



### **HELO\*** is our global Hematology Solution.

An innovative design solution covering all the needs of a high throughput automated hematology platform.

Flexible and efficient, HELO\* is the optimum answer to the constant evolution of your laboratory.

The HORIBA advanced technologies embedded in the Yumizen H2500/H1500 associated with over 30 years experience in Hematology diagnosis offer the highest analytical performances.

Thanks to its data, tube managment, blood film and digitalization management capability, HELO not only addresses your needs, but helps you to optimize your TAT, your floor space and your reagent storage.

HELO comes along with our accreditation assistance program which has been developed in accordance with ISO-15189 certification.









- High throughput analyzer at 120 samples per hour
- On board integrated reagents
- Rotative 360° sample mixing with standardized sample rack system
- NRBC included in Routine (CBC & DIFF)



- Automated conveyor with multi configuration options
- Optimized rack transfer monitoring
- Priority racks and samples management
- Compliant with international safety standard recommendations



- Automatic slide maker (smear and stain)
- High throughput slide maker at 120 slides per hour
- Flexibility of staining protocols: MGG, Wright or Wright Giemsa
- QR code (2D) printing capacity on slides



- Middleware and expert validation station
- Embedded rules package including ISLH rules. Capacity to write tailor made rules for Rerun, Reflex, Comment and validation.
- Centralized Patient's result validation and Quality Controls monitoring
- Web based application
- Real time alerts of Key Performance Indicators (in multi sites environment)



Comprehensive automated slide digitalization:

- Automatically captures digital images of cells from blood smears and body fluid preparations
- White Blood Cells classification
- Red Blood Cells morphological analysis
- Platelets counting estimation
- Remote review software







### Expert blood cell counter, Yumizen H2500 and Yumizen H1500

Automated Hematology Analyzer to answer the expectations of a solid diagnostic platform with rapid and consistent results delivery.

A real throughput of 120 samples per hour. Integrated reagents on board. Automatic 360° rotative sample mixing for perfect homogeneity.

### **HORIBA Medical Trusted technologies**

Up to 56 parameters including PLT 0x\* (Optical extinction technology) Impedance & flow cytometry combined technologies 2 specific immature channels: - For RBC: NRBC, RET\*,

- For WBC: ALY, IMG, IMM, IML.

And dedicated Low Value cycle (LVC): - For body fluids,

- For RBC, WBC and PLT.

Body Fluids application for Cerebro-Spinal Fluid (CSF), Synovial, Pleural, Peritoneal. Up to 6 parameters (BFWBC, BFRBC, BFPN (%;#), BFMN (%;#).

### Intelligent sample management

Unique rotative 4 sided autoloader for perfect sample mixing and optimized loading buffer. Rack designed to ensure secure transportation and full compatibility with many other EDTA devices and tube sorters.





### The reference in fully automated smearing and staining. Ensures:

User and results security.

Standardized Quality blood smears.

Bi-directional/query mode for requested or reflex slides.

Capacity to print 1D or 2D (QR code) barcodes directly on slides leading to provide a full compatibility with many digitalizers.



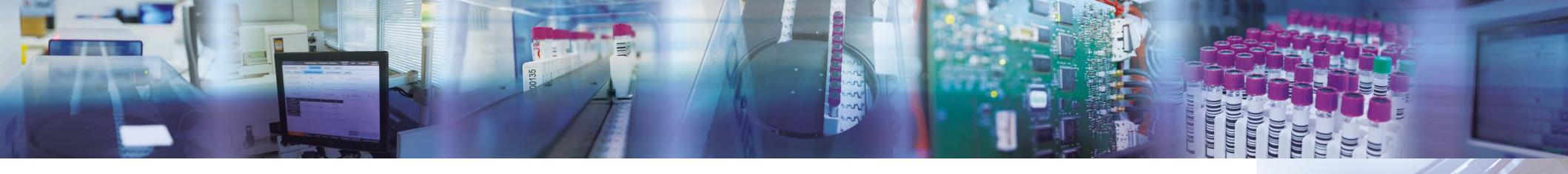
### The Yumizen P8000 as part of the HELO Solution allows:

Automatize the validation workflow based on embedded and customized rules. Reduce the slide review.

Centralize the management of worklists, results and quality control even in multi sites configurations.

Remote access (web application).

<sup>\*</sup> Not available on the Yumizen H1500





### Compact automation with innovative rack tracking system

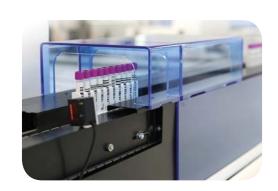
An efficient workload smoothing algorythm allows to always provide the best Turn Around Time taking into account real time indicators such as the quantity of racks loaded, the device status, its analytical capacity, the reagent levels...

### Serene environment

Intuitive real time status system with 3 information levels: Green, Orange or Red light signal.

### Efficient and compact hematology area organization

From single to multiple loading rack areas to efficiently absorb peaks of activity permitting to load in once all the racks during the peak.





### Optimized rack transfer between analyzers

Real time HELO\* configuration overview with key indicators.

Display of detailed information about automation system, analyzers and test agenda status (feasible tests per analyzer).





### Configurations

- Adapted to 4 different analyzers: Yumizen H1500, H2500, H1500 SPS and H2500 SPS.
- Configurations: from 2 to 6 analyzers.
- Shapes: Linear (straight), Angular (1 angle), Workcell (2 angles), and Island (on both sides).

### Conveyor

- Compatible with all racks suited to the Yumizen H1500/2500 range.
- Rack loop conveyor with 2 pneumatic turn modules.
- Conveyor speed: 10 meters per minute.

<sup>\*</sup> HORIBA Evolutive Laboratory Organisation



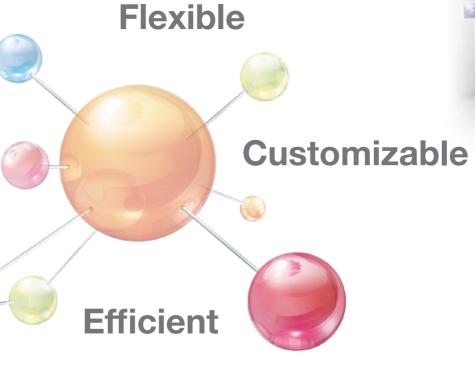
### The linear configuration

As for all possible configurations, enables connection of 2 (240 t/h) to 6 (720 t/h) analyzers with or without automated slide maker (SPS).



### The workcell configuration

Reduced operator travel. Available from 4 (480 t/h) to 6 (720 t/h) analyzers with or without SPS.



### The angular configuration

Ideal for corner location.

Position of angle module can be placed in several location.



### The island configuration

One of the most compact solution.





# Personalized partnership with HORIBA

HELO Project Plan is the dedicated project

management organization to guarantee the successful «go live» of the HELO solution

in your laboratory.

**HELODC** 

laboratory organization.

**HELO Solution Configurator to determine the** right configuration that fits your laboratory

# Dedicated tools to customize and set up your **HELO\* Solution**



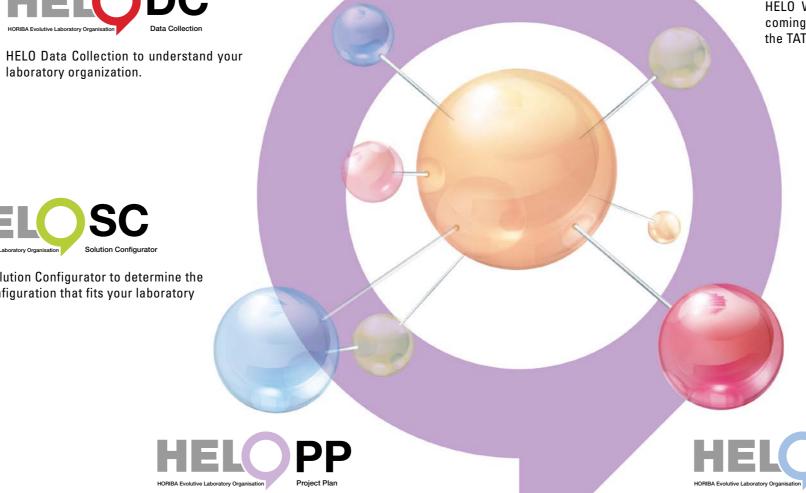
HELO Workflow Simulator uses the information coming from HELO-DC and HELO-WS to estimate the TAT and FTE of your laboratory activity.



**HELO** Installation Preparator combines all of your information to optimize your laboratory installation.



HELO Laboratory Creator creates a real 3D-projection of your future laboratory.





## QAP - Hematology quality program service by HORIBA Medical

### **Continuous training**

On line service 12 monthly campaigns of 6 e-smear cases of high-definition cases (virtual slides) Immediate Individual report -





### Precise and accurate results

- Externalized internal quality controls
- On line service
- Real time peer group comparison

# Quality Assurance Program

### **HORIBA** experience in accreditation

- Horiba provides all required documentation Training

  - Scientific support



### **Educational interactive tools**

- On line service
- Cytological atlas (normal and abnormal cells)
- Interactive case studies interpretation

# A major player in Hematology

### A global presence

Present in over 150 countries on all 5 continents, with internationally recognized instruments and a leader's ranking in most markets, HORIBA Medical is a world leader on the Hematology market.

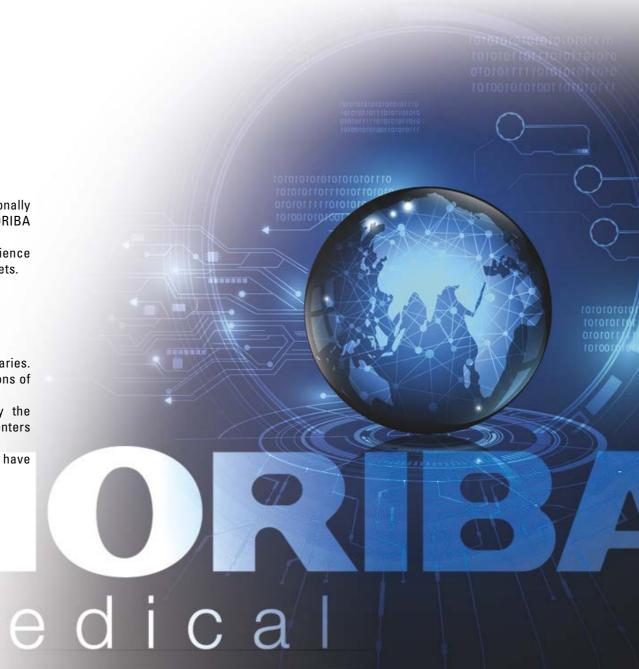
The strength of its distribution network coupled with its experience allows HORIBA Medical to operate efficiently in international markets.

### Expertise at the customer's service

HORIBA Medical has 1,400 employees across its sites and subsidiaries. It produces 7,000 instruments a year and it is now close to 6,000 tons of reagents produced annually.

HORIBA Medical also benefits from technologies patented by the HORIBA Group and the synergies between all its research centers throughout the world.

Since joining the Japanese Group HORIBA in 1996, segment sales have continued to grow exponentially to reach €186 millions in 2017.











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