



 **TECNILABO**

BLOOD LINE

-86°C / +40°C



EXCELLENCE FOR TRANSFUSION LABORATORIES

BLOOD LINE

Low and ultra-low temperature **freezers** for red blood cells and Fresh Frozen Plasma (FFP) storage; **thawers** for FFP; blood bank **refrigerators**; **incubators** and **agitators** for platelets.

- **Advanced technology**
- **Optimal thermal insulation**
- **Automatic defrosting** and **anti-condensation**
- Integrated and remotely controlled **temperature** and **malfunction alarms**
- **Natural refrigerants** with low environmental impact
- **Two temperature probes** (system control and display)
- **Safety control** and **disaster recovery**: guaranteed operation even in the event of T-probe and/or CPU failure
- Connection possibility to **hospital management systems**

Thanks to the Medical Device Certification (2017/745 - MDR and 93/42/EEC - MDD), we are able to support hospitals, blood banks and testing laboratories

We guarantee high temperature accuracy and maximum safety for an optimal storage of samples

DONATION

WHOLE BLOOD

Blood Bank Refrigerators

HAEMO HR/HAEMO

Cold Rooms

PE BBR

+4°C

+4°C

APHERESIS

SEPARATION

PLASMA

Quick Freezing

-60°C/
-70°C

Shock Freezers
KPFF/KPFF V

FFP STORAGE

Freezers
KBPF HGD/KBPF

-20°C/
-40°C

Freezers
K40

-20°C/
-45°C

Cold Rooms
PE PFS

-30°C/
+4°C

Ultra-Freezers

-85°C

RED BLOOD CELLS

Short Period
Conservation

Blood Bank
Refrigerators
HAEMO HR/
HAEMO

+4°C

Long-term
Conservation

Ultra-Freezers

-85°C

PLATELETS

Conservation

Incubators and Agitators
WRV/KWAP

+22°C

PLASMA

Thawing

Thawers
WPDF

+37°C/
+40°C

BLOOD BANK REFRIGERATORS

+2°C / +6°C

HAEMO (HR)



Excellent insulation with 65mm polyurethane foam



Vertical solutions



Solid or glass door



AISI 304 internal surface



AISI 304 drawers with steel dividers (optional)



Air defrosting and condenser technology without forced ventilation



Integrated safety thermostat with anti-freeze and anti-heat function

Class IIa Medical Devices

Capacity from 150 to 400 litres



MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	DRAWERS
HAEMO 180 (HR)	130	520x470x670	650x670x1100	2
HAEMO 310 (HR)	255	530x460x1400	670x670x1830	5
HAEMO 400 (HR)	310	530x460x1650	670x670x2080	6

BLOOD BANK REFRIGERATORS

+2°C / +6°C

HAEMO



- Excellent insulation with 80mm polyurethane foam
- Vertical solutions with single or double door
- Solid or glass door
- AISI 304 internal surface
- AISI 304 outer surface (optional)
- AISI 304 drawers with dividers (optional)
- Monoblock system** to maximise internal storage volume

Possibility of installing the refrigeration unit separately (SPLIT version)

Integrated safety thermostat with anti-freeze and anti-heat function

Class IIa Medical Devices

Capacity from 400 to 1500 litres

Option with 2 alternating systems (TG version)

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	DRAWERS
HAEMO 400	365	500x530x1370	600x620x1900	6
HAEMO 700	600	590x670x1510	740x800x2030	7
HAEMO 1500	1315	1300x670x1510	1460x800x2030	14

PLASMA SHOCK FREEZERS

HORIZONTAL STRUCTURE (KPFF)



- Excellent insulation with 175mm polyurethane foam
- Horizontal structure with 6 or 12 compartments
- Vertical positioning of the bags to allow a **proper deaeration** of the bags
- AISI 304** internal and external surfaces
- Possibility of **simultaneous freezing** of different size bags in separate compartments
- 7" touch screen display with barcode reader/RFID
- Use of **low GWP** and **high thermal efficiency** refrigerants

Capacity
24 / 48 standard
bags (230-300 ml
plasma)

**Class IIa
Medical Devices**



MODEL	EXTERNAL DIM.	COMPARTMENTS
KPFF 24B	1200x900x1250	6
KPFF 48B	1800x900x1250	12

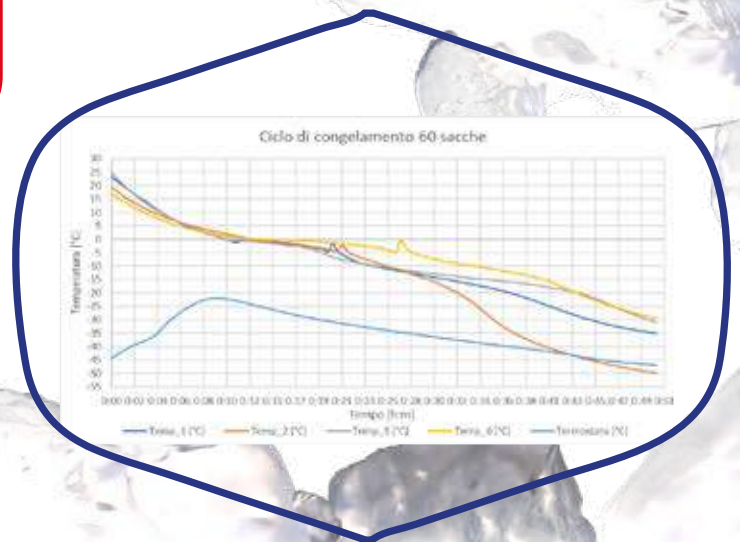
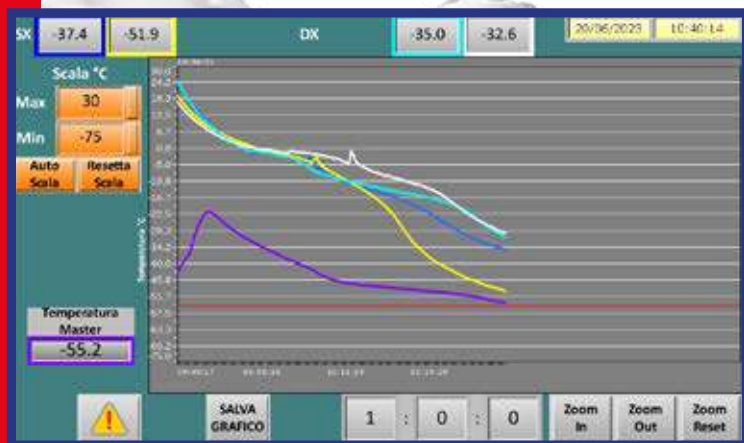
PLASMA SHOCK FREEZERS

VERTICAL STRUCTURE (KPFF V)



- Excellent insulation with 140mm polyurethane foam
- Vertical structure with 2 or 4 freezing shelves
- Shelves inclined by 5° to allow a proper deaeration of the bags
- AISI 304 inner surface and satin-finished steel outer surface
- PLC 10" touch screen display with barcode reader/RFID
- Use of low GWP and high thermal efficiency refrigerants

**Class IIa
Medical Devices**



Capacity
26 / 52 standard
bags (230-300 ml
plasma)

MODEL	EXTERNAL DIM.	SHELVES
KPFF 26 V	1200x880x1805	2
KPFF 52 V	2105x880x1805	4

PLASMA FREEZERS -20°C/ -40°C

WITH AUTOMATIC DEFROST (KBPF HGD)



A line of high-performance **freezers** to meet even the most challenging conditions.

- Excellent insulation with 90mm polyurethane foam
- AISI 304 internal surface
- Automatic hot gas defrosting with maximum temperature increase of 5°C
- AISI 304 drawers (optional)

Class IIa Medical Devices

Colour touchscreen display



Cloud data storage

Capacity from 400 to 600 litres



Remote alarm control and LAN connection

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.
KBPF 400 HGD	402	550x550x1330	730x800x1938
KBPF 600 HGD	600	550x744x1425	730x933x1985

PLASMA FREEZERS -20°C/ -40°C

WITHOUT AUTOMATIC DEFROST (KBPF)



A line of freezers at **reduced energy consumption** and **high performance** ($\pm 5^\circ\text{C}$).



Excellent insulation with 90mm polyurethane foam



AISI 304 internal surface



Undercounter and vertical versions for **maximum flexibility**



AISI 304 drawers (optional)

**Class IIa
Medical Devices**

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.
KBPF 100	127	550x550x420	730x790x832
KBPF 250	254	550x550x840	730x800x1448
KBPF 400	402	550x550x1330	730x800x1938
KBPF 600	632	550x760x1512	730x950x2140



Display touch
colour



Two internal
counter doors
(optional) on KBPF
600 model

Capacity from 100
to 600 litres



FREEZERS -20°C / -45°C

A line at **maximum performance** ($\pm 5^\circ\text{C}$) and **reliability**, with reduced power consumption levels.

**Class IIa
Medical Devices**



Colour
touchscreen
display

Triple heated gasket
to prevent ice
formation



Remote alarm control
and LAN connection

VERTICAL

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	DOUBLE DOOR VERSION
K4057	122	500x450x540	890x825x1820	
K4056	261	501x470x1108	890x855x1820	
K 40 58	358	702x460x1110	1050x840x1840	✓
K 40 60	506	702x650x1110	1050x1030x1840	✓
K4062	606	802x590x1280	1160x970x1999	✓
K4064	708	802x690x1280	1160x1070x1999	✓
K 40 66	809	852x730x1300	1200x1110x1999	✓

HORIZONTAL

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.
K4052	110	550x400x500	900x840x1270
K4052E	174	642x492x550	900x840x1270
K4054	230	1150x400x500	1500x870x1270
K4054E	334	1240x490x550	1500x870x1270
K4055	476	1220x520x750	1935x910x1110
K4055E	705	1860x480x790	2550x874x1120
K405578	801	1780x600x750	2488x982x1100

UNDER THE COUNTER

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.
KUB4075	86	428x343x588	990x635x780

Provision for plastic and
steel shelves with RFID
technology

Excellent insulation
with 140 mm
polyurethane foam

FREEZERS -20°C / -45°C BIOBANK VERSION

The -45°C freezers are also available in the version *Biological Bank* for **extremely safe storage** of samples and plasma.

Booster Mode

Temporary activation of both systems following door openings or increase in thermal load

Twin group

Two independent systems that guarantee maximum safety even in the event of faults

Class IIa Medical Devices







VERTICAL

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	DOUBLE DOOR VERSION
K4056S	266	501x470x1820	1185x855x1820	
K4058S	358	702x460x1820	1050x920x1840	✓
K4060S	506	702x650x1840	1050x1110x1840	✓
K4062S	606	802x590x1999	1160x1050x1999	✓
K4064S	708	802x690x1999	1160x1150x1999	✓
K4066S	809	852x730x1999	1200x1190x1999	✓

HORIZONTAL

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.
K4052S	110	550x400x500	900x840x1270
K4052ES	174	642x492x550	900x840x1270
K4054S	230	1150x400x500	1500x870x1270
K4054ES	334	1240x490x550	1500x870x1270
K4055S	476	1220x520x750	1935x910x1110
K4055ES	705	1860x480x790	2550x874x1120
K405578S	801	1780x600x750	2488x982x1100

ULTRA-FREEZERS -85°C

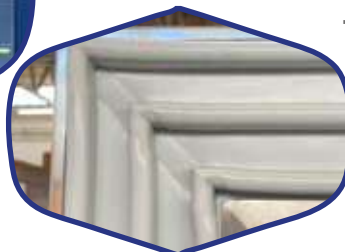
-  **Silent** and energy efficient
-  **Perfect insulation** guaranteed by PUR foam and/or V.I.P. (Vacuum Insulation Panel) to increase the warm-up time
-  **Fast pull-down and recovery times** even with frequent openings and large sample loads
-  Inner case in **AISI 304** (AISI 316 optional)
-  Internal-external pressure compensation valve for easy opening
-  **Cascade system** with the use of pure gases for **easy maintenance**



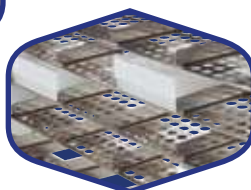
Colour
touchscreen
display



Remote alarm control
and LAN connection



Triple heated gasket
to prevent ice
formation



Accessories: drawers,
front or lateral extraction
racks, cardboard or
polypropylene boxes, CO₂
or LN₂ backup

VERTICAL

(PUR insulation)

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	VERSION DOUBLE DOOR
K57	122	500x450x540	890x825x1330	
K56	261	501x470x1108	890x855x1870	
K58	358	702x460x1110	1050x840x1890	✓
K60	506	702x650x1110	1050x1030x1890	✓
K62	606	802x590x1280	1160x970x2050	✓
K64	708	802x690x1280	1160x1070x2050	✓
K66*	809	852x730x1300	1200x1110x2050	✓

*VIP insulation

Also available in double door version

HORIZONTAL

(PUR insulation)

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.
K52	110	550x400x500	900x840x1270
K52E	174	642x492x550	900x840x1270
K54	230	1150x400x500	1500x870x1270
K54E	334	1240x490x550	1500x870x1270
K55	476	1220x520x750	1935x910x1110
K55E	705	1860x480x790	2550x874x1120
K5578	801	1780x600x750	2488x982x1100



ULTRA SLIM

(VIP insulation)

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	BOXES
K58US	349	490x570x1248	765x935x1875	240
K60US	501	588x656x1300	885x1032x1949	320
K62US	577	600x770x1248	875x1110x1875	400
K66US	831	730x850x 1340	994x1141x1965	600

UNDER THE COUNTER

(VIP insulation)

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.
KUB75	86	428x343x588	990x635x780



Available in undercounter version compatible with WSplug furniture from Labosystem

ULTRA-FREEZERS -80°C

BIOBANK VERSION

ULT -80°C freezers are also available in the version *Biological Bank* for **maximum storage safety** of samples, plasma and blood.

Designed for use in biobanks.

Booster Mode

Temporary activation of the two systems after opening the door:

- temperature reduction of small quantities of samples
- from +15°C to -80°C in less than 2 hours

Twin group

Two independent cascaded two-stage systems with alternating operation doubling the lifespan of the freezer

Class IIa Medical Devices

VERTICAL

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.	VERSION DOUBLE DOOR
K56S	266	501x470x1108	1185x855x1820	
K58S	358	702x460x1110	1050x920x1840	✓
K60S	506	702x650x1110	1050x1110x1840	✓
K62S	606	802x590x1280	1160x1050x1999	✓
K64S	708	802x690x1280	1160x1150x1999	✓
K66S	809	852x730x1300	1200x1190x1999	✓

HORIZONTAL

MODEL	NET CAPACITY	INTERNAL DIM.	EXTERNAL DIM.
K52S	110	550x400x500	900x840x1270
K52ES	174	642x492x550	900x840x1270
K54S	230	1150x400x500	1500x870x1270
K54ES	334	1240x490x550	1500x870x1270
K55S	476	1220x520x750	2395x910x1110
K55ES	705	1860x480x790	2990x874x1120
K5578S	801	1780x600x750	2948x982x1100

Constant temperature of -80°C even with one operating system only

ULTRA-FREEZER -80°C

ULTRA PERFORMANCE VERSION

The Ultra Performance version of ULT freezers guarantees **maximum temperature stability** with **reduced energy consumption**.



Variable-speed compressors with inverter technology

Class IIa Medical Devices

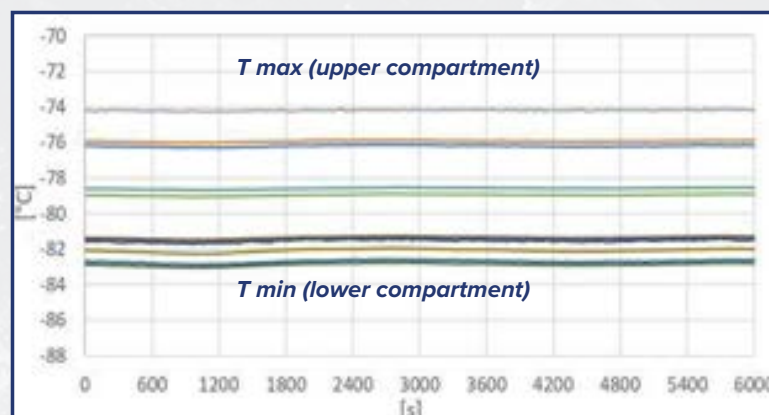
Sustainable materials

Available in Standard or Ultra Slim versions

Perfect thermal insulation guaranteed by PUR and V.I.P.



Colour touchscreen display



THAWERS

FOR PLASMA AND STEM CELLS (WPFDF)



**Class I
Medical Devices**

**4-6 standard bags
2-3 apheresys**

Complete process tracking



A dedicated line for fast, safe, uniform and independent thawing **up to three cycles simultaneously**, patented EU/IT.

Antibacterial plastics

- Multiple sensors in each compartment for an **optimal temperature control**
- Possibility of temperature or time cycles
- Complete separation between the bags and the heating water for maximum safety
- Removable pockets**, washable and sterilisable
- Separate compartments** allowing different settings and independent cycles



**Barcode and
RFID TAG reader**

**Silent and
vibration-free**



PLATELET INCUBATORS

WRV

A line with different capacity, floor-standing and countertop solutions to meet every need.



- Excellent insulation with polyurethane foam or wool fibre
- AISI 304 internal surface
- Glass door for a maximum visibility
- Power and control of KWAP line agitators

**Class I
Medical Devices**

**Capacity up to
720 standard bags**

MODEL	EXTERNAL DIM.	BAGS
W96RT HPL	690x620x1100	96
WRV 700 HPL	710x930x2030	360
WRV 1500 HPL	1420x800x2030	720

PLATELET AGITATORS

KWAP



- Structure in AISI 304
- 63 cycles/minute standard oscillation
- Variable speed (optional)
- Integrated operation with KW incubators or stand-alone



Capacity 24-180
standard bags,
12-90 apheresis bags








**Class I
Medical Devices**

MODEL	EXTERNAL DIM.	SHELVES	BAGS
KWAP 24	490x430x277	4	24
KWAP 48	490x430x400	8	48
KWAP 54	490x430x440	9	54
KWAP 96	490x430x680	16	96
KWAP 108	490x430x740	18	108
KWAP 180	490x490x740	18	180

COLD ROOMS

PE BBR/PE PSF

Cold rooms up to 23m³ for fresh frozen plasma or whole blood storage.

-  **PE BBR** series with positive temperature +2°C/+8°C for whole blood storage
-  **PE PSF** series with negative temperature -20°C/-30°C for fresh frozen plasma storage
-  **Dual system** refrigeration to maximise safety (Twin Group TG)
-  **AISI 304** internal surface
-  **Excellent insulation** with 80mm (PE BBR) or 140mm (PE PSF) polyurethane foam
-  **Remote cooling system** (Split)
-  **7" colour touchscreen display**

Class IIa Medical Devices

Numerous accessories and interior furnishings available

MODEL	VOLUME (m ³)	INTERNAL DIM.
PE BBR 12	12.8	2600x2000x2400
PE BBR 16	16.1	2800x2400x2400
PE BBR 22	22.4	3600x2600x2400

MODEL	VOLUME (m ³)	INTERNAL DIM.
PE PSF 12	12.8	2600x2000x2400
PE PSF 16	16.1	2800x2400x2400
PE PSF 22	22.4	3600x2600x2400



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