Unicare Biomedical

3 Part Hematology Analyzer

Product Features

Reliable Results

- Multiple research parameters
- Accurate hardware
- High accuracy and precision
- Minimum sample consumption

Easy Operation

- User friendly software
- Multiple external interfaces
- Real-Time display of reaction curve
- Up to 60 samples per hour

Easy Maintenance

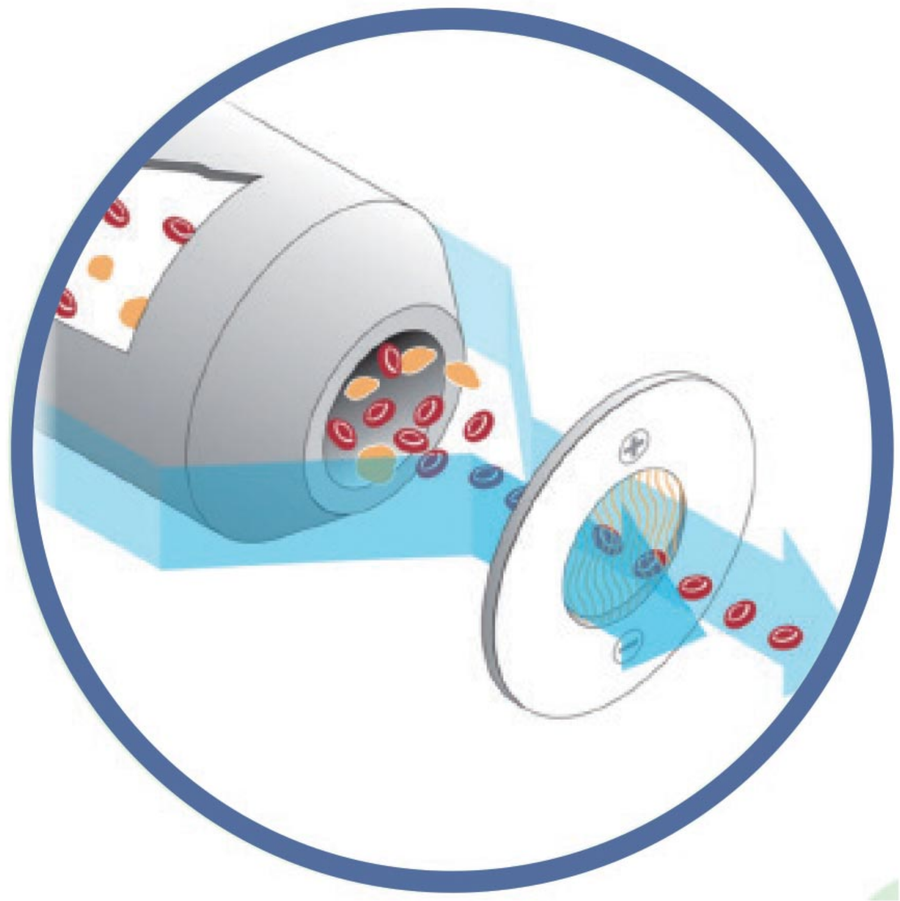
- Automatic and manual maintenance
- Multiple self-checking maintenance
- Modular-design structure
- Anti-blocking and blockage removal design

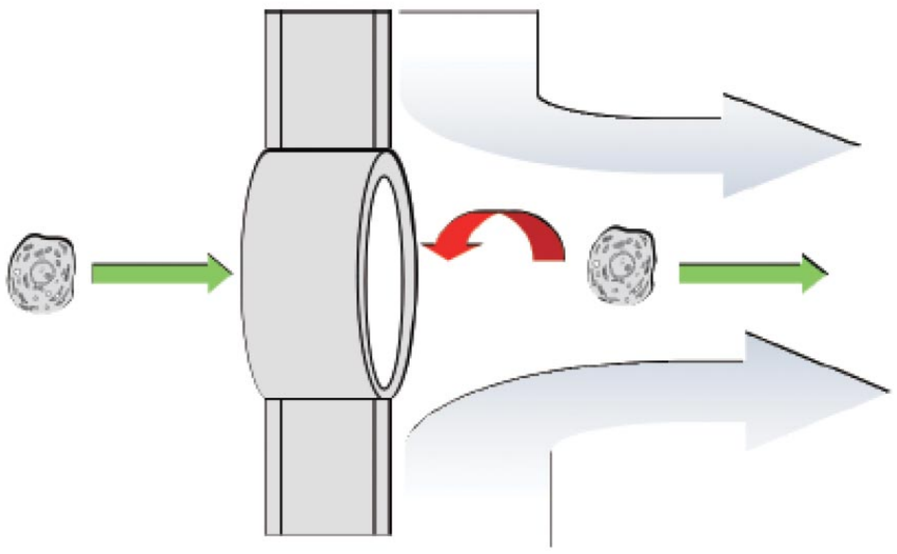
Compact Design

- Suitable for various detection sites
- Integrated design, no need for additional auxiliary instruments

Flow Cytometry - Hydrodynamic Focusing

- The sheath flow impedance method is used to separate and align the particles in the sample. It works by surrounding the sample, with a fluid stream that directs the particles in a single file through the laser beam.
- This ensures that cells pass through the center of the small hole one by one, and each particle is measured individually and accurately, leading to more precise results.



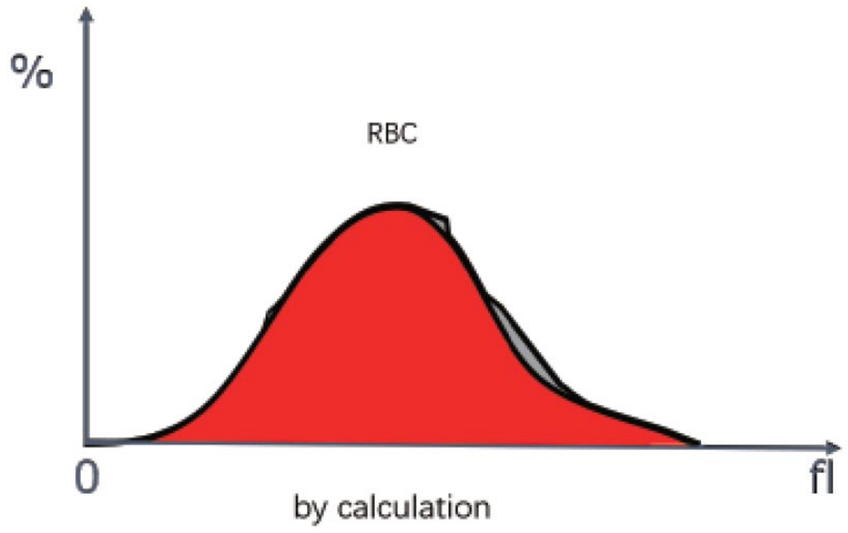


- Analyzer uses Coulter principle to detect number of Leukocyte, Erythrocytes and platelets as well as their volume distribution.
- Each blood cell passing through the gem hole generates a pulse signal.

Software Algorithm - Intelligent and Accurate Results

Digital filtering algorithm

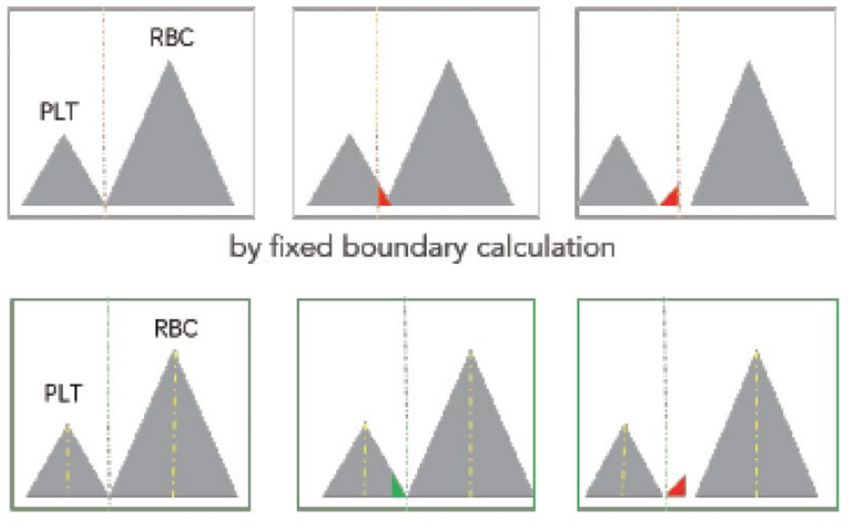
- Automatically identify interference signal, correct the symmetry of RBC histogram, therefore enhance the accuracy of RDW\MCV.



by calculation

Floating boundary technology

- A method that can identify the boundary between RBC and PLT flexibly, and excludes the interference of small red blood cells.



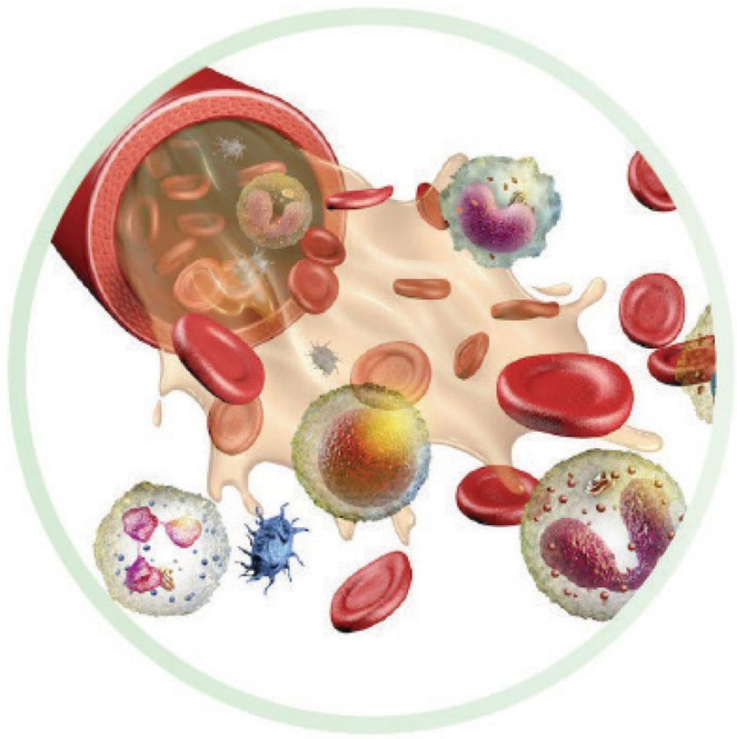
by fixed boundary calculation

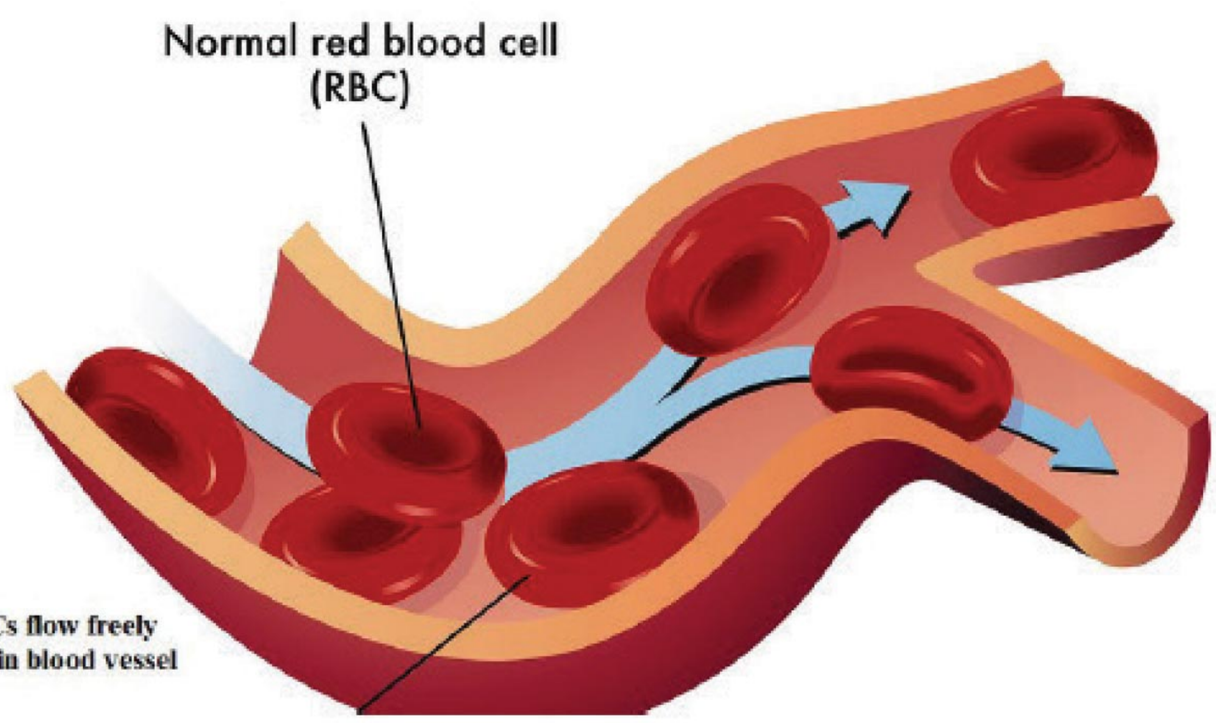
by Floating boundary calculation

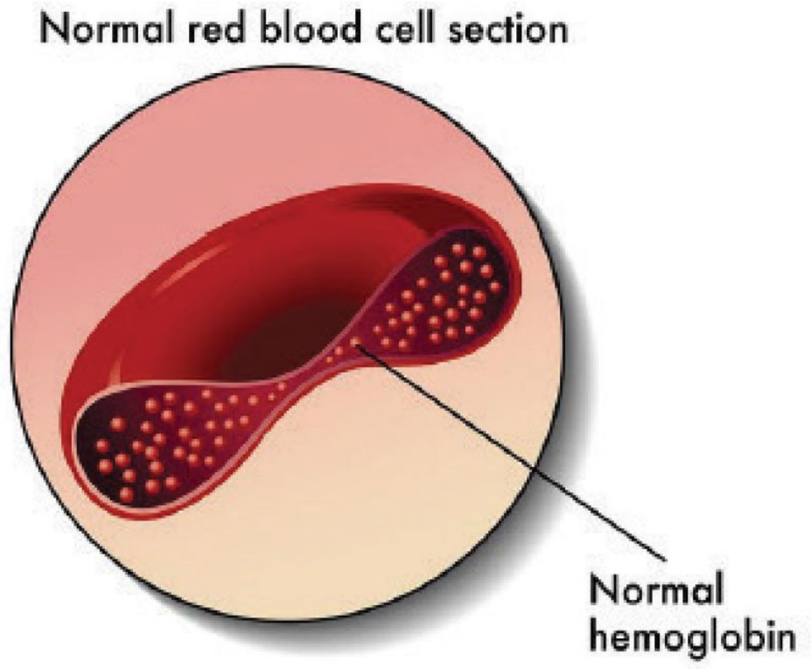
Colourimetric Test - Haemoglobin Concentration

• Hemoglobin is the main component of red blood cells and serves as the transporter for oxygen and carbon dioxide in the blood. Hemoglobin concentraon (Hb) is usually reported as grams of hemoglobin per deciliter of blood (g/dL).

• Colourimetric is used to measure hemoglobin concentration. Non-cyanide lyse reagent secures researchers' health.







Test Parameters

22 Parameters

WBC group (7)

WBC, Lym%, Lym#, Mid%, Mid#, Gran%, Gran#

RBC group (8)

RBC, HGB, HCT, MCV, MCH, MCHC, RDW-SD, RDW-CV

PLT group (7)

PLT, MPV, PDW-CV, PDW-SD, PCT, P-LCC, P-LCR

Reliable Results

Parameter	Linearity Range	Repeatability	Carryover
WBC	(1.0~200)×10⁹/L	≤2.5% (3.5~15.0)×10⁹/L	≤0.5%
RBC	(0.00~8.00)×10¹²/L	≤1.5% (3.50~6.00)×10¹²/L	≤0.5%
HGB	20 g/L ~ 250g/L	≤1.5% (110 g /L~180g/L)	≤0.6%
PLT	(20~5000)×10⁹/L	≤6.0% (100~149)×10⁹/L ≤4.0% (150~500)×10⁹/L	≤1.0%
MCV	-	≤1.0% (80fL ~ 110fL)	-

Reliable Results

Parameter	Electric impedance Colorimetry
Quality Control	X-B floating mean L-J Quality control
Throughput	60 samples/h
Storage	600,000 test records
Sample Volume	9 µL (Whole blood mode) 20 µL (Pre-diluted mode)
Sample Type	Capillary whole blood, Venous whole blood, Pre-diluted blood
Calibration	Manual and Auto-calibration
Graphic Parameters	22 Parameters + 3 Histograms
Dimensions	280 mm (L) * 460 mm (W) * 400 mm (H)
Weight	18.0 KG
Hematology Reagents	Diluent A, Lyse, Probe cleanser

Marketed By :
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