

**HORIBA**  
Medical

ABX **Pentra XL** 80 ●  
Process efficiency in Hematology

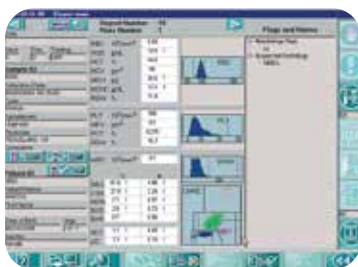


# ABX Pentra XL<sub>80</sub>

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  $\mu$ L in CBC mode and 53  $\mu$ 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, colour matrix, flags and remark.



### 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

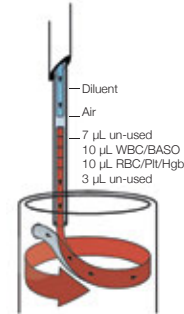
- Real-time Status Overview.
- On-board view of reagent levels, testing progress and ratio of flagged samples.

# Serving the Patient with the Best Technologies

Precise, reliable results from DHSS and MDSS technologies\*

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

- Micro-sampling and complete homogenization of blood samples with reagents.
- Precise aliquot volumes with patented control valve system.
- Only 30  $\mu\text{L}$  in CBC mode and 53  $\mu\text{L}$  in CBC+DIFF mode are extracted.



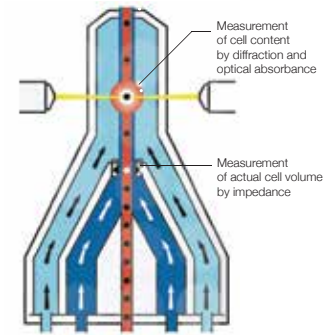
## DHSS (Double Hydrodynamic Sequential System) for Cytochemistry and Cytometry:

### 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.**

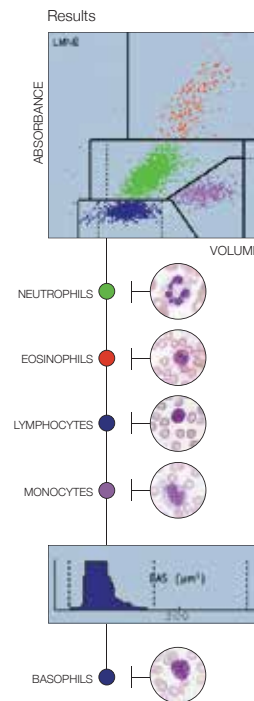
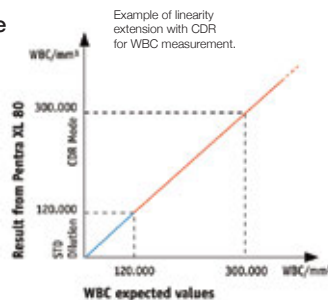
### Flow Cytometry

- 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 light absorbency).



## 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 benefit a result within an extended linearity line.



\* HORIBA Medical Patents

# ABX Pentra XL 80

## Hematology analyzer



Integrated touch screen validation station

### PHYSICAL SPECIFICATIONS

#### 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

#### Printer:

Laser

#### Throughput:

Up to 80 samples/hour in automatic mode  
Up to 80 samples/hour in stat mode

#### Sound Pressure Level:

< 60 dBa

#### Operating Temperature:

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

#### Specimen Volume:

CBC 30 µL  
CBC + DIFF 53 µL

#### Power Requirements:

Power supply from 100 V to 240 V (± 10%)  
50 Hz to 60 Hz  
Power consumption Maximum 186 VA

#### Reagents:

Only 4 reagents  
and 1 diluent :

- ABX Diluent
- ABX Alphalyse
- ABX Cleaner
- ABX Eosinofix
- ABX Basolyse II

### METHODS & TECHNOLOGIES

#### Multi Distribution Sampling System (MDSS)

#### RBC & PLT Detection Principles

Method	Impedance
Aperture diameter	50 µm
Counting depression	200 mb
Counting duration	2x6 seconds
Dilution ratio	1/10 000
Reaction temperature	35°C (95°F)

#### HGB Measurement

Method	Photometry
Wavelength	550 nm
Dilution ratio	1/250
Reaction temperature	35°C (95°F)

#### HCT Measurement

Method	Numeric integration
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#### WBC & BASO Detection Principles

Method	Impedance
Aperture diameter	80 µm
Counting depression	200 mb
Counting duration	2x6 seconds
Dilution ratio	1/200
Reaction temperature	35°C (95°F)

#### Differentiation

Method	<b>Double Hydrodynamic Sequential System (DHSS)</b> Cytometry & Cytochemical association
Aperture diameter	60 µm
Hydrofocusing flow diameter	42 µm
Injection duration	12 seconds
Dilution ratio	1/80
Incubation time	12 seconds
Reaction temperature	35°C (95°F)

#### MCV, MCH, MCHC, RDW Calculation

### SOFTWARE SPECIFICATIONS

#### Data Processing:

Color LCD touch screen: 12 in  
Capacity: 10,000 results + graphs  
Industrial PC board Windows XP  
Celeron 566 MHz  
RAM (256M), Hard disk (10G)  
Floppy disk & CD ROM reader  
RS 232C, TCP/IP, 2 X USB1  
User defined flagging limits  
Transmit patient files & QC to LIS  
Uni-directional & bi-directional connections  
ASTM protocol inside

#### Quality Control Management:

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

#### Logs:

Calibration, Quality Control, Reagent, Settings, Maintenance, Error, Host, Blank Cycle, Patient

#### Patient reports management:

Delta check  
History (Matrix, curves, data)  
Manual input

### PARAMETERS & PERFORMANCE DATA

#### 20 Parameters:

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

Linearity:	Standard	CDR ** Mode	CDR ** Visible range	Unit
WBC	0.56 - 120	120 - 360	360 - 550	10 <sup>3</sup> /µL
RBC	0.1 - 8.0	0 - 8	8 - 18	10 <sup>6</sup> /µL
HGB	0.1 - 24	0 - 24	24 - 30	g/dL
HCT	0.7 - 67	0 - 67	67 - 80	%
PLT (whole blood)	28 - 1 900	1 900 - 3 800	3 800 - 5 500	10 <sup>3</sup> /µL
PLT (concentrate)	28 - 2 800	2 800 - 5 600	5 600 - 7 500	10 <sup>3</sup> /µL

#### Precision:

Parameters	CV (%)	Range	Unit
WBC	< 2.0	4.0 - 10.0	10 <sup>3</sup> /µL
RBC	< 2.0	3.6 - 6.2	10 <sup>6</sup> /µL
HGB	< 1.0	12.0 - 18.0	g/dL
HCT	< 2.0	36 - 54	%
PLT	< 5.0	150 - 500	10 <sup>3</sup> /µL

### CERTIFICATION

EN 61326-1	cTUVus Mark
EN 61326-2-6	UL 61010-1
IEC 61000-3-2	CAN/CSA-C22.2 61010-1
IEC 61000-3-3	98/79/EC (IVD)
IEC 61010-1	
IEC 61010-2-81	
IEC 61010-2-101	

\*\* CDR: Customized Dilution Ratio