

Robustness & Optimization

BioSystems

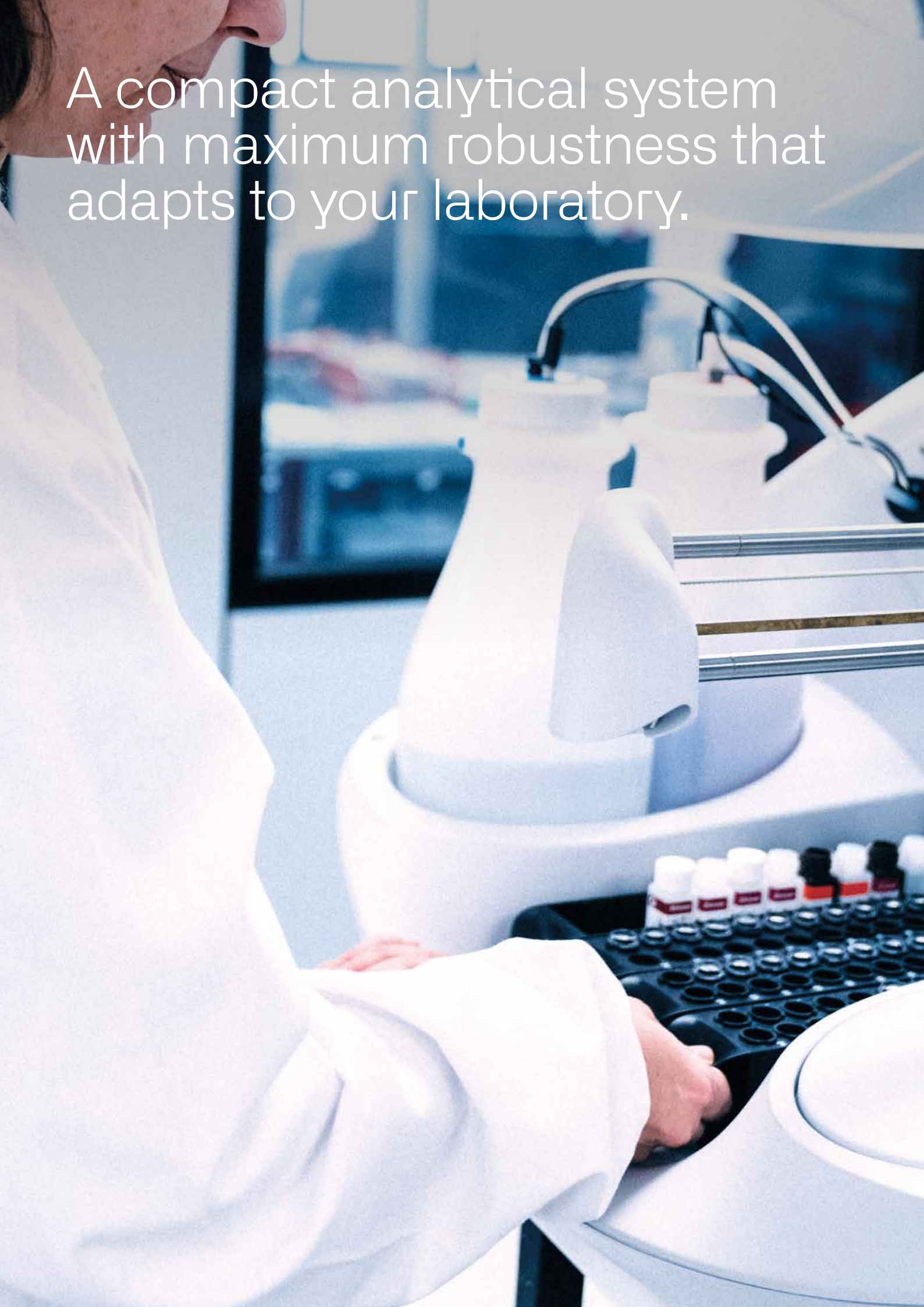
Y15 multiparametric analyser

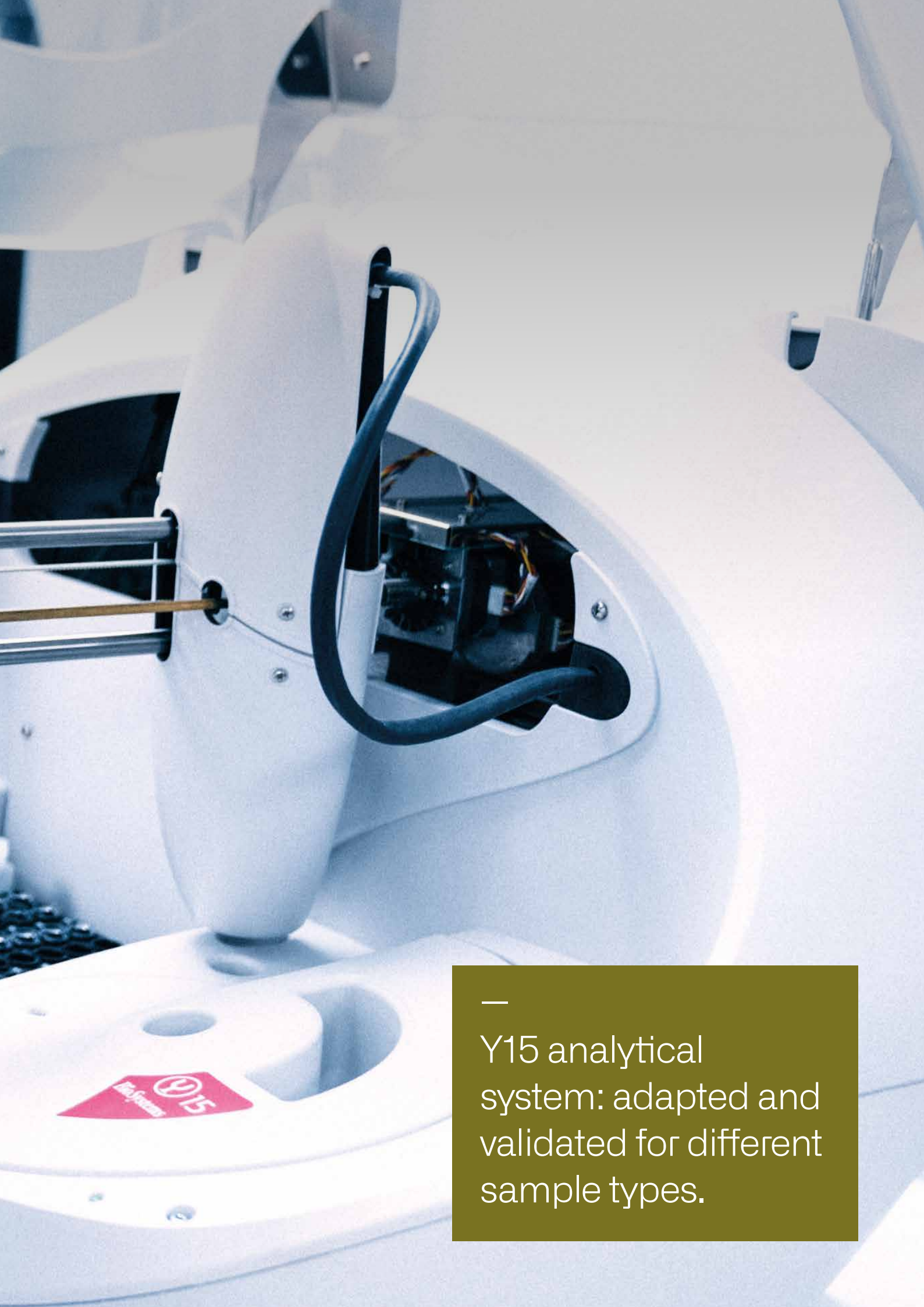
Food & Beverage analysis

human - centred biotech



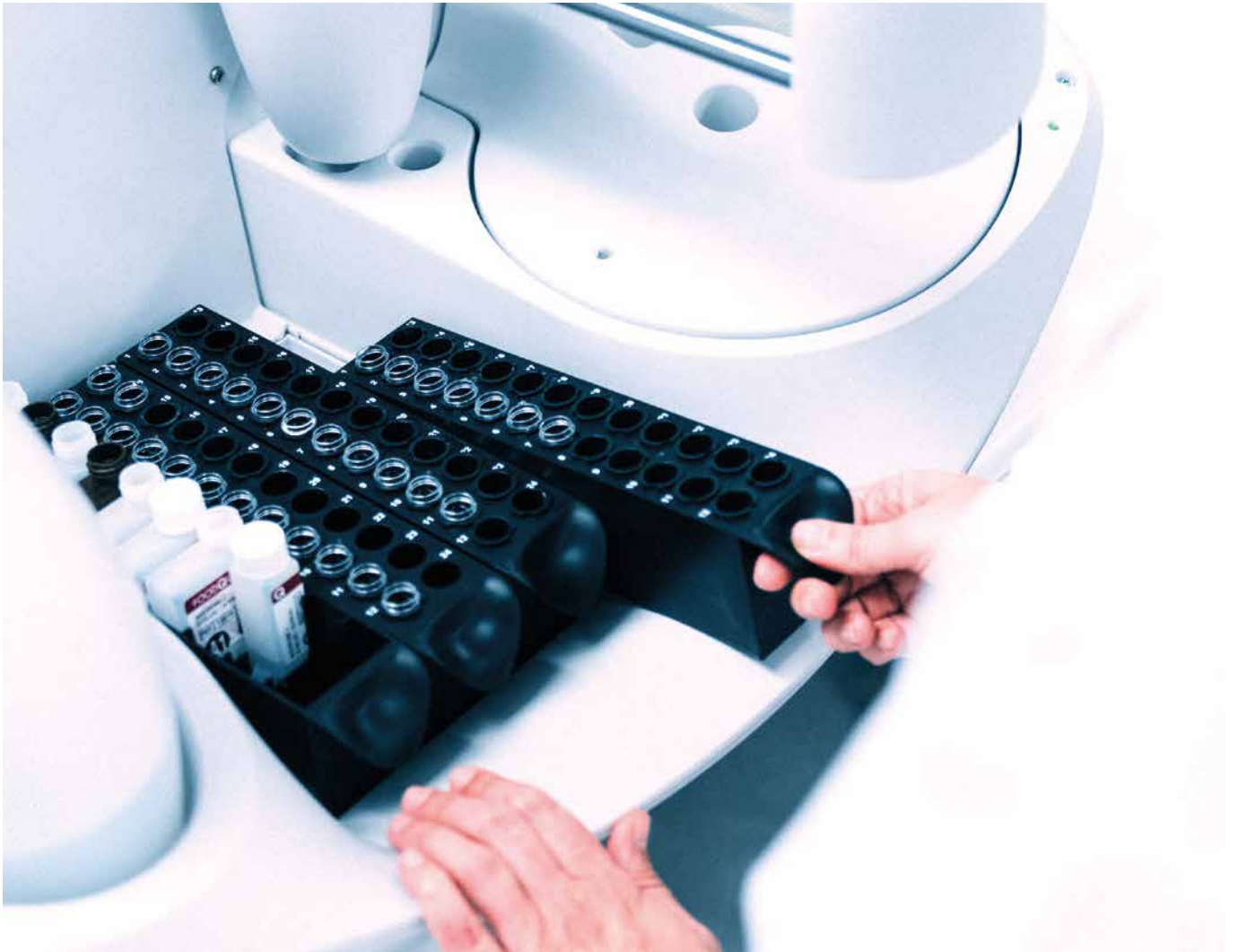
A compact analytical system
with maximum robustness that
adapts to your laboratory.





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Y15 analytical
system: adapted and
validated for different
sample types.

Technological innovation



Efficiency in lab automation

Y15 is an **open analyser** that easily adapts to any need, and thanks to its **multiple configuration options**, it can work with and monitor different sample types simultaneously.

Reliable and validated analysis system

Y15, in conjunction with the BioSystems line of reagents, is a **fully developed system validated for use in oenological laboratories**. It provides rapid and accurate analytical results during the wine making process and facilitates quality control of finished products.

Minimum handling

Reagents adapted and dedicated to the analyser, avoiding the manual liquid handling.



Continuous loading

Samples continuous loading to streamline laboratory tasks.

Stable onboard temperature

Y15c is the version equipped with a cooling system, which increases the *onboard* stability of reagents and ensures a constant temperature during work lists.

Simple and intuitive interface

A User-friendly software, designed specifically for these analysis types. The flexible and simple interface make the Y15 a versatile analyser that can adapt to any need.





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Take care
of your wine,
we take charge
of its analysis.

Analytical solutions

Since 2008, we offer solutions for wine analysis in order to improve the quality and safety of the wine.

From discussions with industry and understanding sector needs, our professional team and technical colleagues help the experts of the wine industry. We develop and validate analytical systems that are accurate and reliable to offer you an excellent user experience.

Finding the best solution at the same time we continuously improve together. Thus, we offer a personal assistance, giving you technical and scientific support in any moment.

At BioSystems, our main aim is to help our users and customers in their daily job monitoring wine processes to make the right decisions during the winemaking.



Technical & scientific support



Remote assistance



Customized assessment



FOODQ
D-GLUCOSE/
D-FRUCTOSE
REF 12800

Q

FOODQ

FOODQ
FREE SUL

FOODQ
FREE SUL
REF 12813
50 mL

FOODQUALITY
FREE SULFITE
REF 12813
50 mL
LOT 017XA
2-8°C
2018-08

FOODQUALITY
ACETIC ACID
REF 12810
40 mL
A
2-8°C

Y15 parameters

Organic acids

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

Sugars

D-Glucose/D-Fructose/Sucrose
D-Glucose/D-Fructose

Ions

Calcium
Copper
Iron
Potassium

Calibration and control materials

High Glucose/Fructose Control
Ions Multical
Multical
Sulfite Control
Red/White wine control

Other parameters

Acetaldehyde
Anthocyanins
Catechins
Colour
Glycerol
PTI (Total Polyphenols Index)
pH
Polyphenols
Total Acidity

Nitrogenous substances and sulfites

Ammonia
PAN
Free Sulfite
Total Sulfite

Technical specifications

Highlights

- Speed of 150 cycles/h.
- Mean throughput of 60 results/h.
- Samples continuous loading.
- Pre and post dilution automatic.
- Dedicated reagents and bottles for the analyser.
- Low water consumption (0.5-1 L/h).

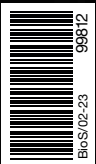
Ordering information

Description	Code	Format
Y15 analyser	83106	-
Y15C analyser	83106C	-
Reaction rotor	AC11485	10 units
Concentrated Washing Solution	AC16434	500 mL
Sample wells (pediatric cups)	AC10770	1000 units
Reagent bottles 50 mL + caps	BO11493	10 units
Reagent bottles 20 mL + caps	BO11494	10 units
Amber reagent bottles 50 mL + caps	BO13442	10 units
Halogen lamp Y15 6V/10W	LA10429U	1 unit



Throughputs		Optical system	
Speed	150 cycles/hour	Light Source	Halogen lamp (6V, 10W)
Mean throughput	60 results/hour*	Lightpath	6 mm
Sample handling		Wavelengths	340 - 405 - 420 - 520 - 560 - 600 - 620 - 635 - 670 nm (1 additional filter can be added by user)
Positions for racks (reagents or samples)	4 or 2 in Y15c	Wavelength accuracy	±2 nm
Rack samples capacity	24 samples position/rack	Spectral range	340 - 900 nm
Max. capacity of samples	72 or 48 in Y15c	Photometric range	-0.05 to 3.0 A
Barcode reader	External	Photometric detection system	Silicon photodiode
Size of primary tubes	Ø 13 mm or 15 mm (max. height 100 mm)	Internal resolution	<0.0001 A
Sample well diameter	13 mm	Baseline stability	0.004 A max., 30 minutes at 505 nm
Sample types	Grape-juice, sulfited grape-juice, white wine, rosé wine, red wine, beer, cider, and other alcoholic beverages	Size and weight	
Dispensing pump	Ceramic pump of high durability	Size (w., d., h.)	840 x 670 x 615 mm
Dispensing tip	Stainless steel 110 mm	Weight	45 Kg
Level detection	Capacitative	Electrical and environmental requirements	
Sample pipetting volume	From 2 µL to 80 µL	Mains voltage	115 to 230 V
Pipetting resolution	0.1 µL	Mains frequency	50 or 60 Hz
Predilution ratio	From 1:2 to 1:40	Electric power	500 VA
Tip wash	Inside and outside	Ambient temperature	From 10 to 35 °C
Reagents handling		Relative humidity	<75%
Volume of reagent bottles	20 mL, 50 mL	Altitude	<2500 m
Reagents rack capacity	10 botellas de 20 o 50 mL	Fluid requirements	
Cooled reagent	Yes, in Y15c. 20 reagents max.	System liquid solution bottle	3 L
Temperature range of cooler	10 °C below room temperature (at 25 °C)	Washing solution bottle	3 L
Reagent volume	R1 volume, 10 µL to 550 µL R2 volume, 10 µL to 200 µL	Waste solution bottle	3 L
Dispensing mode	Ceramic pump without maintenance	Minimum computer requirements	
Pipetting resolution	1 µL	Operative system	Windows® 7 or Windows® 10 64 bit (x64)
Tip wash	Inside and outside	CPU	Intel Core i3 @3.10 GHz or over
Reaction rotor		RAM	512 MB
Reaction volume range	From 180 µL to 800 µL	Hard Disk	20 GB or over
Number of wells	120	Monitor minimum resolution	800x600
Well material	UV methacrylate	Connector of serial channel	USB
Type of incubation	Dry without maintenance	Laboratory Inform on Systems (LIS)	
Temperature	37.0 °C	Connectivity to LIS	Yes
Temperature accuracy	±0.2 °C		

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



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