**Hematology Analyser Specifications**

**PHYSICAL SPECIFICATIONS**

- Dimensions & Weight:
  - Height: 17.5 in
  - Width: 19 in
  - Depth: 77 in
  - Weight: 22 lb

- Printer: Laser Printer (optional)

- THROUGHPUT:
  - Up to 60 samples/hour

- Sound Pressure Level:
  - Up to 60 samples/hour

**SOFTWARE SPECIFICATIONS**

- Data Processing:
  - Colour screen: 15 in, monitor (800 x 600 mhs)
  - Mother board: 80386 microprocessor, 4 counting channels (8088)
  - Capacity: 10,000 results + graphs
  - Windows NT 4.0 service pack 4.0
  - RAM: Minimum 120 MB

- Power Supply:
  - from 100 Vac to 240 Vac ± 10%

- Operating Temperature & Humidity:
  - 16 – 34°C (61 – 93°F) room temperature
  - Maximum relative humidity 80% for temperature up to 31°C (88°F)

- Throughput:
  - Up to 60 samples/hour

- PRINTER:
  - Laser Printer (optional)

**METHODS & TECHNOLOGIES**

**MULTI DISTRIBUTION SAMPLING SYSTEM “MDSS”**

- **RBC/PLT DETECTION PRINCIPLES**
  - Method: Impedance
  - Ruby diameter: 60 µm

- **WBC & BASO COUNT**
  - Method: Impedance
  - Reaction temperature: 35°C
  - Dilution ratio: 1/250

- **HGB MEASUREMENT**
  - Method: Photometry
  - Reaction temperature: 35°C
  - Counting depression: 200 mb

- **RBC/PLT DETECTION PRINCIPLES**
  - Method: Impedance
  - Ruby diameter: 50 µm

- **Parameters**
  - Mean %
  - SD %
  - CV %
  - Difference Difference

- **PARAMETERS & PERFORMANCE DATA**

**Hardware Specifications**

- Processor: Celeron 433 MHz

- Mother board: 68331 microprocessor, 4 counting channels (68HC11)

- Colour screen: 15 in.

**FREE!’S**

- Parameters:
  - **WBC**
    - BEC: 15 4,0 - 11,0 x 10^3/µL
  - **HGB**
    - BEC: 1,5 100 - 200 g/dL
  - **RBC**
    - BEC: 0,69 4,0 - 6,0 x 10^6/µL

**Components**

- Printer: Laser Printer (optional)

**FEATURES**

- **Quality Control Management**
  - User defined flagging limits
  - Transmit patient & QC to LIS
  - ASTM protocol inside

- **Logistics**
  - Reagents, calibration, maintenance, error, blank cycle

**ABX Pentra 60 C+**

- 5-Part Differential analysis, Closed tube sampling, Workstation included.
Pentra 60 C+
Compact high range 5 DIFF

Concept and Technology

- MDSS*
- DHSS*
- No compressor, no shear valve (no maintenance)

* HORIBA ABX Patents

MDSS Microsampling
- Sampling: only 30 µL whole blood for CBC (33 µL for CBC + DIFF).
- Sample dispensed into pre-heated analysis chamber for highly reproducible results.
- Tangential flow reagent dilution for optimal sample mixing.

* HORIBA ABX Patents

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 (HORIBA 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.

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