

IM AUFTRAG DER FORSCHUNG
SUPPORTING RESEARCH -
UNIEQUIP
EXPERIENCE
OVER
40
YEARS

MANUFACTURER OF EQUIPMENTS FOR MODERN LABORATORIES

UNIEQUIP

www.uniequip.com



INDEX

Page No.

UNIVAPO Vacuum Concentrator Centrifuge	1 - 2
UNIVAPO JUMBO 300 Vacuum Concentrator Centrifuge	3
UNIVAPO GYRATOR Vortexing Evaporation System	4
UNICRYO Cold Traps Freeze Drying Table Top Equipments	5
VACUCENTER Diaphragm Vacuum Pump	6
UNIGELDRYER Lab Gel Dryer	7
UNIPACK Power Supplies	7
MASTERBLOT Vacuum Blotter & Dot Blotter	7
Digi-Gel System Gel Documentation System	8
UV-Transilluminator	8
THERMAL CYCLER & UV / DNA WORKSTATION	9
THERMOLEADER Dry Block Cool & Heat Bath	10
VORTEMP Gyrator with thermostatic and cooling function	10
VORTEXER	11
MAGNETIC STIRRER-VORTEXER-STIRRER	12
SHAKING EQUIPMENT	13 - 14
GENERAL LABORATORY EQUIPMENT Water Bath Chiller	15
INCUBATION EQUIPMENT	16
INCUBATION & OVEN EQUIPMENT	17
UNIFLOW Laminar Flow Cabinet	18
UNICRYO Freezer	19
Uniflow Fume Cupboard & UV Workstation	20
UNICHROMAT Chromatography Cabinet	21
AUTOCLAVES	22
CENTRIFUGES	23
Water Purification Equipment	24
Satellite of DNA Preparation	25

Dimensions and specifications are subject to change without notice for further improvements on design.
Dimensions may vary dependent on different accessories used.

UNIVAPO

Vacuum Concentrator Centrifuge

Vacuum and centrifugal force combine to provide a gentle and highly efficient method of evaporation, drying and concentrating biological liquids.



UNIVAPO 100/150 ECH
Free selection of temperature and time parameters can be easily set over touch of a few buttons on the control panel and also for the timer with automatic switch off.



UNIVAPO 100/150 H
Standard selection +39°C
Optional: analog temperature setting up to +80°C

Technical Informations

UNIVAPO ECH: with the new temperature control, we offer 2 operation modes: normal operation with pre selection of temperature and timing with memory function. Large and good visible digital display presents the selected temperature and time. Over soft-touch buttons you can activate the start function. The selected program will start and a signal sound will inform you about the end of the process.

UNIVAPO H: classic on/off power and heater function. Centrifuge drive starts automatically after closing the perspex lid. We supply two different versions of heating, fixed temperature +39°C or variable over the same capillary thermostat placed in front panel working from ambient to +80°C.

UNIVAPO ECH and UNIVAPO H are supplied with analog vacuum gauge.

Vacuum manometer is chemical resistant.

Both centrifuges are supplied with two pieces of 2-way teflon fitted vacuum valves.

On request we can supply automatic bleeder valves.

UNIVAPO ECH and UNIVAPO H are supplied with teflon coated chambers.

General Informations

The UNIVAPO offers a vacuum-tight rotor chamber. Fast concentration of your samples is guaranteed. The preset relatively low rotational speed of the magnetically driven rotor develops enough centrifugal force so that boiling (foaming) is avoided. Your samples are concentrated in a very gentle manner and are 99% recovered.

Application: For preparative protocols of DNA, RNA, proteins, peptides, amino-acids, hormones, enzymes, with maximum recovery. For all possible analytical protocols.

UNIVAPO Specifications		
Model	UNIVAPO 100 ECH / H	UNIVAPO 150 ECH / H
Fixed speed	1250 rpm	1250 rpm
Temperature	up to +80°C higher temperature is possible over setpoint change	up to +80°C higher temperature is possible over setpoint change.
Dimension (w x d x h)	290 x 370 x 295 mm	340 x 400 x 375 mm
Chamber dia.	250 mm	300 mm
Weight	20 kg	30 kg
Electrical supply	220V, 50Hz / 300W	220V, 50Hz/ 500W

DISC ROTORS FOR UNIVAPO	
UNIVAPO 100 72-11 for 72 tubes 1,5/2,0 ml 40-13 for 40 tubes 12/13 mm 24-18 for 24 tubes 18 mm 10-24 for 10 tubes 24 mm Rotor for 6 x 15 ml Falcon tubes Special rotors on request	UNIVAPO 150 144-11 for 144 tubes 1,5/2,0 ml 76-13 for 76 tubes 12/13 mm 46-18 for 46 tubes 18 mm 30-24 for 30 tubes 24 mm Swing-out-rotor for 4 microtiterplates Swing-out-rotor for 2 deepwellplates Special rotors on request

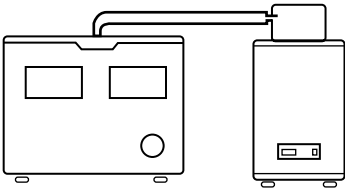
Trolley for UNIVAPO SYSTEMS

UNIVAPO SYSTEMS for optimal operation:

2

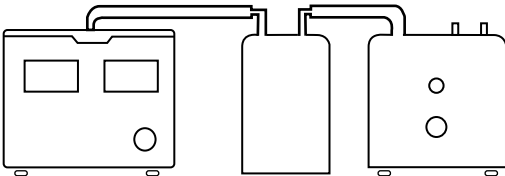
UNIVAPO, in combination with UNIJET, covers 90% of all applications UNIVAPO SYSTEM with Aspirator Vacuum Pump:

UNIVAPO + UNIJET I, UNIJET II or UNIJET IV



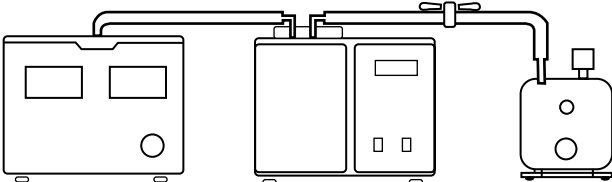
UNIVAPO SYSTEM with Diaphragm Vacuum Pump:

UNIVAPO + VACUCENTER/8, VACUCENTER/2 + Washing bottle 1000 ml



UNIVAPO SYSTEM with Rotary Vane Vacuum Pump:

UNIVAPO + UNICRYO 2L-60°C, UNICRYO 2 x 2L + UNIVAC D04, UNIVAC D08



UNIVAPO+UNIJET

UNIVAPO JUMBO 300

Vacuum Concentrator Centrifuge with integrated UNICRYO Cold Trap



Inner chamber diameter	440 mm x 250 mm deep
Temperature range	5°C over amb. up to +80°C
16 Amp	1000 Watt
Temperature control	proportional
Timer	99,9 hours
Current	220V 50Hz
Speed & G-force	rpm 700/450
Foaming below	256 g-force
8 x Mikrotiter Plates	cap.max. 8 x micro plate
Chamber size W x H	440mm x 250mm
Weight	60 kg
Fix angle & disc	Rotor

3

The Univapo Concentrator Centrifuge offers a new perspective in evaporation of bigger quantity of biological liquids in combination with a bigger rotor chamber for high capacity of probe material.

This centrifuge is made for the Pharma Industry and special Laboratories producing OligoNucleids.

This new Jumbo version is based on the same technique like our model Univapo 150 but the motor drive is much stronger and we need 2 x 3 magnets (total 6) to transfer the power in the upper drive section for the rotor transfer. This technique we have invented in 1978 and used since then.

The biggest rotor we have made is a double stage rotor for total 8 microtiter plates also usable for 5 cm high plates. We will made all other classic sizes in order of the customer question. The chamber diameter offers 440mm x 250 mm deep.

The Jumbo Concentrator Centrifuge will offer all The popular electronic control for free selection of temperature between ambient and +80°C and timer. The heating transfer is managed of strong heating mantel electric and we control the vacuum via vacuum sensors over analog vacuum gauge. This vacuum control system is not sensitive in

reference of aggressive chemicals. We can also offer digital Vacuum Controller with pressure control and magnetic valves. The digital control device is very chemical sensitive.

The final speed of the Jumbo centrifuge sets at over 700 rpm. Important is the start speed and we need 3 seconds to drive the speed over 250 rpm. After 250 rpm the G-forces are stronger than the vacuum pressure and the liquid on top cannot boil up or foam. The long know how we have in this technology makes sure the probe material will evaporate with the same careful behavior as all our smaller concentrator centrifuges.

We offer 2 different vacuum systems: our Diaphragm Pump VACUCENTER with 2 mbar final vacuum or the version with MC2L-60°C and dual stage vacuum pump with final vacuum of 0,04 mbar > model D04 & D08m³/hour. The classic lubrication Vacuum Pump manages bigger quantity of liquids in a very short time. The Diaphragm Pump is better if the liquids are very toxic and very aggressive like Acetone, Acetonitrile. If we get the correct information regarding your evaporation liquid we will offer the best equipment combination for the best result.

UNIVAPO GYRATOR

Vortexing Evaporation System



UNIVAPO GYRATOR

Through the Vortex-movements big quantities of liquids can be evaporated in short time. The vertical position of the tubes inside the disc rotor enables to process larger quantities of liquids. Maximum 6 x 500 ml. The Gyrator is equipped with a custom rotor.

Through the direct innovative heating of the rotor and the rotor chamber we reach a perfect heat transfer in direction of the tube and liquid. This is the big advantage in opposite to our classic UNIVAPO spinning concentrator centrifuge.

Programmable: Ramping parameters of time, speed and heat can be easily set with the touch of a few buttons on the control panel.

Rotor: we design and customize rotors for every request.

Specifications:

External dimensions (w x d x h):	450 x 430 x 360 mm
Max. temperature :	max. +80°C
Heating power:	500 W
Chamber diameter:	295 mm, Teflon chamber
Weight:	42 kg
Max. capacity:	6 x 300 ml tubes (optional adapter for 6 x 600 ml)
Speed up to:	1200 rpm (in reference of rotor)
Orbit:	6 mm

Features of the new digital control:

- Separated control for Timing and Heating. Heating working +5°C over ambient up to +80°C
- Time start from 0 - 99,99 hours.
- Vortexing speed control will start per analog control. The user has to check the surface under visible control. The quantity of liquid will determine the vortexing speed. The speed will always start under soft reaction.

Vacuum control : in case of the aggressive liquids we do not use digital vacuum control. Most of the electronic vacuum controllers are working with very sensitive sensors and the aggressive vapor is knocking out the sensor in a short time. The electronic sensor needs mostly some days return to normal action. Our analog vacuum meter does not have this problem. Above the vacuum meter we install a needle vacuum valve for control function inside the rotor chamber. This needle valve will be very helpful if the vacuum pump supplies too strong vacuum into the vacuum chamber. Light evaporating liquids like : Alcohol, Acetone, Acetonitrile, Ether ect, will evaporate very fast under vacuum with 2-8 mBar. Oil-lubricated vacuum pumps are not suitable for this job. The aggressive chemical vapor will destroy this type of pump in a very short time. Please follow our advice and use UNJET II or Diaphragm Pumps.

Optionally available:

- Glass lid
- Automatic bleeder valve
- Adapter for a higher rotor chamber (for max. 6 x 600 ml tubes)
- Temperature in-sample probe



vertical position of glass tubes spends higher content for better evaporation rate.

General Information

The UNIVAPO-GYRATOR-Evaporation System is ideal for preparation of samples in variety of application in drug discovery, agrichemistry, mycology testing and environmental and industrial analysis.

The GYRATOR processes large volume samples up to 10 times faster (in reference of liquid) than traditional centrifugal evaporation methods in reference of quantity of the probe material; it is ideal for preparation of samples in variety of applications in toxicology testing and biotechnology research.

The Gyrator is compact, easy to program and accommodates interchangeable sample blocks.

A real alternative to the Baloon Evaporator.

FOR UNIVAPO GYRATOR SYSTEM WE ADVISE TO USE UNIVAC PUMP

UNICRYO Cold Traps Freeze Drying Table Top Equipments

- Ice condenser 2, 4 or 6 liters
- Defrost heater
- Analog vacuum gauge
- Standard temperature -55°C
- Digital display on request
- CFC free cooling system
- Perspex top with vacuum in-and outlet for cold trap
- Small footprint
- Fuzzy logic
- Transparent Freeze Drying drum for 2, 4 and 6 liters Unicryo equipment.
- Variable drying platforms with heated or non heated surface
- Power supply for heating platform 24 Volt
- Special design on request



UNICRYO MC2L
supplied with disc manifold for FD flask.



5



UNICRYO MC4L or 6L
supplied with acrylic drum and shelf rack for FD ampoules



UNICRYO FREEZE DRYER DUO SYSTEMS
Two cold traps // All freeze drying accessories available
Available in 2 x 2 or 2 x 4 Liters



VACUUM PUMPS

UNIJET Aspirator Vacuum pump

- Energy saving and environmental safe vacuum system.
- Strong vacuum is created by pumping water through Teflon venturi jets.
- Teflon jets are designed for increase of 99% chemical resistance.
- Spends vacuum for Vacuum Concentrators, Geldryers, Blotters ...
- No oil needed, only deionized water.
- Analog vacuum gauge.
- UNIJET II and UNIJET IV are supplied with refrigerated water bath.
- UNIJET IV: you can regulate the vacuum. This model has 4 jet pumps.

MODEL	UNIJET I	UNIJET II
Air flow	35 liters/min	35 liters/min
Pressure	4mbar at+4°C	4mbar at+4°C
Dim, mm	370 x 250 x 400	362 x 438 x 638
Weight	8 kg	38 kg
Power	160 W	500 W
No. of jets	2	2



UNIVAC Oil Rotary High Vacuum pump

6

Features: low noise, direct drive, double stage, flexible coupling drive, fully adjustable gas ballast, low maintenance, drop-away carry handle, motor safety switch, oil mist filter included;
UNIVAC D04 Rotary vane vacuum pumps, 4,5m³/h, total vac. 0,05 mbar.
UNIVAC D08 Rotary vane vacuum pumps, 8,7m³/h, total vac. 0,05 mbar.
UNIVAC D16 Rotary vane vacuum pumps, 16m³/h, total vac. 0,05 mbar.



VACUCENTER Diaphragm Vacuum pump

Features: 100% oil-free transfer, chemically-resistant, maintenance-free, environmentally friendly, cool running motor even when in constant use;

MODEL	VACUCENTER/2	VACUCENTER/8	VACUCENTER/240	VACUCENTER/290	VACUCENTER/125
Delivery l/min	34	34	11,5	11,5	60
Ult. vacuum	2 mbar	8 mbar	240 mbar	290 mbar	125 mbar
Dimensions	297 x 226 x 171 mm	341 x 226 x 166 mm	187 x 123 x 90 mm	187 x 123 x 90 mm	282 x 155 x 210 mm
Weight	13.4 kg	12.6 kg	2.5 kg	2.5 kg	14.4 kg



EQUIPMENT FOR ELECTROPHORESIS

UNIGELDRYER 3545 & 2020

Drying your gels as fast as possible!

- Digital time & temperature control
- Aluminium drying surface: 35 x 45 cm or 22 x 22 cm
- Scintered polyethylene sheet
- Glass lid for security and heat storage
- Sealed drying area by silicone cover
- Effective and quick heat transfer
- Fast drying pre-vacuum
- 100% corrosion resistant
- SODA-active-prefilter optional
- RACK-SYSTEM with trolley optional
- Digital control with timer, alarm signal
- Temp. range up to +85°C
- Heating power 600 Watt
- Dimensions 2020 (w x d x h): 260 x 360 x 90 mm
- Dimensions 3545 (w x d x h): 495 x 485 x 85 mm



UNIPACK

Power Supplies

High performance, easy to operate instruments for any application from high voltage electrophoresis to high current blotting!

- Different versions from 100 to 2000 V, 400mA to 2 A, up to 200 W
- Programmable
- Unique in offering a graphic and text dual display
- 4 Output terminals

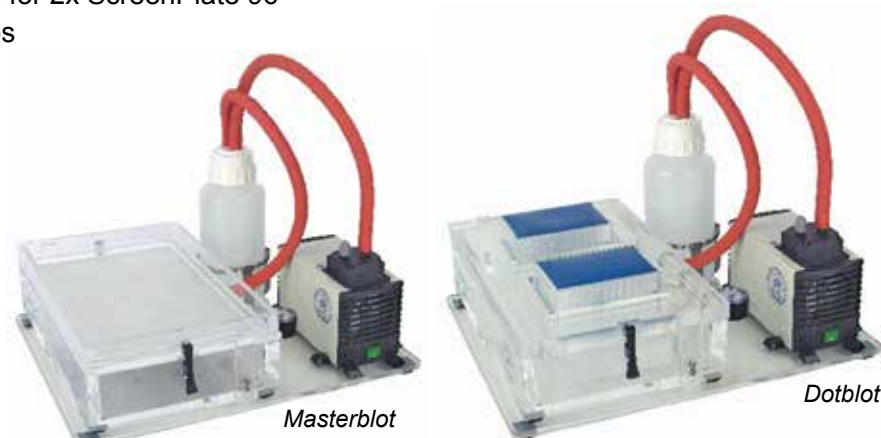


7

MASTERBLOT

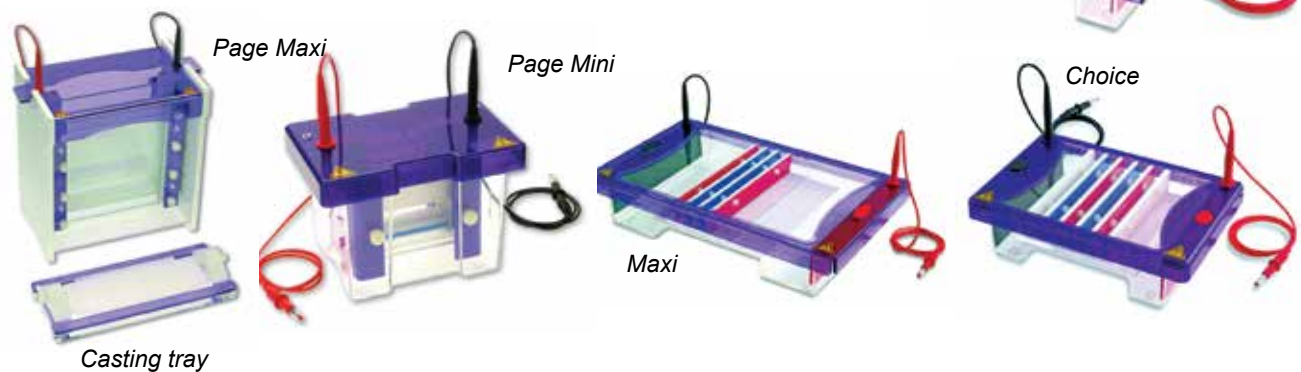
Vacuum Blotter & Dot Blotter

- Built-in oil free diaphragm vacuum pump for precise and stable low-vacuum
- Transparent plexiglass chamber (20 x 30 cm), big buffer container
- Pump and chamber are separated for flexible use
- Optional: Dot Blot Frame for 2x ScreenPlate 96
- One instrument for 2 Jobs



Electrophoresis Chambers Horizontal & Vertical

- Horizontal Chambers Gel sizes from 7 x 7 cm to 26 x 32 cm
- Vertical Chambers Gel sizes 7.5 x 8 cm, 16 x 17.5 cm
- High quality, high reliability, easy handling
- Excellent and reproduceable results
- "Plug and Go" Gel Casting with casting dams
- Up to 200 probes in one gel (Centipede System)
- Automatic and continuous buffer circulation for multiple buffer usage or very long runs
- Additional casting trays for up to 3 gels available
- A wide range of accessories and different inserts are available



UV-Transilluminator

8

- Light source: 6 x 8 W tubes
- Filter size: 20 x 20 cm
- Hi/Lo Intensity switch
- UV resistant plastic cover

Models:

Transilluminator 2020-254 20 x 20 cm with 254 nm
 Transilluminator 2020-312 20 x 20 cm with 312 nm
 Transilluminator 2020-365 20 x 20 cm with 365 nm
 Transilluminator 2020-254/365 20 x 20 cm with 254 and 365 nm
 We have also more models on request...



Digi-Gel System Gel Documentation System

- Great observation from front view window and TFT screen
- Convenient accesses on two sides for gel operation
- No need of EtBR filter while using with MS 312 nm UV Transilluminator
- User friendly
- Compact configuration and size
- Complete package
- Over 8 million pixels digital camera
- Camera max. view filled: 29 x 22 cm
- Camera max. image resolution: 3,264 x 2,448
- Auto focus
- Multi focus area selection
- 8" TFT liquid crystal screen
- High resolution screen
- Models with - CCD Cameras available



Laboratory Equipment for DNA application

Thermal Cycler based on Peltier Technology

Standard/ Gradient Thermal Cycler

A100/A200

96 Module: 96wells x 0,2ml
 9677 Module: 96wells x 0,2ml + 77wells x 0,5ml
 48 Module: 48wells x 0,2ml + 48wells x 0,5 ml
 384 Module: 384wells(A100 only)
 Multi-purpose Module: 9677 Module + In-situ Adapter

Specification:

- * Temp. range 0°C up to 100°C
- * Max. heating rate 3,5 °C / second
- * Max. cooling rate 3,0 °C / second
- * Temp. accuracy +/- 0,2 °C (35°C-100°C)
- * Temp uniformity +/- 0,2°C(at 95°C)
- * 7" Color Full Touch Screen, Graphical Display
- * Effortlessly Interchangeable Modules
- * Heated lid, step less adjustable
- * Durable Premium Peltier Elements
- * Large Storage of 10,000 Programs on board, unlimited with USB Flash Drive
- * Outstanding block temperature uniformity
- * Ensuring best possible experimental results
- * Global adaptable switch power>85V-265V

Osram UV Lamp 2 x 18 Watt

Gradient Cycler features

Gradient Accuracy < +/- 0,3°C (35°C - 100°C)
 Column Uniformity < +/- 0,3°C (at 95°C)
 Gradient Range 30°C ~ 99,9°C
 Gradient Capability 12 Column (Vertical)



UV / DNA WORKSTATION

Protecting the ambient environment

- Overall dimension (W x D x H) in mm 700 x 520x (360) x 640
- Inside dimension (W x D x H) in mm 640 x 450 x 550
- Carbon Dustfilter 5µ absorbtion prefilter to protect the UV Lamp
- UV Lamp 2 x 18 Watt > Osram
- With Light 1 x 24 Watt
- UV Light Timer digital controller of duration time
- Time Counter counting the working time



UNI EQUIP recommends Accumax pipettes for PCR preparation

(volumes from 0.5µl to 5ml)



Laboratory Equipment for DNA application

THERMOLEADER

Dry Block Heat Bath & HB-120

- Compact design
- HB120: dual block equipment
- Temperature range: up to +150°C
- Cap-Secure cover
- Optional external probe
- Microprocessor controlled
- Digital LCD display
- RS232 connection
- Interchangeable Blocks: 1,5ml / 2,0ml / 0,5ml / 0,2ml Stripes and 15ml FALCON / 45ml FALCON 96 place flat bottom well... and custom tailored blocks.



Mod. HB 120 with blocks

THERMOLEADER

Dry Block Cool and Heat Bath -10°C to +100°C Peltier-based

10



- Standard Block 40 x 0.5ml + 14 x 1.5ml
- Programmable
- Digital Microprocessor controller
- 128 x 64 Dot Matrix Display
- Temperature increase: 0.1°C
- Temperature calibration: Yes
- Temperature uniformity @ 37°C: +/-0.2°C
- Temperature accuracy @ 37°C: +/-0.2°C
- Operation modes:
 - Constant temperature (-10°C to + 100°C) Timer: 1-9999min.
 - Program operation: 1-4 steps and up to 9 cycles
 - Timer setting separately for each step
- Data Log: RS232

VORTEMP GYRATOR

with thermostatic and cooling function

Mod. MS 100 +5°C over ambient up to +100°C

Mod. MSC 100 0°C up to +100°C

- LCD liquid crystal display
- With power recovery, restore power after the instrument can automatically resume operation according to the original set
- Microprocessor control, temperature control linear, oscillation speed is accurate, small fluctuations
- Has a timer function, the range from 0 to 100 hours of training time for any set
- A variety of standard sample modules to choose from easy to replace.
- Temperature calibration and short jog function Oscillatory
- Brushless DC motor, long life, maintenance-free
- Multiple security features, meet the CE safety standards, safe and reliable



VORTEXER

VORTEMP

Shaking Incubator for Microtubes and Microplates



- Programmable speed, time and temp.
- Ramps for temp. and time settable in 5 steps
- Large digital display
- Temperature range from +37°C up to +85°C
- Optional +100°C
- Large capacity: 56 microtubes or 4 microplates
- Usable also in cold rooms
- Easy interchangeable platforms for microtubes and for microplates
- RS232 for GMP control
- Optional control software for PC
- Small footprint

VIBROMIX - UNITWIST 100

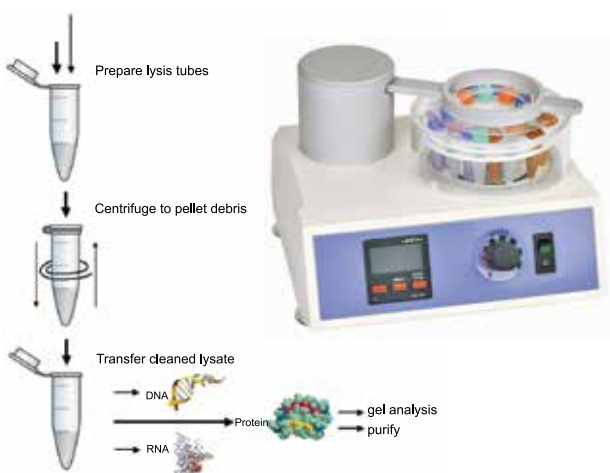
- Capacity: 1 20 x 1.5/2.0 ml Microtubes (Foam) included, replaceable clamps for different types of standard micro plates
- Digital display
- Load independent soft-start
- Timer function: 1 - 99min or continuous
- Speed 300-1800 rpm, Orbit 2mm
- Small footprint: 85mm x 100mm
- Can be used inside incubators (up to 40 °C)



11

UNIPREP

Gyrator 3-D Vortexing of Microtubes



- A new most effective and gentle way of vortexing your samples!
- Rotor capacity 24 microtubes
- Optimal resuspension of DNA
- Ideal for DNA purification protocols
- High quality nucleic acids because of minimal DNA sharing and maximized cell lysis
- Very good breakage even of plant cells
- Control of speed, time and frequency of vortexing guarantees standardization and reproducibility
- Automated procedure
- 3-D movement of microtubes during shaking activity

MAGNETIC STIRRER, VORTEXER, STIRRER

UNIMAG - Talent

Magnetic stirring + heating

This instrument series combines magnetic stirring up to a range of 1800rpm (adjustable) with a 18 x 18 cm heating plate to reach up to 450°C*+ > real time temperature adjustment by means of an external temperature probe. Tripod included.

- Microprocessor controller
- Large LCD screen to display more values at same time
- Surface specially coated for chemical resistance
- External temperature probe for medium
- Free-step rotation for speed adjustment
- Excellent suited for viscous liquids
- Over temperature safety device
- Heat indication for caution
- Platform size 18 x 18 cm



UNIMAG POWERTEX VORTEXER

0-3000 Rpm - 4 mm Orbit

Constructional Features:

- Well-balanced design and optimized safety shell style
- Basis with 3,5 kg and rubber feet for excellent stable operation which minimize the vibration and movement / noiseless
- Touch sensitive switch offers real-time mixing
- Variable speed control knob for mixing
- The non-spark BLDC motor offers preventive operations, quick and free-maintains
- Built in safety device from overload and over current
- Chemical resistant PP (Poly propylene) molded exterior
- A wide range of accessories available – (VMS0011 as standard offer)
- CE certificated



Small footprint



12

LABORATORY STIRRER

- We supply Laboratory Stirrers for low - high viscosity liquids!
- Stirring volumes up to 70 liters
- Speed up to 2000 rpm
- A wide range of stirring shafts are available
- Also versions with digital display



SHAKING EQUIPMENT

UNITWIST Orbital Shaker

Model 300 + Model 400



- Small footprint
- Load independent soft-start
- Different platforms for clamps, spring bars,...
- 4 axes power transfer
- Orbit: 40 mm (300) / 20 mm (400)
- Speed & Timer function
- Speed range 25-220 rpm (model 300) or 50-300 rpm (model 400)
- High loading capacity: 10 kg (model 300) or 25 kg (model 400)

UNITWIST 3-D

Rocker Shaker

- For all laboratory applications
- Variable speed from 10 to 100 rpm
- Adjustable agitation - from gentle to vigorous
- Low weight improves mobility
- 10 kg carrying capacity
- In combination with UNITHERM HB water bath for hybridizations, washes,...



13

UNITWIST RT

Rocking Table Shaker



- For use in cold rooms, incubators, ovens,... or in combination with UNIHOOD
- Compact design, smooth running, strong motor
- Adjusted tilt at a 4,5° or 5,5° or 7,5° angle position
- Speed from 0-50 oscillation per minute
- Moisture resistant enclosed motor
- Maximum 5 kg loading

UNITHERM WA 8 / WA 12 Water Bath

- With perspex lid
- Digital temp. control
- Temp. up to + 100°C
- Bath volume 8 liters or 12 liters



UNITHERM WA 25 Orbital Shaking Waterbath



First Waterbath with powerful, noiseless magnetic drive. German technology

- Temperature range up to +80°C
- Speed range 10-220 rpm
- Drive orbit 20 mm
- Digital display with acoustic alarm
- Microprocessor control
- Digital temperature and timer setting
- Shaking frequency adjustable
- Stainless steel lid

14

UNITHERM WA 25
with shaking platform and plastic clamps

Different sizes of clamps available:
25 ml, 50 ml, 100 ml, 250 ml, 500 ml, 1000 ml, 2000 ml

UNITHERM HB Hybridization water bath + UNITWIST 3D

- Temperature range up to +100°C
- Microprocessor controlled
- Fast heating hybr. water bath designed to facilitate Northern and Southern Blot Hybridization
- Combined with UNITWIST 3D Shaker



GENERAL LABORATORY EQUIPMENT

THERMOSTAT

Water Bath

- With stainless steel water bath
- Microprocessor temperature and time controller
- Available temp. range RT+5°C up to 100 °C (also available with cooling to -50°C)
- Audible and visible alarm for temperature and water level
- With interface to external water bath
- Pump (flux): 4L/min



UNITHERM WATERBATH WA 6/15T

Incl. Thermostat E5, Incl. Magnetic Stirrer 6 or 15 places

Waterbath

Allround dimensions : 596 x 270 x 187mm
 Bath dimensions : 410 x 25 x 80mm
 Weight : 6,2kg



Hang-in-Thermostat

Working temp. : ambient up to 60°C
 Temp. permanence : +/- 0,3K
 Temp. setting : digital
 Forwarding amount : 5l / Min
 Heating power : 1,0 KW
 Safety class : Class II-DIN12879
 Weight : 3,3 kg

Magnetic-Stirrer UNIMAG 15/6

Adjustable from : 50 to 850l / Min
 Max. stirring capacity:
 UNIMAG 15 : 15x250ml
 UNIMAG 6 : 6x500ml
 Performance:
 UNIMAG 15 : 15W
 UNIMAG 6 : 8W
 Weight:
 UNIMAG 15 : 2,8kg
 UNIMAG 6 : 2,2kg

15

UNITHERM 4/14D

Recirculating Chiller

- Small footprint and big performance
- - 10°C to ambient
- Environmentally friendly, saves water;
- Compact design with CFC-free refrigerant
- Uses: Cool up 4 PAGE electrophoresis chambers, also useful for thermocycler and water bath, cooling coils for UNIHOOOD, cooling blocks and rotary evaporators.



Incubation Equipment

UNITHERM CO₂ CO₂ Incubator



- 50 and 160 liters
- Built-in CO₂ changeover unit
- Coved corners for easy cleaning
- New anti-corrosion anode for easy set-up & tap water use
- Patented copper-housed HEPA filter for superior contamination prevention
- Factory pre-set door thermostat
- Pre-heated CO₂ gas inlet for increased temperature uniformity
- Front-mounted connections ... RS232 interface, parallel interface, CO₂ sample port, alarm contact, safety overtemperature control (3503-2 doesn't have RS232 and parallel interface)
- 4 digital displays for temperature, CO₂, humidity, data communication
- Picture shows model 160 liters
- 220-240 Volt / 50 Hz
- 185 Volt / 60 Hz on request

UNITHERM Incubator

16



EASY TO OPERATE -
FUZZY LOGIC CONTROL

- Temperature range: RT 5°C - 65°C
- CE confirmation, UNITHERM supports research
- Time setting range: 1-9999min
- **Microprocessor controller** with timing function ensures a stable and reliable use (see optional equipment)
- Independent **alarm system** for temperature - limiting ensures that experiments are safe and no accident can happen
- An **observation window** is installed behind main door. When the glass door is open, breeze circulation and heating system will automatically stop, which ensures no disadvantage of convection.
- Specular **stainless steel chamber**, film heating method ensures quick heating
- **Recorder and printer** (optional) are able to record or print set parameters and trace variation curves of the temperature (4~20mA standard signal)
- **Equipped with UV-lamp (254nm) on request // no front window**

UNITHERM Serial Oven



- **Perfect design**
- Chamber made in stainless steel
- Door supplied with safety window
- Unique "ebm" ventilation system - Made in Germany
- Microprocessor control unit
- Classic German design
- **Easy to operate - fuzzy logic control**
- Temperature Range: RT 5°C - 250°C (300°C on request)
- Open door with reliable anti-thermic handle
- Display for presetted temperature and current temperature.
- Time setting range: 1-9999min
- German standard over temperature protection device (3.1)
- UNITHERM supporting research
- CE confirmation

Incubation & Oven Equipment

UNIHOOD

Incubator hood with option for refrigeration

- This portable incubator hood can cover shaker, roller and other temperature sensitive equipments.
- Transparent perspex box
- Black back wall makes sure that the probe material is under best focus
- Temperature range from ambient up to +65°C
- As an option we offer a cooling coil system with UNITHERM 4/14 D chiller to drop the chamber temperature down to +8°C
- Available in three sizes
- Digital temperature and time control
- Power socket on the backside



UNIHOOD with shaker

UNITHERM 6/12

Hybridization Oven with Multifunction

- Integrated UNITWIST
- Orbital Shaker or 3-D Shaker or Rocking Shaker or Vortex Shaker
- Digital control with memory function for ramping, temp. and time and shaking speed
- Rapid heating ramp > max. +100°C
- Large capacity: 8 or 16 bottles
- Chamber illuminated



UNITHERM 6/12

Hybridization flask sizes:
150 mm x 35 mm 300 mm x 50 mm
300 mm x 35 mm 300 mm x 70 mm

17

HUMIDITY CONSTANT TEMPERATURE INCUBATOR

- Temperature range up to 85°C
- Humidity range up to 95%
- Size 100L, 150L, 250L
- Specular stainless-steel chamber, semicircular arcs at corners for easy cleaning
- Space between shelves in the chamber is adjustable
- Microprocessor controller for temperature and humidity ensures a reliable and precise control
- Independent alarm system for temperature-limiting ensures experiments run safely that means, no accident can occur
- A test duct is placed at the left side of the chamber (50 mm Ø)
- Equipped with display and printer on request

On request we offer high & low humidity chambers from -60°C to 130°C till 1000l capacity



UNIFLOW BIOHAZARD SAFETY CABINET

Mod UVUB 1200/1500/1800

High Operator Comfort

- Sloping front for best supervision
- Clear slide windows give good lighting conditions
- Light damper ensures individual adjustment of light intensity up to 100 Lux
- The front edge slopes to suit the position of the operators arm ergonomically correct
- Control board in eye level for the operator
- Removable work surface for easy cleaning
- For export we offer a floor rack with central support system

High Safety

- True sterility better than class 100 following international standards
- High uniformity with down flow of 0.45 m/s +/- 10% with 30% exhaust
- No cross contamination and vibration with more balanced air
- Product protection, H-14 HEPA filter for the highest purity in the working chamber, 99.995% MPPS according to EN 1822

Other features

- Stainless steel with rounded corners
- Divided stainless steel table tops in two versions
- Side and front windows in hardened glass
- Smoothworking chamber with rounded corners
- Clean room design for easy cleaning without dusty places
- Change of HEPA filters is easy done from the front
- Includes DOP/DOS for certification test



Fullfills requirements for class 2 safety cabinets according to EN 12469: 2000, BS 5726, DIN 12950

18

UNIFLOW Vertical Laminar Flow

Mod UV 1200/1500/1800

Corrosion resistant epoxy powder painted steel.

Work surface: Glaze AISI-stainless steel completely perforated to ensure flow laminarity and air recycling at the work surface level.

Transparent side wall: Safety glass.

Absolute Filter: HEPA filter, tested with D.O.P. aerosol. Their efficiency, higher than 99.999% at 0.3 micro particle size-penetration -ensures performance exceeding requirements of U.S.Federal Standard 209e, British Standard 5295, VDI-2083 and AS 1386-1976.

Motor blower: direct coupled motor, electronic speed controlled to maintain a constant air flow of 0.45 m/sec, and compensate for a partially clogged filter up to a maximum plenum pressure of 40 mm of water.

AIR FLOW SCHEMA



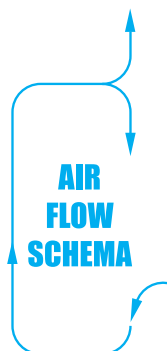
UNIFLOW KC-III

CLASS III safety cabinet

- Offers the highest safety class
- The cabinet is sealed and airtight. Work is performed mechanically with gloves
- BS 5726 certification
- During operation there is negative pressure of 200 PA in the working chamber
- The cabinet is supplied with a pre-filter and double HEPA filter system
- Safety gate

UNIFLOW UVU 700 Laminar flow cabinet

- Benchtop instrument
- Small footprint
- Dual HEPA filters class 100
- Excellent lighting
- Double protection, for the product and the user
- Vertical recycling airflow
- Stainless steel working surface
- Extreme quiet operation



FUME HOOD UNIFLOW With sliding front window

- Microprocessor controlled monitoring system
- Highly effective protection from toxic vapours
- High filtration efficiency
- Large adsorption capacity
- Filter monitoring system
- Ducting
- Flow rate up to 250 m³/h
- Filter: Carbon charcoal granulat & silicat granulat
Both material are mixed depending of poisonous vapors.

AIR
FLOW
SCHEMA



19

Mod.	APA 145.75	APA 145.90
Size (W x D x H)	750 x 600 x 1450	950 x 600 x 1450

UNIFIRE Laboratory burner with touch-free IR sensor or wireless Foot Pedal Switch

- Totally power cordless
- The UNIFIRE is a safe and efficient instrument for open flame application in the laboratory or fieldwork
- The flame can be ignited by a wireless foot pedal control or by touch-free IR-sensing movement
- With the rechargeable battery, this unit is truly portable when paired with an optional gas cartridge
- Microprocessor technology
- Temp. threshold level 1350°C on liquid gas



**We supply portable UV lamps!
8 Watt / 254 nm and 15 Watt / 254 nm**

DEEP FREEZER & REFRIGERATORS

UNICRYO

Deep Freezer -86°C - Upright & Chest Line

Temperature Control

- Microprocessor temperature
- Digital temperature display
- Adjustable temperature range // -10°C to -86°C with an increment of 1°C

Safety Control

- Malfunction alarm includes audible and flashing alarm for high temperature voltage setting, sensor failure, condenser efficiency effect, high ambient.
- Multiple level protections: password, compressor delay start, extra high
- All separate parts are safety grounded

Refrigeration System

- Optimized cascade refrigeration technology
- High efficiency Danfoss compressor
- Extra thick, high density insulation material for the best temperature press
- Special design of three-layer sealing structure, and heat-insulating system
- Special designed computer controlled system for temperature stage compressor from overloading



UNICRYO BLOOD BANK REFRIGERATOR

- +4°C CFC free cooling system, autom. defrost
- Sliding drawer with blood bag divider system for better time control
- Digital Temp. Controller with acoustic & visual alarm
- Central house alarm on request
- Data Logger temp. control for ea. drawer
- Front door with double glass window
- Illumination inside the chamber
- Different sizes available.



UNICRYO Laboratory Freezer -40°C / Plasma Freezer

- -40°C > CFC free cooling system
- Same alarm system like Refrigerator with automatic defrost system
- Hermetic Danfoss compressor system
- Digital Temp. Controller with acoustic & visual alarm
- 140 mm Isolation with full door > no window

UNICHROMAT

Chromatography Cabinet

- Temp. range betw. -1°C to +18°C
- Automatic defrost system
- Capacity: 700 / 1500 / 2025 liters
- Digital temperature control
- Alarm system optional
- Lock optional
- Stainless steel chamber
- Fully isolated glass doors
- Special design on request
- We offer special stainless steel sliding drawer for ÄKTA HPLC equipment



UNICHROMAT 900



UNICHROMAT 1500

**Äkta HPLC equipment
are manufactured by
GE Healthcare - Life Science**

**Independent over & under temperature protection
We let you choose your shelf configuration**

Left chamber / Right chamber

» Shelf for Äkta-System (100 kg loading) retractable, or 3x shelves for each maximal 20 kg loading, behind the shelves and between left and right chamber we can mount the column-holders for you.

You like to be mobile - so you get casters.

There are cable ducts mounted on both sides of the unit, covered by a closing plate.

21



Shelf for Äkta

WE SUPPLY STAINLESS STEEL DRAWERS FOR ÄKTA SYSTEMS

Horizontal Table Top Autoclave

First table top autoclave with vapor jet streaming

18 & 23 liters in Class-N and B version 121°C or 134°C

Model: UC-18 B & UC-23 B and UC-18 N & UC-23 N

- > Microprocessor controlled
- > Intelligent software on a powerful processor
- > Hot vapor injecting
- > Free temperature selection
 - Chamber sizes: 18l (Ø247 x 350 mm)
 - 23l (Ø247 x 450 mm)
 - 1 Basic Rack & 3 Shelves
 - Instrument protected by sensors ensuring the proper state >> audible and visual alarms
 - Drying function only mod. B supported by diaphragm vacuum pump.
 - Water tank on top, front outlet
 - Printer port RS 232 and Printer available
 - Comfortable 1 finger operate



UNICLAV - Vertical Automatic Vapor Pressure Autoclave

Free temperature selection from 40°C / 100°C / 121°C / 135°C

- MJ 54 / MJ 80 liters.
- Lever Lock: adopt lever / closing support which can be opened and closed easily. With the self sensing pressure joint lock device, the system will automatically check the locking status of the lid. Thus effectively avoiding the eruption of steam caused by the startup of unsafe sterilization program and wrong operations.
- Control Panel: Sterilization mode, temperature and time can be set up directly. Simple and vivid status flow chart makes the whole process of sterilization clearly observable. The panel also displays the rest of sterilization.
- Interface: RS 232 and USB interface meet user's demand for DATA TREATMENT and analysis. Printing function can be selected. Perfect process control.
- Inner Container / Autoclave Vessel: SUS 304 is adopted as the inner container, which goes through electrolytic polishing. The chamber is TÜV pressure certificated.
- Cooling: the down cooling of the autoclave vessel is supported by 2 ventilators and cut essential the process time.
- Drainage Valve: Stainless steel valve makes possible to sink the water out of the vessel



22

Vertical Automatic Vapor Pressure Autoclave

100°C up to 134°C

- Quick lock lid
- TÜV and CE certification
- Sizes: 34 liters/ 54 liters/ 60 liters/ 85 liters/ 105 liters
- Double interlock
- Graphic display
- Timed free steaming
- Adjustable autom. exhaust
- Optional cooling system
- Optional printer
- Optional exhaust air filter
- Warming & dissolving of culture medium
- Start-Timer by calender
- Memory back up
- Available with PRE-VACUUM



All above Autoclaves offer TÜV & CE certification

High-Speed Mini Centrifuge UEC 15

- Max Speed of 15.000 rpm > RCF 15345
- Rotor 12 x 1,5/ 2 ml with aerosol tight lid
- Reduction adapters for 0,2/0,4/0,5 ml
- PCR Rotor 2 x 8 > 0,2 µl optional
- Imbalance detection autom. out/off
- Timer function 0-999 minutes& hours
- Big black & white LCD display
- USB port for documentation
- Small footprint , low noise



UEC Force 250 or 350/Refrigerated

The classic programable laboratory centrifuge with a big range of rotors.

- Rotation speed 200 to 15.000 rpm
- Centrifuge force 21.630 x g
- Brushless drive system free of maintenance
- Automatic rotor recognition system
- Microprocessor controlled function for speed / time / temperature
- Adjustable acceleration & braking system
- Special start and stop features
- Up to 100 program steps
- Big Rotor program> max. 4 x 100ml
- Refrigerated version work CFC free

23

Refrigerated Z 36 HK & Z 366

- Max. speed : 15.000 / 16.000
- Max. RCF : 2432l g-force
- Max. Volume:6x250ml
- Maintenance free>induction drive
- Microprocessor with soft touch and large display
- Large range of different rotors available.



*The best universal centrifuge
for your laboratory*

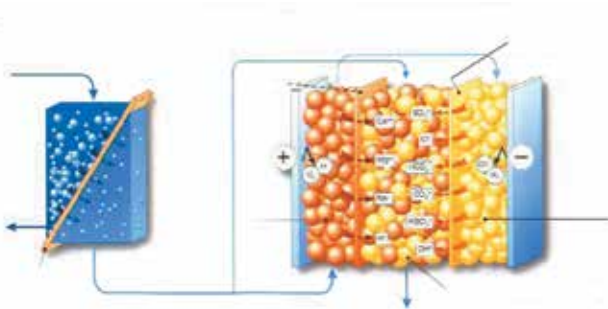
Water Purification Equipment



Our ultra pure water systems exceed all reagent grade water quality standards including: ASTM type 1, NCCLS Type 1 and DIN ISO 3696 Type 1 standards.

ULTRA-PURE WATER SYSTEMS with integrated TOC Monitoring

UniEquip ultra pure systems line incorporates all known high-end purification technologies and materials including mixed bed resin (electronic-grade), acid washed activated carbon, synthetic carbon, ultrafilter, sterile filter and UV-oxidation to produce the best reagent grade water. The UniEquip ultra pure water systems, optional with integrated TOC measurement, purify the water down to a TOC level which has never been reached before. Cartridge replacement is simple and fast due to quick connectors and easy access. All operating data can be recorded by an integrated RS 485 interface.



REVERSE OSMOSIS SYSTEMS

Contemporary clear design combined with top level technology - these are the compact reverse- osmosis systems, UniRO... and UniRO...plus. Possible applications for the UniRO...series are the supply of automatic washers and the deionization of raw water. UniRO...plus is the combination between reverse-osmosis and electro- deionisation. Output from 5 l/h to 100 l/h, with accessories like softener, storage tank, booster pump and much more.

24



DEIONIZERS

Do you need a deionization system for water purification? Do you want uncomplicated operation with unsurpassed reliability? Then the UniEquip Deionizers are exactly what you are looking for.

Our varied assortment ranges from pressureless plastic equipment to high-value pressure-resistant stainless-steel equipment with a basic capacity of 600 to 15,000 liters. We can offer you our systems tailored to the requirements of your laboratory.

Satelite of DNA Preparation



**THERMOLEADER
HB - 120**



UNIREP GYRATOR



PIPETTES



**CENTRIFUGE
UEC 15**



UV / DNA WORKSTATION



VIROXMIX - UNITWIST 100



VORTEMP GYRATOR



THERMAL CYCLER

25

www.uniequip.de

Head Office:

UniEquip GmbH
Fraunhoferstr. 11
D - 82152 Martinsried / Munich
GERMANY

Tel.: 0049-89-8575200 Fax: 0049-89-8561304
Email: info@uniequip.de

Service: service@uniequip.de

Manufacture:

UniEquip GmbH - Freital
Coschützer Str. 82a
D - 01705 Freital / Dresden
GERMANY

Tel.: 0049-351-6411830 Fax: 0049-351-6411832
Email: freital@uniequip.de

www.uniequip.com