

Paramedical Srl
Present

ELPHO

New Electrophoresis
Instrument

ELPHO



- New electrophoresis instrument
- Dedicated to the automation
- Electrophoresis on Acetate Cellulose
- Made in Italy
- Presented in Dubai (MedLab)
- Attractive Design

Presentation

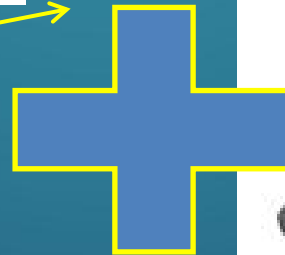


- fully automatic
- Very small
- compact
- Simple to use
- computer integrated
- System Voice Integrated
- It occupies only 50 cm of space
- Until 16 tests in a single process
- simple Software
- economic

Dimensions

Computer Inside

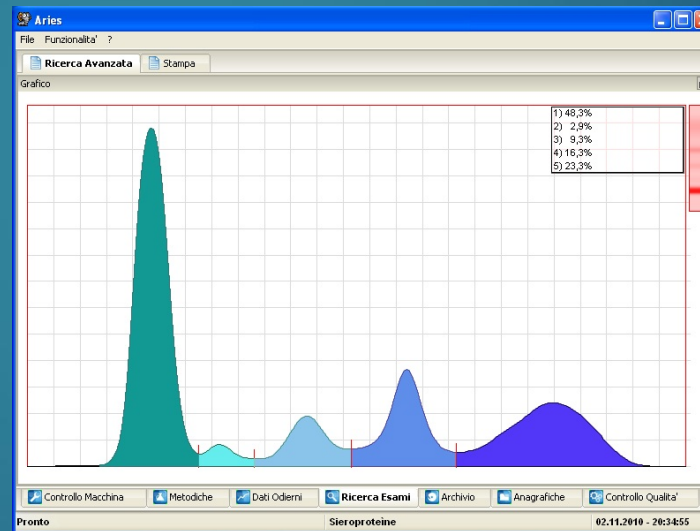
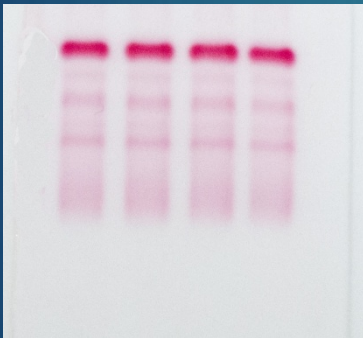
Monitor
Keyboard
Mouse



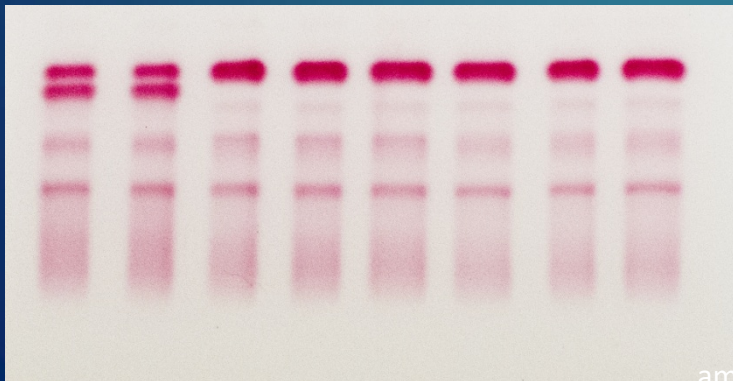
TECHNICAL CHARACTERISTICS

ANALYSIS TYPE

SERUM PROTEINS



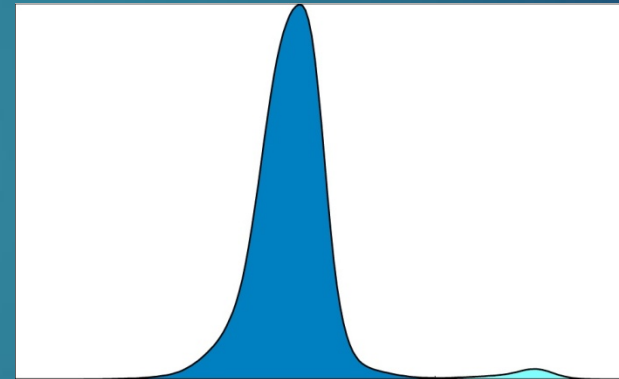
Albumin
Alpha 1
Alpha 2
Beta 1
Beta 2
Gamma



TECHNICAL CHARACTERISTICS

ANALYSIS TYPE

HEMOGLOBIN



HbA1
HbF
A2

Strips



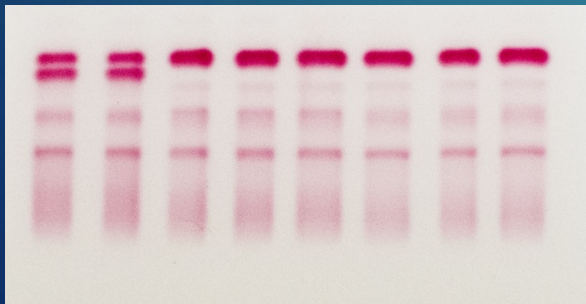
Electrophoresis on cellulose acetate

- Supported on Mylar
- Wet Cellogel



Ability to use strip

- 4 samples
- 8 samples



Kit serum proteins & Hemoglobin

- 400 Test (50 strips of 8 samples)
- 200 Test (50 strips of 4 samples)

Computer Inside



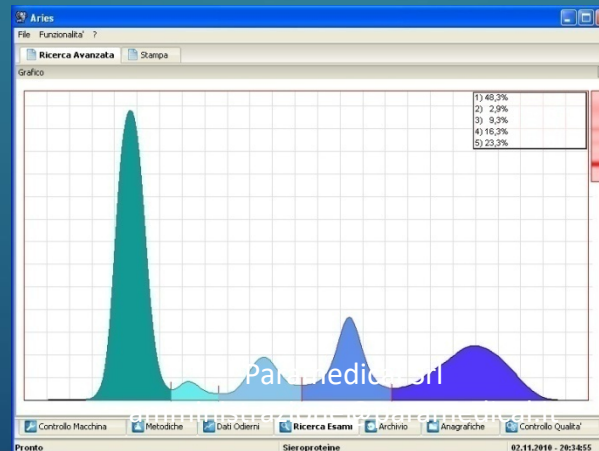
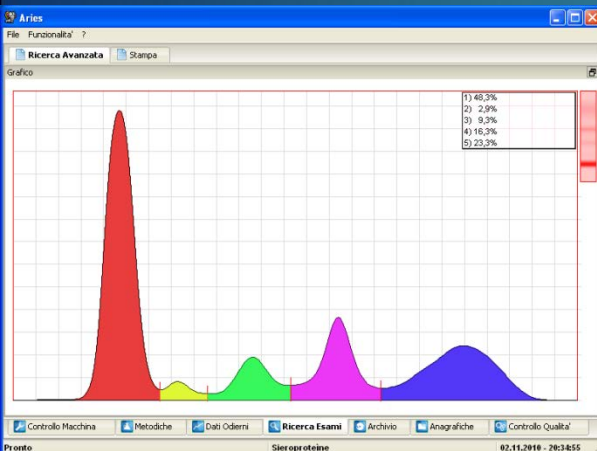
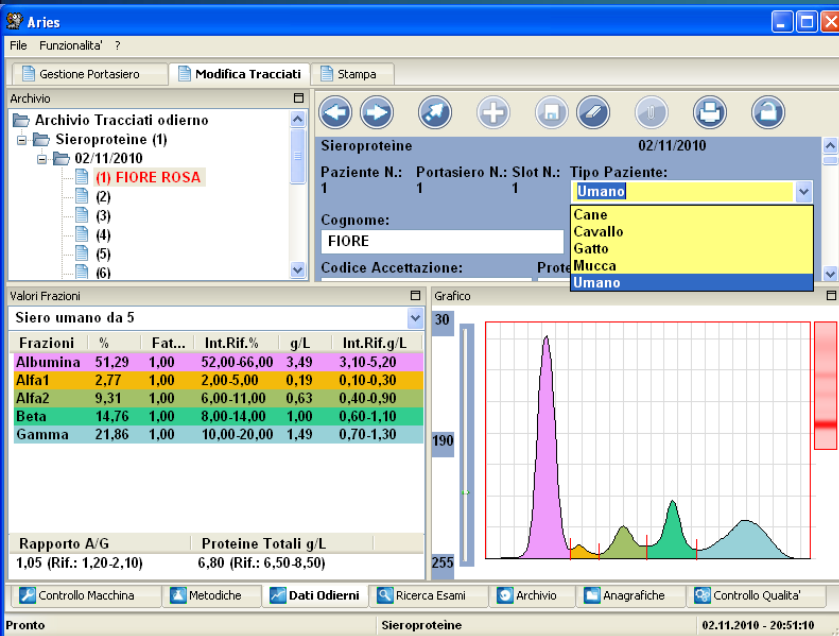
Elpho is an Electrophoresis Instrument that have inside a integrated computer allow the customer gain the space.

Already have the computer inside, Elpho has got the software installed inside.

The frontal panel of computer exit from the Elpho Machine so that they can interface with external devices such as a mouse, printer and monitor or Internet for remote controls.

Software and Graphic

- intuitive software
- video tutorial
- Graph to customize
- Colorful Patterns
- custom report
- analysis for
Dog, Cat, Horse, Cow ...



Patient Report

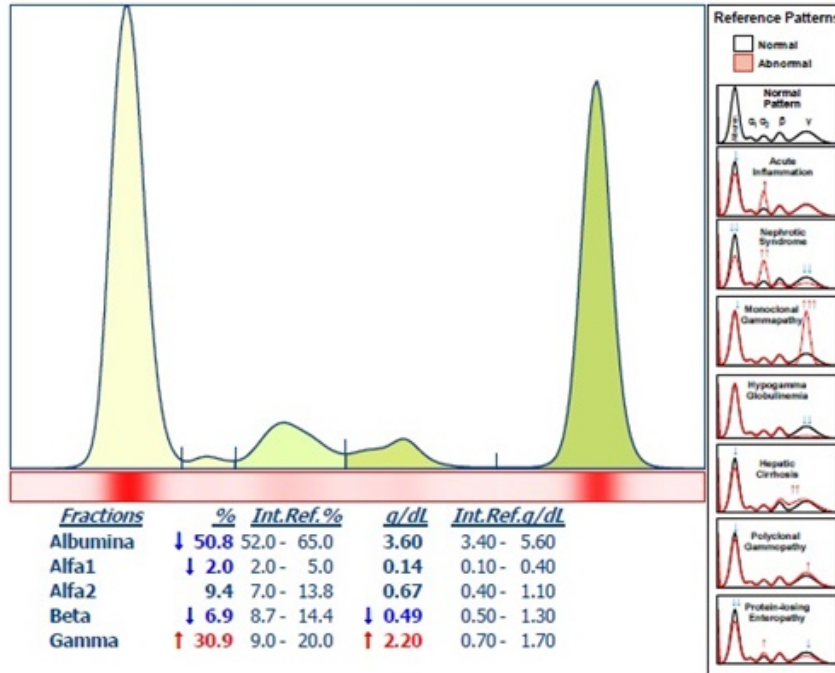
Clinical Analysis Laboratory

Serum Proteins Electrophoresis

N. Prog.: 1
Date Acc.: 07/05/2015

Surname: DOUGLAS Name: JAMES (Age: 22)
Code Acc.: 256987

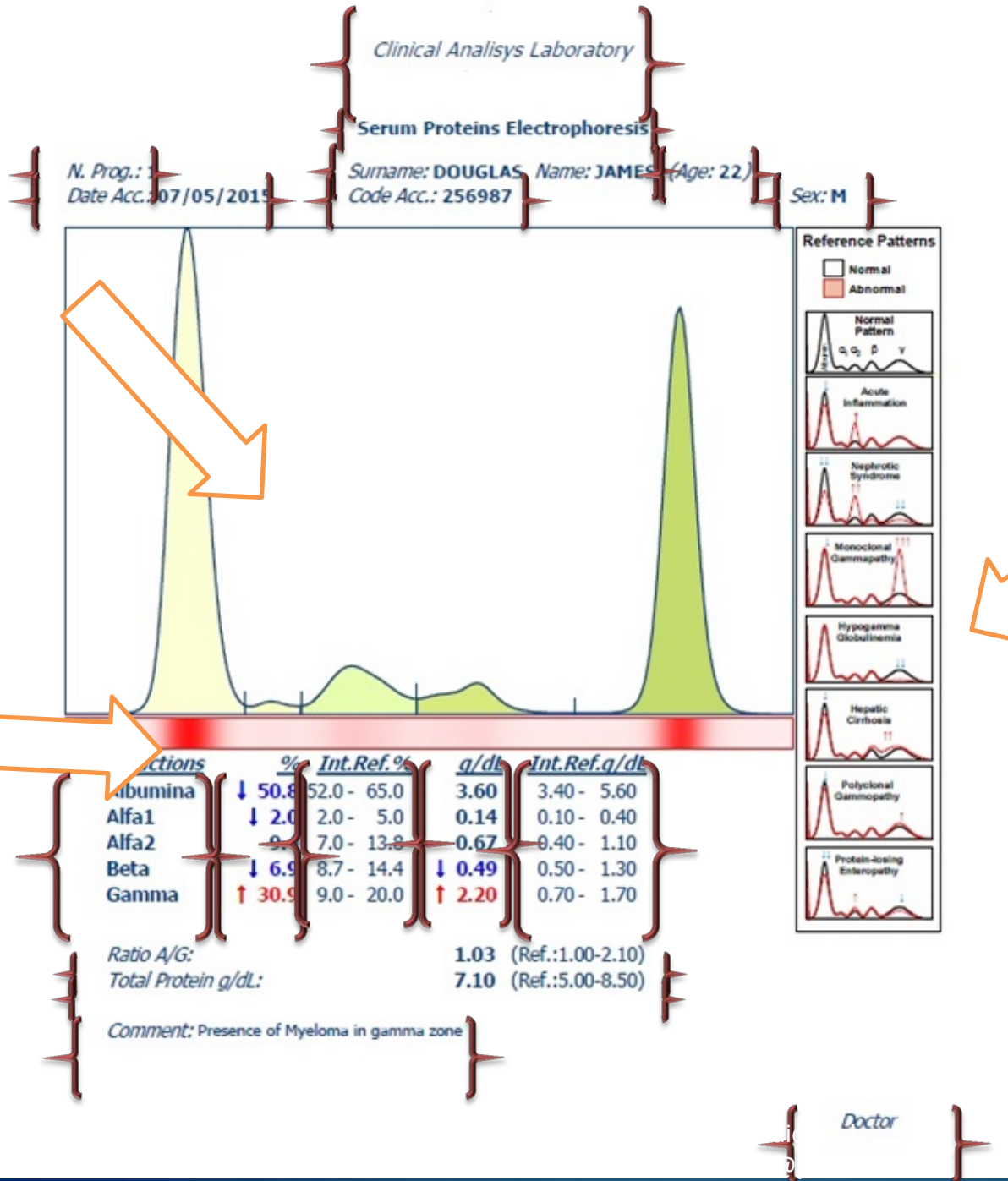
Sex: M



Ratio A/G: 1.03 (Ref.:1.00-2.10)
Total Protein g/dL: 7.10 (Ref.:5.00-8.50)

Comment: Presence of Myeloma in gamma zone

Doctor



Header of Laboratory

Name of electrophoresis

Progress number

Name and surname

Date of acceptance

Code of acceptance

Sex of patient

Age of patient

Reference pattern

Graphic

Pattern of migration

Fractions

Value with arrows up and down

Reference range

Value in g/dL

Reference range g/dL

Ratio A/G

Total protein g/dL

Comment

11
Doctor

Inside the Machine

1 Strip Holder

2 Robotic Arm

3 Button Turn on

4 smart card reader

5 Migration Chamber

6 Cover of Migration Chamber

7 Samples Holders

8 Applicator

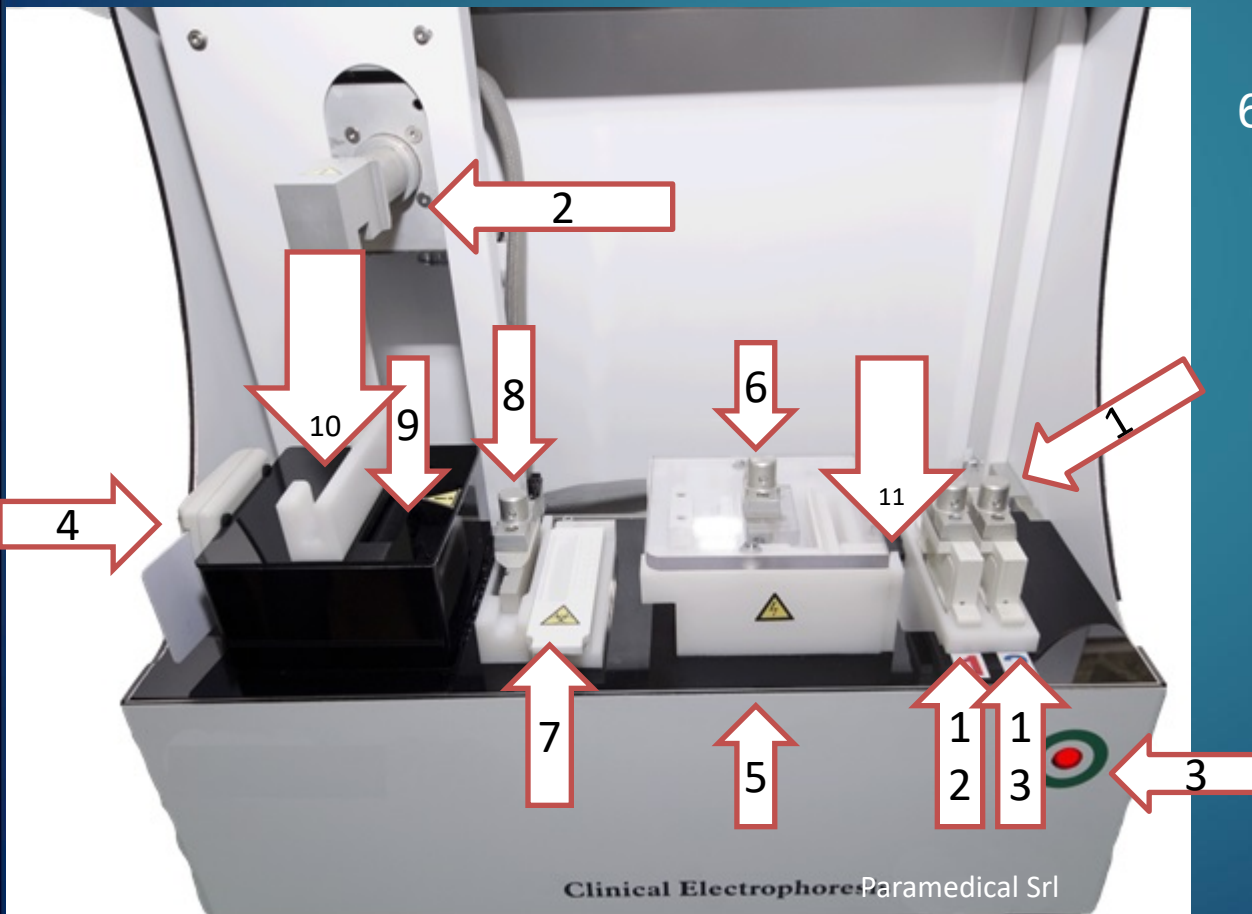
9 Densitometer

10 Parking cover

11 Dry strip

12 Imbibition chamber

13 Stain/Destain Chamber



Object inside the Machine

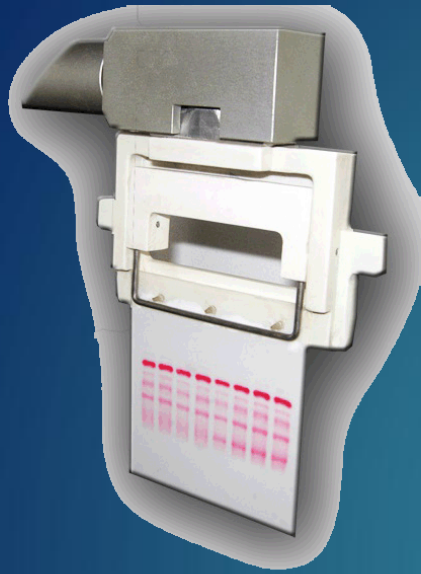


1. Strip Holder

- Serves to maintain the strip
- To be placed in the chamber
- Is the object most used by robotic arm
- Can not be reversed
- The robotic arm detects the presence of objects each time takes them

- If use less than 8 samples (1 strip), put 1 serum holder
- If use more than 8 samples (2 strip), put 2 serum holder

The Strip holder



The door strip is the frame to which the strip is inserted

It consists of a fixed support with three guides not symmetric between them so such as to allow the operator not insert the Strip the contrary

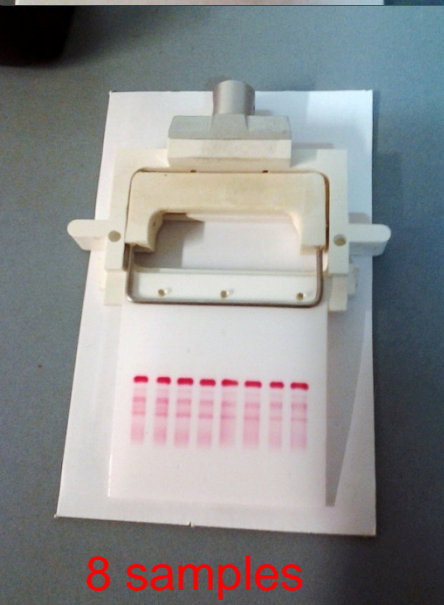
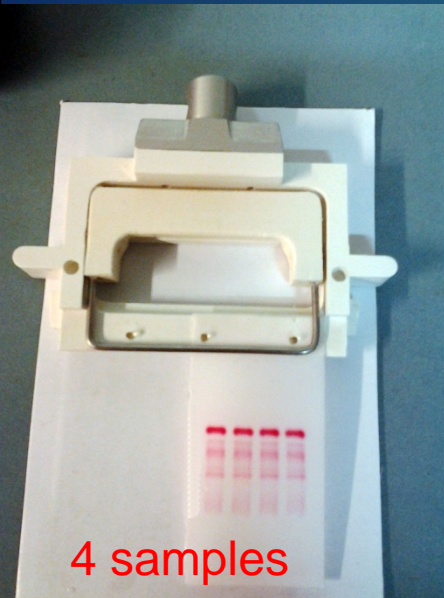
It consists of a movable part which allows the Strip be hooked to the fixed frame

Strip and Strip Holder

Elpho is the only instrument capable of performing electrophoresis using a strip format from 4 samples and 8 samples on a same strip holder

1. The strip 4 samples must be inserted on the extreme right (as in the figure) in the first two guides centering on the right

2. The strip 8 samples is the entire frame position and it occupies all three centering guides (as shown)



Objects inside the Machine



2. Chamber

- a) in the chamber 1 loading the Buffer
- b) in the chamber 2 loading the Staining and destaining

The chamber 1 (with autofill or without) is used for keep wet the strip with buffer for 5 minutes. This operation is called “Imbibition”

The chamber 2 (with autofill or without) is used for staining the strip with “Red Ponceau” for about 1 minutes
And then destaining the strip with “Citric Acid Solution” for cleaning the strip

In the chamber 1 the Buffer can be loaded and recovered (model with autofill)
In the chamber 2 the Staining/destaining can be loaded, recovered and discharged
In the both chamber there are the optical sensor level of the liquids (model with autofill)

Objects inside the Machine



2. Migration Chamber

Is the chamber where there is the migration of the samples on the strip

There are 2 step on the migration chamber

1. deposition of the serums (right side)
2. migration (left side)

Inside of the Migration Chamber there are 2 bridge with papers soaked in Buffer
Both papers are positively charged and negatively charged

The Cover of migration chamber is has temporarily shifted
when the strip holder enters in the chamber

In the Migration chamber the Buffer can be loaded and recovered
In the chamber there is the optical sensor level of the liquids (model with auofill)

Objects inside the Machine



3. Serum Holder

- the right side should be applied serums in the holes
- 25 microliters insert into each hole
- the holes are two rows of 8 (16 total)
- the left side is inserted a paper to dry the applicator
- the serum holder is inserted into the slot
- Insert up to the block
- It is not disposable (monouse)
- At the end of process washing it with current water

Objects inside the Machine



4. Applicator

- is the object most delicate
- serves to take the serum
- deposited on the serum 'acetate strip
- is never taken by the user
- before its use is washed with running water in automatic
- after the deposition is washed with running water in automatic
- after washing is dried air with fan

Objects inside the Machine



5. Densitometer

- Reading system for the strips
- A. Light source system
 - 8 leds
 - same light intensity
 - independent of each other
- B. Receiving source system
 - 8 photodiodes independent
 - independent regulation
 - linearity from 0 to 2.8 D.O.

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Objects external to the Machine

Device:

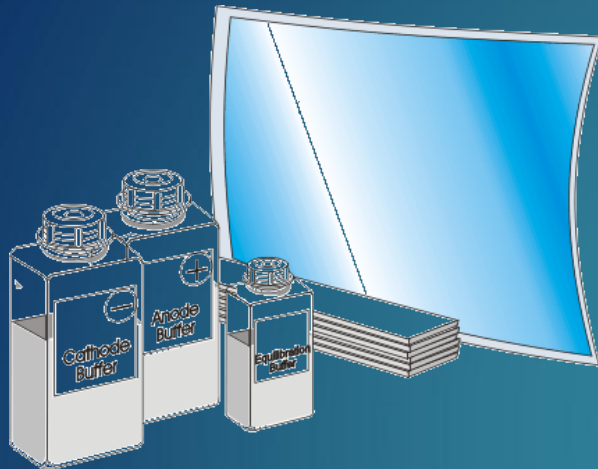
- Monitor
- Mouse
- KeyBoard
- Printer
- Speakers

External Tanks:

- Staining 500 mL
- Destaining 5000 mL
- Buffer Serum 500mL
- Buffer Hemoglobin 500mL
- Distilled Water 1000 mL
- Discharge 5000mL

External Sensor Level

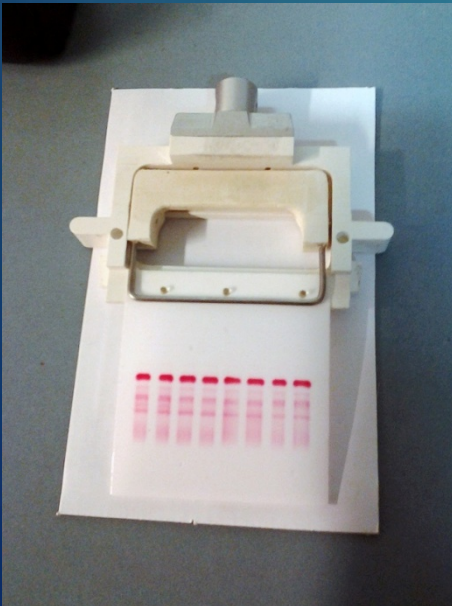
KIT SERUM PROTEIN



KIT SERUMPROTEIN 400 TEST
CODE: 08CDR4

CONTAINS:

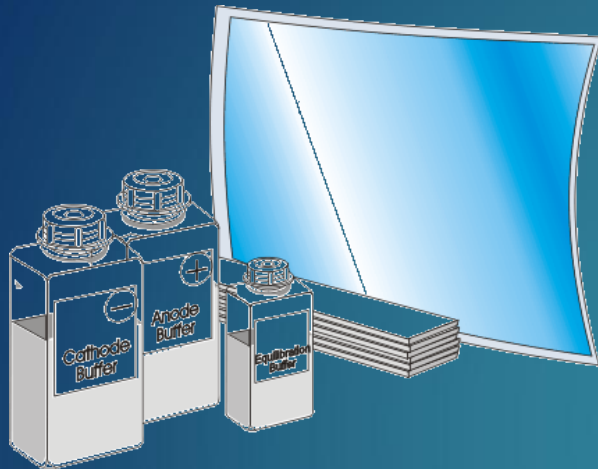
25 X 2 Acetate of cellulose Strips (8 Samples)
1x500 mL Buffer serum protein ready to use
2x250 mL Ecologic Solution Destain
1x200 mL Stain ready to use
5 Dry strip paper 92 x 40 mm
20 Dry Applicator 70 x 13 mm
2 Migration Chamber 70 x 20 mm
Smart Card 50 test



To Prepare the ecologic destain with distilled water:
Bring it to 5 Liters

Fill the distilled water tank

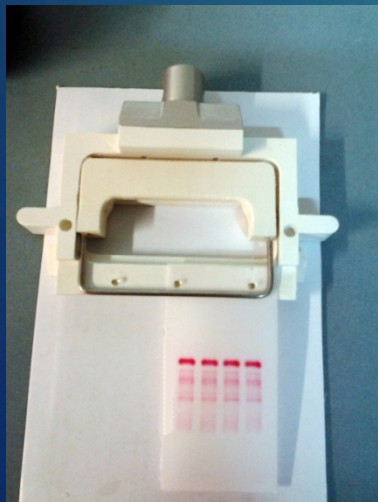
KIT SERUM PROTEIN



KIT SERUMPROTEIN 200 TEST
CODE: 08CDRM2

CONTAINS:

- 25 X 2 Acetate of cellulose Strips (4Samples)
- 1x500 mL Buffer serum protein ready to use
- 2x250 mL Ecologic Solution Destain
- 1x200 mL Stain ready to use
- Dry strip paper 92 x 40 mm
- 20 Dry Applicator 70 x 13 mm
- 2 Migration Chamber 70 x 20 mm
- Smart Card 50 test

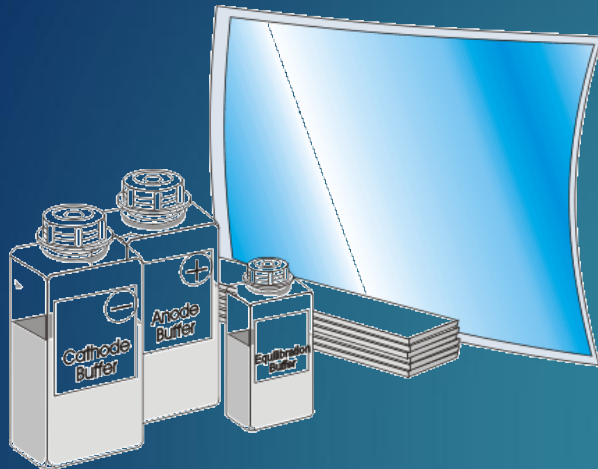


To Prepare the ecologic destain with distilled water:
Bring it to 5 Liters

Fill the distilled water tank

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KIT HEMOGLOBIN



KIT HEMOGLOBIN 400 TEST
CODE: 08CDR5

CONTAINS:

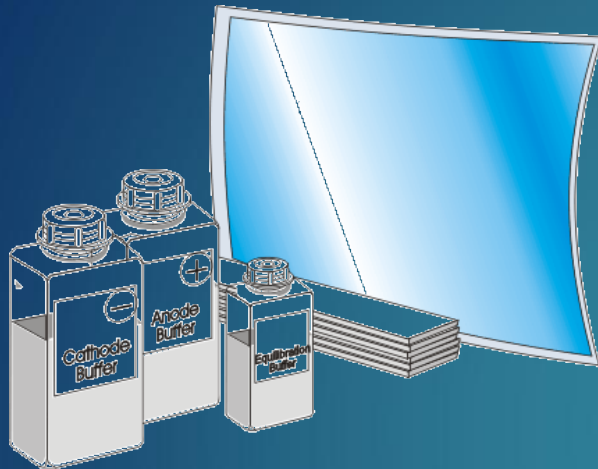
- 25 X 2 Acetate of cellulose Strips (8 Samples)
- 1x500 mL Buffer HEMOGLOBIN ready to use
- 2x250 mL Ecologic Solution Destain
- 1x200 mL Stain ready to use
- Dry strip paper 92 x 40 mm
- 20 Dry Applicator 70 x 13 mm
- 2 Migration Chamber 70 x 20 mm
- Smart Card 50 test



To Prepare the ecologic destain with distilled water:
Bring it to 5 Liters

Fill the distilled water tank
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KIT HEMOGLOBIN



KIT HEMOGLOBIN 200 TEST
CODE: 08CDRM2

CONTAINS:

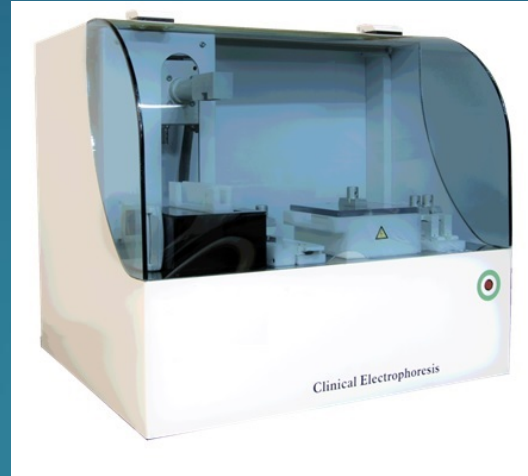
- 25 X 2 Acetate of cellulose Strips (4Samples)
- 1x500 mL Buffer HEMOGLOBIN ready to use
- 2x250 mL Ecologic Solution Destain
- 1x200 mL Stain ready to use
- Dry strip paper 92 x 40 mm
- 20 Dry Applicator 70 x 13 mm
- 2 Migration Chamber 70 x 20 mm
- Smart Card 50 test



To Prepare the ecologic destain with distilled water:
Bring it to 5 Liters

Fill the distilled water tank
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Elpho



- 1) Dedicated for
- 2) Computer
- 3) Automation
- 4) Test /process
- 5) Automation Fluidic
- 6) KIT
- 7) Costs KIT
- 8) Sistem Voice
- 9) Software

Human & Veterinary

INTEGRATED

TOTAL

16 Samples

TOTAL

+ QUALITY

COMPETITIVO

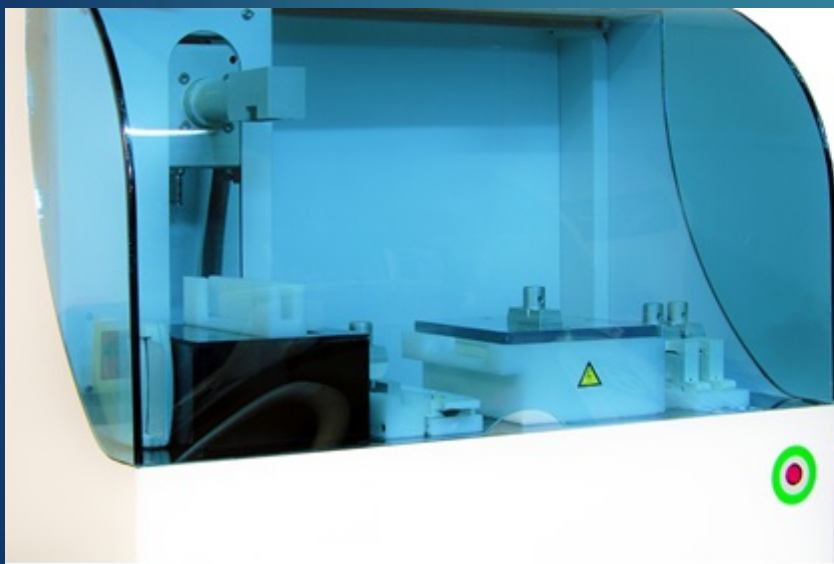
YES

MODIFIED

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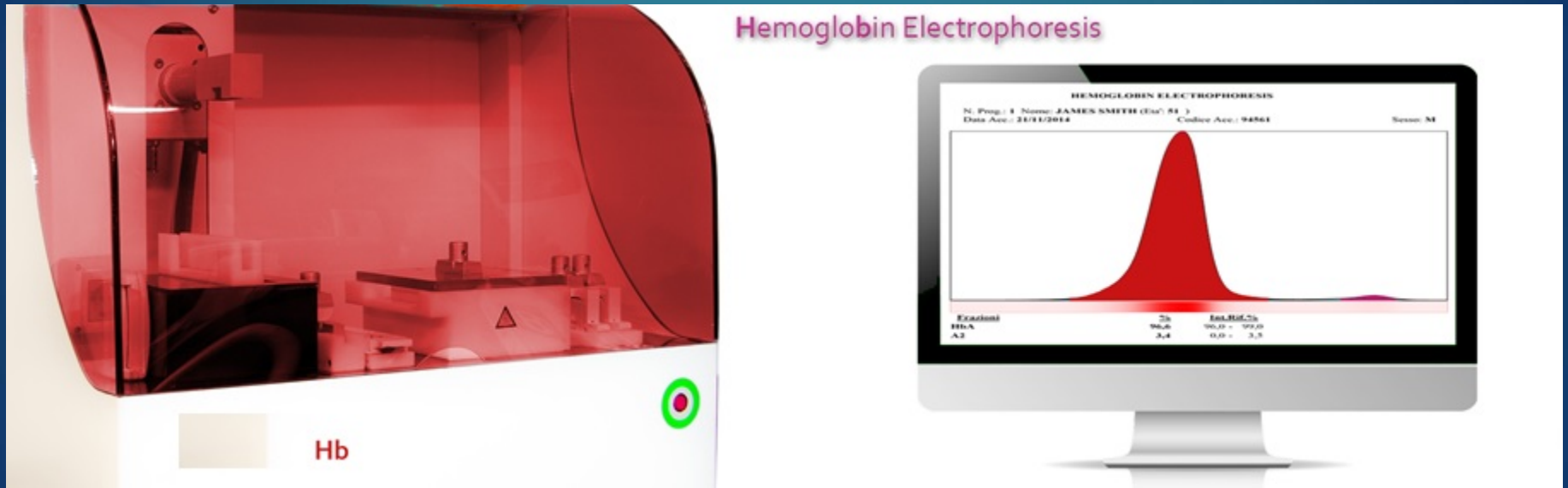
Elpho SERUM PROTEINS



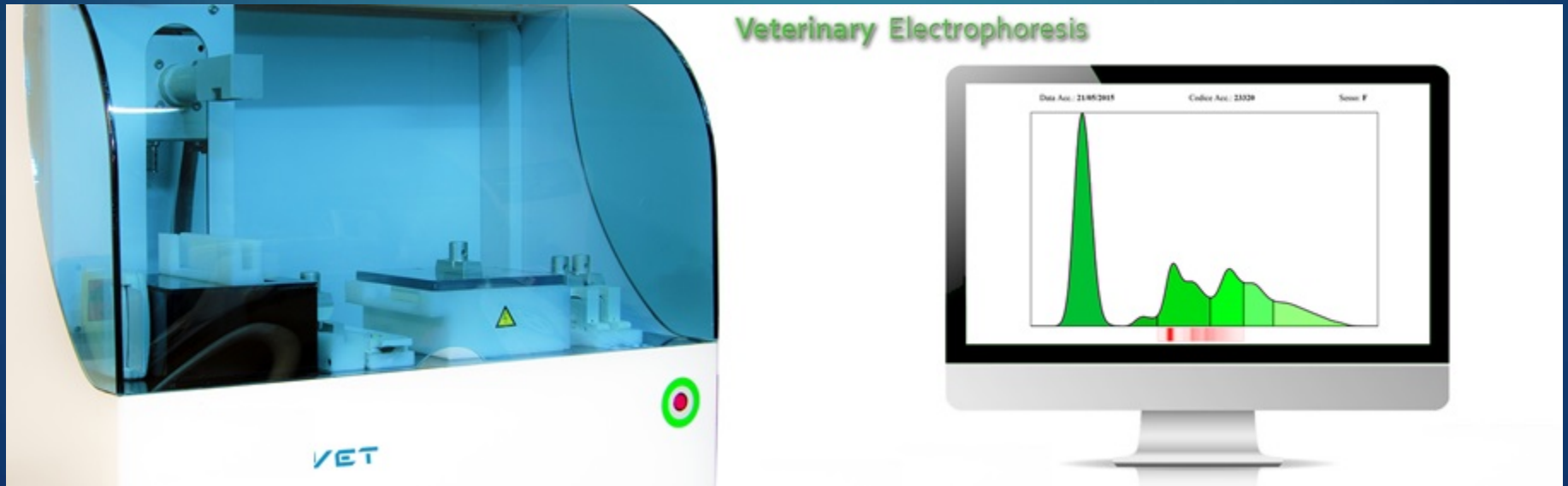
Serum Proteins Electrophoresis



Elpho HEMOGLOBIN

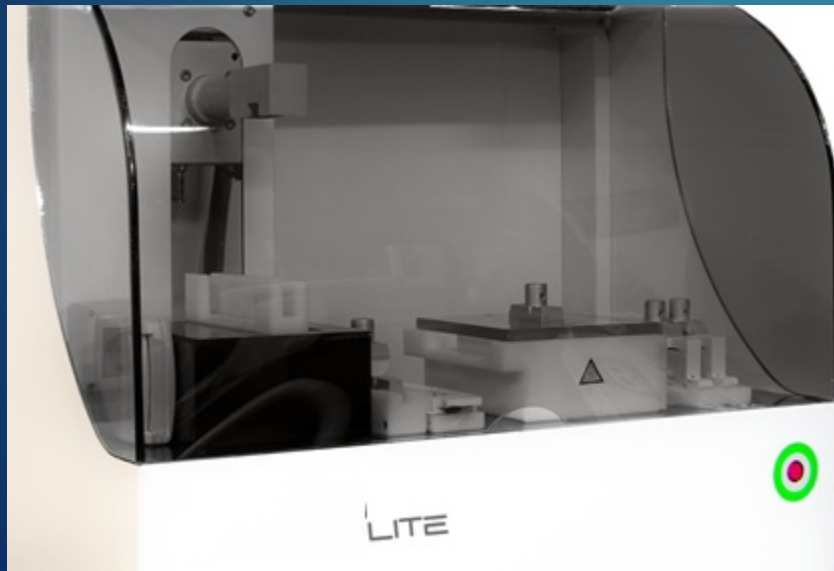


Elpho ELECTROPHORESIS VETERINARY

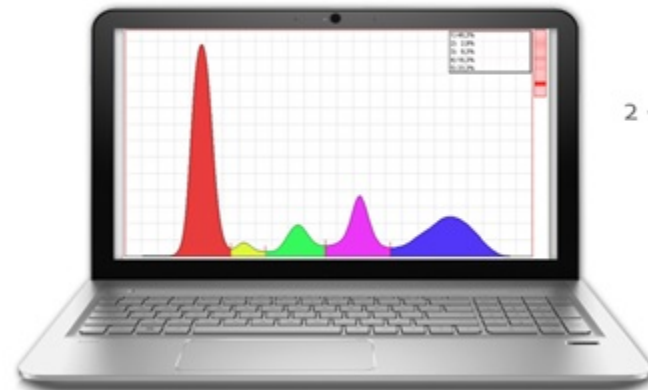


Elpho

ELECTROPHORESIS 2-4-8 Samples



Electrophoresis for 2-4-8 Samples only



External PC



2 - 8 samples max

Proteins
Hemoglobin

Manual Load
Buffer