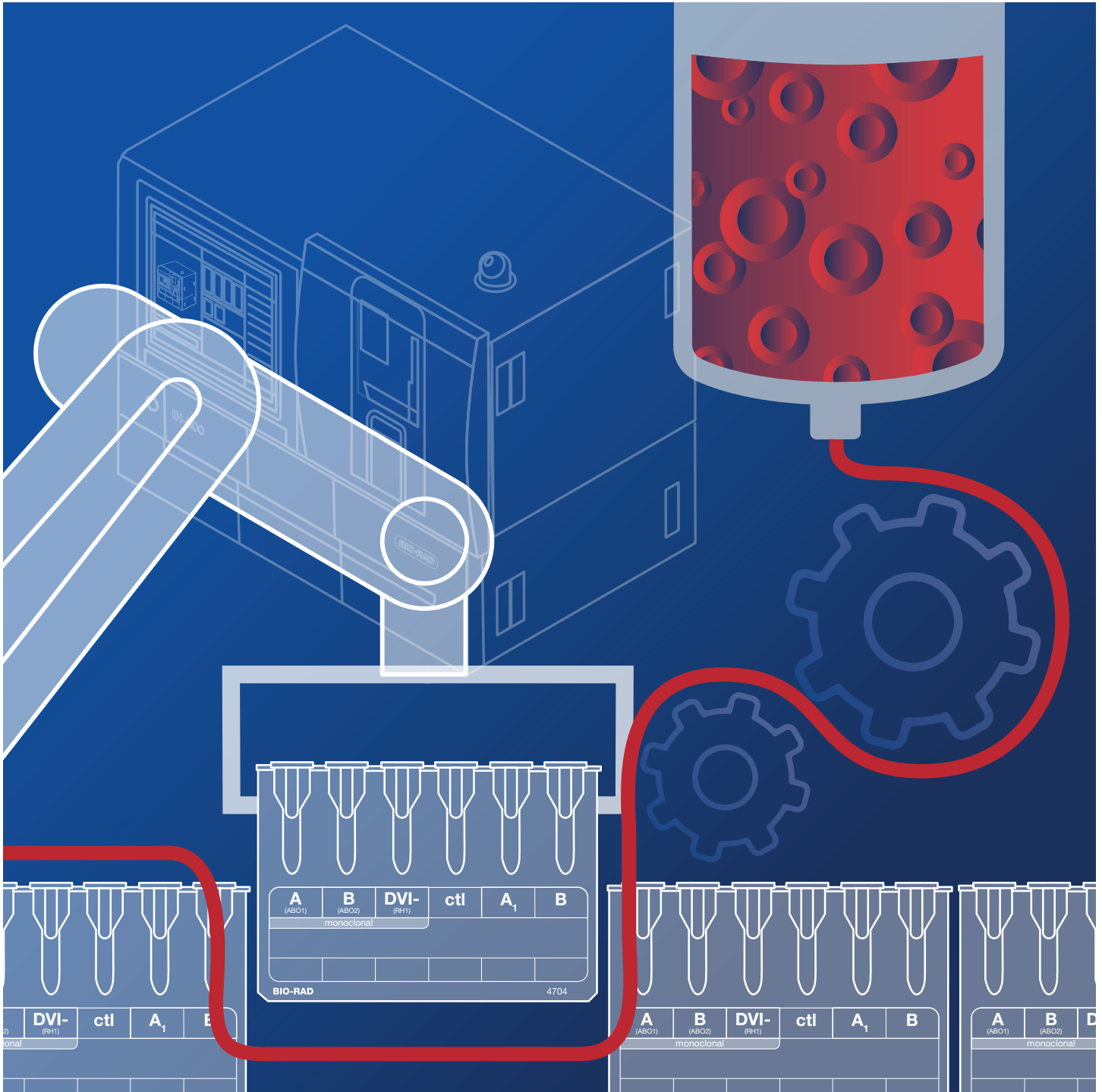


# IH-500 Fully Automated System for ID-Cards





## Choose. Connect. Control. Community.

Choose your preferred testing method and platform

# IH-500 System

## Innovation Driven by Experience

Bio-Rad is one of the world's most respected suppliers of blood screening systems.

We have been serving blood banks and transfusion centers across the world for more than 30 years, consistently developing and delivering high-performance and reliable systems designed to satisfy your needs.

We know our future – and that of our customers – depends on our ability to search beyond today's solutions.

We will continue to invest in innovation that lies at the heart of our commitment: helping you to provide your services as efficiently and effectively as possible.



## The IH-500 Fully Automated System - Developed Together with our Customers



ID-Diluent piercing

- Fully automated QC Monitoring system
  - ↳ Increased result reliability
- Optimized scheduling of emergency samples (STAT)
  - ↳ Faster time to result
- 7 day on-board reagent stability
  - ↳ 24/7 availability
- Automated antibody titration
  - ↳ Increased productivity/test panel
- Intelligent reagent identification system
  - ↳ Improved traceability
- Well by well processing of ID-Cards
  - ↳ Reduced wastage and cost
- Waste management
  - ↳ Operator safety

# The IH-500 System fits any Laboratory Environment

## Stand-Alone System

In combination with the optional stand-alone table, IH-500 can become a stand-alone system providing ultimate flexibility for the modern laboratory environment.



## Compact Bench-Top System

Designed as a compact bench-top system to fit into any laboratory environment, IH-500 requires minimal workspace whilst providing maximum workflow.



## Innovation

- 6-axis industrial robot
- Maintenance free transport technology

## Improved Traceability

- Internal storage for up to 164 ID-Cards
- Single ID-Card tracking for more flexibility during ID-Card loading
- 100% traceability

## Continuous Loading

- Continuous sample and reagent vials loading
- Independent loading and pipetting areas

## Flexibility

- Stand-alone table (optional) with customizable configuration
- Flexible multi-purpose loading dock

## Reduced Hands-on Time

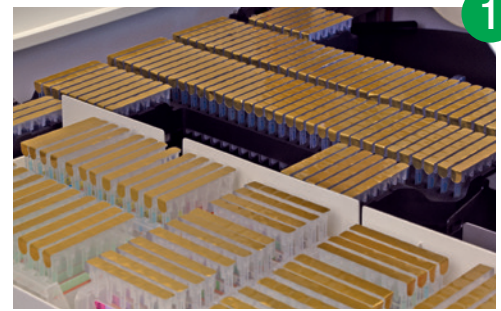
- Automated workflow
- Automatic waste management system

## Safety & Reliability

- Intelligent liquid identification system
- Well by well processing for less ID-Card waste

## Easy to Use

- Integrated keyboard for convenient data input
- Integrated PC and 19" touchscreen monitor



Internal storage of ID-Cards



Drawer for flexible loading



Tray for reagent vials



Internal solid waste container



Keyboard for manual data entry



1

7

IH-500

2<sup>a</sup>  
2<sup>b</sup>

4

3



5

6

8

9

1 2 3 4 5

SYSTEM LIQUID

SYSTEM LIQUID

LIQUID WASTE

LIQUID WASTE

1

2

5



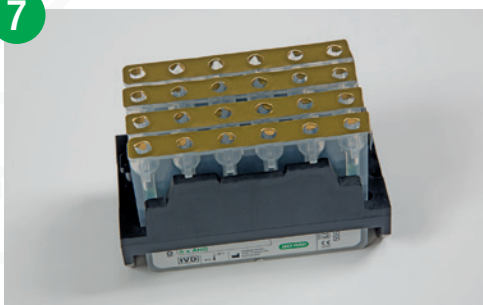
4-color status light

6



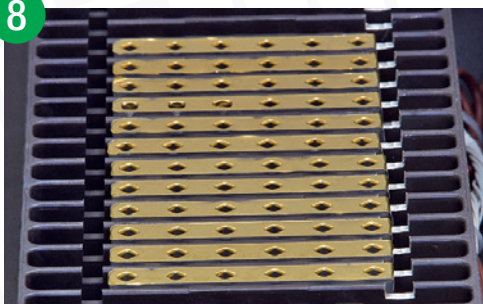
Reagent storage and pipetting area

7



ID-Card transport holder

8



Incubator at 37°C

9



Fluidic area

## 24/7 Ready to Start Availability

- 4-color status light
- More than 200 tests available

## 7 Day On-Board Reagent Stability

- Temperature controlled storage area
- New active cooling technology

## Throughput Optimization

- Faster time to result
- Optimized scheduling of emergency samples (STAT)
- On-board priority updates
- Flexible ID-Card management for optimized throughput

## Walk-Away

- Loading capacity for 50 samples
- Internal storage for 34 liquid reagent vials
- Management of 4 ID-Diluent racks in parallel

## Active QC Monitoring

- Automatic check for reagent lot QC status during the loading process
- Automatic check for instrument QC status prior to each sample processing

## Reduced Training & Maintenance

- Easy to learn standardized Bio-Rad user interface
- No daily maintenance (only weekly)
- No-interruption process for system liquid refilling and liquid waste emptying
- Optional direct connection to laboratory drainage



**BIO-RAD**



## Assay and Sample Oriented Mode

Perform the tests sample by sample or prioritize a specific test which result will be delivered first throughout a multitude of samples.

## Single ID-Card Tracking

Properly load the ID-Cards in any direction and any order. The IH-500 System adapts, stores, and indexes.

## Carry over Prevention Greater than 1:32,000

One of the highest carry-over prevention in the immunhematology automation.

## 7 Day On-Board Reagent Stability

Through active cooling of the reagent storage area, IH-500 can ensure a 7 day on-board stability for reagents.

## On-Board Reagent Management

Ensures the correct on-board time even when a reagent is interchanged between different systems.

## Immediate STAT Handling

A designated STAT sample will be pipetted and processed immediately.

## Well by Well Processing

IH-500 is able to handle single wells. This feature reduces the waste of partially used ID-Cards.

## Automated Antibody Titration

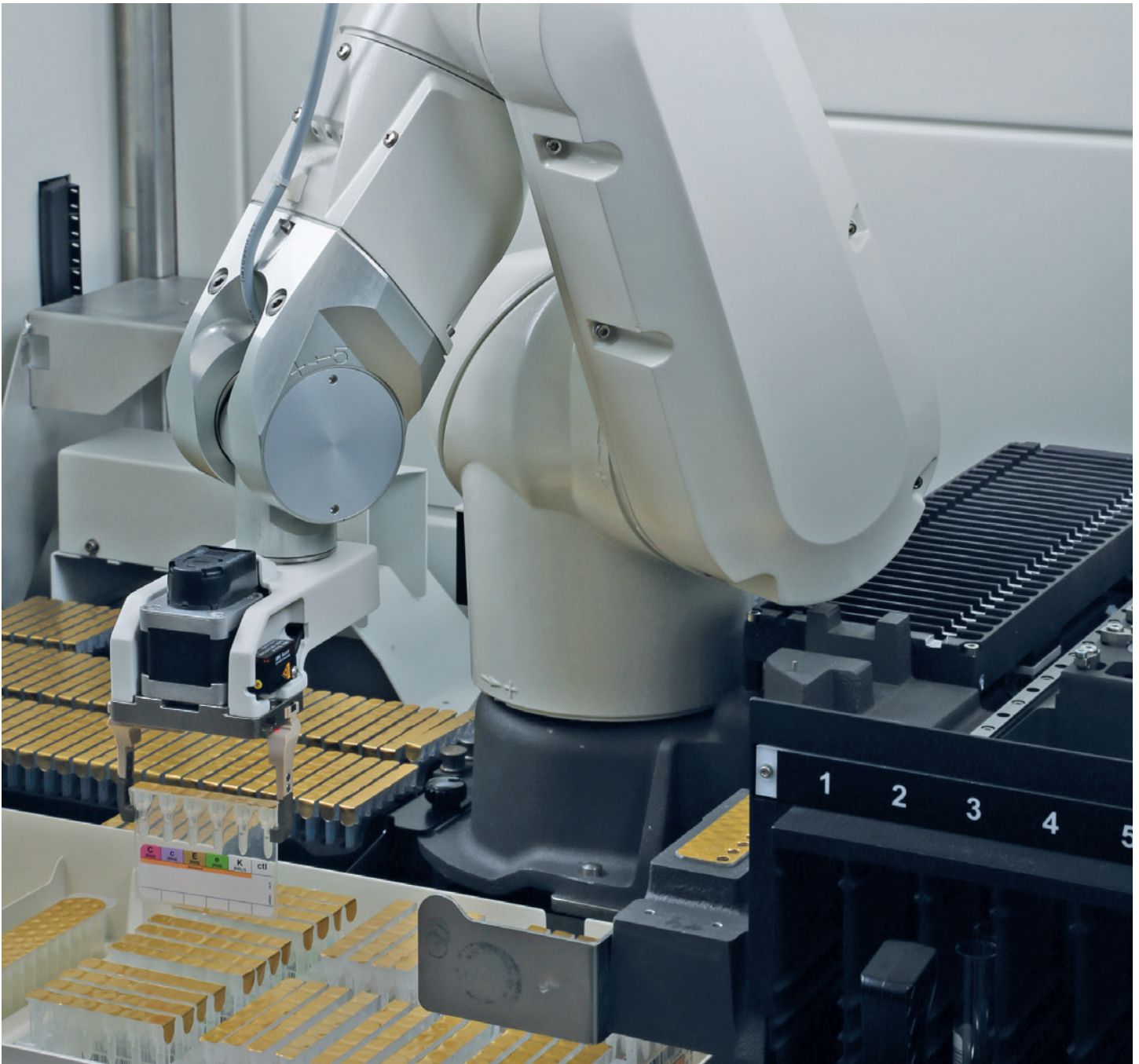
Perform two-fold dilutions up to 1:2048 and titrate using any reagent registered on the machine.

## Instrument QC

IH-500 dedicates an additional QC to the instrument. This is useful when one lot of reagents is used between different systems.



ID-Card piercing



6-axis industrial robot

## Innovation Meets Design

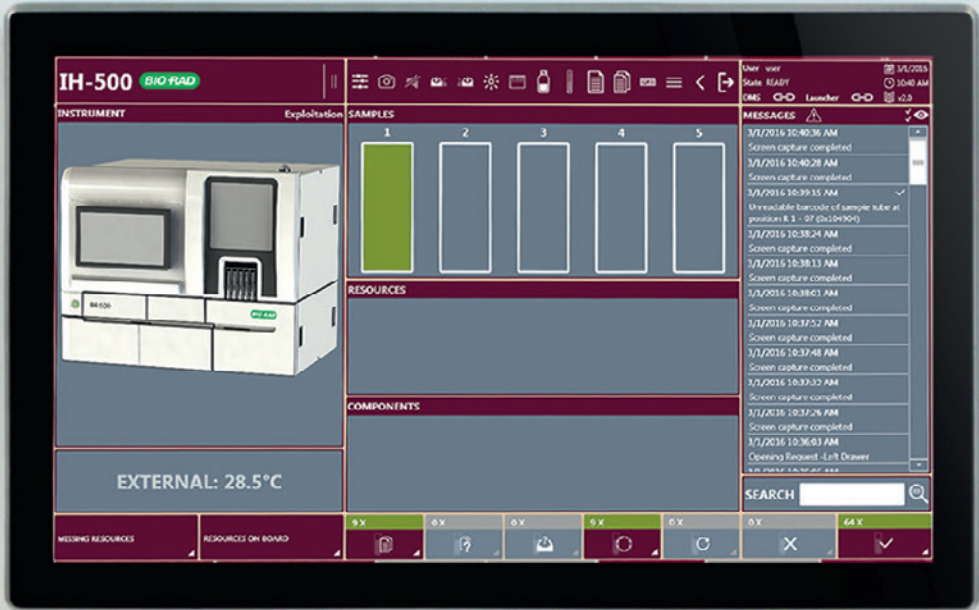
### Revolutionary Robot Technology

The 6-axis industrial robot provides new possibilities for managing resources. This technology allows for a compact instrument design and optimal use of space.

The innovative motor inside the arm provides a maintenance-free transport component and increases the reliability of the entire instrument.

### Flexible Bench-Top System

The IH-500 System combines functionality and design to satisfy the changing needs of a modern immunohematology laboratory. It features a compact bench-top design that together with an optional stand-alone table can flexibly become a stand-alone system.



IH-500

## Specifications

### Electrical Data

Voltage	100-230 VAC
Frequency	50/60 Hz
Power consumption	1,550 VA

### Environmental Conditions

Operating temperature	18°C to 28°C
Storage temperature	-20°C to 55°C
Operating humidity	5% to 80% rh
Storage humidity	5% to 80% rh
Altitude maximum	2,000 m

### Dimensions

Width	115 cm
Height	98 cm
Depth	85 cm
Weight	213 kg
Minimal installation depth	60 cm

### Capacity

Samples	50
ID-Cards	164
Reagent vials	34
ID-Diluents	4

### Emissions

Heat emission	1,000 W
Noise level	max. 65 dB(A)
Pollution level	2

## Main Features

- Walk-away
- Continuous loading
- 7 day on-board reagent stability
- Immediate STAT handling
- Active QC monitoring
- Well by well processing
- Only one connection to the LIS through IH-Com

## Ordering Information

Catalog #	Description	
001500	IH-500, Fully Automated System for ID-Cards.....	1 Unit
0595002	Stand-alone table (optional) .....	1 Unit
009000	IH-Com Kit Fullversion, Data Management and Result Interpretation Software.....	1 Unit
12009844	IH-A <sup>b</sup> ID, Integrated Antibody Identification Software.....	1 Unit
009030	IH-Web, Remote Result Management Software .....	1 Unit
2000050	BRiCare, Remote Service and Support Software .....	1 Unit

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Laboratories, Inc.**

*For further information, please contact the Bio-Rad office nearest you or visit our website at [bio-rad.com/diagnostics/immunohematology](http://bio-rad.com/diagnostics/immunohematology)*

Clinical  
Diagnostics Group

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## Performance\*

A, B, AB, D, CDE, ctl	60 samples/h
A, B, AB, D, CDE, ctl + A <sub>1</sub> , A <sub>2</sub> , B + C, c, E, e, K, ctl + Ab screening I, II, III	24 samples/h
A, B, DVI-, ctl/A <sub>1</sub> , B + Ab screening I, II, III	32 samples/h
A, B, DVI-, ctl/A <sub>1</sub> , B	48 samples/h
Ab screening I, II, III	82 samples/h
Ab screening I, II, III + Autocontrol (AC)	42 samples/h
Ab screening with pooled cells	96 samples/h
A, B, DVI-, ctl/A <sub>1</sub> , B + Ab screening I, II	36 samples/h
A, B, DVI-, ctl/A <sub>1</sub> , B + C, c, E, e, K, ctl	48 samples/h
A, B, AB, DVI+, DVI-, ctl + A <sub>1</sub> , A <sub>2</sub> , B, O + C, c, E, e, K, ctl + Ab screening I, II, III	24 samples/h

\* Performance data may vary depending from the loading sequences and requested sample profiles.

## Test Methods

- Blood Grouping ABO/D
- Phenotyping Rh/K
- Antibody Screening
- Direct Antiglobulin Test (DAT)
- Antibody Titration
- Reverse Grouping
- Compatibility Tests
- Antibody Identification
- Single Antigen Testing