

IN A SMALL, CONVENIENT, BENCH-TOP ANALYZER, PENTRA 60 PROVIDES A COMPLETE HEMATOLOGY PROFILE INCLUDING 5 PART DIFFERENTIAL ANALYSIS FOR RELIABLE DIAGNOSIS AND PATIENT MANAGEMENT.



PENTRA 60: TECHNICAL SPECIFICATIONS

12 Parameters (CBC mode)	<ul style="list-style-type: none"> RBC, HGB, HCT, MCV, MCH, MCHC, RDW PLT, MPV, PCT, PDW WBC 	Display	<ul style="list-style-type: none"> 16 lines LCD screen
26 Parameters (5 DIFF mode)	<ul style="list-style-type: none"> RBC, HGB, HCT, MCV, MCH, MCHC, RDW PLT, MPV, PCT, PDW WBC, LYM, MON, NEU, EOS, BASO, ALY (Atypical Lymphocytes), LIC (Large Immature Cells) in % and # RBC and BASO histograms PLT histogram High resolution LMNE matrix, including ALY and LIC populations 	Data processing	<ul style="list-style-type: none"> Multitask multifunction RS 232 C Uni-directional
Sample handling	<ul style="list-style-type: none"> By single button aspiration on whole blood. Open tube mode. 	Printer	<ul style="list-style-type: none"> EPSON LX 300 80 column dot matrix printer, A4 paper format
Sample volume	<ul style="list-style-type: none"> 30 µL in CBC mode 53 µL in 5 DIFF mode 	Report options	<ul style="list-style-type: none"> Histogram selection for 12 or 26 parameters User programmable parameter units Reference values printed on every report Full page graphic reports
Throughput	<ul style="list-style-type: none"> 60 samples per hour 	Start-up cycles	<ul style="list-style-type: none"> Automatic and programmable
Post-draw stability	<ul style="list-style-type: none"> Up to 48 hours 	Cleaning cycles	<ul style="list-style-type: none"> Automatic and programmable
Sample distribution	<ul style="list-style-type: none"> MDSS technology (ABX Patent) 	Reagents	<ul style="list-style-type: none"> ABX DILUENT (20 L) ABX ALPHALYSE (0.4 L) ABX CLEANER (1 L) ABX EOSINOFIX (1 L) ABX BASOLYSE II (1 L) Optional CN-Free Lysis: ABX LYSEBIO (0.4 L)
Counting methods	<ul style="list-style-type: none"> Cytochemistry Focused Flow impedance Light absorbance 	Reagent alarm	<ul style="list-style-type: none"> Yes
Sample identification	<ul style="list-style-type: none"> Alphanumeric patient identification with patient run number and sequence number Optional barcode reading 	Dimensions	<ul style="list-style-type: none"> 51,6 x 44,4 x 48,1 cm (H x W x D)
		Weight	<ul style="list-style-type: none"> 35 Kg
		Power supply	<ul style="list-style-type: none"> 100 V to 240 V 50/60 Hz, 200 VA

Parameters	Linearity limits*	Visible range*	Error limit**
WBC	0 – 120 x 10 ³ /mm ³	120 -150	±0.3 7.5%
RBC	0 – 8 x 10 ⁶ /mm ³	8 - 18	±0.07 3%
HGB	0 – 24 gr/dl	24 - 30	±0.3 3%
HCT	0 – 67 %	67 - 80	±2 3%
PLT (WHOLE BLOOD)	0 – 1900 x 10 ³ /mm ³	1900 - 2800	±10 12.5%
PLT (PLT CONCENTRATE)	0 – 2800 x 10 ³ /mm ³	2800 - 3200	±10 12.5%

Parameters	Within-run precision
Lymphocytes	< 5 %
Monocytes	< 10 %
Neutrophils	< 3 %
Eosinophils	< 20 %
Basophils	< 30 %

* From software release V2.2.0 and above
 ** Which ever is greater



HORIBAABX
Diagnostics

HORIBA ABX INTERNATIONAL (33 / 4 67 14 15 16) - HORIBA ABX - FRANCE (33 / 4 67 14 15 15) - HORIBA ABX - BENELUX (32 / 3 281 49 08) - HORIBA ABX - ITALY (39 / 06 51 59 22 1)
 HORIBA ABX - SPAIN (34 / 91 353 3010) - HORIBA ABX - PORTUGAL (351 / 2 14 72 17 70) - HORIBA ABX - U.K. (44 / 1462 8144 00) - HORIBA ABX - AUSTRIA (43 / 1 718 78 44 00)
 HORIBA ABX - POLAND (48 / 22 673 20 22) - HORIBA ABX - USA (1 / 949 453 0500) - HORIBA ABX - BRAZIL (55 / 11 55 45 1500) - GERMANY AXON LAB AG (49 / 7153 92260)
 ABX ONLINE : <http://www.horiba-abx.com>

Meeting your needs, immediately.

- Immediate switch from the CBC to the 5 DIFF mode in one single operation on the front panel (no additional rinsing or start-up cycle).
- Hematological status in less than one minute.
- Only 30 µL (CBC mode) or 53 µL (5 DIFF mode) of sampling volume.
- Designed for the most demanding conditions (Pediatrics, Geriatrics,...).
- Highly cost-effective analyzer.



ABX Pentra 60

Hematology Analyzer

26 parameters with 5 part differential analysis

Pentra 60

HAN239D / Subject to technical modifications



PENTRA 60

26 PARAMETERS WITH 5 PART DIFFERENTIAL ANALYSIS

SIMPLICITY
QUALITY
EFFICIENCY

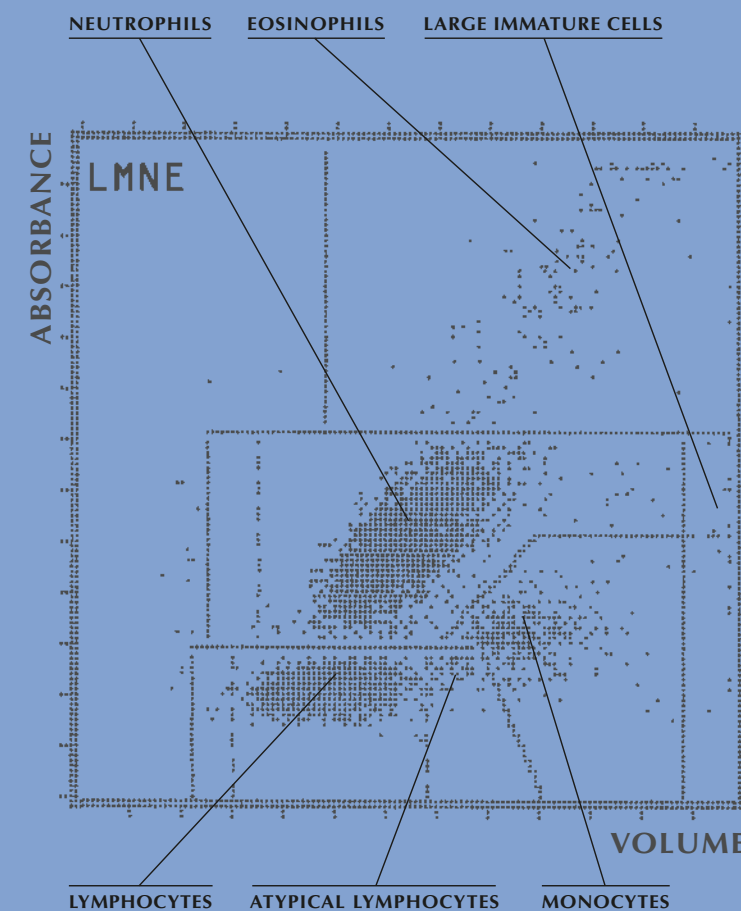
Cytochemistry, Focused Flow Impedance and Light Absorbance:
PENTRA 60 yields more data with increased accuracy.

In less than a minute, PENTRA 60 provides a full diagnostic access to the hematological status of the patient with a full 5 part differential, including Atypical Lymphocytes (ALY) and Large Immature Cells (LIC).



- 26 Parameters fully automated hematology analyzer
- DHSS* technology combining cytochemistry, focused flow impedance and light absorbance principles of measurement
- Full 5 part differential, including Atypical Lymphocytes (ALY) and Large Immature Cells (LIC)
- High resolution matrix + 3 programmable histograms for RBC, BASO and PLT
- 48 hours post-draw stability
- 60 samples/hour (CBC / CBC+5 DIFF)
- Selectable CBC or CBC+5DIFF analysis
- Only 53 µL sampling volume (5DIFF) on primary tube (no predilution step)
- Multi Distribution Sampling System (MDSS*)
- Optional Cyanide-free lysis

* ABX patent



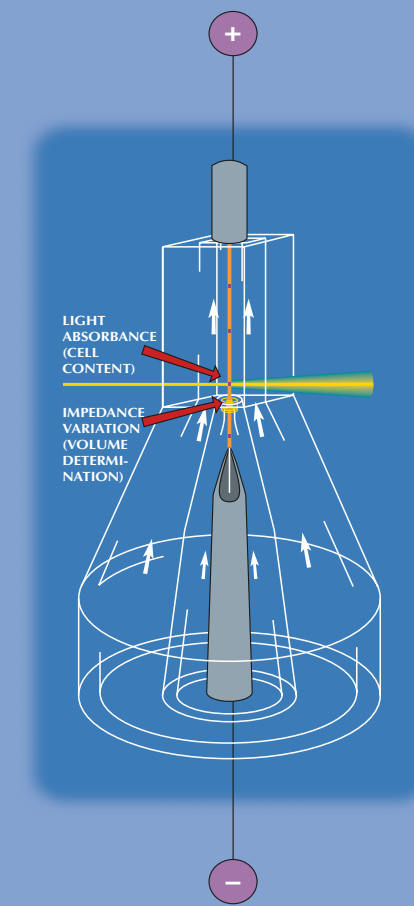
DHSS

“DOUBLE HYDRO DYNAMIC SEQUENTIAL SYSTEM”

DHSS is an ABX proprietary technology which allows for the measurement of the cell volume and for the analysis of the cell content in one unique flow cell.

DHSS offers exclusive advantages:

- A sequential system (timing device) is applied to the two measurements; the first passage of the cell through the aperture impedance system should be combined with the passage through the light beam in less than 200 microsecond time period. This timing prevents the counting of bubbles or static and will give a perfect leukocyte differential (ABX LMNE matrix).
- The DHSS technology guarantees optimum repeatability and post-draw stability of the analysis.



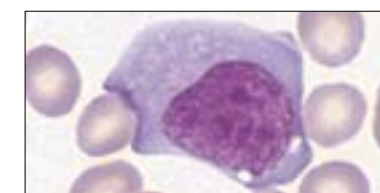
Full 5 part differential WBC analysis

Each type of WBC is stabilized in its native form, the three measurement principals are sequentially applied:

- CYTOCHEMISTRY (Incubation with Eosinofix™).
- FOCUSED FLOW IMPEDANCE, to measure the volume.
- LIGHT ABSORBANCE, to analyze the cell content.



The high definition of the matrix allows the definition of 2 additional populations: Large Immature Cells (LIC), and Atypical Lymphocytes (ALY), in percentage and absolute count.



MDSS

“MULTI DISTRIBUTION SAMPLING SYSTEM”



- Only 53 µL of sampling volume (whole blood) for a CBC+5 DIFF analysis
- Perfect mixing and homogenization of the sample and the reagents
- Immediate CBC/CBC+5 DIFF selection with no rinsing cycle
- Post-draw stability of more than 48 hours
- No shear-valve, no compressor, no maintenance

Following aspiration of 30 µL (CBC mode) or 53 µL (5DIFF mode) of whole blood through the sampling needle, blood is then split into appropriate aliquots in the specific chambers for dilution. The aliquots are injected in a tangential flow of pre-heated reagent, which mixes homogeneously the cell suspension and cleans, the sampling needle internally and externally.

BEHIND ITS ELEGANT AND HIGHLY COMPACT DESIGN, PENTRA 60 CONCEALS THE VERY BEST IN INNOVATION IN ORDER TO MEET YOUR EVERY NEED IN TERMS OF QUALITY AND COST CONTROL MANAGEMENT.



Quality: Accurate results and ease of use

- Only 30 µL (CBC mode) or 53 µL (CBC+5DIFF mode) sampling volume
- Alphanumeric or barcode patient identification
- Complete selective flagging
- Normal limits printed with patient results



Simplicity: Automatic and compact analyzer

- One button aspiration with probe wipe
- 12 or 26 parameters with histograms and matrices
- Automatic calibration
- One button auto/manual start up and shut down



Efficiency: Cost-effective hematology analyzer

- Only 4 on-board reagents (+ diluent)
- Low reagent consumption
- Selectable CBC or CBC+5 DIFF analysis
- “Zero-maintenance” concept
- Highly cost effective analyzer