# Take care of your wine, we take care of its analysis

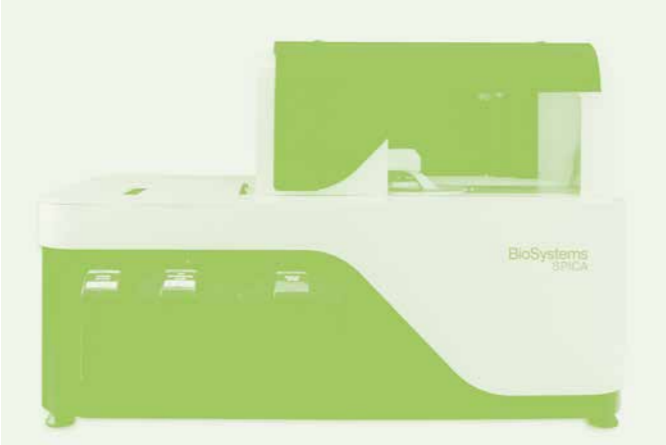
BioSystems
SPICA

Food & Beverage analysis

human - centred biotech

# It has never been so easy; the first assisted analytical system.


SPICA is a new system; innovative, modular, connected and intelligent.




# Automatic oenological analyser

SPICA is set to revolutionize the automatic and multiparametric analytical platforms of the wine sector, SPICA is:

**Flexible and modular.** Able to configure and adapt to different analytical needs.

**Connected.** It allows working with any device such as a PC, tablet or even your smartphone, and allows to upload and manage data in the cloud.

**Smart and intuitive.** The improved autonomy and efficiency of the platform together with a very simple application make it an optimized and user-friendly tool.

**Robust and accurate.** Incorporating the latest mechanical assemblies offering robustness, repeatability and excellent accuracy.


—

SPICA has been designed together with users from all over the world.

# Modular and flexible

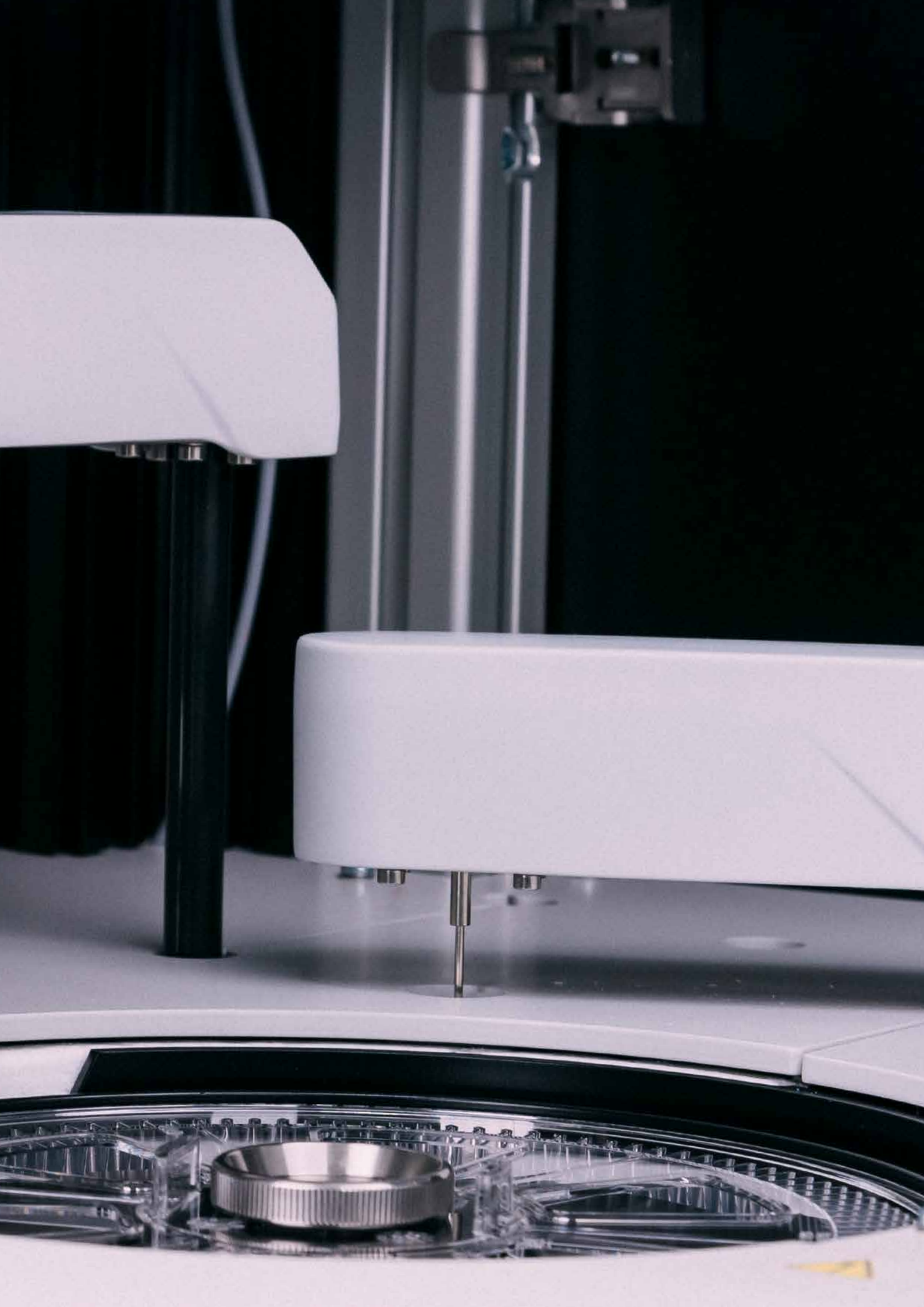
SPICA has been designed to meet the ever-growing complexity of the wine industries demands. Offering flexibility in programming, SPICA allows users to customize their testing protocols through management of reagents, samples, pretreatments and incubations. Thus improves quality of testing and provides an avenue for future developments and customizations.

The new modular design allows users to add functionality to the SPICA in the form of reagent cooling systems, barcode readers, or a cuvette washing station. These modules can be added at later dates to adapt to changing user needs.

# Connected

SPICA improves upon previous experiences with a reimagined user interface focusing on accessibility and ease. The incorporation of an internal computer and cloud-based platform allows users to run the SPICA from any computer or smart device.

Being connected through the Cloud means the analyser no longer connects to software or transfers data to a separate program. The built-in application allows for seamless updates and improvements, along with more efficient access to remote support.



# Smart and intuitive

Every stage in the process has been simplified, from setting the device up to the daily routine. No software installations, no peripheral setups, no reagent mixing or expiration control; SPICA takes care of everything.

The new interface is very user-friendly and intuitive, designed on user experience feedback in collaborative partnerships with many companies from all over the world. It's automatically adaptable to any support used.

SPICA will guide you through all the processes, guaranteeing accurate results with low reagent consumption. SPICA accompanies you in your decisions.

# Robust and accurate

SPICA provides the precision and accuracy you need for everyday decision making. With the incorporation of a powerful LED optical bank ranging from **280 nm to 750 nm**, and a mechanical stirrer, you can be confident in your results.


—
State-of-the-art
technology
in each detail.

# SPICA reagents

## Calibration and control materials
High Glucose/Fructose Control
Ions Multical
Multical
Sulfite Control
Red/White wine control

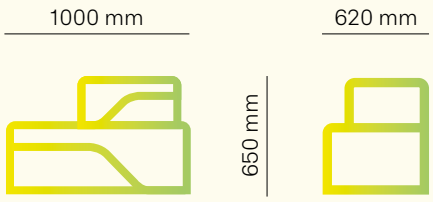
## Ions
Calcium
Iron
Potassium

## Nitrogenous substances and sulfites
Ammonia
Free Sulfite
PAN
Total Sulfite

## Organic acids
Acetic Acid
Ascorbic Acid
Citric Acid
D-Gluconic Acid
L-Lactic Acid
L-Malic Acid
Sorbic Acid
Tartaric Acid

## Other parameters
Acetaldehyde
Anthocyanins
Catechins
Colour
Glycerol
TPI (Total Polyphenols Index)
pH
Polyphenols
Total Acidity

## Sugars
D-Glucose/D-Fructose/Sucrose
D-Glucose/D-Fructose



# Technical specifications

## General characteristics

| | |
|---|---|
| Speed | 140 cycles/hour |
| Mean Throughput | 50 results/hour* |
| Analysis principles | Photometry, turbidimetry |
| Analyser type | Random access Analyser |

## Sample and reagent management

| | |
|---|---|
| Sample and reagent rotor capacity | 105 positions (7 racks x 15 positions) |
| Barcode readertype | Optional |
| Number of samples with barcodes | 70 |
| Size of primary tubes | 12 mm to 16 mm diameter (max. height 100 mm) |
| Sample well | Sample well diameter 13.5 mm |
| Reagent bottle volume | 20 mL, 60 mL, 10 mL, 40 mL or 10 + 40 mL |
| Refrigerated reagents | Optional |
| Refrigerator temperature range | 10 °C under room temperature (at room temperature of 21 °C) |
| Type of sample pump syringe | Low-maintenance, ceramic piston |
| Piston diameter | 8 mm |
| Liquids handling limits | 2 - 600 µL |
| Dilution ratio | 1:1 to 1:100 |
| Dispensing resolution | Yes |
| Level detection | Interior and exterior |
| Washing of tip | Optional |
| Clot detector | No |
| Vertical collision detector | Yes |
| Thermostat tip | Yes |

## Reaction rotor

| | |
|---|---|
| Minimum reaction volume | 180 µL |
| Maximum reaction volume | 800 µL |
| Number of cuvettes | 120 |
| Cuvette material | UV methacrylate |
| Type of incubation | Dry |
| Dispensing time for second reagent | Relative to RA dispensing (variable) |
| Reaction cuvette temperature | 37 °C |
| Accuracy of temperature | ± 0.2 °C |
| Temperature stability | ± 0.1 °C |
| Stirrers | 1 |

## Optional table

| | |
|---|---|
| Single table | AC17345 |

## Optical system

| | |
|---|---|
| Light source | LED + Hard Coating Filter |
| No. of wavelengths | 11 minimum |
| Wavelengths | 280 - 340 - 405 - 420 – 505 – 520 – 560 – 600 – 620 – 635 - 750 nm |
| Filter bandwidth | - 0.2 A to 3.5 A |
| Wavelength accuracy | 0.0001 |
| Photometric range | Principal photodiode + reference photodiode |
| Internal resolution | CV <1% at 0.1 A |
| Detector | Yes |
| Measurement precision (for 340 nm, 405 nm & 505 nm) | CV <0.1% at 2 A |

## Environmental requirements

| | |
|---|---|
| Room temperature | 10 °C to 35 °C |
| Relative humidity | <85% with no condensation |
| Maximum altitude | <2000 m |
| Contamination grade | 2 |
| Transportation, storage temperature | 0 °C to 40 °C |
| Transportation and storage humidity | <85% with no condensation |

## Dimensions and weight

| | |
|---|---|
| Dimensions (W. x D. x H.) | 100 cm x 62 cm x 65 cm |
| Weight | 75 Kg |

## Electrical requirements

| | |
|---|---|
| Mains voltage | 115 V or 230 V |
| Network frequency | 50 Hz or 60 Hz |
| Electric power | 450 VA |
| Fluctuations of the mains voltage Electric power | ± 10 |

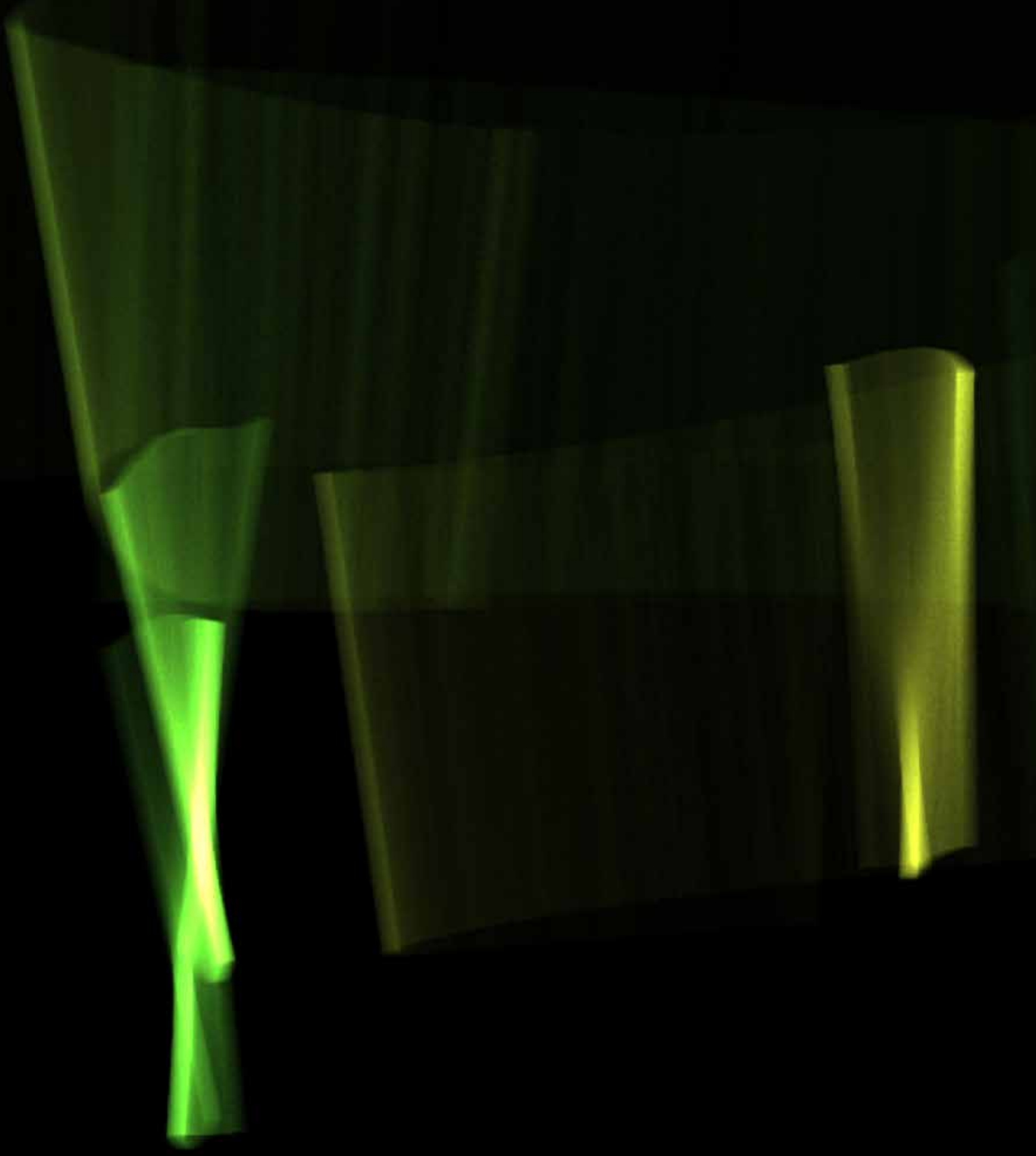
## Fluid requirements

| | |
|---|---|
| Type of water | Fluid requirements |
| Water tank | 3 L |
| Water tank | 3 L |
| Washing solution tank | 1 L |

## Uninterruptible power supply (UPS)

| | |
|---|---|
| UPS ref. AC17262 | Optional / external |

*Average value, final throughput will depend on the configuration of the worklist and the analyte



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