

ABX **Pentra XL** 80

Process efficiency in Hematology



ABX Pentra XL80

Process efficiency in Hematology

**Delivering the performance you need
from a hematology Analyzer**

Cytology Platform Performance

- 80 tests per hour
- Large capacity auto-loader (100 tubes)
- Stat sampling on open or closed tubes
- 20 parameters: CBC (10), DIFF (10)
- Micro-sampling on whole blood:
30 μ L in CBC mode and 53 μ L in CBC+DIFF mode
- Customized Dilution Ratio (CDR)
- Automatic Sample Re-run
- Integrated Validation Station
- Compatible with ABX Pentra ML (Multilink System)
to centralize hematology operations



Performance

- Single screen to view data.
- 20 parameters, histograms, color matrix, flags and comments.



Comfort

- On-screen location of test samples.
- Virtual mapping of rack location including tube position, rack number and type of analysis (CBC or CBC + DIFF).



User Friendly

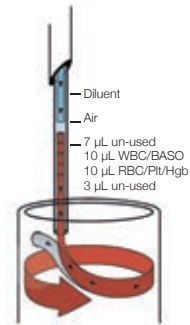
- Real-time Status Overview.
- On-board view of reagent levels, testing progress and ratio of flagged samples.

Delivering quality results with proven methods

Precise, reliable results
from MDSS and DHSS methods*

Micro-sampling MDSS (Multi-Distribution Sampling System):

- Micro-sampling and complete homogenization of blood samples with reagents.
- Only 30 μL in CBC mode and 53 μL in CBC+DIFF mode.



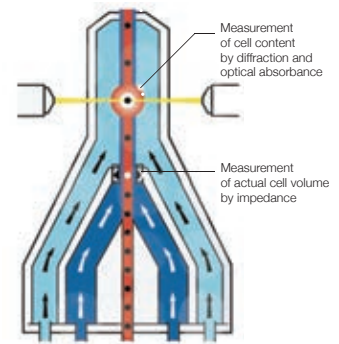
DHSS (Double Hydrodynamic Sequential System):

Cytochemistry

- Produces excellent cell differentiation by **regulating the temperature during the cytochemical staining** of internal cellular components using Chlorazol Black.
- 48 hours post-draw stability.

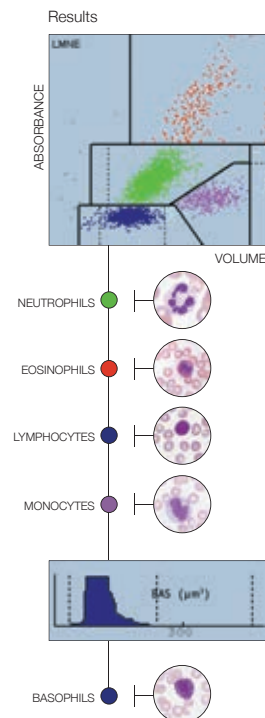
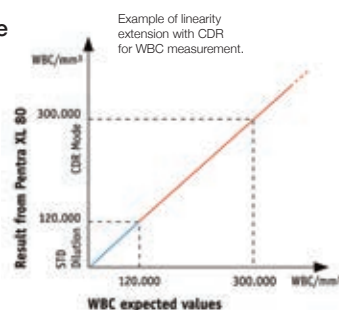
Flow Cytometry

- Precise cellular identification by injecting the prepared sample into a double hydrofocusing cytometer: **impedance** (cell volume measurement) & **optical** (analysis of the internal cellular structure by measuring defraction and optical absorbance).



Efficiency with Customized Dilution Ratio CDR:

- Enables an automatic extension of linearity in case of out-of-range samples. Samples are automatically flagged, re-sampled, then diluted to provide a result within an extended linearity limit.



* HORIBA Medical Patents

ABX Pentra XL⁸⁰

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Integrated touch screen validation station

PHYSICAL SPECIFICATIONS

• Analyzer Dimensions & Weight:

Height	Width	Depth	Weight
21.5 in	32.3 in	22.4 in	122 lb
54 cm	82 cm	57 cm	55 kg

• Throughput:

80 samples/hour

• Specimen Volume:

CBC Mode 30 µL
CBC + DIFF 53 µL

• Power Requirements:

Power supply from 100 V to 240 Vac (± 10%)
50 Hz to 60 Hz
Power consumption Maximum 230 VA
Maximum heat output 670kJ/h (635 BTU/h)

• Reagents:

5 reagents only Diluent
Lysebio (cyanide free)
Cleaner
Eosinofix
Basolyse II

• Sound Pressure Level:

< 60 dBa

• Operating Temperature:

16 to 34°C (61 to 93°F) room temperature.

METHODS & TECHNOLOGIES

• Multi Distribution Sampling System (MDSS)

Reaction temperature 35°C (95°F)

• RBC & PLT Detection Principles

Method Impedance

• HGB Measurement

Method Photometry
Wavelength 550 nm

• HCT Measurement

Method Numeric integration

• WBC & BASO Count

Method Impedance

• Leucocyte Differentiation

Method Impedance with hydrofocus
Cytometry & Cytochemical

• Calculated Parameters

MCV, MCH, MCHC, RDW

SOFTWARE SPECIFICATIONS

• Data Processing:

Color LCD touch screen: 12 in
Capacity: 10,000 results + graphics Windows XP
RS 232 connection either Unidirectional or Bidirectional interface
User defined flagging limits
Transmits Patient & QC results to LIS using ASTM protocol

• Quality Control Management:

24 selectable QC files
XB: 100 operator selectable files with statistics (20 results per file)
With-in run
Levey-Jennings graphs

• Logs:

Reagents, calibration, maintenance, errors, blank cycle, quality control, settings, host, and patient

• Patient Report Management:

Delta check
History (matrix, curves, data)
Manual result input

PARAMETERS & PERFORMANCE DATA

• 20 Parameters:

WBC	RBC	RDW
NE# & NE%	HGB	PLT
LY# & LY%	HCT	MPV
MO# & MO%	MCV	
EOS# & EOS%	MCH	
BAS# & BAS%	MCHC	

• Linearity:

Parameters	Limits	CDR ** Limits
WBC	0 - 120	120 - 360 x 10 ³ /µL
RBC	0 - 8.0	0 - 8 x 10 ⁶ /µL
HGB	0 - 24	0 - 24 g/dL
HCT	0 - 67	0 - 67 %
PLT (A)*	0 - 1900	1900 - 3800 x 10 ³ /µL
PLT (B)*	0 - 2800	2800 - 5600 x 10 ³ /µL

• Precision:

Parameters	%CV	Range
WBC	< 2.0	4.0 - 10.0 x 10 ³ /µL
RBC	< 2.0	3.6 - 6.2 x 10 ⁶ /µL
HGB	< 1.0	12 - 18 g/dL
HCT	< 2.0	36 - 54 %
PLT	< 5.0	150 - 500 x 10 ³ /µL

*A Hgb > 2 g/dL

*B Hgb < 2 g/dL

** CDR: Customized Dilution Ratio

CERTIFICATION

UL 61010-1:2012
CAN/CSA C22.2 No. 61010-2-101-04 (R2009)

HORIBA
Medical



Operating IMS

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