



ABX Pentra 80

Hematology Analyser

- 5-Part differential
- Automatic sample handling
- Touch-screen monitor and interactive software

Pentra 80

Reliable results day after day.



Automatic mode:

- 10 tubes per rack.
- Positive identification of tube and rack (integrated barcode).



Manual mode:

- Sampling from open or closed tubes.
- 16 possible tube sizes.
- Positive identification (external barcode).

80 samples/hour + continuous loading

➤ Ideal for workloads up to 350 samples/day.

10-rack capacity + automatic rerun of abnormal samples

➤ Immediate testing of pathologic samples without manual reloading.

Microsampling of 30 µL (CBC) or 53 µL (CBC + DIFF) in automatic or manual mode

➤ Exceptional results with all sample types, even very small volumes (Paediatric, Oncology, etc.).

Can analyse platelet counts up to 2.8 million/mm³ without predilution

➤ Ideal for Blood Collection Centres and Blood Banks.

End-over-end rotation of tubes before sampling

➤ Homogenisation of samples using reference method.

Reads barcodes on racks and tubes

➤ 100% accurate sample identification.



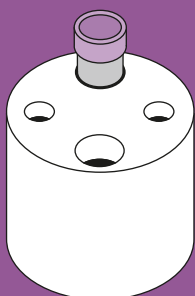
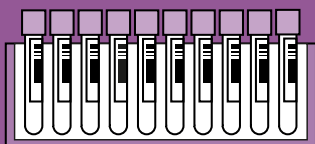
- Cells blood count + differential leucocyte count with 26 parameters
More detailed results and lower slide review rates.
- Flow cytometry using principles of impedance, cytochemistry and measurement of light absorbance (Double Hydrodynamic Sequential System (DHSS) technology)
Combination of 3 recognised measurement methods.
- Continuous loading and stat sampling
Optimised, versatile hematology workstation.
- 100 tube capacity
Walk-away capacity of over 1 hour (including technical validation).
- Automatic and immediate rerun of samples (user-definable)
Improved, automated validation process.
- Only 4 reagents (integrated) + diluent
Simple, economical handling of reagents.
- Double sampling needle
ABX patent eliminates the need for a sampling valve and allows analysis of micro-volumes.
- Fluidic and pneumatic circuits controlled by stepper motor
Very quiet (no compressor) and increased accuracy.
- Integrated workstation with colour touch-screen monitor
Innovative, user-friendly interface.
- Quality Assurance including QC, XB, Repeatability, etc
Comprehensive quality management.
- 9 internal logs
(maintenance, calibration, reagents, etc.)
Automatic archiving and complete accountability (essential for laboratory accreditation).
- Memory that can hold up to 10,000 patient files
Save previous results with graphs and matrix.
- Mono or bi-directional connection
Easily integrated into your laboratory organisation.

Pentra 80

Cutting-edge technology
at every stage of analysis.

1

Sampling modes



Automatic mode (CBC/DIFF)

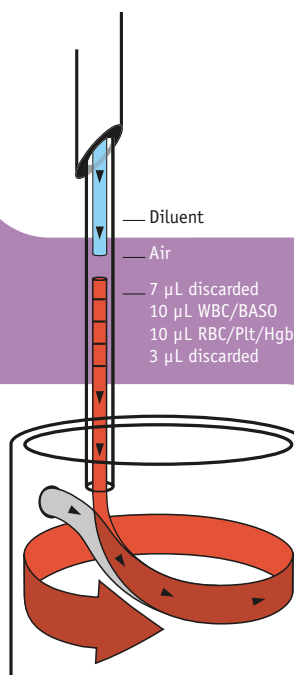
- 10 tubes per rack
- Identification of tubes and racks
- 80 samples/hour

Manual mode (CBC/DIFF)

- Open or closed tube
- 16 tube types
- Tube type recognition and positive identification (external barcode)
- 80 samples/hour

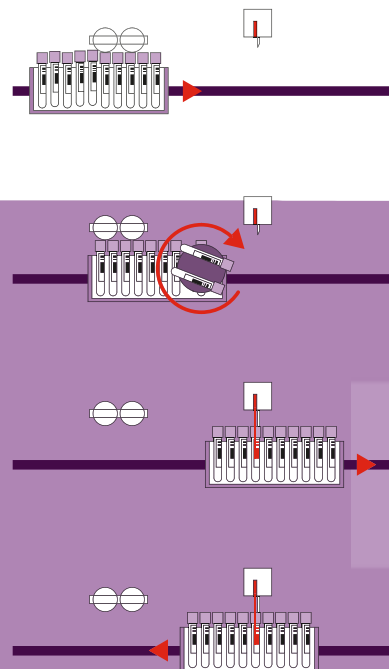
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MDSS microsampling



3

Safe sample handling



Multi Distribution Sampling System*

- Sampling : only 30 µL whole blood for CBC (53 µL for CBC + DIFF).
- Sample aliquot taken, transferred to analysis chambers. Pre-heated analysis chambers for highly reproducible result.
- Tangential flow reagent dilution for optimal homogenisation.

* ABX Patents

Linear rack loading

Verification of tubes (position and height) with automatic readjustment.

End-over-end rotation before sampling

One-minute mixing.

Positive rack and tube identification

Integrated barcode reader.

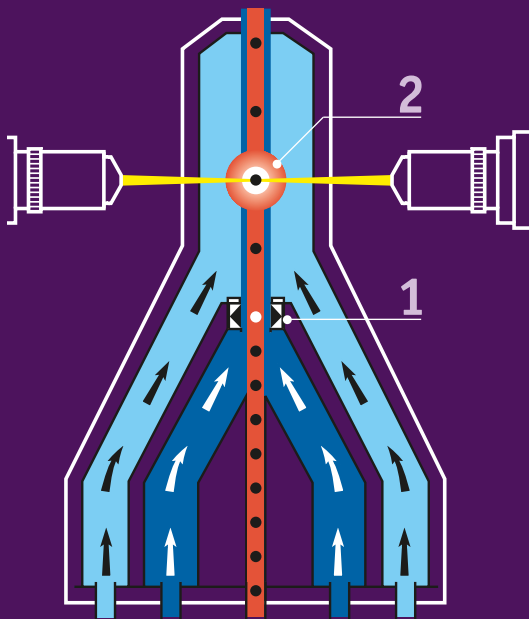
Microsampling (MDSS concept)

Automatic rerun

According to laboratory-defined criteria.

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Cytometry / Cytochemistry DHSS



Cytochemistry

Sample incubation in a temperature-controlled chamber and enzymatic staining with Chlorazol Black. This reagent specifically stains leucocyte nuclei, granules and membranes.

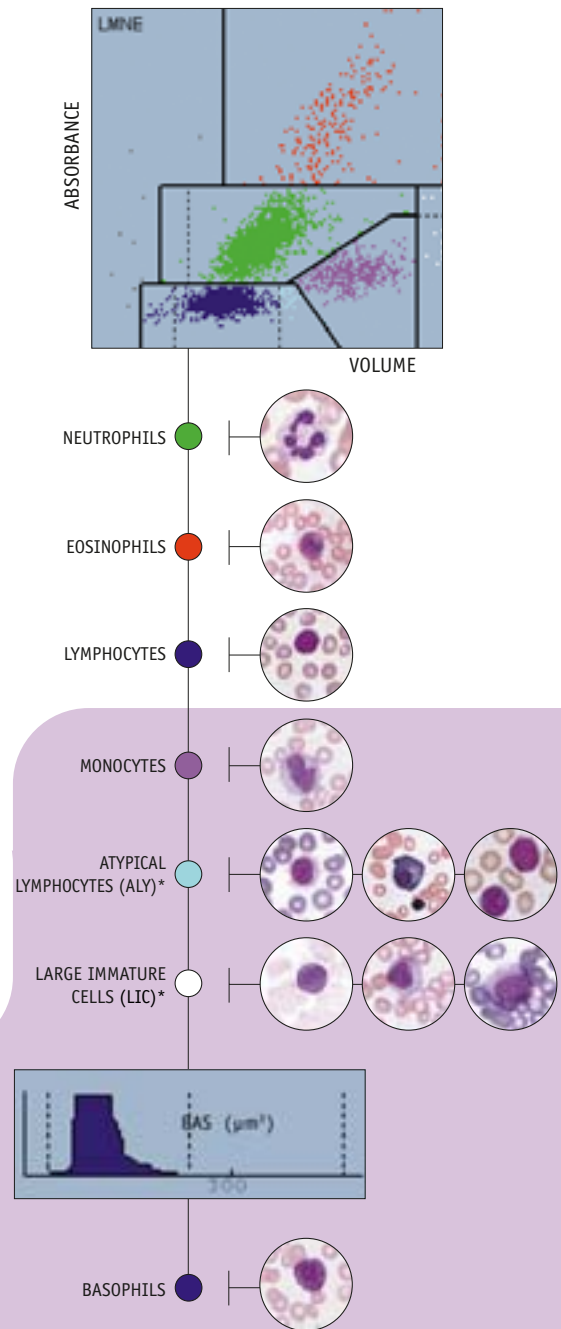
Cytometry

Injection of the prepared sample into a double hydrofocus cytometer (ABX patent) and analysis of cell complexity with a polychromatic light source.

- 1) Measurement of actual cell volume by impedance.
- 2) Measurement of cell content by diffraction and optical absorbance.

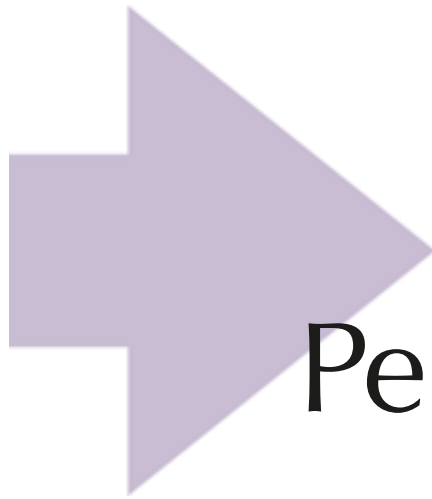
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Results



- 26 parameters.
- Histogram of RBC, WBC, PLT.
- Colour leucocyte matrix.
- Pathological and morphological alarms.
- Differential leucocyte count by DHSS technology.
- Basophil measurement through specific channel.
- Percentage and absolute value of neutrophils, eosinophils, basophils, lymphocytes and monocytes.
- Determination of 2 additional sub-populations (% and #):
 - Atypical lymphocytes (ALY)*,
 - Large Immature Cells (LIC)*.

* Research use only



Pentra 80

One-step control.



Integrated workstation with touch-screen monitor.

Intuitive user interface and software.

Monitoring and accountability of all results.

Completely automated and programmable maintenance.

Quality control (Levey-Jennings charts).

Personalised printout of results with ranges and comments.

Completely automated, programmable start-up and shut-down.

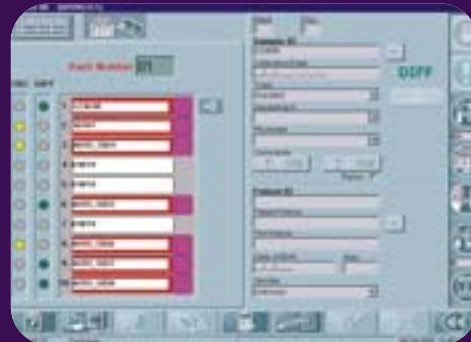
System:

Reagents (levels, expiration dates, notebook, etc).
Quality Control (XB, reproducibility, calibration, etc).
Complete accountability (9 online logs).



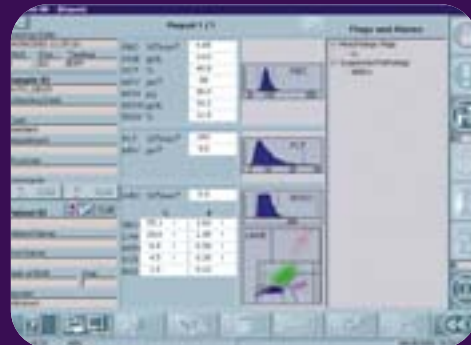
Sample:

Virtual visualisation of work list.
Use of demographic information to create analysis profile.
Entry of personal comments.



Results:

Visualisation of results, alarms, comments, demography, etc
Colour matrix, zoom-in matrix and graphs.
Sorting of results (normal, with alarms, rejected, etc.)



Archives:

10,000 result memory capacity.
Search by patient identification number or by date.
Automatically saves results with graphs,
matrix, alarms, comments, etc.





Pentra 80

ABX Pentra 80

Hematology analyzer

HORIBAABX
Diagnostics

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