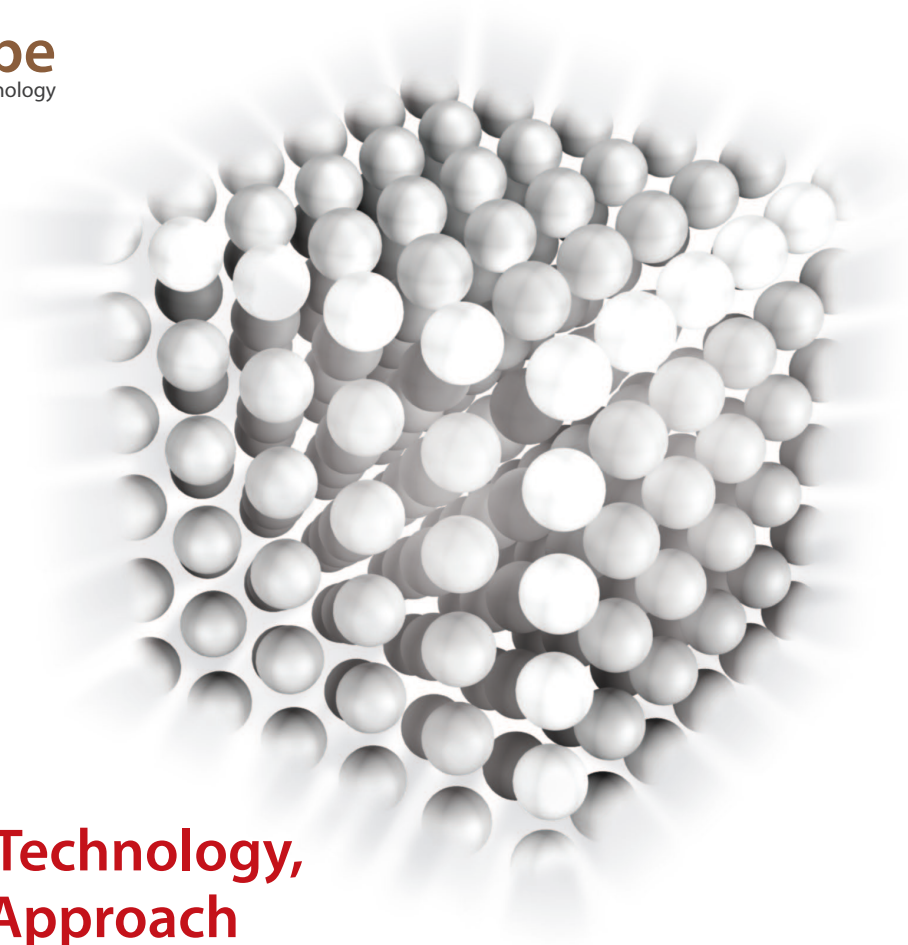




**SF Cube**  
Cell Analysis Technology



**Exclusive Technology,  
Inclusive Approach**

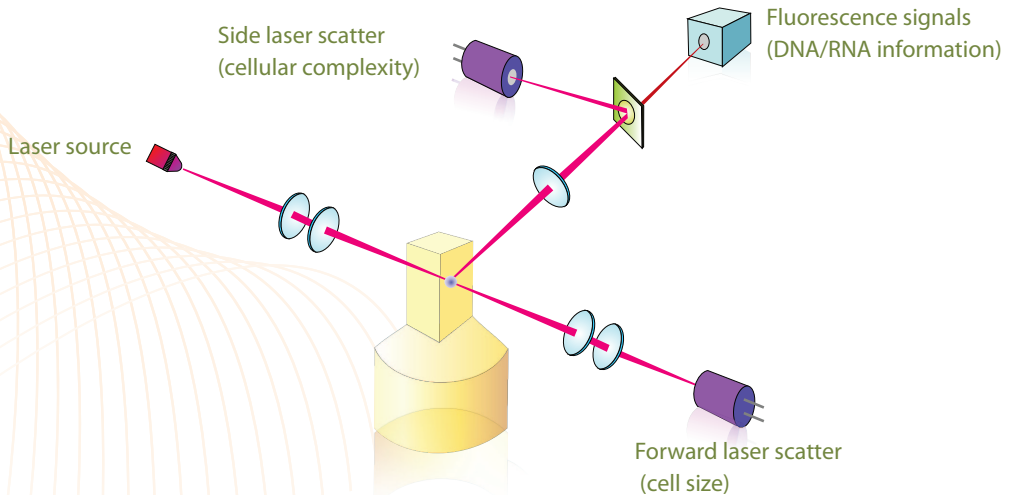
**BC-6800**   
Auto Hematology Analyzer

**mindray**  
healthcare within reach



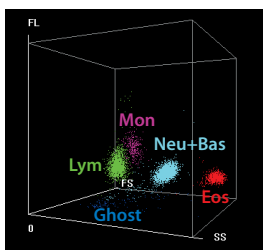
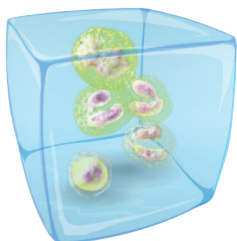
# SF Cube

SF Cube is a pathbreaking technology for reliable blood cell analysis, including WBC differential, Reticulocytes and NRBC with efficient flagging. After reaction with proprietary reagents, the targeted blood cells undergo 3D analysis using information from scatter of laser light at two angles and fluorescence signals. The 3D scattergram builds the power to better identify and differentiate blood cell populations, especially to reveal abnormal cell population undetected by other techniques.



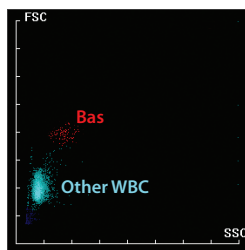
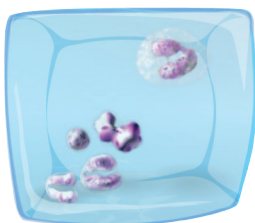
# SF Cube

## DIFF



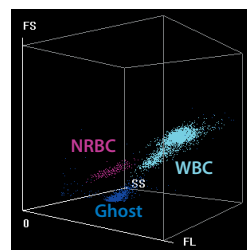
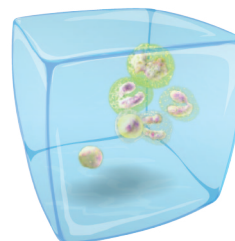
- Diff analysis in BC-6800 is a flow cytometric method that uses the SF Cube cell analysis technology to achieve a higher level of accuracy in WBC differential and flagging. After treated by reagents, the differential WBC populations are located in the DIFF scattergram according to their size, cellular complexity, and DNA/RNA information.
- IMG\*(#, %) parameters provide information about immature granulocytes, including promyelocytes, myelocytes and metamyelocytes.
- HFC\*(#, %) parameters represent high fluorescent cell population, such as blasts and atypical lymphocytes.

## BASO



- Basophils are rendered bigger and more complex than other WBC sub-populations after mixing with reagents.
- The total WBC count is primary based on Baso channel with additional comparison of WBC information from 3 other delicated optical channels in order to eliminate the interference from NRBC, Lyse-resist RBC, etc.

## NRBC

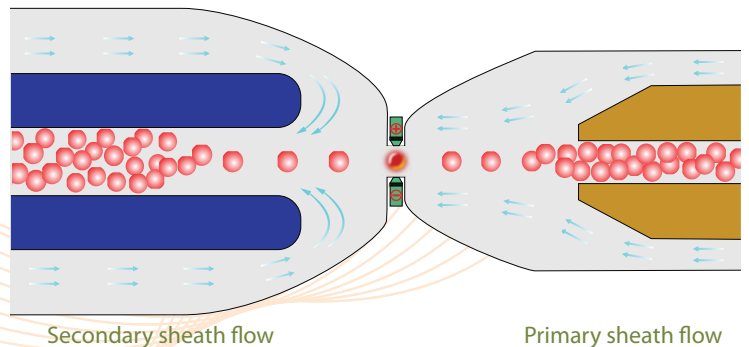


- NRBCs are counted in a dedicated channel by SF Cube method, which ensures timely and accurate results and provides the clinicians with information permitting better treatment decisions.
- BC-6800 automatically corrects total WBC count and 5-Part Diff results when NRBCs are detected. This ensures more reliable WBC & 5-Part Diff results and decreases manual review rate and also possibility of errors.

\* means research parameter

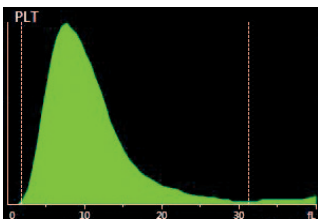
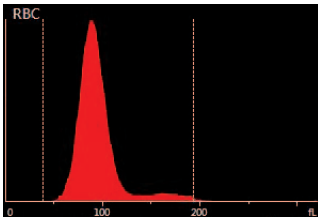
# Focusing Flow-DC method

The Focusing Flow-DC method uses sheath fluid to ensure optimum environment for reliable cell counting. The primary sheath flow ensures that cells pass through the counting aperture in single file and the secondary sheath flow prevents recirculation of the counted cells. These hydrodynamically focused cells are measured by DC method using their resistance to passage of electricity between electrodes positioned across the counting aperture.

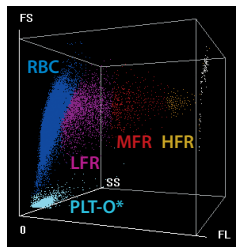
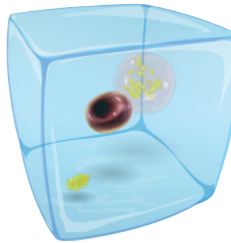


# Focusing Flow-DC method

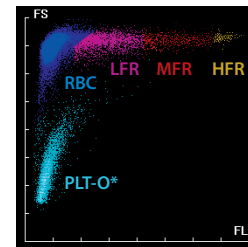
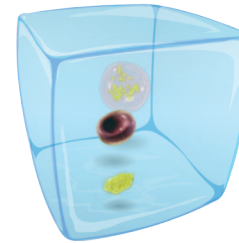
## RBC & PLT



## RET



## PLT-O

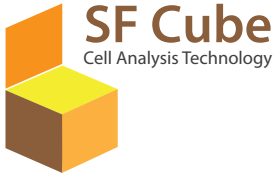


- The Focusing Flow-DC method minimizes the interference traditionally encountered in DC technology to produce near gaussian histograms. Because of this, the histogram related parameters like MCV, RDW-CV, RDW-SD are more accurate and provide more reliable clinical information.

- Reticulocyte parameters provide information on status of erythropoiesis and extend valuable help in the differential diagnosis and/or therapeutic monitoring of anemias.
- In the SF Cube cell analysis technology, reticulocytes are differentiated from the other red cells by their reaction with fluorescent stain. Besides the traditional parameters such as RET# and RET%, BC-6800 provides data concerning immature reticulocytes (MFR, HFR), which can assist in early diagnosis of anemia and monitoring the bone marrow response to therapy.

- In the SF Cube cell analysis technology, platelets can be distinguished from the other interfering cell populations. PLT-O\* result avoids the interference from microcytic and fragmented RBCs, large platelets and/or platelet clumps by fluorescent stain, and enhances the results accuracy and sensitivity.
- PLT result is automatically corrected when PLT-O\* counting mode is employed.

\* means research parameter



# Let BC-6800 transform

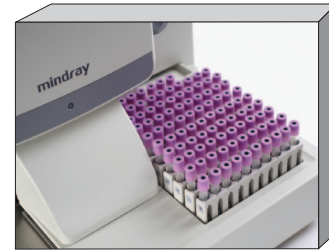
Today, laboratories not only need more reliable routine CBC plus 5-part diff WBC testing by way of high processing speed, but are also looking for options that extend the analyzer's output in form of Reticulocytes, Nucleated RBCs, Fluorescent Platelet counts etc. for wider clinical application and research. On the other hand, they are restricted by limited budgets. BC-6800 can help to meet all these needs just perfectly and even exceed the expectations.



**your lab!**



Both PC and touch screen operation



125 tests/hour  
100 tubes capacity



Built-in and external barcode scanner



Supports wider sizes and types of sample tubes



Easy to load information



Convenient replacement of reagents



On-line external quality control



Run STAT sample at any time

# BC-6800

## Auto Hematology Analyzer

### Technical Specifications:

#### Principles

SF Cube cell analysis technology for WBC, 5-Part diff, NRBC, RET and PLT-O  
 Focusing Flow-DC method for RBC and PLT  
 Cyanide free hemoglobin measurement

#### Parameters

33 reportable parameters: WBC, Lym%, Mon%, Neu%, Bas%, Eos%, Lym#, Mon#, Neu#, Eos#, Bas#; RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, RET%, RET#, IRF, LFR, MFR, HFR, NRBC#, NRBC%; PLT, MPV, PDW, PCT, P-LCR, P-LCC

14 research parameters: HFC#, HFC%, IMG#, IMG%, WBC-R, WBC-D, WBC-B, WBC-N, RBC-O, PLT-O, PLT-I, PDW-SD, InR#, InR%<sub>0</sub>

2 histograms for RBC and PLT

3 scattergrams (3D) for DIFF, NRBC and RET

6 scattergrams (2D) for DIFF, BASO, NRBC, RET, RET-EXT, PLT-O

#### Performance

Parameter	Linearity Range	Precision	Carryover
WBC	0-500×10 <sup>9</sup> /L	≤2.5% (≥4×10 <sup>9</sup> /L)	≤1.0%
RBC	0-8×10 <sup>12</sup> /L	≤1.5% (≥3.5×10 <sup>12</sup> /L)	≤1.0%
HGB	0-250g/L	≤1.0% (110-180g/L)	≤1.0%
HCT	0-75%	≤1.5% (30%-50%)	≤1.0%
PLT	0-5000×10 <sup>9</sup> /L	≤4.0% (≥100×10 <sup>9</sup> /L)	≤1.0%
RET#	0-0.8×10 <sup>12</sup> /L	≤15% (RBC≥3×10 <sup>12</sup> /L; 1%≤RET%≤4%)	/

#### Sample Volume

Predilute mode (capillary blood), Open vial	40μL
Manual mode (whole blood), Open vial	150μL
Autoloader mode (whole blood), Closed vial	200μL

#### Throughput

Up to 125 samples per hour (CBC+DIFF)  
 Up to 90 samples per hour (CBC+DIFF+RET)

#### Loading capacity

Up to 100 sample tubes

#### Mode

CBC, CBC+DIFF, CBC+RET, CBC+NRBC, CBC+DIFF+RET, CBC+DIFF+NRBC, CBC+DIFF+RET+NRBC, RET

#### Data storage capacity

Up to 100,000 patient results including all numeric and graphical information

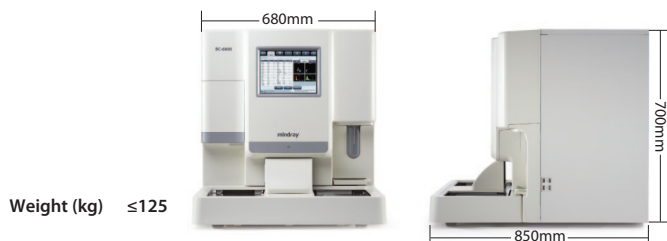
#### Printout

Various printout formats and user-defined formats available

#### Operating environment

Temperature: 15°C~32°C

Humidity: 30%~85%



DISTRIBUTOR:



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 P/N:ENG-BC6800-210285x8-20111010

# mindray

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