

# erytro

High efficiency  
and flexibility



TYPING

GRIFOLS

# erytra

## High workloads handled efficiently

### Committed to patient safety

For more than twenty years, Grifols has researched and developed blood typing systems that have enabled millions of safer transfusions to be performed all over the world.

No two IH labs are alike; therefore, Grifols offers a scalable range of different instruments that are specifically tailored to suit different processing needs.

### Fully automatic, high-throughput, high-capacity instrument

The Erytra instrument is designed to perform pretransfusion compatibility tests using gel technology. The instrument's excellent self-organizing capacity optimally performs all the different steps needed for typing blood groups and identifying unexpected antibodies.

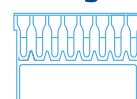
### Efficient and flexible

Erytra adapts to your laboratory needs and delivers quick, highly reliable results to help support patient safety.

Quickly ramp up laboratory capabilities with a high-throughput, fully automated instrument



DGgel®



Erytra uses the universal DG Gel cards with a 8-well format.

# erytra

## Intelligent organization on 3 different working levels

Erytra makes intelligent use of laboratory space with an upright design achieved by internal elevators and adjustable touchscreen monitor.

The transparent casing provides a clear view of 3 smart, organized, working levels.

The internal back, 2 sample probes, 4 independent incubators, and 2 centrifuges ensure reliable performance.

### **Level 1: Sample and reagent management – Continuous access**

- High capacity of samples and reagents (96 samples and 54 reagents)
- Detection of the presence and diameter of samples and reagents
- Positive identification of samples and reagents
- Clot detection and automatic system recovery
- Arm with two probes. Integrated probe washing station
- Dilution and homogenization of samples by intelligent agitation
- Double dilution station. Automatic washing



Level 1

### **Level 2: DG Gel card management – Great capacity to store up to 3200 tests**

- High capacity for 400 cards (3200 tests)
- Storage and monitoring of DG Gel cards for daily routine
- Detection of the presence, identification, and transportation of DG Gel cards
- Four independent incubators with automatic intelligent temperature control (25°C and 37°C)
- Configurable service racks for reusing and inspecting DG Gel cards



Level 2

### **Level 3: System solutions management – Excellent autonomy**

- Stocking of washing and waste solutions and cards. Optional direct drainage
- Monitoring of the level of Erytra solutions and the number of cards used
- Dispensing verification of the DG Gel cards
- Centrifuging of DG Gel cards
- Reading of results



Level 3

## «I want an instrument that will handle high workloads efficiently»

It is a true walk-away instrument with non-stop autonomy of up to 4 hours thanks to its great capacity and the configurable auto-query request of tests and auto-validation of normal results.

## «I need to have continuous access»

The exclusive DG Gel double decker racks load directly onto the Erytra multi-drawer system without interruption. Samples and reagents can be loaded and unloaded, and can be placed randomly in the drawers at any time. For additional flexibility, Erytra uses the same sample holder as Erytra Efleks.

## «It's urgent!»

Erytra can work by batch or by sample, and it also handles rush jobs effectively. Urgent samples are treated with priority and processed immediately. Simply load the samples randomly in any position, and click the STAT button.

## «I want maximum quality and safety in the results»

Erytra automatically performs a series of controls before, during, and after processing, such as card integrity check and dispensing verification of the DG Gel cards.

<sup>1</sup>Only monthly maintenance is required.



4 sample drawers with 96-sample capacity for continuous loading.



4 card drawers for up to 400 DG Gel cards.

## «I need a premium-quality, cost-effective system»

Erytra delivers high-quality results more efficiently due to its 8-column DG Gel format and its unique simultaneous perforation and dispensing technology, avoiding cross-contamination. Moreover, it ensures the 100% use of the well cards. During production, DG Gel cards undergo a unique airtightness quality test. In the laboratory, a quick visual inspection is sufficient to determine whether the card is in optimum condition for use.

## «I need to be flexible in the daily routine»

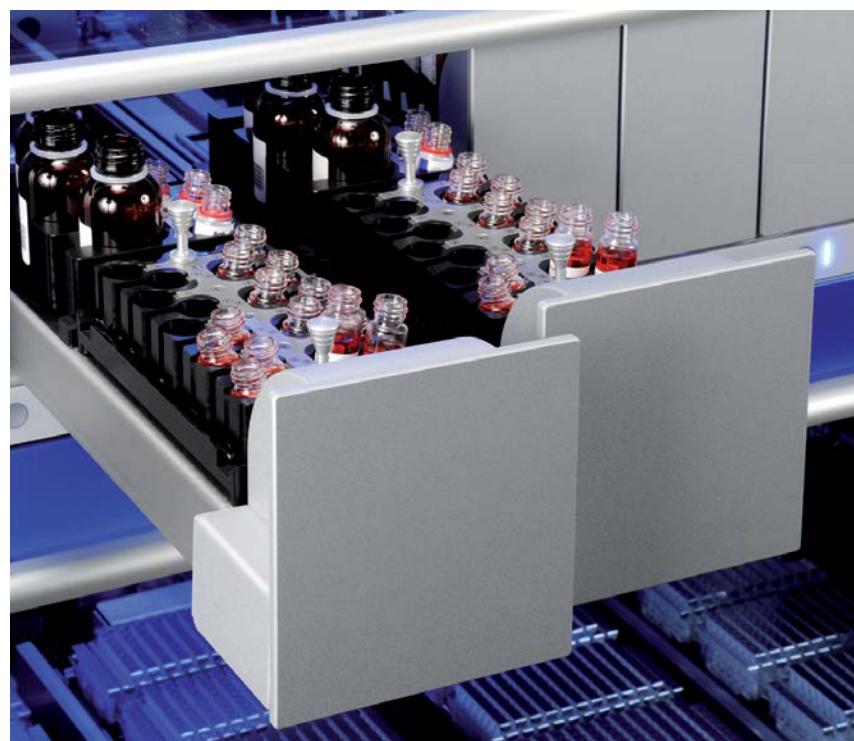
User interaction is easy with intuitive software and a touchscreen interface. Staff can remotely access the instrument to validate results and monitor the analyzer status. The instrument can issue a warning if any intervention is required.

### «I need an instrument with easy maintenance»

Erytra requires minimal maintenance and minimal training.<sup>1</sup>

### «I need after-sales service support that lets me take care of my patients without any interruptions»

Direct contact with the manufacturer means you will receive immediate high-quality service and support. Erytra incorporates a remote diagnostics tool to provide additional customer support. Grifols products have international after-sales support through our subsidiaries and network of distributors.



2 reagent drawers with a total capacity of 54 liquid reagents.



# Software

The Erytra intuitive software optimally handles the routine work of large immunohematology laboratories.

## Real-time information

- Analyzer status and autonomy
- Remaining time for sample completion
- System warnings



Real-time information

## Clear results

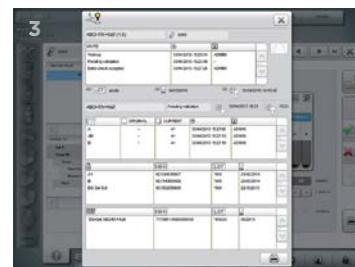
- Revision of results with a clear, close-up, high-definition picture for extra assurance
- Check of discrepancies. Configurable warnings for results to be reviewed
- Complete traceability report
- Auto-print function of results



Clear results

## Safety

- Entire process and results are fully traceable
- System access is password controlled. Configurable roles per user
- Internal checking at different steps of the test procedure
- Configurable quality control policy
- Anti-virus for additional safety



Safety

## Remote access

- Database access from any computer with an internet connection
- Validation of results
- View warnings in real time
- Web-based application to monitor status of instrument and samples
- Remote diagnostics tool: technical/specialist support can remotely connect to the system for troubleshooting



Warnings in real time

## Quality control

- Configurable quality control policy
- QC request warning for new lot of reagents
- Dedicated management of QC results

## Efficient communication

- Bidirectional connection to the LIS (laboratory information system)
- Configurable LIS connectivity and configurable auto-validation function for normal results
- ISBT 128 management





# Technical specifications



## TECHNIQUES

Full ABO/Rh blood group typing (forward and reverse)
Rh + Kell phenotype
Weak D
Cross-matching test
Unexpected antibody screening
Identification of unexpected antibodies
Antibody titration
Enzyme assays
Direct Coombs test
Determination of special antigens

## CAPACITY

54 reagents
· 36 agitated
· 12 non-agitated (non-agitated reagents can be extended to 48)
· 6 diluents
96 samples
· 4 drawers x 2 racks x 12 positions
400 DG Gel cards
Washing solutions
· 8 L DG Fluid A solution (extendable to 16 L)*
· 8 L DG Fluid B solution (extendable to 16 L)*
· 16 L waste solution*

\* With optional direct drainage to laboratory

## THROUGHPUT

Maximum throughput: 90 cards/hr (720 results/hr) <sup>1</sup>
Full ABO/Rh blood group typing: 60 samples/hr <sup>2</sup>
Antibody screening (I, II, III): 106 samples/hr
Antibody screening (I cell): 240 samples/hr
Type & screening: 48 samples/hr <sup>3</sup>

Throughput depends on the profiles being processed:

<sup>1</sup> Results obtained with DG Gel Rh Pheno + Kell

<sup>2</sup> Results obtained with DG Gel ABO/Rh (2D) (profile: A, B, AB, DVI-, DVI+, Ctl., N/A1, N/B)

<sup>3</sup> Results obtained with DG Gel ABO/Rh (2D) and antibody screening (I, II, III)

## DIMENSIONS AND WEIGHT

Width: 110 cm (43.3 in)
Depth: 70 cm (27.6 in)
Height: 175 cm (68.9 in)
Weight: Approximately 350 kg (772 lb)

## POWER SUPPLY

Voltage: 100-240 V

Frequency: 50/60 Hz

Power: 600 W

## REFERENCE

## PRODUCT LIST

## PRODUCT DESCRIPTION

210400	Erytra	A fully automated instrument with a high-processing capacity for pretransfusion compatibility tests using DG Gel cards
213713	Sample holder	Holder to load samples into Erytra and Erytra Eflexis analyzer
233738	Erytra system solution container	Additional container for the diluted system washing solutions (DG Fluid A or DG Fluid B)

This equipment complies with the Directive 98/79/EC of the European Parliament and of the Council on in vitro diagnostic medical devices. CE mark certification

Product registration and availability vary by country. Ask your local Grifols representative for more information.

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