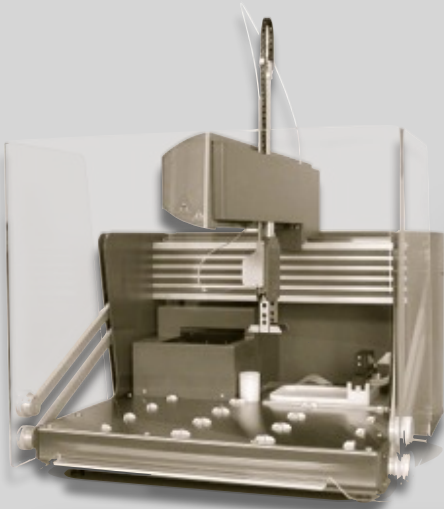




A NEW EXPERIENCE IN LAB AUTOMATION

E-Robot²

e-Robot²



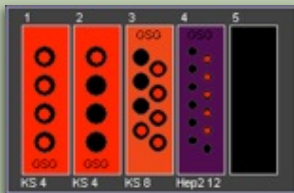
ELISA AND IFA AUTOMATION

*the best Walk-Away System for
ELISA and IFA assays in a
compact version*

THE REFERENCE POINT OF ELISA AND IFA AUTOMATION

e-Robot² is the best robotic workstation for the complete automation of the ELISA and IFA assays on standard microtiter plates and glass slides.

Based on the Sias Xantus platform, **e-Robot²** is a successful example of GSG RobotiX experience to develop customized solutions for **OEM Application**.



e-Robot² has been developed as **Open System**, able to be configured for almost every ELISA and IFA assays.

Furthermore the system can run simultaneously different assays from different reagents supplier, whenever possible in the same support.

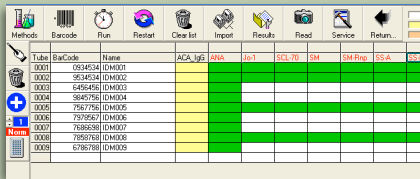
Innovative solutions make this system powerful and fast in a relative small size footprint (about 70 cm wide).



COMPLETE AUTOMATION

e-Robot² is a Walk-Away Analyzer for **ELISA** protocols, from pipetting through incubation, washing, reading and results printout. Featuring semi-automated bar code reading of samples, plates and reagents,

Time	Plate	Step	Method
00.00.00	1	Distribute	Tetano IgG
00.00.56	1	Incubation	Tetano IgG
00.01.01	2	Distribute	ANCA 6
00.02.26	2	Incubate	ANCA 6
00.32.31	2	Wash	ANCA 6



Method	Barcode	Run	Restart	Clear list	Import	Results	Read	Service	Retan...
Tube	BarCode	Name	ALCA IgG	ANA	Jo1	SCL10	SM	SM-Rep	SSA
0001	0524534	DM001							
0002	9834534	DM002							
0003	6454545	DM003							
0004	9845795	DM004							
0005	7957795	DM005							
0006	7978677	DM006							
0007	6086528	DM007							
0008	7959783	DM008							
0009	6786788	DM009							

comprehensive software requires a very **minimal interaction**.

IFA assays are **entirely processed** but read with an external microscope.

SAFE

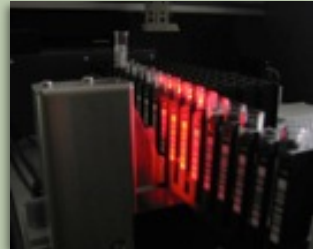
Barcode identification for **samples, reagents, plates**.

Active Safety Shield pauses the system when open. Optional **Top Cover** available.



Liquid, bubbles and clot detection.

Safe **tips decontamination** to prevent samples and reagents carry-over (washable tip).



RELIABLE

e-Robot² is the most reliable solution in the automation of autoimmunity and infection disease tests.

Maintenance is extremely **minimal** and the **costs** are the **lowest** for a liquid handling system (no syringes to be replaced).



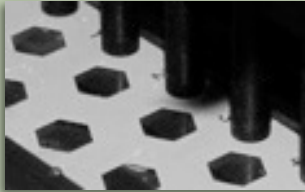
FAST AND VERSATILE

ELISA and IFA test can be executed in the **same run**, optimizing the laboratory **working hours**.

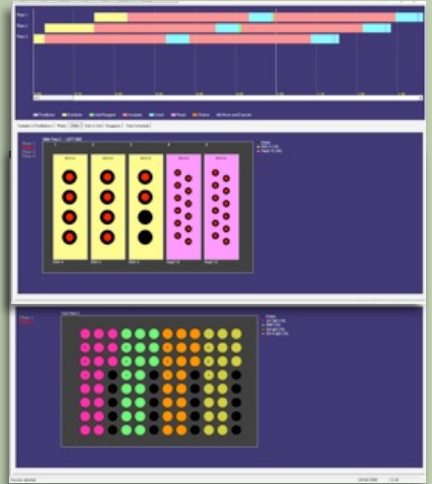
e-Robot² is available with one pipetting channel (washable tip) plus a robotic handler arm for plate transportation.

ELISA and IFA assays can be simultaneously executed in the same run despite the extreme compactness.

Smart Slide Wash extremely flexible and fully customizable.



The IFA slides are submerged during the wash step for an effective and gentle action on the substrate, efficiently washing **up to 5 slides** in **less than 6 minutes**.



Patient		T			
Tube	BarCode	Name	ANCA 6	Hep2 6	Tetano IgG
0001	IDM001	IDM001			
0002	IDM002	IDM002			
0003	IDM003	IDM003			
0004	IDM004	IDM004			



User Name

Role

The **e-Robot²** is extremely **flexible**, combining **screening and titration** of IFA assays.

A new **Serial Dilution Optimization** allows to use only the wells required for **each sample**, increasing dramatically the efficiency.

The **e-Robot²** supports different **user profiles**, setting up different level of features for different figures in the lab.

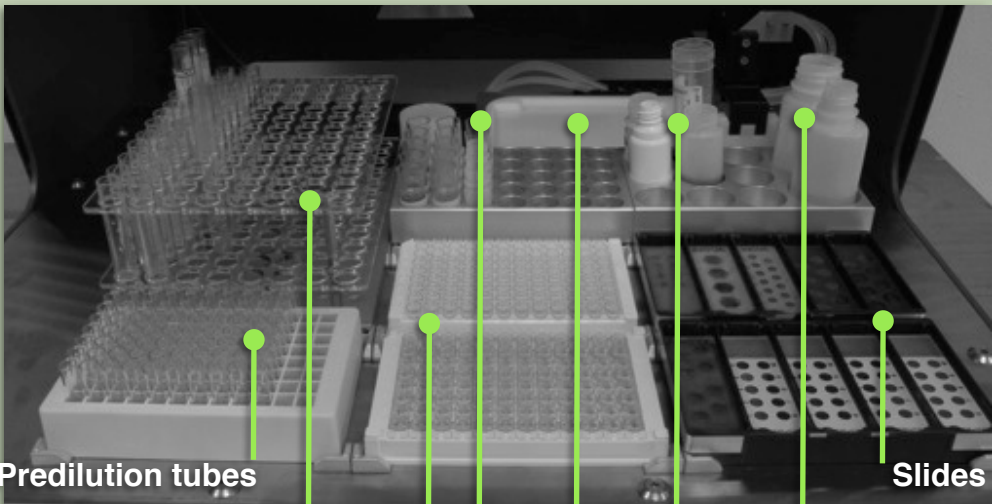
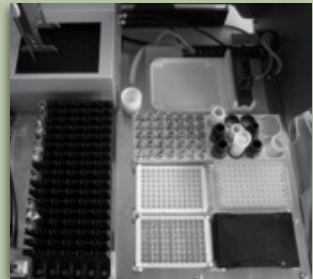
OPEN AND

e-Robot² The accommodates in a very flexible way **up to 96 sample tubes**, 32 standard-control vials, 2 diluent and 9 reagent containers on MTP-sized racks to maximize the flexibility.

The system can be equipped with the **barcode reader on-board** or with an extra pre-dilution area.



Due to the MTP-sized positions the layout possibilities are almost infinite, optimizing the working area for any specific preference.



Predilution tubes

Sample tubes

Test plates

Standard Controls

Slides

Diluents

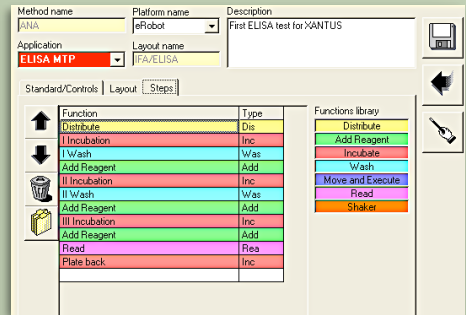
Reagents

Washer

USER FRIENDLY

e-Robot² user-friendly application software has been designed to make the **user interaction** easier.

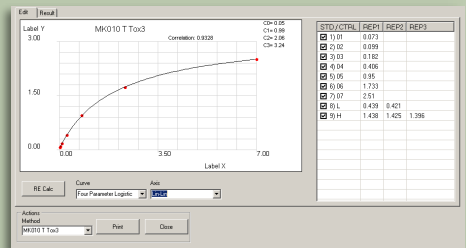
Application-Oriented programming interface simplifies the test method implementation, instrument preparation and assay execution follow-up.



RESULTS

e-Robot² software has sophisticated tools for ELISA qualitative and quantitative data reduction, with **enhanced curve management**.

A complete **IFA Run Report** is available for tracking patient position on the slides, helping the operator when reading slides with the microscope.



IMPORT - EXPORT

e-Robot² software further offers **bi-directional** connection to Host PC (LIS) by *file transfer* in **ASCII or XML** format file for downloading *Worklists* and uploading Results.

A *host-query* interface using **HL7** communication format is available as **optional** (**HL7 Manager** application program).



LAYOUT EXAMPLES

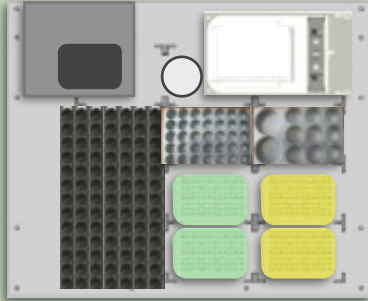
option A - ELISA with Samples bar code reader

2 Predilution Plates

2 ELISA Plates

32 Standards-Controls

11 Multi-size Reagents

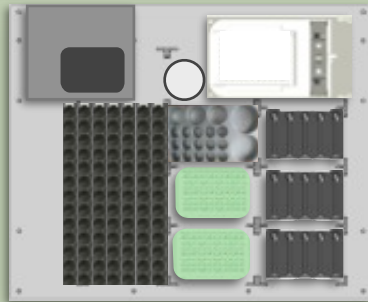


option B - IFA with Samples bar code reader

2 Predilution Plates

15 IFA Slides

Controls and Reagents



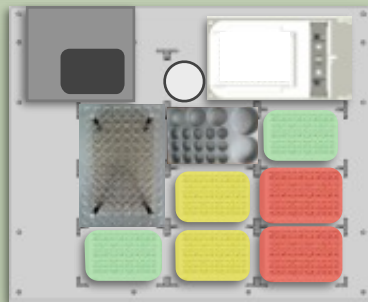
option C - ELISA with Heated Incubator

2 Predilution Plates

2 ELISA Plates

2 Positions 37°C Incubator

Controls and Reagents

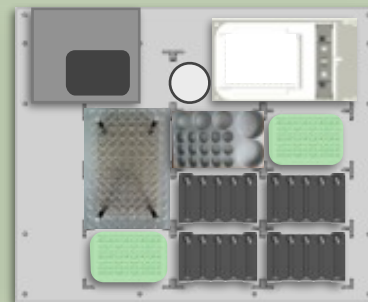


option D - IFA

2 Predilution Plates

20 IFA Slides

Controls and Reagents



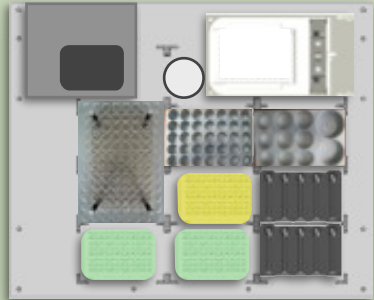
LAYOUT EXAMPLES

option E - IFA

2 Predilution Plates

1 ELISA Plates

10 IFA Slides

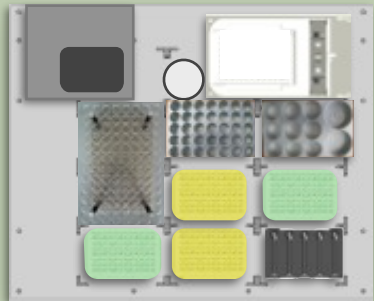


option F - ELISA-IFA

2 Predilution Plates

2 ELISA Plates

5 IFA Slides



**... AND ANY OTHER CUSTOM SOLUTION
ACCORDING TO YOUR SPECIFICATIONS!**

NO LIMITS

No limitation in the software to the maximum number of parameters which can be executed in the same run.

Up to 12 test per each plate.

Up to 5 different test/slides per each slide tray.

Special covers, available as options, allow the incubation of slides and plate at ambient temperature in **humid conditions**.



BAR CODE	Semi-Automatic system for Bar Code identification. Most popular Bar Code can be read. Bar Code reader for sample tubes and reagent containers. Max number of digits: 20.	
SAMPLES	96 samples tubes position (primary tubes) in linear racks (ResaTrax) with 16 tubes 13mm each, or 14 tubes 16mm each.	
PREDILUTION	Predilutions in 162 microtubes and serial dilution in microtitre plates, depending on the Layout.	
TIPS	Washable tip.	
LIQUID DETECTOR	Capacitance. Liquid, bubble and clot detection.	
CARRY-OVER	Up to 10 ⁻⁶ depending on the washing cycles and the reagents characteristics.	
LIQUID DISPLACEMENT	High precision micro-anular gear pump for precise and accurate liquid handling.	
VOLUMES	Minimum sample/reagent volume 5ul. Maximum sample/reagent volume 1ml.	
SHAKER	Plates and Slides Shaker with different shaking mode (orbital, linear, etc.) optional.	
PLATE READER	Single channel photometer for single, dual or multi wavelength measurement. Range between 400 and 800 nm. 4 standard filters up gradable to 6. Standard wavelength 620 nm, 492nm, 450nm, 405 nm (other values available on request).	
HEATED INCUBATOR	Single position incubator (optional) Controlled temperature from 5 C° above Room Temperature to 49°C. Precision at 37°C +/- 0.5°C	
WASHER	8 channels with 4 software selectable buffer lines. For MTP and Slides.	
PC REQUIREMENTS	Not recommended <i>Intel Atom</i> and <i>Celeron</i> processor. Not recommended NetBook and its processor. Display Resolution 1280x1024. Software is fully compatible with <i>Microsoft Windows XP/Seven</i> operating system.	
INTERFACE to PC	CAN Bus on USB 2.0 port	
OPERATING CONDITIONS	Temperature: 15°C to 30°C/60°F to 85°F Relative humidity: 10 – 85% at 30°C/85°F or below.	
WEIGHTS	Weight approx. 50 Kg, depending on the configuration	
DIMENSIONS mm	Width 650, Depth 700, Height 850.	NOTE: PC not included
CE mark	Instrument bears CE mark	



GSG Robotix is an Italian company with years of experience in the field of laboratory automation.

Where procedures and analytical methods need to be automated, GSG Robotix is able to respond with a turnkey solution, skillfully combining expertise with hardware and software appropriately chosen and ad-hoc developed.

In addition to development and fine tuning of new procedures GSG Robotix has got solutions ready for use in the diagnostic field.

The application areas range from the preparation of slides for IFA methods to the complete automation for ELISA, and their simultaneous execution.

From the interpretation of agglutination reactions to full automation in blood grouping tests, in microplate and Gel Card.

For further information contact info@gsgrobotix.it



GSG RobotiX è un' azienda italiana con anni di esperienza nel settore dell'automazione da laboratorio.

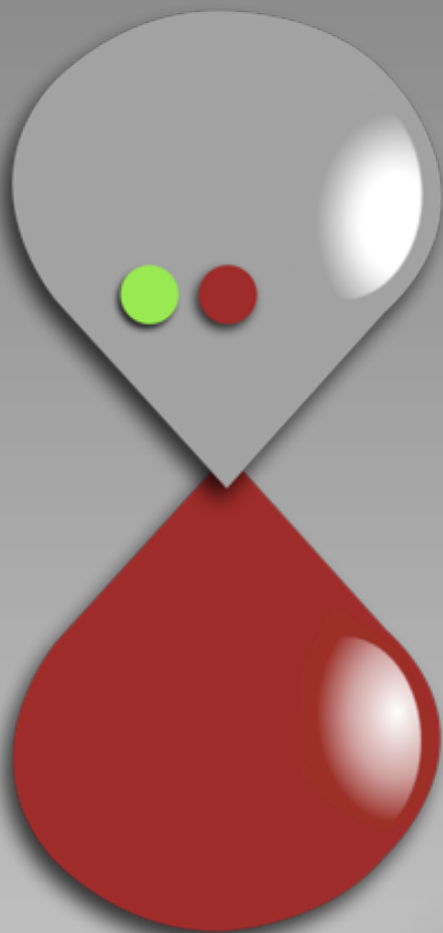
Laddove vi siano procedure e metodi analitici da automatizzare, GSG RobotiX è in grado di rispondere con soluzioni chiavi in mano, combinando sapientemente know-how con hardware e software opportunamente scelti e sviluppati ad-hoc.

Oltre allo sviluppo e alla messa a punto di nuove procedure GSG RobotiX dispone di soluzioni pronte all'uso in campo diagnostico.

I campi applicativi spaziano dalla preparazione dei vetrini per metodiche IFA alla completa automazione per metodiche ELISA, nonché alla loro esecuzione simultanea.

Dalla interpretazione di reazioni di agglutinazione alla completa automazione nella determinazione gruppi sanguigni, su micropiastra e Gel Card.

Per maggiori informazioni contattare info@gsgrobotix.it



A NEW EXPERIENCE
IN LAB AUTOMATION

GSG ROBOTIX SRL
VIA GIACOMO MATTEOTTI 66
20092 CINISELLO BALSAMO (MI) -
ITALY
INFO@GSGROBOTIX.IT
WWW.GSGROBOTIX.IT
TEL: +39 026128842

GSG ROBOTIX BRAND AND LOGO CAN'T BE USED WITHOUT WRITTEN PERMISSION OF GSG ROBOTIX SRL.
E-ROBOT BRAND AND LOGO CAN'T BE USED WITHOUT WRITTEN PERMISSION OF GSG ROBOTIX SRL

BROCHURE VER.2-2014