

Pentra XLR

Process efficiency in Hematology



Pentra XLR

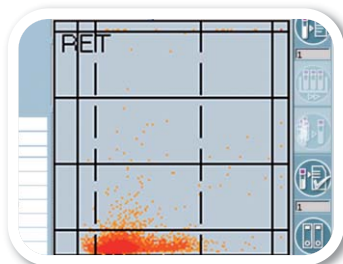
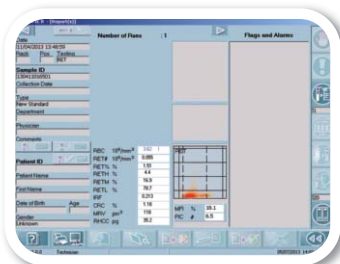
Compact and reliable hematology platform including reticulocytes by fluorescence

- 36 parameters
- 80 samples/hour
- Enhance productivity, quality, flexibility
- Increase your expertise in anaemia characterization
- Add value to your hematology lab



● More productivity

Facilitate diagnosis with full reticulocyte parameters



Full synergy with HORIBA Medical high range solution : same reagent, same QC, same technology

- RET# : Reticulocyte count (#).
- RET%: Reticulocyte percentage (%).
- RETH%*, RETM%*, RETL%*.
- IRF: Immature Reticulocyte Fraction.
- RHCc*: Reticulocyte Hemoglobin Cellular content (pg).
- MRV*: Mean Reticulocytes Volume (fl, μm^3).
- CRC%: Corrected Reticulocyte Count (%).

Save time and increase efficiency

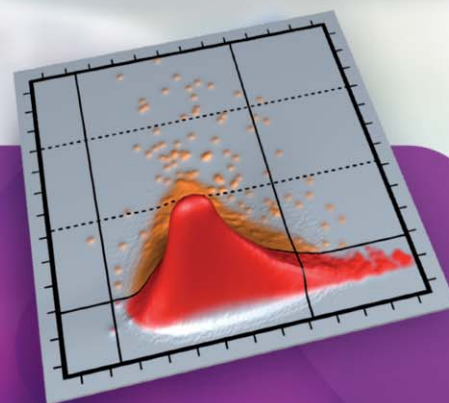


80 samples/hour instrument with large walk-away capacity

- Auto-loader with large capacity (100 tubes).
- Onboard view of reagent levels, test in progress and ratio of flagged samples.

Differential diagnosis of anaemia:

- Classification and monitoring of anaemia based on the Reticulocyte count, CRC and RDW-SD.
- Follow-up of iron-deficiency anaemia based on the MRV* and the RHCc*.
- Detection and monitoring of the erythropoietic response according to three stages of maturation: RET High*, RET Medium*, RET Low* and maturation parameters (IRF and MRV).



• More quality

• More flexibility

Standardise lab processes and traceability



Easy to use platform and intuitive software

- Touch screen software.
- Direct access to interface by icons.
- Contextual toolbar and help online.



Auto-rerun and reflex with user settings

- Out of range results may be instantly confirmed with additional analyses.
- Fully programmable re-sampling according to haematology criteria, delta check, flags and limits.



Secured automatic validation

- Precise patient reports showing test results, demographics, graphs, flags, remarks.
- Data storage management (10 000 patient results) with export to USB key.

Advanced technology solutions to meet your lab's Quality needs

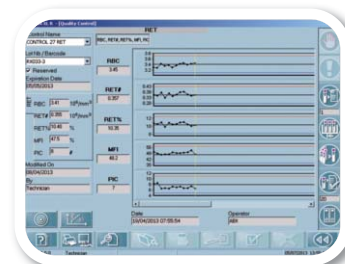
Optimize Quality Assurance

Traceability (1) and (2)

- Access to all information logs concerning instrument status (calibration, quality control, settings, maintenance, laboratory information system, patients...).
- 3 control levels with barcode identification for RET and DIFF.
- Control results displayed in charts and Levey-Jennings graphs.
- XB results and graphs available from 100 files.
- Repeatability test management.



(1)



(2)

Quality control export to QCP (3)

- Comparison with pair labs in real time.
- QC result easily exported by USB (XML format).



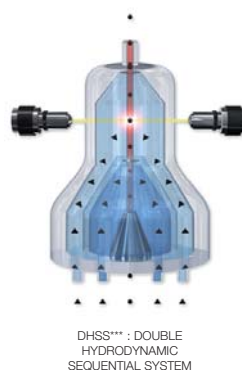
(3)

Benefit of proven technology

A concentration of technology

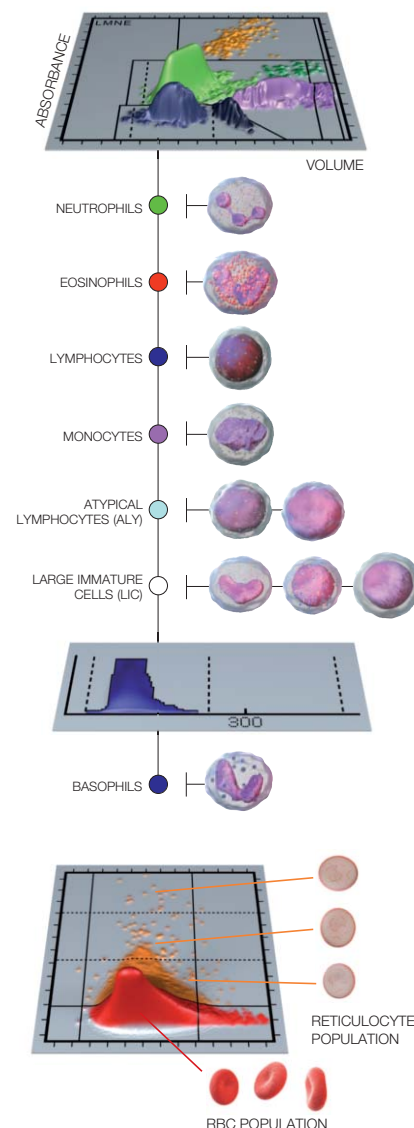
- 6 recognized measurement principles included on a single analyser.

| Reference methods | CBC | DIFF | RET |
|-------------------|-----|------|-----|
| Impedancemetry | ○ | ○ | ○ |
| Flow cytometry | | ○ | ○ |
| Cytochemistry | | ○ | |
| Fluorometry | | | ○ |
| MDSS*** | ○ | ○ | ○ |
| DHSS*** | | ○ | ○ |



DHSS*** : DOUBLE HYDRODYNAMIC SEQUENTIAL SYSTEM

Results



Extended linearity with CDR**

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

Robust and reliable platform

- More than 1 000 Pentra XL 80 are currently successfully used throughout the world, they are particularly appreciated for their accuracy, their convenience and the efficiency of their results.

* RUO parameters (Research Use Only)

** CDR: Customized Dilution Ratio

***HORIBA Medical patents

Multi-faceted solutions to maximize your lab's Flexibility needs

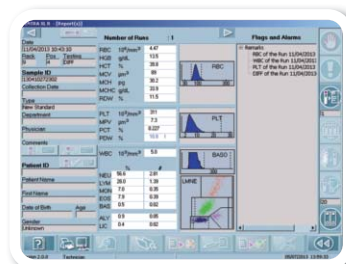
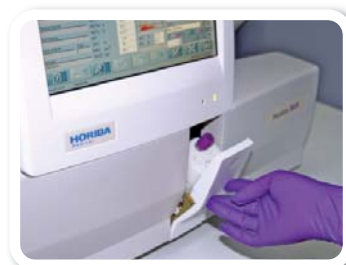
Space saving: Compact with integrated PC

Compact platform providing 36 parameters

- Continuous workload.
- Easy access to samples.
- Stat sampling on open and closed tubes.

Single screen to view all data

- 36 parameters.
- Histograms, colour matrix.
- Flags and remark.



Comprehensive settings options and secured validation

Integrated validation station

- Automatic and customizable validation to meet your laboratory requirements.
- Focus on abnormal results.
- Programmable Delta check flags for accurate patient follow-up.
- Automatic calculation of Wintrobe constants according to manual data input.



Compatibility with ABX Pentra ML data management

- Complete patient hematology file.
- Standardisation of lab validation rules.
- Same expertise between core and satellite labs.



Operational efficiency

MDSS***

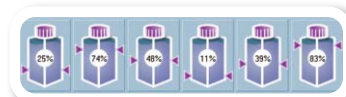
(Multi-Distribution Sampling System)

- Micro-sampling and complete homogenization of blood samples with reagents.
- Precise aliquot volumes.
- Only 35 μ L in CBC mode and 53 μ L in CBC+DIFF mode and 35 μ L in RET mode.



Low reagent consumption

- Real-time status Overview.
- 10 or 20 L choice for diluent.



Pentra XLR

Haematology analyzer



PHYSICAL SPECIFICATIONS

Dimensions & Weight:

| Height | Width | Depth | Weight |
|---------|---------|---------|--------|
| 21.5 in | 32.3 in | 22.4 in | 126 lb |
| 54 cm | 82 cm | 57 cm | 57 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 | 35 µL |
| CBC + DIFF | 53 µL |
| RET | 35 µL |

Power Requirements:

| | |
|-------------------|---|
| Power supply | from 100 V to 240 V (± 10%) 50 Hz to 60 Hz |
| Power consumption | Maximum 230 VA |
| Heat output | Maximum 670 Kj/h |

Reagents:

Only 5 reagents
and 1 diluent :

ABX Diluent 10 or 20L
ABX Lysebio (cyanide free)
ABX Cleaner
ABX Eosinofix
ABX Basolyse II
ABX Fluocyte

PARAMETERS

CBC:

WBC RBC HGB HCT MCV MCH MCHC PLT MPV PCT* PDW*
RDW-CV RDW-SD

Differential Leukocytes:

NEU# & NEU% LYM# & LYM% MON# & MON% EOS# & EOS%
BAS# & BAS% ALY*# & ALY*% LIC*# & LIC*%

Reticulocytes:

RET% RET# RETH%* RETM%* RETL%* CRC% IRF% MRV* RHCC*

CERTIFICATION

98/79/EC (IVD)
cTUVus Mark

EN 61326-1
EN 61326-2-6
IEC 61000-3-2
IEC 61000-3-3

IEC 61010-1
IEC 61010-2-81
IEC 61010-2-101
UL 61010-1
CAN/CSA-C22.2 61010-1

SOFTWARE SPECIFICATIONS

Data Processing:

Colour LCD touch screen: 12 in
Operating System : Windows XP Embedded™
Capacity: 10 000 results + graphs
Celeron 566 MHz
RAM (256 MB), Hard disk (10 GB mini)
External DVD/CD drive connected to instrument USB port
RS 232C, TCP/IP, USB connections
User defined flagging limits
Transmit patient files & QC to LIS
Uni-directional & bi-directional connections
ASTM protocol inside

Quality Control Management:

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

Logs:

Reagents, quality controls, calibration, blank cycle, maintenance,
data handling, settings, communication, errors, by date

Patient reports management:

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

PERFORMANCE DATA

Linearity:

| Parameters | Standard | CDR ** Mode | CDR ** Visible range | Unit |
|-------------------|-----------|---------------|----------------------|---------------------|
| WBC | 0 - 120 | 120 - 360 | 360 - 550 | 10 ³ /µL |
| RBC | 0 - 8 | 0 - 8 | 8 - 18 | 10 ⁶ /µL |
| HGB | 0 - 24 | 0 - 24 | 24 - 30 | g/dL |
| HCT | 0 - 67 | 0 - 67 | 67 - 80 | % |
| PLT (whole blood) | 0 - 1 900 | 1 900 - 3 800 | 3 800 - 5 500 | 10 ³ /µL |
| PLT (concentrate) | 0 - 2 800 | 2 800 - 5 600 | 5 600 - 7 500 | 10 ³ /µL |
| RET% | 0 - 42 | | | % |
| RET# | 0 - 1.5 | | | 10 ⁶ /µL |

Precision:

| Parameters | CV (%) | Range | Unit |
|------------|--------|-------------|---------------------|
| WBC | < 2.0 | 4.0 - 10.0 | 10 ³ /µL |
| RBC | < 2.0 | 3.6 - 6.2 | 10 ⁶ /µL |
| HGB | < 1.0 | 12.0 - 18.0 | g/dL |
| HCT | < 2.0 | 36 - 54 | % |
| PLT | < 5.0 | 150 - 500 | 10 ³ /µL |
| RET% | < 12.0 | 0.5 - 3.0 | % |
| RET# | < 20.0 | 0.02 - 0.10 | 10 ⁶ /µL |
| CRC | < 15.0 | 0.75 - 2.3 | % |

* RUO parameters (Research Use Only)

** CDR: Customized Dilution Ratio

HORIBA

Medical

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