

# PHARMACEUTICAL INDUSTRY AND BIOTECHNOLOGY CATALOGUE





# **Comprehensive SciLab International** solutions for the pharmaceutical industry and the biotechnology

At SciLab International, we specialize in delivering technical solutions, laboratory equipment, and consumables for industrial processes in the pharmaceutical, food, cosmetics, and chemical sectors, as well as research centers. We support laboratories and production facilities with a complete offering that combines high-performance products with responsive technical services.

In the pharmaceutical industry, regulatory compliance and precise control of analytical processes are essential. As a trusted partner, SciLab International provides specialized instruments designed to meet current standards (USP, EP, FDA).

Our dedicated catalog includes essential pharmaceutical testing equipment for quality control and R&D laboratories — such as tablet hardness, friability, and disintegration testers, dissolution testers, HPLC chromatography systems, and analytical balances.

We also supply industrial process monitoring equipment, including in-line measurement systems for total organic carbon, ozone, and conductivity, fully compatible with sterile environments, along with devices for humidity and temperature control. In addition, we offer enzymatic cleaning solutions for pharmaceutical tanks and production lines to guarantee compliance with the highest cleanliness standards.

Our services cover IQ/OQ/PQ qualification, professional training, and on-site technical support, ensuring your equipment remains compliant, reliable, and continuously optimized.

To ensure close local support and optimal responsiveness, SciLab International has established technical partnerships with several key players in the biomedical engineering sector across the continent.

These partner companies — recognized for their technical expertise and professionalism — work in close collaboration with us to provide our clients with rigorous service, both commercially and technically.

Our partners are located throughout the African continent: Ethiopia, Egypt, Morocco, Senegal and Tunisia.





# **Table of content**

# Laboratory:

| 1– Liquid chromatography systems : HPLC, UHPLC and FPLC | Page 3  |
|---|---------|
| 2– Liquid chromatography consumables                    | Page 4  |
| 3– Polarimeter  | Page 5  |
| 4– Refractometer  | Page 5  |
| 5– UV-Visible spectrophotometer                         | Page 5  |
| 6- Physical testing instruments                         | Page 6  |
| 7– Total Organic Carbon (benchtop TOC) analyzer         | Page 8  |
| 8– Ultra-pure water production systems                  | Page 8  |
| 9– Bioreactors  | Page 9  |
| 10– Cells counter                                       | Page 9  |
| 11– Precision and analytical balances                   | Page 10 |
| 12– Halogen moisture analyzer                           | Page 10 |
| 13- Stirrers and baths                                  | Page 11 |
| 14– Incubators  | Page 12 |
| 15- Climatic chambers                                   | Page 12 |
| 16– Drying ovens  | Page 12 |
| 17– pH-meters   | Page 13 |
| 18– Conductivity meters                                 | Page 13 |
| 19- Centrifuges   | Page 14 |
| 20 – Temperature and humidity data loggers              | Page 15 |
| 21– Liquid particles counter                            | Page 17 |
| 22– Fume hoods  | Page 17 |
| 23– Kjeldahl protein & nitrogen analyzer                | Page 17 |
| 24– Microscope  | Page 18 |
| 25– Freezing point osmometer                            | Page 18 |
| 26– HPLC safety kits                                    | Page 18 |
|   |         |

# Industrial process:

| 1– On-line bioburden (microbial) analyzer      | Page 19 |
|--|---------|
| 2– Total Organic Carbon (On-line TOC) analyzer | Page 19 |
| 3– Automatic tablet testing system             | Page 20 |
| 4– Pilot counting/filling machine              | Page 20 |
| 5– Pilot tablet press                          | Page 20 |
| 6– On-line dissolved ozone sensor              | Page 21 |
| 7– On-line conductivity sensor                 | Page 21 |
| 8– Enzymatic solution for biofilms treatment   | Page 21 |





# Liquid chromatography



#### Knauer AZURA HPLC system for R&D and CQ analysis

- Wide range of HPLC systems, ready to use, with automated injection system available in different configurations.
- Pumps (isocratic, binary or quaternary): Max. pressure 862bar and flowrate 0 to 10ml/min.
- Wide range of detectors: UV-Visible, multiwavelength, diodes array, refractive index, fluorescence, ...
- •Columns oven: +5 to +85°C; temperature stability +/-0,1°C.
- Automated sample injection system with 108 samples capacity.
- 21CFR Part11 compliant data processing software.



## Knauer AZURA UHPLC system for R&D and CQ analysis

- Wide range of UHPLC systems, ready to use, with automated injection system available in different configurations.
- Pumps (isocratic, binary or quaternary): Max. pressure 1200bar and flowrate 0 to 5ml/min.
- Wide range of detectors: UV-Visible, multiwavelength, diodes array, refractive index, fluorescence, ...
- •Columns oven: +5 to +85°C; temperature stability +/-0,1°C.
- Automated sample injection system with 108 samples capacity.
- 21CFR Part11 compliant data processing software.



## **Knauer AZURA FPLC system for BioLC purifications**

- Complete solutions for FPLC on a minimum footprint: AZURA FPLC systems combine flexibility and reliability. The biocompatible/metal-free FPLC is the perfect choice for your protein purification task.
- Inert pumps with different gradients (binary, ternary or quaternary) and with various flowrates (10, 50, 100, 250, 500 or 1000ml/min)
- Wide range of detectors : UV-Visible, multi-wavelength, diodes array, refractive index, conductivity, pH monitor, fluorescence, light scattering.
- Fraction collectors : semi-automatic (collecting valve) or automatic.
- •Columns oven: +5 to +85°C; temperature stability +/-0,1°C.
- Automated sample injection system.
- 21CFR Part11 compliant data processing software.



# **Consumables for**

# liquid chromatography



## Knauer and Dr Maisch HPLC, UHPLC and Preparative HPLC columns

Finding the best fitting column for your HPLC, UHPLC, Préparative HPLC, GPC or SEC applications always starts with looking closely at the substances you want to analyse, we supply a wide range of LC columns with a high quality stationary phases.



#### **Knauer FPLC columns Sepapure®**

FPLC Sepapure® columns are dedicated for purification of biomolecules. Sepapure® media for affinity chromatography (AC) and Ion-Exchange chromatography (IEX) is based on Agarose and depending on the specific purification mode functionalized with ligands e.g. Protein A, Ni-NTA or quaternary ammonium (Q). These FPLC media are available packed in 1 ml and 5 ml cartridges or as bulk media.



#### SciLab HPLC sample vials

- Discover our premium sample vials, designed for accuracy and consistency in sample storage. Ideal for various lab analyses, ensuring sample integrity and reliability.
- Various references compatible with all autosamplers brands.
- Vials, micro-vials and vials inserts, with different volumns.
- Available in clear or amber borosilicate glass and also in PP.
- Wide range of septa



#### SciLab chromatography syringe filters

- Streamline your workflow with our syringe filters: intuitively color-coded for quick selection, ensuring optimal throughput and minimal sample loss. Achieve unmatched precision and purity in every filtration.
- Wide range of membranes : nylon, PVDF, PTFE, PES, MCE, PP, cellulose acetate or regenerated cellulose.
- Available in 13, 25 or 30mm diameters and 0,22 or 0,45µm pore sizes.



# Polarimeter, refractometers

# and spectrophotometer



#### Hanon benchtop automatic polarimeter P850 Pro

- Measuring modes : Optical Rotation; Specific Rotation; Concentration; Sugar Degree.
- Completely meet the requirements of user ID classification & tracking, Esignature, and Data tamper-proof, which listed in FDA 21CFR part.11.
- Measuring range : +/-89,99°Arc (+/-0,01°); +/-259°Z
- Repetability: 0,002° optical rotation
- Light source: 589,3nm LED
- Peltier temperature control: 10 to 50°C; +/-0,2°C
- Display: 8 inches, TFT touch screen



## Hanon benchtop automatic refractometer A670

- LED cold light source with a working life more than 100000 hours
- Completely meet the requirements of user ID classification & tracking, Esignature, and Data tamper-proof, which listed in FDA 21CFR part.11.
- Suitable for scientific research institutes, petroleum, oil, pharmaceutical, paints, food, daily chemical, sugar and geological prospecting industries.
- Refractive index range : 1.30000 to 1.70000 nD; +/-0,0001
- Brix range : 0 to 100%; +/-0,1%
- Temperature control range : 5 to 80°C; +/-0,02°C
- Display: 7 inches, TFT touch screen
- Automatic or manual temperatue compensation



## Hanon double-beam UV-Visible spectrophotometer i9

- The Main unit and PC software can independently implement functions of Quantitative; Kinetics; Wavelength Scan; Multi Wavelength; DNA/Protein and Data Printing, PC software can complete the function of data processing.
- Wavelength range: 190 to 1100nm; +/-0,1nm
- Variable bandwidth: 0,5; 1; 2; 4 or 5nm
- Photometric range: 0 to 200%T; -4.0 to +4.0A; 0 to 9999C
- Photometric accuracy: +/-0,2%T
- Noise : +/-0,0005A/h
- Scanning speed: High, middle, low





# Physical testing instrument



#### SciLab tablet friability and abrasion tester CS-II

- Two drums run synchronously. Auto stop at timing point.
- The drum is made of high quality hyaline acryl.
- The speed and revolution of the drum can be preset at any time, either preset or real data is displayed on the LED.
- A MPU is used to control all operations, high accuracy is achieved in testing rotary speed and circle number.
- Automation: auto-test, auto-diagnose, auto-alarm.
- Cylinders number : 2
- Rotation speed : 20 to 90rpm; +/-1rpm
- Rotation count: 10 to 900r; +/-1r



## Hanon automatic melting point apparatus MP490

- Integrates video technology into melting point measuring. It not only provides users with reliable melting point test result, but also intuitively displays temperature curve and real-time video image, and achieves the function of save, replay the video, stamp video and so on. It also provides better help for users to observe melting process of sample.
- Completely meet the requirements of FDA 21CFR part.11.
- capillary capacity: 4, with inned diameters from 0,9 to 1mm.
- Temperature range: RT to +400°C with 0,2°C repetability.
- Video & camera with video reply and color 8 inch touch screen.
- Automatic find melting point
- Methods storage : 200
- Memory capacity: 128 GB



## SciLab disintegration testers BJ

- Available in 1, 2, 3 or 4 baskets versions, with 6 tubes in each basket.
- Each test station (basket) is driven independently, with autostop at timing point.
- The bath liquid can achieve an evev temperature
- A MPU is used to automatically the temperature, time and frequency of nacelle back and forth.
- Automation: auto-test, auto-diagnose, auto-alarm.
- Nacelle back and forth frequency: 30 to 32/min.
- Nacelle back and forth range: 55mm; +/-2mm.
- Automatic time range : 1 to 900min.
- Accuracy of temperature : 37°C; +/-0,5°C.





# **Physical testing instrument**



#### Ischi advanced tablet hardness testers H-Series

- For manual measurement of 5 parameters: weight, thickness, diameter (length), width and breaking force (hardness). Intuitive operation via 7" touch-screen display. State-ofthe-art technology with LED status lamp. Smart, user-friendly with high quality.
- Hardness measuring range: 4 to 400N; +/-1N. (optional 40N or 800N).
- Tablet diameter: 1 to 60mm; +/-0,05mm.
- Weight: external balance.
- Units: Hardness (N, Kp, SC); diameter (mm, inch).
- Measurement method: constant speed or constant force.
- Complies with 21 CFR Part 11 regulation.



#### Haosoo tablet dissolution tester DT 12

- This fully automatic system is composed of an automatic dissolution tester DT12 and an optional automatic sampling station SC12.
- Completely meet the requirements of FDA 21CFR part.11.
- Using 12 cup speed partition (6+6) 2 working areas, 2 batches of dissolution tests can be completed at the same time.
- Speed range: 1 to 300rpm; +/-0,1rpm.
- Temperature range : RT to +55°C; +/-0,1°C.
- Swing of (paddle) shaft : <=0,3mm.
- Basket swing : <=0,5mm.
- Optional automatic sampling system with 12 sampling channels with sampling racks 12x16 holes and sample volums from 0,1 to 100ml.



#### SciLab gel texture analyzer JS-III

- Used for testing gels and gel-like materials, by determining the freezing stength of gelatin in a specified environment. : Bloom test.
- Test range : 5 to 1000 Bloomg; +/-0,3%.
- Sampling depth: 1 to 60mm; <=+/-0,1mm.
- Sampling speeds : 0,1; 0,2; 0,5; 1 or 2mm/s.
- Measurement cylinder diameter : 12,7mm; +/-0,01mm.
- Bottle capacity: 150ml (inner diam. 59mm; height 85mm).
- Integrated printer.
- Complete system delivered with water cooling system and cooled bath.





# Ultra-pure water control and production

# systems



### membraPure benchtop TOC analyzer miniTOC<sup>2</sup>

• The miniTOC<sup>2</sup>, TOC analyzer is designed for monitoring total organic carbon (TOC) in pure and ultrapure water.

The miniTOC<sup>2</sup> uses a high-flow-rate concept and efficient "direct surface" UV oxidation.

Combined with conductivity detection, the miniTOC<sup>2</sup> ensures rapid TOC value monitoring.

- Compliance: USP 643, EP 2.2.44, DIN EN 1484, GLP, and 21 CFR Part 11.
- Measuring range: 0.5 to 1500 ppb, ±0.3 ppb.
- Sample conductivity range: up to 10 μS/cm.
- Conductivity resolution: 0.001 μS/cm.
- 8" color graphic touchscreen.
- Can be connected to an automatic sample changer (40 vials of 40 mL each).



## membraPure ultra pure water system Astacus<sup>2</sup>

- Production ultra pure water (Type I), from pretreated water supply (reverse osmosis or deinized water).
- Conductivity of produced water: 0,055µS/cm.
- Resistivity of produced water : 18,2 M $\Omega$ .cm.
- TOC value of produced water : <10ppb for Reagent quality, <5ppb for Life Science quality and <3ppb for Analytical quality.
- Produced rate: 2lit/min.
- 3 versions available : « Reagent » for general lab use, « Analytical » for special techniques (HPLC, ICP, ...) and « Life Science » for cell culture.



#### membraPure ultra pure water system Aquinity<sup>2</sup> P35

- Production of pure water (Type II) and ultra pure water (Type I), directly from tap water.
- Conductivity of produced water: <0,2μS/cm Type I; 0,055μS/cm Type II.
- Resistivity of produced water : >5M $\Omega$ .cm Type II; 18,2 M $\Omega$ .cm Type I.
- TOC value of produced water: <10ppb for Reagent quality, <5ppb for Life Science quality and <3ppb for Analytical quality.
- Produced rate: 10 lit/h.
- UV lamp: 185nm and 254nm
- 3 versions available : « Reagent » for general lab use, « Analytical » for special techniques (HPLC, ICP, ...) and « Life Science » for cell culture.





# Bioreactors and cells counter



## Applitech Biotech benchtop double vessels bioreactor Abio-**Bundle eDual-Control**

- Dual-Control flexibility The "eDual-Control" allows two independent bioreactor vessels to be controlled from a single control unit
- Broad volume range vessels : from 0.3 lit up to 16 lit
- Intuitive Touchscreen Interface Equipped with a 13.3" color touchscreen
- Comprehensive Gas Control: Supports up to 6 Mass Flow Controllers (MFCs) per vessel for flexible gas delivery.
- Each vessel supports up to 4 variable-speed pumps
- Secure multi-user access & Data Integrity: Up to 23 operator accounts with 3 level password protection helps ensure process security and traceability.
- Built-in data storage ensures no data loss, even if external systems fail.
- WebUI: allows control and monitoring through a standard web browser.
- Comes standard with AbioPIMS Lite or AbioExpert Lite software for process data capture, recipe management, and traceability.



#### Applitech Biotech single use vessel bioreactor AbioSUS

- Wide range of working volumes: 50 L, 200 L, 500 L, 1,000 L, and 2,000 L, making it suitable for R&D, process development, and GMP production.
- High-Precision Temperature Control with a double-jacketed vessel frame, offering a control range of 8 °C to 40 °C with ±0.1 °C stability.
- Efficient Mixing Performance Equipped with a servo motor and dual-blade marine impeller to ensure uniform mixing and excellent mass transfer
- Integrated In-Line Weight Measurement A high-accuracy C6 load cell continuously tracks the culture weight
- Robust User Management & Data Integrity
- Regulatory Compliance & High-Quality Materials The single-use AbioBag is manufactured from a 7-layer co-extruded film, sterile, pyrogen-free, animalorigin-free, and certified to USP Class VI / ISO 10993



# Applitech Biotech Dual-Fluorescence Cell Counter, Countleader FL

#### -1000

- Dual-fluorescence AO/PI staining mode for high-precision analysis
- Fast analysis: 8 samples in under 2 minutes
- Minimal sample volume required: only 15 μL
- · No cleaning, calibration, or maintenance required
- 12-inch high-definition touchscreen
- Compliant with 21 CFR Part 11





# **Balances and moisture analyzers**



## **Kern & Sohn precision balances PDT**

- Touch display.
- Meet the requirements of GLP and FDA 21CFR part.11.
- Internal automatic calibration.
- Weighing capacity: from 320 to 6000gr (depending on models).
- Reproducibility: from 0,03 to 0,003gr (depending on models).
- Functions : statistical function, percentage, weighing with tolerance range, counting, totalizing and more.
- Stainless steel weighing surface: 115mm diameter or 185x185cm (depending on models).



#### Kern & Sohn analytical balances ADT

- Touch display.
- Meet the requirements of GLP and FDA 21CFR part.11.
- Internal automatic calibration.
- Weighing capacity: from 120 to 320gr (depending on models).
- Reproducibility: from 0,3 to 0,4mg (depending on models).
- Functions : statistical function, percentage, weighing with tolerance range, counting, totalizing and more.
- Stainless steel weighing surface: 90mm diameter.



## Kern & Sohn halogen moisture analyzer DAB 200-2

- Blacklit graphic display with 14mm height digits.
- External calibration.
- Weighing capacity: from 200gr.
- Readability weight/moisture: 0,01gr / 0,05%.
- reproductibility weight of sample 2gr/10gr: 1,5% / 0,3%.
- Moisture % / Dry content % : 20 to 100% / 100 to 20%
- Drying modes: standard, gentle or rapid





# Stirrers and baths



# Phoenix Instrument magnetic stirrer with heating function RSM-

• Temparture range: RT+5°C to 340°C)

• Speed range: 100 to 1500 rpm

- Plate in stainless steel with porcelain surface (80mm diameter)
- Connector for PT-1000, integrated control function
- Digital adjustment with backlit Display
- Indicator for hot surface, even when stirrer is shut-off
- High stirring volume: 20 L



#### Phoenix Instrument vortex stirrer Vortexer RS-VA 10

- Touch- or continuous
- Variable speed 100 to 2,500 rpm
- Anti-slipping feet
- Various top frames available
- Sturdy cast housing



## Phoenix Instrument digital overhead stirrer RSO-40

- Digital stirrer with LCD-display
- Microprocessor-controlled speed accuracy
- Smooth start procedure
- Selectable display of speed/torque
- RS 232 Interface
- Sturdy cast housing
- Max. stirring quantity: 40 liters H2O
- Speed: 50 to 2200 rpm
- Max. viscosity: 50.000 mPas
- Max. torque: 60 Nm



#### Ultrasonic bath Phoenix Instrument DU-100S

- Stainless steel tank
- Tank volume 10 lit (also available in 3,2 4,5 6,5 22 and 45 lit
- Electronic controlof all parameters and protections
- Adjustable power from 10 up to 100% Adjustable temperature until 60°C
- deliverd with stainless steel lid and basket and with 60ml cleaning solution



#### Water bath Phoenix Instrument WB-12

- Stainless steel tank
- Volume: 12 lit (also available in 5 and 22 lit)
- PID control via a colour screen, and alarms setup
- Temperature : until100°C, resolution 0,1°C et homogeneity +/-0,5°C
- Delivered with lid and drain valve





# Incubators, climatic chambers and ovens



#### Phoenix Instrument incubators TIN-IN & TIN-IF

- The organic materials used in the typical laboratory application require a constant and gentle heating.
- Available in both versions: Forced air circulation or natural convection
- Volumes from 16 to 200 liters
- Temperature range : from RT+10 °C up to 70 °C
- Temperature variation at 37°C: +/-0,3°C
- Color touch screen display for the selection of the various functions.
- All parameters on a single screen: temperature, fan speed, time, program number and step, USB pendrive presence, date and time.



#### Phoenix Instrument climatic chambers CH-150 & CH-250

- The climatic chambers are the ideal instrument to do stability and aging test on materials, simulation of environmental conditions and stress test in several fields such as: industry, food, textile, packaging, rubber/plastics, etc.
- Volumes: 150 & 250 liters
- Temperature range : from +10°C to +70°C
- Humidity range: from 45% RH to 95% RH
- Safety class: 3.1
- Integrated mini printer
- Digital control by PID regulator and GLP functions



## Phoenix Instruments drying ovens TIN-TN & TIN-TF

- Ideal for everyday use in the processes of drying and sterilization, these ovens are characterized by a high load capacity and by the accurate temperature control.
- Available in both versions : Forced air circulation or natural convection
- Volumes from 30 to 400 liters
- Temperature range : from RT+10 °C up to 300 °C
- Temperature variation: +/-0,3°C ro +/-0,5°C depending on models.
- Color touch screen display for the selection of the various functions.
- All parameters on a single screen: temperature, fan speed, time, program number and step, USB pendrive presence, date and time.





# **Electrochemistry**



#### Phoenix Instrument portable pH-meter EC-26 pH

- GLP functions
- Data logger (automatic or manual), 1000 data records
- Connection to PC via micro-USB
- Free DATA LINK +
- Automatic brightness adjustmentprogram number and step, USB pendrive presence, date and time.
- pH measuring range : -2.00 to +16.00 pH
- Temparatue measuring range : -10°C to +110°C
- Calibration points: 1 to 3
- IP-Class: IP 57



## Phoenix Instrument benchtop pH-meter EC-45 pH

- Measuring range : -2 to +20 pH
- Tempartue range : -30 to +130°C
- Automatic Calibration up to 5 points
- DHS-function, automatic recognition of DHS- and analog electrodes
- Large, colored graphic display
- Memory with re-call of last calibration date and time and information of electrode's life
- Non-volatile memory holds up to 1,000 data points with date/ time in automatic (Data logger) or manual
- External keypad and can be equipped with a magnetic stirrer
- GLP function
- IP54 rated housing handles splashes



## Phoenix Instrument benchtop conductivity meter EC-36 cond

- High-resolution colour display, adjustable brightness
- Display of Conductivity/TDS and temperature values
- Automatic conductivity calibration up to 5 points
- Selectable stability parameter (low-medium-high)
- Automatic and manual temperature compensation
- Protection class IP 54 and GLP function
- Adjustable safety temperature
- Conductivity range: 0 to 200 mS; ajustable accuracy 0,1 μS to 0,1 mS
- TDS range : 0,1 mg/l to 200g/l
- Temperature range : 0 to 110°C









#### Phoenix Instrument mini centrifuge CD-1012

- •Ideal for quick spins, microfiltration of samples, cell separations and many other routine laboratory procedures.
- Max. Speed 10,000 rpm (7,490 g)
- OLED display may switch speed and time;
- Safe, endurable and robust rotor with clamp locking design easy to operate
- Wide voltage technology the speed is not affected by voltage fluctuations high
- Compatible with 0.5/1.5/2mL×12 tubes+4×PCR8 strips 0.2 mL×44 PCR tubes.
- Central button can adjust the motor speed and supports soft braking and instant stop modes.



## Phoenix Instrument refrigerated high speed centrifuge CD-3124R

- Speed: 200 to 15.000 rpm (21,380 g)
- Timer: 30 s to 99 min or continuous
- Capacity: 24 x 1.5/2 ml, 36 x 0.5 ml, 12 x 5 ml, 18 x 5 ml, 4 x 8 x 0.2 ml
- Temperature : -20 to +40°C
- Automatic lid locking
- Acceleration and deceleration time: 25 s, adjustable in 9 steps
- Aluminium rotos, autoclavable at 121°C
- 9 programs memory
- MCA test by TÜV Rheinland



## **Phoenix Instrument centrifuge CD-0412**

• Speed: 300 to 4.500 rpm (2,490 g) • Timer: 30 s to 99 min or continuous

• Capacity: 6 x 15 ml or 12 x 10 ml

• Rotor: 54° fix angle

• Brushless motor drive

• Conforms CE, TUV and FCC. MCA test according to IEC/EN61010-2-20



# Temperature and humidity data loggers



## tempmate single-use temperature data logger XS

- Single-use data logger for logistics.
- Temperature range : -10°C to +70°C; +/-0,5°C (possible down to -20°C with limited run time
- Protection class: IP67.
- Logging interval: 10 min (others on request).
- USB data transfer to the PC, with PDF report (data & graph).



## tempmate temperature data logger M1

- •Ideal for recording temperature in laboratory instruments (fridges, freezers, incubators), in tempered rooms (positive or negative), in samples transport (logistics) or in the laboratory premises.
- Temperature range : -30°C to +70°C (-40°C to +80°C with external probe); +/-0,5°C.
- Alarms configuration : 5 points
- Memory: 32000 data.
- Data acquisition interval: 10 sec to 24 h.
- USB data transfer to the PC, with PDF report (data & graph).
- Protection: IP67.
- Options : external probe and wall braket (with screws or magnet).



#### tempmate temperature and humidity data logger M2 TH

- •Ideal for recording temperature and humidity in laboratory instruments (fridges, freezers, incubators), in tempered rooms (positive or negative), in samples transport (logistics) or in the laboratory premises.
- Temperature range: -30°C to +70°C (-40°C to +90°C with external probe); +/-
- Humidity range : 0 to 100% RH; +/-3% RH
- Alarms configuration: 6 points for temperature and 2 points for humidity
- Memory: 60000 data.
- Data acquisition interval: 10 sec to 11h59min.
- USB data transfer to the PC, with PDF report (data & graph).
- Options: external temperature probe and wall braket (with screws or magnet).





# Temperature and humidity data loggers



## tempmate multi-parameters data logger GM2 TH (GSM 4G/5G data transfer)

- Recorded parameters : temperature, humidity, ambient light, tilt indicator and shock indicator.
- •Ideal for recording temperature and humidity in laboratory premises, in storage areas, in process areas. Perfect for all other parameters in logistics (deliveryt véhicules).
- Temperature range : -30°C to +70°C (-200°C to +100°C with external probe); +/-0,5°C.
- Humidity range: 5 to 95% RH; +/-3% RH
- Alarms configuration : 6 points
- Memory: 50000 data.
- Data acquisition interval: 10 min to 1440 min.
- GSM real time data transfer to the Cloud (data & graph).
- Options : external temperature probes and wall braket .



# Various equipement



## **TDTF liquid particules counter GWJ-16**

- Measurement principle: Light obscuration
- Particle size range: 1 to 500 μm
- Measurement channels: 16 configurable particle-size channels
- Concentration range: 0 to 24,000 particles/mL
- Recommended sample volume: 1 to 100 mL
- Sampling flow rate: 5 mL/min to 100 mL/min (adjustable)
- Display: High-resolution color touchscreen
- Integrated printer
- Standards compliance: USP <788>, <789>, BP, CHP
- Calibration: ISO 21501-2 compliant
- Touchscreen control



#### SciLab fume hood LFH PP

- Completely made of polypropylene (frame, lower base and work surface) : anti -corrosion hood.
- Different internal dimensions: 1200, 1500 and 1800 mm.
- Air speed: 0,5 +/-0,1 m/s..
- Electronic control of all parameters.
- Safety glass front window with mechanical mouvement.
- LED internal white light: 800 Lux.
- Delivered with: sink, water tap, vacuum tap, 4 electric plugs, lower base with storage cabinet, centrifugal fan.



## Hanon automatic Kjeldahl protein/nitrogen analyzer K1160

- Fully automatic distillation, titration, fault self-test, calculation, printing, waste disposal
- High accuracy burette, can be adjust from 0.2 to 1µL/Step.
- Compliance with FDA 21CFR Part 11 and GMP.
- Measuring range : 0,1 to 240 mg N, with +/-0,5% accuracy and more than 99,5% recovery
- Water consumption: only 0,5lit/min
- Optional autosampler with 24 samples per batch



# Various equipement



#### Kern & Sohn binocular microscope OBE 132

• Tube type : binocular.

• Ocular magnifications: 10 x.

• Standard objectives: 4x, 10x, 40x and 100x.

• Illuminance : transmitted light.

• Illumination intensity : 3W—LED.

• Condensor type : Abbe.



## Knauer freezing point osmometer K-7400 S

- Compliant with European Pharmacopoeia requirements (Ph. Eur. 2.2.35, 10/2021)
- Measurement range: 0 to 2000 mOsmol/kg
- Accuracy: SD ≤ 4 mOsmol/kg from 0 to 400 mOsmol/kg
- RSD ≤ 1% from 400 to 2000 mOsmol/kg
- Sample volume: 50 to 150 μL
- Measurement time: 2 minutes
- Linearity: ±1% from 0 to 1500 mOsmol/kg
- ±1.5% from 1500 to 2000 mOsmol/kg
- Calibration up to 3 points: 0 mOsmol/kg and one or two additional points of choice



## S.C.A.T. HPLC safety kits

- The ideal solution for protecting users against solvent vapor emissions originating from HPLC systems.
- The SCAT protection system directly tackles the hazard of chemical fumes at the source and ensures that containers (mobile phase bottles and waste containers) remain securely closed at all times.
- Equipped with filters featuring replacement indicators (for mobile phase bottles and waste containers).
- Multiple cap types available: depending on the HPLC configuration (number of detectors, purge lines, autosamplers drain, etc.).



# **Process equipment et consumables**



## Mettler Toledo on-line bioburden (microbial) analyzer **7000RMS**

- Online microbial analyzer for real-time measurement of microbial contamination in pharmaceutical-grade water. This online analyzer provides a rapid microbial contamination monitoring method to control your water system.
- No sample preparation required. No reagents needed
- Continuous or batch sampling modes
- Real-time microbial load monitoring, enabling improved process control; does not replace traditional sampling
- Optimizes loop availability by reducing cleaning duration
- Improves system restart after shutdowns
- Facilitates diagnostics in case of contamination (faster loop release)
- Displays the number of AFUs (Auto-Fluorescent Units), as well as a dashboard showing the history of AFUs detected in the sample stream. Results can be displayed every two seconds.
- Biological detection limit: 1 AFU (Auto-Fluorescent Unit)
- Minimum detectable size: ≥ 0.5 μm
- Measurement range: Total count from 0 to 10,000/mL
- Compliance: USP 1223, USP 1231, and Ph. Eur. 5.1.6 (Pharmacopeial guidelines: alternative microbial control methods)



## Mettler Toledo on-line TOC analyzer 6000TOCi

- The 6000TOCi online sensor delivers true continuous measurement for the detection of organic contamination. With an extremely rapid response to TOC changes, the 6000TOCi is ideal for all pure water applications where rapid detection of TOC changes is critical
- Measuring range : 0,05 to 2000 ppbC (µg/lit)
- Detection limit: 0,025 ppb
- Resolution: 0,001 ppbC (µg/lit)
- Condustivity range : 0,02 to 100 μS/cm
- Conductivity accuracy :  $\pm$  2%, 0.02 20  $\mu$ S/cm  $\pm$  3%, 20 -100  $\mu$ S/cm
- Cell constant accuracy: +/-2%
- Temperature range : up to 100°C
- Water consumption: 8,5 ml/min
- Software: ALCOA+ and 21 CFR Part 11 compliant
- Intelligent Sensor Management (ISM)



# **Process equipment et consumables**



## Ischi automatic tablet testing system UTS 4.3

- The UTS 4.3 accomodates a wide range of tablet shapes and sizes, from round, oval, square to rectangular, including numerous special shapes. For challenging oblong tablets, incorporate the globaly acclaimed Oblong Centering System (OZB) for unmatched precision..
- Hardness range: 4 to 500N; +/-1N (optional 50N and 1000N).
- Diameter/length/width range : 0 to 18mm; +/-0,05mm.
- Thickness range: 0 to 17mm; +/-0,05mm • Weight range: 10 to 50.000mg; +/-1mg.
- 21 CFR Part 11 compliant
- Can be connected directly to a tablet press for on-line testing.



## Biomation pilot counting/filling machine Octacount

- The Octacount is a GMP compliant counting and filling machine for tablets, capsules, dragees and other molded products in IP65 protection class.
- Counting range: 1 to 99.999.
- Speed: until 57.000/h.
- Operation : via 7" Sienmens touchscreen.
- Exact filling with 99,9% accuracy.
- Optional automatic filling system, up to 32 containers can be filled automatically.



## Ronchi single-punch pilot tablet press Unique

- Maximum production capacity: 3,600 tablets/hour
- Maximum compression force: 50 kN
- Tablet diameter: from 1.5 mm (micro-tablets) to 22 mm
- Maximum fill depth: 20 mm
- Adjustable parameters: diameter, fill depth, hardness, production speed
- "Test" mode: Production of a single tablet
- Construction: Nickel and stainless steel
- Control via touchscreen interface
- Protection rating: IP54
- Capability to install multiple types of round punches: from 4 mm to 22 mm



# Process equipment et consumables



## Mettler Toledo on-line dissolved ozone sensor pure O3

• The pureO3 dissolved ozone sensor guarantees rapid, accurate measurement across a wide range of ozone concentrations. It uses Intelligent Sensor Management (ISM) technology to provide predictive diagnostics for low-maintenance, in situ measurement

• Operating range : 0 to 5000 ppb (µg/lit)

• Response time: 60 s

Measured pressure resistance: 0 to 3 bar
Sample flow rate: 200 ml/min to 500 ml/min



#### Mettler Toledo on-line conductivity sensor UniCond

- $\bullet$  The UniCond 2-electrodes conductivity sensor provides an exceptionally wide measurement range due to its advanced built-in circuit. The sensor can be used to measure everything from ultrapure water to brackish water (up to 50,000  $\mu S$  / cm)
- Condustivity range / Cell constant: 0,02 to 3000 / 0,1 cm<sup>-1</sup>
- Connection : 1<sup>1/2</sup> inch Tri-Clamp
- Electrode material : Stainless steel 316L
- Measurement technology/ Electrode configuration : Conductive/ 2-electrode
- Hygienic/Biocompatibility Approvals
- Certificates & Approvals: EN10204 3.1 & USP <88> Class VI



#### Realco enzymatic solution for biofilms treatment BiLiSS

- Enzymatic cocktail specially formulated to degrade the protective matrix of biofilms and limit their development.
- Availability of the PDE as well as the method for validation of the absence of residues.
- Reduces EHS risks thanks to neutral pH and T° of use at 45°C (20°C version, available: BiLiSS Cold).
- Non agressive for equipment (EPDM, PTFE, ...).
- Positive impact on the environment (discharge of prepurified water)
- Biodegradability rate > 98%.