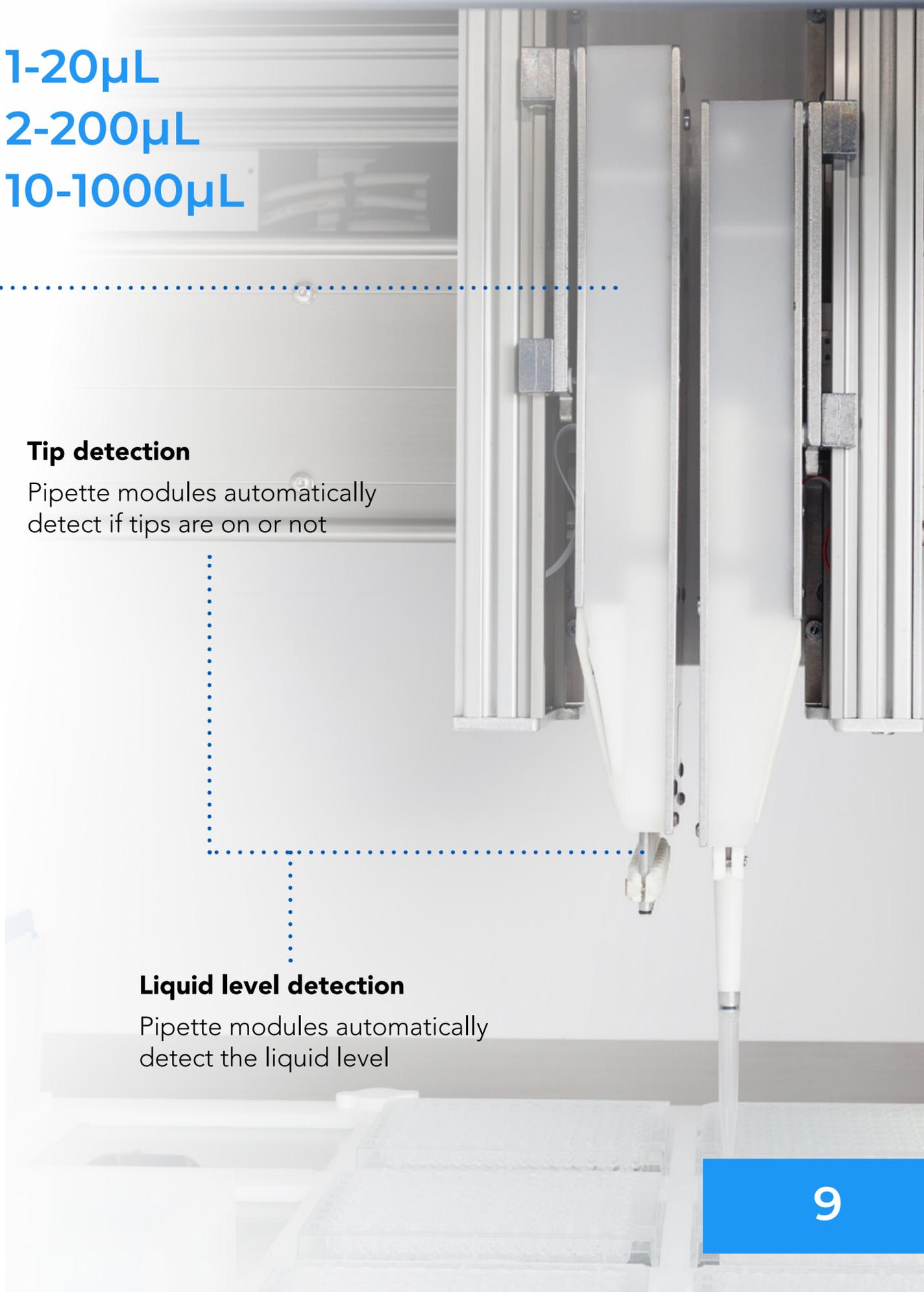
No installation required. Log on directly from your computer to the robot

**Software**

Runs in the browser

**Liquid level detection**

Pipette modules automatically detect the liquid level



## A helping hand in the lab

River Stone Biotech uses flowbot ONE every day

“At River Stone Biotech flowbot ONE has helped us to automate a lot of pipetting tasks, which previously were done by hand; reformatting, cherry picking, sample preparation, assay setup etc.” tells Joan Thuun Hansen who is a senior laboratory technician at River Stone Biotech Aps in Copenhagen.

Joan Thuun Hansen and her team was looking for a flexible as well as time saving solution to their liquid handling and they hoped to find a system that would allow them to start automating immediately.

“Several parametres motivated us to look for a flexible, time saving and easily implemented solution to liquid handling in our lab, that can be operated by all researchers in the lab and not only specially trained staff. What we needed was not only an easy way to go from manual to automated pipetting, but also a solution that was precise, accurate and could provide us with consistent results.”

With the decision to use flowbot ONE for liquid handling in their lab River Stone Biotech has experienced significant improvements of both reproducibility capacity, time savings and better work environment.

Joan Thuun Hansen is happy with the outcomes: “Flowbot ONE has freed up time for us to do other tasks, which has been highly important. We have now phased out some really tedious manual work, while improving the health of our staff, which was a great concern for us. Handling 384 well plates with flowbot ONE is just so much easier and pipetting mistakes are even eliminated. We are really happy with this.”

The user-friendly software of flowbot ONE ensured that the lab team at River Stone quickly started using the robot.

“Flowbot ONE is very intuitive to use. The training of me and my colleagues on the machine went smoothly and setting up programs has been easy to do ourselves right from the beginning. We use the robot practically every day.”



“

*Handling 384 well plates with flowbot ONE is just so much easier and pipetting mistakes are even eliminated*

– Joan Thuun Hansen, Senior Laboratory Technician, River Stone Biotech

# Specifications

## Pipette channels

1 channel, 4 channel and 8 channel

## Weight

70 kg

## Dimensions

W100cm x D60cm x H80cm (closed)  
W100cm x D60cm x H110cm (open)

## Precision and accuracy

Complies with the ISO 8655 standard

## Run time estimation

A time estimation for the length of the program is made for each run

## Pipette tips usage

Automatic calculation of number of pipette tips needed for each run. If needed new time estimation for new loading is provided.

## Capacity

12 positions (SBS format)

## Safety

Safety door detection and emergency stop button.

## Streaming

Components inside the robot are automatically recognized using computer vision technology and live video recording of each run is streamed to your computer.

### Software

- Runs in your web browser via enclosed wifi connection to the robot's computer

### Volume ranges

- 1-20 $\mu$ L or 2-200 $\mu$ L or 10-1000  $\mu$ L

### Tip detection

- Pipette modules automatically detect if tips are on or not

### Liquid level detection

- Pipette modules automatically detect the liquid level

### Consumables

- Pipette tips: standard pipette tips can be applied

### Labware

- Standard components already predefined in the software.  
New components can easily be defined by the user

### Integratable devices

- Heater/cooler/shaker
- Magnetic module
- More to come...

### More features

- Bottom touch
- Optional tip reuse
- Pause (reaction or incubation time)
- Customizable liquid classes
- CSV Import/Export of programs
- Logs of executed programs
- Sharing programs between users



# Unilabs increased productivity by 40%

**At Unilabs in Copenhagen, blood samples from sclerosis patients from all over the world are being screened for antibodies against a virus, and the results are being used for diagnostic analysis.**

“Every day we screen a minimum of 470 samples from patients. For this we use the pipetting robot flowbot ONE of which we have five in our laboratory. In a specific pattern, the robots dilute the samples and dispense them onto microtiterplates. The process for one assessment takes a little less than 30 minutes and we are completing 10-12 assessments every day. It’s an improvement of 40 % more samples screened,” tells Dana Svraka, Medical Laboratory Technologist at Unilabs, Copenhagen.

Being an international company, Unilabs performs diagnostic services in large scale, with more than 120,000 cases of pathology diagnostic services, 3.8 million imaging examinations and 195 million analyses made annually, in more than 250 laboratories spread globally. Unilabs provides diagnostic services to different patient groups.

For Unilabs in Copenhagen, the implementation of five flowbot ONE robots in their workflow resulted in significantly shorter turnaround time for incoming patient samples. Dana Svraka is enthusiastic about this efficiency improvement: “Now, the sclerosis patients get answers 30 % faster than before. The time from we start the tests until we can conclude on results has been significantly shortened and it is really satisfying to me. We could not have done this without the flowbots.”

Prior to automating their screening process, they had some concerns regarding training and the general use of pipetting robots. “We were a little concerned about losing the manual know-how of pipetting. But the bottom line is that our lab team still fully controls the pipetting, only now we avoid aching hands and shoulders due to locked work positions and repetitive procedures. This is really important to us.”

It took little effort for the Laboratory Technologist at Unilabs to become familiar with flowbot ONE. The Danish company Flow Robotics has designed flowbot ONE to be intuitive for new users. “We are really happy with how user-friendly flowbot ONE is. You quickly get started in the morning – a push on the button and it is ready to start running the predefined programs,” describes Dana Svraka, “It’s great that you don’t have to learn a lot of new procedures, it’s simple to use since you can setup programs with a few clicks, and everyone in our lab understood how to right away.”

“We are happy we decided to automate our dilution series with flowbot ONE. We have increased our productivity, reduced injuries and, on a bigger picture, we give the answers of the samples quicker, so that medical staff can provide the right care for the patients sooner,” concludes Dana Svraka, and returns to the lab, where one robot already finished a run and is ready for the next batch of samples.

...their  
...%



*You quickly get started in the morning - a push on a button and it is ready to start running*

– Dana Svraka, Medical Laboratory Technologist at Unilabs, Copenhagen

# Your journey

## Process from interest to installation



We invite you to share your interest in automating your processes. We can validate it online or during a live demo and together with you we find the right solution.



Along with ordering flowbot ONE you will be guided to which types of pipette modules that would fit your needs.



Our team will produce your flowbot ONE.



flowbot ONE is installed and validated (IQ/OQ) on site and ready to use at the day of delivery.



The introduction and training in using flowbot ONE can be done at the same day of delivery.



After delivery we remain available for you with --- questions, answer....

# Your labware - our robot

## Book a demo

You can always book a demo of flowbot ONE. We can arrange it as a virtual demo or as a live demo at either your or our laboratory.

Our team is always ready to help you!

Just give us a call!



**Send us an email:**  
**[sales@flow-robotics.com](mailto:sales@flow-robotics.com)**

**Or give us a call:**  
**+45 40185935**

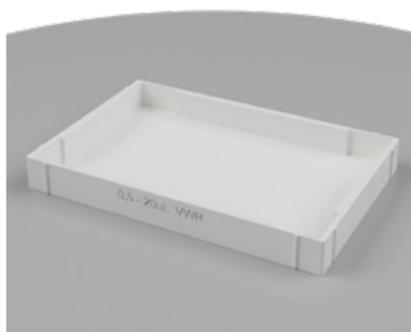
# Catalogue

We produce platforms for your tip boxes that aids a more flexible application to the liquid handling applied in your lab.

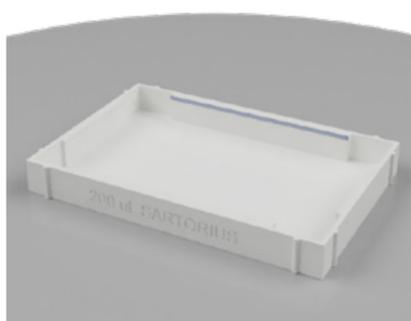
## Adapters for tip boxes



VWR tip boxes for Sartorius tips

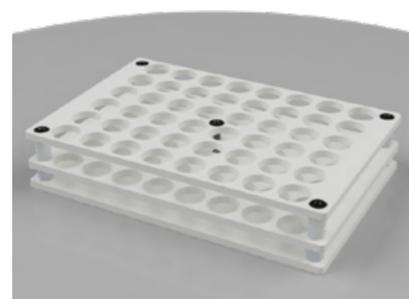


Thermoscientific tip box



Starlab tip box

## Standard labware



2 mL HPLC vials



Eppendorf 5 mL (x12)



Microfuges tubes from 0.5 mL PCR tubes to 5 mL Eppendorf tubes

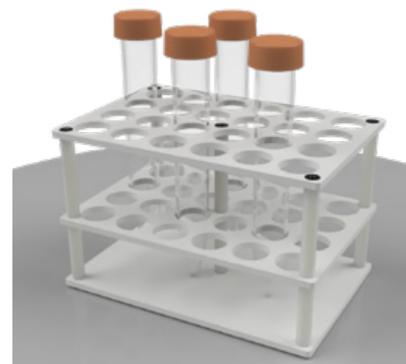
We also produce racks customized for your labware.

Each rack are designed to fit into the SBS format inside flowbot ONE. Upon ordering a robot you can choose which racks you will buy.

### Tailored to your needs



Special glass flasks



falcon tubes 15 mL and 5 mL

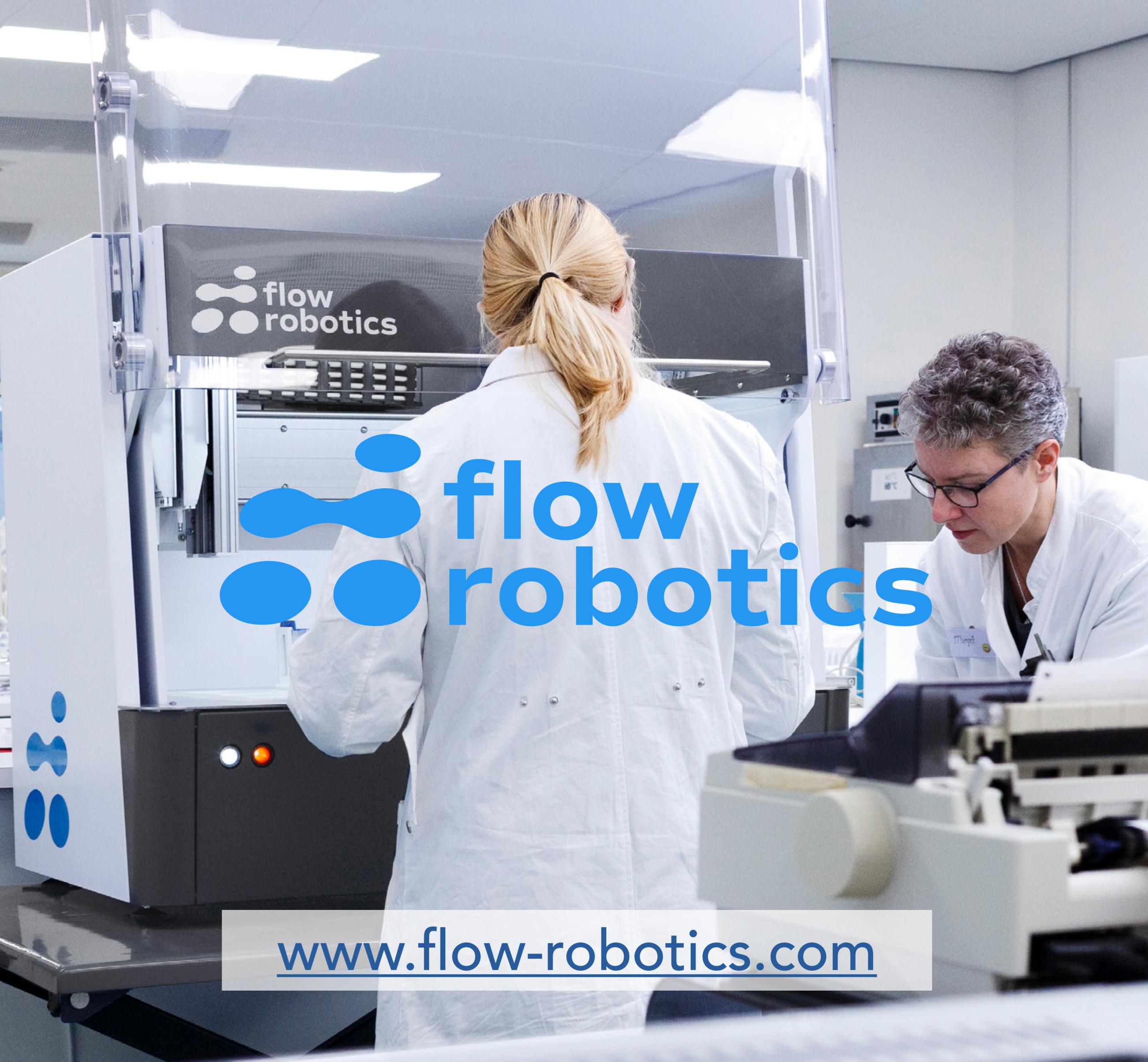


Duran glass flasks



PCR tubes x 24

For further information contact our team on:  
[sales@flow-robotics.com](mailto:sales@flow-robotics.com)



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