



BC-5800

Auto Hematology Analyzer



mindray
healthcare within reach

BC-5800

Auto Hematology Analyzer

- 5-part differentiation, 29 parameters, 2 histograms + 2 scattergrams
- Up to 90 samples per hour
- Laser scatter + Chemical dye + Flow cytometry technology
- Independent channel and optical method for Basophil measurement
- Powerful capability to flag abnormal cells
- Optional autoloader, barcode scanner
- Large TFT touch screen
- Large storage capacity: up to 40,000 samples
- Recommended or customizable decision rules to re-exam abnormal samples
- Support uni- or bi-directional LIS



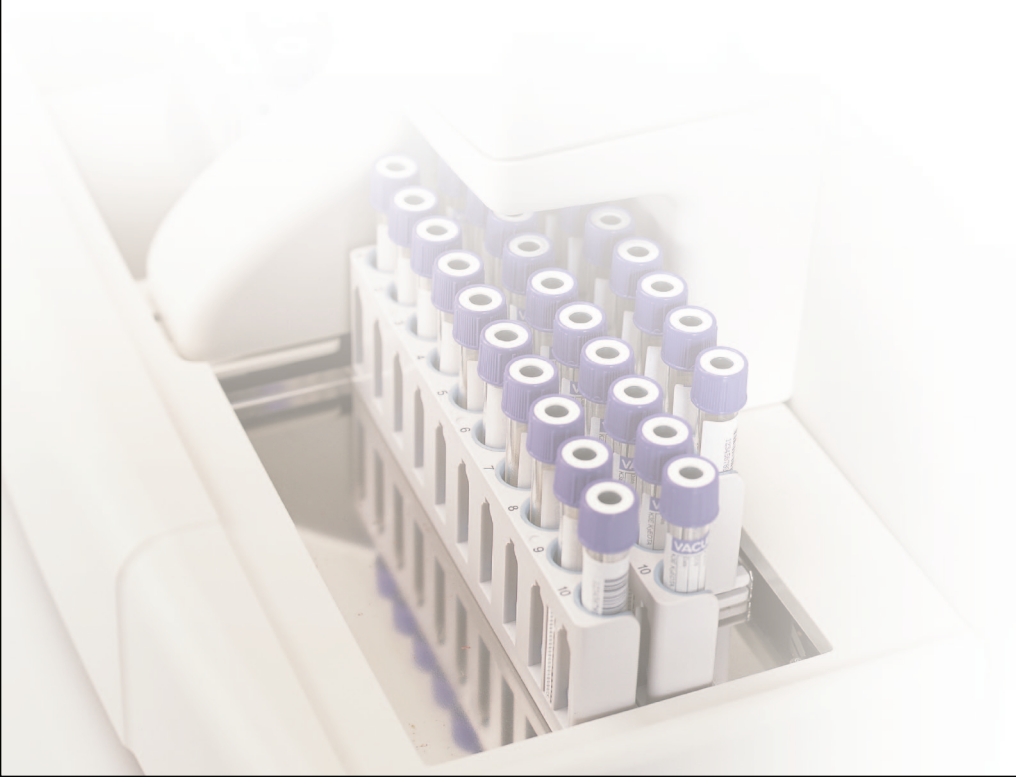
Close structure

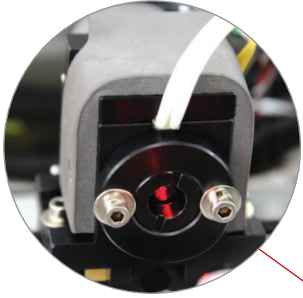
Shield from interference:
EMI, dust, etc.



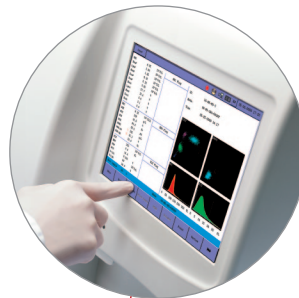
Internal barcode scanner

Maximize reading capability
Preventing errors and reducing
misreads

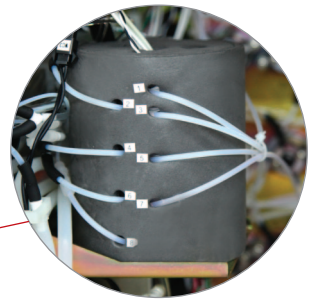




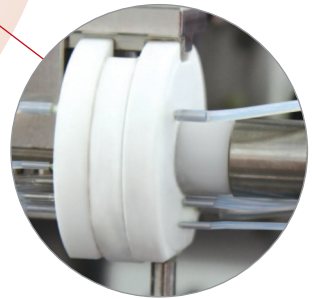
Semiconductor laser with heater
 Reliable, Durable
 Heater makes the laser more stable



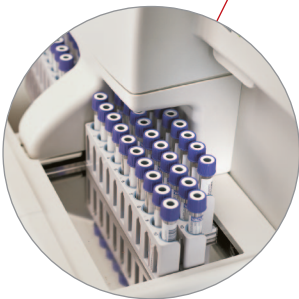
10.4 inch touch screen
 High resolution
 User-friendly software



Pre-heater
 Heat the reagents to proper temperature
 Maintain all cells in the original physiological status
 Maximize reaction process



Sample Rotatory Valve (SRV)
 High precision
 Easy maintenance
 Blood sensor monitors aspiration volume



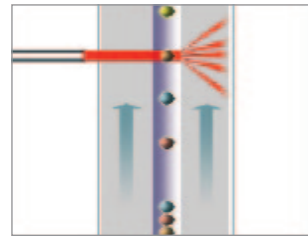
Autoloader with 50 tube positions
 Save time with continuous loading
 Random access



STAT
 Provide STAT results quickly
 Minimal interruption to routine workflow

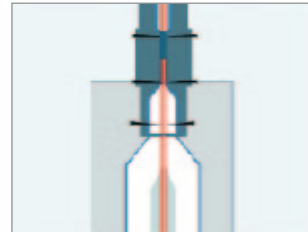
- **Laser light scatter**

BC-5800 hematology analyzer utilizes the semiconductor laser for the flow cytometry system. Through calculations of different angles via laser scatters, the instrument provides complete analysis including cell size, granularity and complexity.



- **Dual acceleration flow cell system**

Dual acceleration flow cell system reduces the velocity gap between sheath flow and blood cells, ensuring a more stable signal, which allow for accurate measurement via laser scatter.



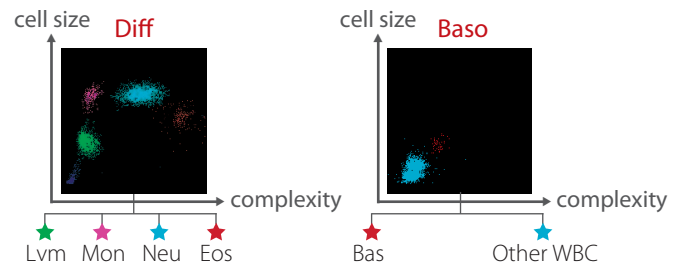
- **Chemical dye method by original reagents**

The basophils and eosinophils can be accurately differentiated by the unique chemical dye method. The Mindray original reagents, control and calibrator is a complete system to ensure high accuracy.



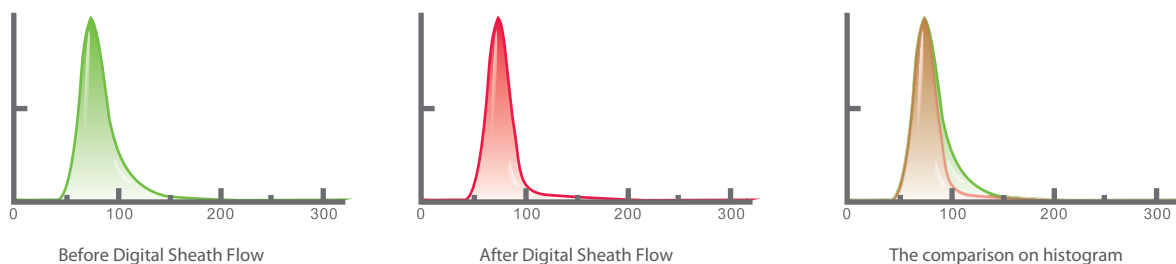
- **2 separate channels to differentiate WBC**

BC-5800 counts lymphocyte, monocyte, neutrophil and eosinophil in Diff channel, and basophil in a separated Baso channel. Optical method to test Basophil: more information about cell physiology, more reliable.



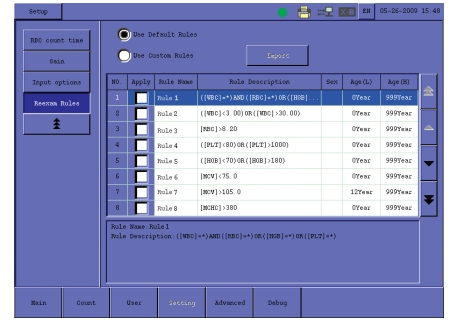
- **Digital sheath flow**

Mindray patented technology can monitor every cell's status while going through the aperture, this accurately measures the volume of cells, giving a standardized histogram shape.



- **Re-exam**

Decision rules recommended by Mindray can help remind to re-exam abnormal samples, reduce post-analytical errors and review rate. Decision rules can also be customized with new input support to fit any standard laboratory practices.



- **Various formats report & User-defined formats report**

Paper: A4, A5, Letter, Continuous Paper.
Report formats: 4 Pre-defined formats & 4 User-defined formats.

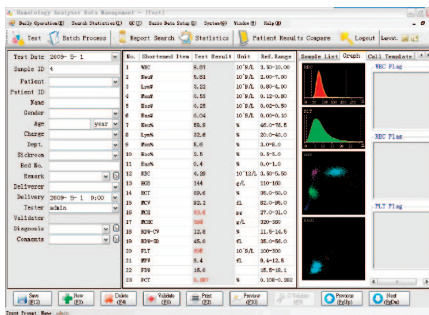
- **Quality control**

Mindray original control and calibrator. Provides 60 QC files, each file can save 310 QC results. Import QC information including lot No., level, exp. date, mean and range values through USB disk.



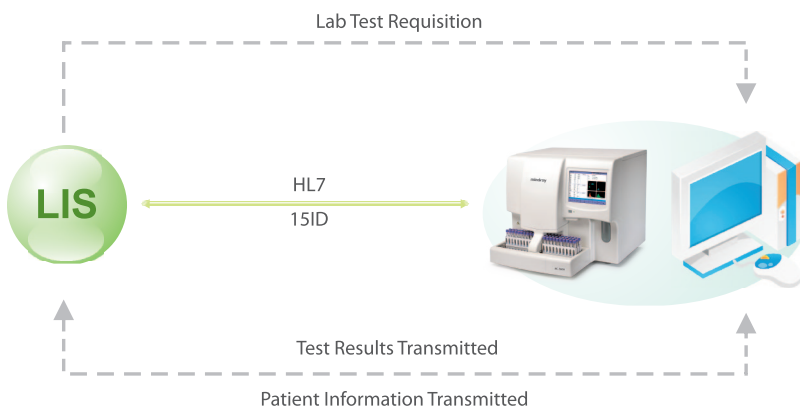
- **Memory can hold up to 40,000 patient results**

Save previous results with graphic and numeric information.



- **Data Management Software (DMS)**

With DMS, data can be transmitted to PC. DMS is a standard configuration of BC-5800 to meet different laboratories' demand, and offer more customization on report, data editing and net connection.



- **Uni- or Bi-directional LIS**

Transmit test results and patient information in bi-directional mode. Support HL7 and 15ID communication protocol. Easily be integrated into your laboratory organization.

BC-5800

Auto Hematology Analyzer

Technical Specifications

Principles

Impedance method for RBC and PLT counting
Cyanide free reagent for hemoglobin test
Flow Cytometry (FCM) + Laser light scatter + Chemical dye method for WBC differential analysis and WBC counting

Parameters

29 parameters: WBC, Lym%, Mon%, Neu%, Bas%, Eos%, Lym#, Mon#, Neu#, Eos#, Bas#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, MPV, PDW, PCT, P-LCR, P-LCC. 4 Research parameters include LIC%, LIC#, ALY%, ALY#
2 Histograms for RBC and PLT
2 Scatter grams: 4-differential scatter gram, Basophil scatter gram

Reagent

Diluent, LEO(I), LEO(II), LBA, LH
All reagents configured liquid sensor

Performance

Parameter	Linearity Range	Precision	Carryover
WBC	0-200×10 ⁹ /L	≤2.5% (4-15×10 ⁹ /L)	≤0.5%
RBC	0-8.2×10 ¹² /L	≤1.5% (3.5-6.0×10 ¹² /L)	≤0.5%
HGB	0-260g/L	≤1.5% (110-180g/L)	≤1.0%
HCT	0-67%	≤1.5% (30%-50%)	≤0.5%
PLT	0-2000×10 ⁹ /L	≤4.0% (150-500×10 ⁹ /L)	≤1.0%

Sample Volume

Prediluted	40 μL
Manual mode (Open vial)	120 μL
Auto loader/Manual mode (Closed tube)	180 μL

Throughput

Up to 90 samples per hour

Display

10.4 inch TFT Touch Screen
Resolution: 800×600

Multi-language

Chinese, Czech, English, French, German, Greek, Italian, Polish, Portuguese, Romanian, Russian, Spanish, Turkish

Data Storage Capacity

Up to 40,000 results including numeric and graphical information

Communication

LAN Port supports HL7 and 15ID protocol

Interface

USB, LAN, COM
Support Uni- or bi-directional LIS

Printout

External Laser printer / Inkjet printer, various printout formats and User-defined formats

Operating Environment

Temperature: 15°C~30°C
Humidity: 30%~85%

Power requirement

Main unit: 100-240V~50Hz
Pneumatic unit: 110/115V~50/60Hz
220/230V~50/60Hz

Dimension and Weight

	Main unit	Pneumatic unit	Sample loader (Optional)
Width (mm)	664	305	516
Depth (mm)	613	475	237
Height (mm)	585	425	90
Weight (kg)	≤76	≤25	≤8

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