# LABORATORY & STERILIZATION TECHNOLOGY





# EC 160 CO<sub>2</sub> INCUBATOR

- Chamber Volume : 160 liters
- Temperature range: Ambient Temperature: + 7°C to 50°C
- Temperature variation / fluctuation: ± 0,3°C at 37°C / ± 0,1°C
- Programmable temperature alarm range:  $\pm 0.5$ °C to 5°C
- Air jacketed heating system
- RaPIDceII™ fast temperature recovery without overshoot
- CO<sub>2</sub> Range: 0 to 20 % CO<sub>2</sub>
- CO<sub>2</sub> Variation / Fluctuation: ± 0.3 % / ± 0.1%
- Programmable CO<sub>2</sub> alarm range: ± 0.5 % to 5.0%
- Infra-Red CO<sub>2</sub> level control permitting frequent access
- LifeCeII™ control software to optimize parameters
   Large, bright LCD display with text messages and help
- Simultaneous display of set and actual values
- Seamless stainless steel chamber with rounded corners
- Clean chamber without any sensor inside
- NüveDis™ 90°C wet disinfection system
- NüveTrack™ monitoring and recall of last 72 hr. parameter values and alarms
- Auto Zero for permanent accurate control
- 0.22 μm sterile filtration of CO<sub>2</sub>, sampled gases and Auto-Zero reference air
- Typical 95 % RH to protect cultures against dehydration
- Audible and visual (text) alarms, remote alarm relay
- · Remote alarm outlet
- · Built-in 2nd stage gas regulator
- · Three shelves
- Humidity tray

# DF 490 ULTRALOW TEMPERATURE & FR 490 LOW TEMPERATURE DEEP FREEZERS

- DF 490: -86°C FR 490: -41°C
- **DirectFREEZETM**: Faster and homogenous freezing through the coils located inside the shelves.
- Four independent compartments with insulated doors for decreasing air entry
- Minimized air exchange on opening reduces ice build-up and protects samples
- Compartment dimensions match commonly used cryoboxes
- Washable air filter for simple maintenance and top performance
- · Perfect airtightness with soft gasket
- Heated contact surface of gasket to virtually eliminate icing-up
- Chamber made of stainless steel for long life and shelves made of aluminum for faster heat transfer
- Epoxy-polyester powder coated stainless steel outer body
- Foamed-in-place high density polyurethane insulation
- Easy to use and safe operation using a microprocessor control system

- Highly visible, large LED display
- Temperature, data tracking and storage on PC via optional RS 232 port and NüveFREEZE™ software
- Password protected control system
- · Door handle with key lock
- Key operated mains power switch to protect your samples
- Audible and visual alarm system
- · Alarm system is fed by a permanently recharged battery
- Display of actual temperature even at power failure
- · Standard remote and central alarm ports
- Optional battery-operated 7- day chart recorder
- Optional AlerText™ SMS alarm system for ultimate security
- Optional NüveWarn™ remote alarm system
- Optional CO<sub>2</sub> back-up system extends protection in case of failure (DF only)
- Up to 32,000 tubes storage capacity with 455 liters chamber volume











# EN 025/055/120 INCUBATORS

- Three different sizes: 25, 55 and 120 liters.
- Temperature range: Ambient Temperature +5°C / 80°C.
- Excellent incubation conditions for the applications in biology and microbiology laboratories such as medical and veterinary fields; research and quality control examinations in pharmaceutical, food and cosmetics industries and biotechnology.
- Programmable PID microprocessor control system.
- User friendly control panel located on the door, including digital displays for temperature and time.
- Stainless steel interior for easy cleaning and decontamination.
- Air jacketed heating system and triple insulation for highly precise and constant temperatures.
- Very homogeneous temperature distribution by natural air convection:
   Minimum turbulance and no cross contamination.
- Frameless inner glass door for the observation of samples without any temperature drop.
- Safety thermostat as standard.
- Optional NüveTherm™ data control software and RS 232 kit.



# EN 300/400/500 INCUBATORS

- Three different sizes: 22, 44 and 120 liters.
- Temperature range: Ambient Temperature +5°C / 80°C.
- Excellent incubation conditions for the applications in all biology and microbiology laboratories such as medical and veterinary fields; research and quality control examinations in pharmaceutical, food and cosmetics industries and in biotechnology.
- Programmable PID microprocessor control system.
- User friendly control panel including digital displays for temperature and time.
- · Delayed start timer.
- Anodic-oxidated aluminum chamber for standard models; stainless steel chamber for "P" models.
- Very homogeneous temperature distribution obtained by natural air convection for standard models and by forced air ventilation for "P" models.
- Frameless inner glass door for the observation of samples without any temperature drop.
- Safety thermostat as standard.





# ES 120/252 COOLED INCUBATORS

- Two different sizes: 120 and 252 liters.
- Temperature range: -10°C / 60°C.
- Ideal design for freezing, incubation, drying, different types of tests and long storage in the fields of biology, zoology, botany and the quality control and R&D laboratories in industry such as pharmaceutical, food and cosmetic.
- Programmable microprocessor control system.
- Nine program memories with nine steps.
- Easy to use control panel including digital displays for temperature, time, program no and step no.
- · Stainless steel chamber.
- High density injected polyurethane insulation.
- Powerful air circulation system for excellent temperature uniformity and stability even at low temperatures.
- Automatic defrost system.
- Large window on the door consisting of triple glass for perfect insulation.
- · Interior lighting with on/off control.
- Optional NüveTherm™ data control software and RS 232 kit.

## FN 032/055/120 DRY HEAT STERILIZERS / OVENS

- Three different sizes: 32, 55 and 120 liters. •
- Temperature range: Ambient Temperature +5°C / 250°C.
- Designed for sterilization, drying and heating purposes.
  - Programmable PID microprocessor control system. •
- User friendly control panel including digital displays for temperature and time.
  - Delayed start timer. •
- Stainless steel interior for easy cleaning and high resistance to most of the chemicals.
  - Excellent uniformity and stability of temperature by triple insulation and air jacketed heating system.
  - Natural air convection for homogeneous temperature distribution. •
  - Very low temperature loss by means of the door pressing firmly and tightly on the chamber gasket.
    - Outlet port for vapour exhaustion.
      - Safety thermostat as standard. •

# FN 300/400/500 DRY HEAT STERILIZERS / OVENS

- Three different sizes: 22, 44 and 120 liters.
- Temperature range: Ambient Temperature +5°C / 250°C.
- Designed for sterilization, drying and heating purposes.
  - Programmable PID microprocessor control system. •
- Easy to use control panel including digital displays for temperature and time.
  - Delayed start timer. •
- Excellent uniformity and stability of temperature by high grade of insulation and 
  microprocessor control system.
- Anodic-oxidated aluminum chamber for standard models; stainless steel chamber for "P" models.
  - Very homogeneous temperature distribution obtained by natural air convection for standard models and by forced air ventilation for "P" models.
- Low temperature loss by means of the door pressing firmly and tightly against the chamber gasket.
  - Outlet port for vapour exhaustion.
    - Safety thermostat as standard. •







250 HLd ...

# KD 200/400/700 OVENS

- Three different sizes: 193, 373 and 757 liters.
- Temperature range: 70°C / 250°C.
- High volume for drying and heating purposes.
- Programmable PID microprocessor control system.
- Easy to use control panel including digital display for temperature and time.
- Delayed start timer.
- Excellent uniformity and stability of temperature by high grade of insulation and microprocessor control system.
- Stainless steel chamber.
- Very homogeneous temperature distribution obtained by forced air ventilation.
- Extraction far
- Low temperature loss by means of the door pressing firmly and tightly against the chamber gasket.
- Outlet port for vapour exhaustion.
- · Safety thermostat as standard.



- Useful volume: 15 liters. •
- Temperature range: 70°C / 200°C. •
- Ideal design for gentle drying of heat labile samples and experiments under inert gasses.
  - Programmable PID microprocessor control system. •
  - Easy to use control panel including digital displays for temperature and time. •
- Stainless steel chamber with high resistance to corrosion, most of the chemical vapours and contamination.
  - One piece gasket made of silicon, simply fitted directly on the oven body.  $\bullet$ 
    - Vacuum gauge on the control panel. •
  - Two spherical valves for vacuum connection and adding dry air or inert gasses.
    - Heat-treated glass window on the door.
      - Safety thermostat as standard. •
    - Optional NüveTherm™ data control software and RS 232 kit •





#### NF 048 MICROLITRE AND HAEMATOCRIT CENTRIFUGE

#### Angle Rotor

**Haematocrit Rotor** 

Maximum Capacity 24x1.5/2 ml 24xcapillary tubes 14,000 rpm Maximum Speed Maximum RCF 12.000 rpm 18,188xg 14,811xg Programmable microprocessor control system.

Digital displays for time and speed / RCF (xg).

1 - 99 minutes timer with hold position.

Epoxy-polyester powder coated steel chamber.

Quiet, direct drive, brushless induction motor.

Motor over heating protection.

Ventilation system for minimum temperature increase in the chamber.

Choice of 24x1.5/2 ml Angle Rotor and 24x capillarytube Haematocrit Rotor.

Adaptors for 500/800 µl, 200 µl PCR, 250/400/700 µl.



#### NF 200 BENCH TOP CENTRIFUGE

Maximum Capacity : 12x15 ml Maximum Speed : 5.000 rpm Maximum Speed Maximum RCF 2.822xg

- Programmable microprocessor control system.
- Digital displays for time and speed / RCF (xg).
- 1 99 minutes timer with hold position
- Epoxy-polyester powder coated steel chamber
- Pulse key.
- Quiet, direct drive, brushless induction motor.
- Motor over heating protection.
- Ventilation system for minimum temperature increase in the chamber.
- Lid lock
- Delivered with 12x15 ml Angle rotor made of polypropylene.
- Adaptors for 1,5/2 ml, 5 ml and 7 ml tubes.



#### NF 400-NF 400R MEDIUM CAPACITY BENCH TOP CENTRIFUGES

#### **Angle Rotor Swing-out Rotors**

Maximum Capacity 16x15ml 4x100ml 2xM.Plate 4,100 rpm 2.142xg Maximum Speed 4,100 rpm 4.100 rpm Maximum RCF

Programmable microprocessor control system. Digital display for time and speed / RCF (xg).

Digital display for temperature for NF 400R

Programmable relative centrifugal force (RCF)

Electronic imbalance detection system.

Stainless steel chamber.

1 - 99 minutes timer with hold position.

5 acceleration / 5 braking rates.

Lid lock.

Powerful, quiet, and maintenance - free induction motor.

Minimum temperature increase in the chamber by means of ventilation system for NF 400.

Temperature control between -9°C / +40°C for NF 400R.

Motor over heating protection.

Wide range of accessories to accommodate most manufacturers' tubes and microtitre plate. Totally CFC free refrigerant fluid and insulation material for NF 400R.

## NF 800 - NF 800R MULTI PURPOSE BENCH TOP CENTRIFUGES

#### Swing-out Rotors

Maximum Capacity: Maximum Speed : Maximum RCF:

4x200 ml 2x3M.Plate 4.100 rpm 4.100 rpm 3.045xg 2.349xg

6x50 ml 9.000 rpm 9.418xg

**Angle Rotors** 30x15 ml 24x1.5/2 ml 4.100 rpm 14.000 rpm 3.007xg 18.407xa

## NF 1200 - NF 1200R MULTI PURPOSE BENCH TOP CENTRIFUGES

#### **Swing-out Rotors**

#### **Angle Rotors**

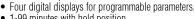
Maximum Capacity: Maximum Speed: Maximum RCF:

4x280 ml 2x3M.Plate 4.100 rpm 4.100 rpm 3.082xg 2.349xg

6x100 ml 9.000 rpm 8.965xg

10x10 ml 24x2 ml 30x1.5/2 ml 12.000 rpm 14.000 rpm 13.500 rpm 14.167xg 18.407xg

20.170xg



1-99 minutes with hold position.

Programmable parameters:

- Ten program memories.
- 10 acceleration / 10 braking rates
- Stainless steel chamber.
- Wide range of accessories to accommodate most manufacturers' tubes and microtitre plate.

Programmable microprocessor control system.

Program no., speed / RCF, time, acceleration and breaking rates and temperature for NF 800R and NF 1200R.

- Powerful, quite, maintenance-free induction motor.
- Minimum temperature increase in the chamber by means of ventilation system for NF 800 and NF 1200.
- Temperature control between -9°C / +40°C for NF 800R and NF 1200R.
- Totally CFC free refrigerant fluid and insulation material for NF 800R and NF 1200R.







#### BM/BS SERIES WATERBATHS

Different tank volumes and temperature ranges:

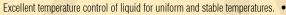
BM 302 : 14 liters, Ambient Temperature +5°C / 80°C BM 402 : 30 liters, Ambient Temperature +5°C / 80°C

BS 302 : 14 liters, 0°C / 80°C BS 402 : 30 liters, 0°C / 80°C









- Seamless stainless steel tank.
- Powerful internal circulation pump for homogeneous temperatures.
  - Programmable microprocessor control system. •
- Easy to use control panel including digital displays for temperature and time.
  - Optional external circulation system for BM and BS series.
    - Various type of tube racks and shelves for flasks. •
  - Optional NüveTherm™ data control software and RS 232 kit •

#### ST 30 SHAKING WATERBATH

- Tank volume: 30 liters •
- Temperature range: Ambient temperature +5°C / 99.9°C
  - Shaking speed between 20 250 rpm •
- Programmable microprocessor control system for shaking speed, temperature and temperature
  - LED display for shaking speed, temperature and time •
  - Excellent temperature control of liquid for uniform and stable temperatures
    - Seamless and stainless steel tank •
    - Heater replaced outside of the tank •
    - Triple insulation for homogeneous and stable temperature
      - User friendly control panel •
- Possibility to use different type of tubes, flaks or erlenmeyers with the wide range of accessories •

#### NB 5/9/20 UNSTIRRED WATERBATHS

- Three different useful volumes: 4, 7 and 15 liters. •
- Temperature range: Ambient temperature + 5°C / 99.9°C •
- Designed for many general and special applications in microbiology, research and industrial laboratories.
  - Excellent temperature control of liquid by programmable PID microprocessor control system.
    - Highly visible dual display for temperature and time.
      - Delayed start timer. •
      - Seamless stainless steel tank for easy cleaning. •
  - Excellent temperature uniformity and stability by triple insulation. Footprint almost equal to the working area to save bench space. •





#### ND 4/8/12 **WATER DISTILLERS**

- Capacity: ND 4: 4 lt/hr, ND 8: 8 lt/hr, ND 12: 12 lt/hr
- Distilled water storage tank capacity: ND 4: 8 liters, ND 8: 16 liters, ND 12: 24 liters
- New design with distilled water storage tank
- Fully automatic system with microprocessor control system
- Stainless steel boiler and condenser
- Stainless steel heaters
- Energy saving design by the distillation of heated cooling water
- Protected heaters against running dry
- Warning leds for: High water level, insufficient water, heater failure, half full storage tank, full storage tank
- Siliphos cartridge filter to decrease calcification on the heaters
- · Suitable for bench and wall mounting





## NS 103 **ECONOMICAL WATER DISTILLER**

- Distilled water capacity: 3.5 lt / hr.
- Stainless steel heater.
- All surfaces in contact with water and steam made of stainless material.
- Manometer for inlet water pressure.
- Protection against empty boiling tank and water interruption.
- High efficiency even at low inlet water pressure.
- Wall mounted type, saving space in the laboratories.
- · Easy and simple operation.



## **PS 54** PLATELET AGITATOR

- Capacity: 54 pcs platelet bags
  - Number of shelves: 9 pcs. •
- Shaking speed: 60 stroke/min •
- Specially designed for platelet bags
  - Low noise operation •
- Body and shelves made of stainless steel •
- Maximum homogeneity with mesh type shelves for air circulation
  - Easy access to platelet bags on pull-out shelves
    - Ergonomic shelf design •
  - Information shown on the label holder for each shelf
    - Audible alarm if motion is not detected .



#### KN SERIES BLOOD BANK REFRIGERATORS

Capacity: •

KN 72: 202 liters, 72 blood bags, KN 120: 320 liters, 120 blood bags, KN 294: 630 liters, 294 blood bags, KN 504:1090 liters, 504 blood bags.

- Advanced technology to store blood and blood components.
  - Stainless steel chamber. •
  - High density injected polyurethane insulation. •
  - Door window with triple glass for perfect insulation. •
- Magnetic gasket on four sides of the door and door key lock. ullet
  - Chamber illumination with on/off switch control. •
- Easily drawn stainless steel drawers with plexiglass cover on the front. •
- Separators inside the drawers to hold the blood bags in an angled position for easy label reading.
  - Powerful air circulation system to maintain temperature uniformity and stability and for quick recovery time.
  - Fully automatic defrost system to maintain cooling coil efficiency.
    - Mains power witch key with lock. •
    - Microprocessor control system to simplify the operation and quarantee the safety of the stored component.
      - Temperature range: 0°C / +10°C. •
      - Large digital display with a resolution of 0.1°C. •
- Alarm system for high and low temperature, power failure, temperature sensor failure, and open door.
  - Re-chargable battery to feed alarm system. •
  - Remote and central alarm outlets as standard. •
  - Optional **NüveBank™** temperature data tracking and storage software and RS 232 port. •
  - Temperature measurement from a liquid which has similar thermal specifications with blood.
    - Battery operated 7-day chart recorder with high resolution. •
    - Optional **AlerText™** SMS alarm system for ultimate security
      - Optional NüveWarn™ remote alarm system •







## PN 150/300 PLATELET INCUBATORS

- PN 150 : Chamber Volume : 187 liters Includes 1 pc PS 54 Platelet Agitator PN 300 : Chamber Volume : 340 liters Includes 2 pc PS 54 Platelet Agitator
  - Temperature range: 20°C to 35°C
    - Interior chamber: Stainless steel •
- Convenient observation of platelet bags with interior illumination and large window
  - High density injecte polyurethane insulation •
  - Perfectly insulated triple glass window and stainless steel frame •
- Antifogging inner glass for avoiding condensation and outer glass blocking UV light •
- Prevention of air leakage from the chamber and ambient ingress with magnetic gasket
  - Protection against inadvertent and unauthorized access by using a key lock  $\, ullet \,$
  - Excellent temperature uniformity and stability with powerful air circulation system  $\, ullet \,$ 
    - Platelet protection because of quick recovery time after door openings
      - Simple and safe operation using a microprocessor control system •
- Highly visible, large LED display with 0.1°C resolution ●
  Optional **NüveBank<sup>™</sup>** temperature data tracking and storage software and RS 232 port
  - Power switch with key lock to prevent the platelet incubators from unauthorized use
    - Audible and visual alarm system .
    - Alarm system is fed by automatically recharged battery
      - Display of actual temperature even at power failure
        - Battery operated 7-day chart recorder •
        - Standard remote and central alarm ports •
    - Optional  $\textbf{AlerText}^{\intercal} \textbf{M} \textbf{S} \textbf{M} \textbf{S} \textbf{ alarm system for ultimate security } \bullet$ 
      - Optional **NüveWarn™** remote alarm system •







# MN SERIES CLASS II MICROBIOLOGICAL SAFETY CABINETS

- Two models with different working table width: MN 090: 89 cm / MN 120: 119 cm.
- First class protection for operator, environment and product.
- Microprocessor control system with digital display for air flow speed.
- Two HEPA filters with 99.999 % efficiency for particles  $\geq$  0.3  $\mu$ m.
- Automatic speed compensation system against clogged filter.
- Mains power switch with key lock.
- Alarms for: Power failure, control system failure, open window, low and high air flow speed, clogged filters.
- Perfect air tightness of window seal by means of gas spring assisted window.
- Comfort of usage with very quiet blower and high light intensity.
- Smooth chamber walls and rounded corners without soldering for easy cleaning and decontamination.
- Stainless steel and removable 3 pcs. work table.
- DOP test inlet, elapsed time counter and 2 pc. power socket as standard.
- EN 12469 Certificate for MN 120.



# LN SERIES LAMINAR FLOW CABINETS

- Two models with different working table width: LN 090: 89 cm. LN 120: 119 cm.
- Designed for the applications with non-hazardous materials in particle free environment for complete product protection.
- Single piece working table made of stainless steel for easy cleaning and decontamination.
- Pre-filter with 85 % efficiency for particles  $\geq$  0.5  $\mu$ m ; HEPA filter with 99.999 % efficiency for particles  $\geq$  0.3  $\mu$ m.
- Microprocessor control system with digital display for air flow speed.
- Automatic speed compensation system against clogged filter.
- Audible and visible alarm for lower or higher airflow speed.
- Recirculated HEPA filtered air to prolong the lifetime of pre and HEPA filters.
- High light intensity and low noise level.
- Elapsed time counter and 2 pcs. power socket as standard.
- DOP test inlet.

#### OT 012 BENCH TOP STEAM STERILIZER

- Chamber volume: 12 liters.
- Temperature range: 110°C / 140°C.
- Used for the sterilization of unwrapped medical or dental instruments.
- Programmable microprocessor control system.
- Easy to use control panel, including digital displays for temperature and time.
- Proportional heating system.
- Manometer for chamber pressure.
- Safety valve against over-pressure.
- Very simple operation without any water or drain connection.





# B & S CLASS BENCH TOP STEAM STERILIZERS

#### OT 18B/23B OT 23S OT 23VS/32VS

- Conforms to the requirements of EN 13060 standard.
- Chamber Capacity: OT 18B: 18 liters

OT 23B, OT 23S, OT 23VS: 23 liters

OT 32VS : 32 liters

#### • Type of Sterilization Loads:

**B Models:** All wrapped, un-wrapped, solid, hollow load products Type A\* and porous products.

**VS models:** Non-wrapped solid products, porous products, small porous items, hollow load products Type B\*, single wrapped products, multiple-layer wrapped products.

**S model:** Non-wrapped solid products, single wrapped products.

#### Programs:

B & S models: Universal, Quick, Gentle, Prion

VS models: Universal, Wrapped Materials, Gentle, Quick, Prion

#### • Test Programs:

B models: Bowie & Dick / Helix Test and Vacuum Test

VS models: Bowie & Dick and Vacuum Test

- Seamless chamber for 18 and 23 liters models.
- $\bullet \;\;$  Fractionated pre-vacuum system for B and VS models.
- Fractionated gravity system for OT 23S
- Advanced microprocessor control system with 128x64 pixels LCD display.
- Process evaluation system.
- · Comprehensive self-diagnostic system.
- Memory for last 52 cycles.
- · Reminder for cleaning and maintenance.
- RS 232 port for printer, NüveStore™ SD card writer or NüveSteamArt™ softwere for traceability.
- \* As defined in EN 13060 Standard











#### OT 100V VERTICAL STEAM STERILIZER

- Chamber volume : 100 liters
- Advanced technology for the sterilization of textile; wrapped or packed materials; glass and liquid
- Fully automatic system leaves user free for other important work
- Integrated steam generator for fast production of steam
- Maintenance-free diaphragm type powerful vacuum pump
- Fractionated pre-vacuum to eliminate all air bubbles and achieve 100% steam penetration
- Fractionated post-vacuum for efficient drying of the samples
- Sterilization quality matching the needs of EN 285 European Standard for Large Steam Sterilizers
- Pre-heated chamber to eliminate condensation on the chamber walls and speed up the heating of the samples
- Easy to use microprocessor control system with 128x64 pixels LC display
- 5 preset programs : Universal, Solid, Prion, Quick, Gentle
- 6 special programs including liquid sterilization at 121°C
- Test programs for Bowie & Dick / Helix and vacuum leakage
- . Memories for the last 25 cycles
- · Cycle counter records the number of the operated cycles in the memory
- RS 232 port for printer NüveStore™ SD card writer or NüveSteamArt™ software for traceability
- · Password protected Service menu
- Process evaluation system
- Comprehensive self diagnostic system for possible failures
- Ergonomic and user friendly design conforming to 93/42/EEC
   MDD Medical Device Directive, EN 285 European Standard for Large Steam
   Sterilizers and 97/23/EEC PED Pressure Equipment Directive



# OT 40L / 90L LABORATORY STEAM STERILIZER

• Chamber volume:

OT 40L: 40 liters, OT 90L: 90 liters

• Maximum capacity :

OT 40L: 2x5 liters, OT 90L: 3x8 liters

- Sterilization temperature range : 105°C 135°C
- Especially developed for the steam sterilization of liquid and culture media
- Advanced microprocessor control system with 128x68 pixels LC display
- 5 preset programs : 2 for liquid and 3 for solid
- · 2 custom made programs for liquid and solid
- Programmable melting program: 60°C 100°C
- Programmable pre-heating: 40°C 60°C
- Memory for last 25 cycles
- Programmable delayed start function
- Flexible temperature sensor to measure the exact liquid temperature
- · Cooling by forced air ventilation over chamber
- · Fractionated exhaust system for sensitive materials such as glass
- Comprehensive self-diagnostic system
- Chamber made of 316L stainless steel
- Manometer for chamber pressure
- Validation port
- RS 232 port for printer NüveStore™ SD card writer or NüveSteamArt™ software for traceability
- Safety precautions for lid opening depending on the type of the sterilized material

# OT 300 / 430 / 570 STEAM STERILIZERS

- Conforms to the requirement of EN 285 European Standard for Large Steam Sterilizers. Chamber and STU capacity: OT 300: 300 liters, 4 pcs. STU OT 430: 430 liters, 6 pcs. STU OT 570: 570 liters, 8 pcs. STU
  - Ideal design for the steam sterilization of packed or unpacked surgical and dental instruments, operation linen, glass, plastic, rubber and silicon materials, infusion liquids, microbiological cultures and medical waste.
    - Chamber, steam jacket, door and steam generator made of 316L stainless steel and conform to PED 97/23/EC Pressure Equipment Directive.
    - Pneumatically controlled door opening with safety system.
    - Steam driven one piece chamber gasket made of silicon. High capacity, low noise water ring vacuum pump for vacuum function. •
  - High quality valves, sensors and transmitters for a problem free and safe operation. ullet
    - Pneumatic valves in the steam lines. •
    - Innovative AIR COOLING system for low water and energy consumption.
  - PLC control system with 7" colorful touch screen •
  - Wide screen allows monitoring all related information regarding sterilization cycle.
    - 6 preset programs, 50 custom made programs. •
    - Two test programs: Bowie&Dick and vacuum leakage.
      - Memory for last 28 cycles. •
    - Independent control system besides the main control system to record the data related to every cycle.
    - Comprehensive self-diagnostic system for possible system malfunctions.
      - Service menu to detect the problem in case of a failure.
        - Thermal printer offered as standard. •
        - Optional RS 232 port and software. •
  - Double door versions with 3.3" touch screen on the clean side: OT 430D and OT 570D. •







#### GC 400 GROWTH CHAMBER

- Advanced technology for tests at different climatic and lighting conditions such as plant growth, seed germination, acclimation of plants, culture of plant cells and tissues, genetic manipulations of plants, cultivation of protoplasm and cells, incubation and rearing of insects.
- · Chamber volume: 400 liters.
- Wide range of temperature control: -20°C / +60°C (lights off), 0°C/+60°C (lights on)
- Programmable humidity range: 20 % / 95 % Rh (between +10°C and +60°C).
- Programmable alarm range: 2 10°C, 5 20 % Rh.
- Lighting from three sides: Left, right and up.
- Max. lighting level: 20.000 lux.
- Programmable lighting function: 0 24 hour timer for each side.
- Door mounted, state-of-art programmable microprocessor control system.
- 10 program memories.
- 9 program steps for temperature and humidity.
- Programmable altitude for calculating right humidity value according to psychrometric formula.
- User friendly control panel including 128 x 64 pixel LC display.
- · Chamber made of stainless steel and glass windows.
- · Humidity produced by a humidity generator.
- $\bullet \quad \text{Humidity measurement according to pyschrometric diagram}.$
- Self-diagnostic system for possible failures.
- 32 Kb standard, 256 Kb optional memory.
- Adjustable electronic safety thermostat.
- Outlet for printer connection for printing current or stored programs.
- Optional **NüveGrowth™** software for programming and control via PC.
- CFC-free refrigerant and insulation.

#### TK 120/252/600 TEST CABINETS

- Three different sizes: 120, 252, 632 liters
- Economical solution to simulate real environmental conditions by controlling temperature, humidity and day & night cycles.
- Excellent design for different purposes in different sectors such as:
   Electric and electronic industry, automobile industry, automobile supply
   industry, chemical industry, plastic industry, textile industry,
   pharmaceutical industry, food industry, packaging industry, plant growth,
   seed germination, incubation and rearing of insects.
- Wide range of temperature control: -10°C/ +60°C (lights off), 0°C/ +60°C (lights on).
- Programmable humidity range: 20 % 95 % Rh. (between +10°C / +60°C).
- Programmable alarm range: 2 10°C, 5 20 % Rh.
- Powerful illumination by means of the lights located inside the door Max. lighting level: TK 120: 6.000 lux, TK 252 / 600: 12.000 lux.
- Programmable lighting timer: 0 24 hours.
- Easy to use programmable microprocessor control system.
- 10 program memories.
- 9 program steps for temperature and humidity.
- User friendly control panel with 128 x 64 pixel LC display.
- 32 Kb standard, 256 Kb optional memory.
- · Chamber made of stainless steel.
- Ø 25 mm. access port.
- · Internal glass door.
- Humidity produced by the humidity generator.
- · Self-diagnostic system for possible failures.
- · Adjustable safety thermostat for heating.
- · Outlet for printer connection for printing current or stored programs.
- Optional **NüveGrowth™** software for programming and controlling via PC.
- CFC-free refrigerant and insulation.





### ID 300 CLIMATIC TEST CABINET

- Ideal design for the tests at different climatic conditions and stability, artificial aging and storage tests in industries such as electronic, automobile, automobile supply industry, aircraft and aviation, chemical, plastic, textile, pharmaceutical, construction material, food, packaging and military equipment.
  - Chamber volume: 290 liters.
  - $\bullet$  Wide range of temperature control: 40°C / +150°C.
    - Programmable humidity range:15 % 98 % Rh (Between 10°C / 90°C).
      - Door mounted state-of-art programmable microprocessor control system.
        - Ten program memories.
        - Programmable 9 step for
        - temperature and humidity.
        - Programmable altitude to calculate the right humidity value according to psychrometric formula.
        - User friendly control panel including
           128 x 64 pixel LC display.
          - Stainless steel chamber.
        - Ø80 mm access port on the right side.
      - Triple insulation consisting of high density injected polyurethane, glass wool and aluminum layer.
        - Heated door window with quintuble glass for perfect insulation.
          - Interior lighting.
        - · Producing humidity by dew-point bath.
        - Humidity measurement according to psychrometric diagram by means of the dry and wet bulb temperature.
      - Self-diagnostic system for possible failures.
        - Adjustable electronic safety thermostat.
        - Possibility of connecting four pieces of PT 100 temperature sensor measure any four points in the chamber.
      - 32 Kb standard, 256 Kb optional memory.
        - Outlet for printer connection to print current or stored programs.
        - Optional NüveClimate™ software program for control via computer.
        - CFC-free refrigerant and insulation.



# ID 300 CLIMATIC TEST CABINET





#### **A Strong Foundation**

Established over 40 years ago in 1968, NÜVE is one of the fastest expanding manufacturers of laboratory and sterilization instrumentation in the world today.

Quickly becoming market leader in our home country, the major proportion of our production is today exported to over 90 countries worldwide and the brand is established as a driving force in the development of new products.

#### **Quality & Reliability**

Quality is a keyword for NÜVE. This is proven by its certification to ISO 9001:2008 and ISO 13485:2003. Combining this with a strong ethic of providing outstanding value, NÜVE incessantly strives to increase efficiency through evolution of its working practices and investment in the latest machine tools. Top class components and high grade raw materials ensure that the final product is something that the user can be proud of. An important factor in the high level of reliability is the commitment of the production team, half of which has been with the company for over 20 years.

#### **Investment & Expansion**

Substantial investment in R&D enables NÜVE to offer an ever-widening range of quality products. A team of highly qualified and experienced engineers has been producing instruments with unique characteristics bringing additional benefits to our customers. The offer in the field of biology in particular has significantly expanded and the level of technological innovation is proven by the large number of trade-marked features recently introduced in the range.

NÜVE has been growing continuously and strongly, even during the recent worldwide economic crisis. With its dedication to customer service, NÜVE is committed to ensuring the supply to its customers on time. During the last seven years, the size of the production plant was doubled as were the number of machine tools for production.

#### **Wide Ranging Markets**

NÜVE products are designed and developed for a broad spectrum of markets including clinical laboratories, medical research, biotechnology, agriculture, veterinary labs, food, beverage and dairy, chemicals, automotive, aerospace, ceramics, water and pharmaceutical industries.

#### **Professional Support**

As we innovate, we educate. Recognizing that education is key onto the continuous growth of the company and its products, NÜVE is committed to providing relevant, leading-edge educational opportunities throughout the year for its distributors. Comprehensive distributor training in products and after-sales servicing by NÜVE experts ensures professional local support for customers and an excellent return on the investment in this innovative brand. Some recent instruments include the facility enabling NÜVE engineers to carry out analysis and even updates remotely from the NÜVE headquarters, keeping customer products on top performance.



# NÜVE SANAYİ MALZEMELERİ İMALAT VE TİCARET A.Ş.

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ISO 9001: 2008 **( €**