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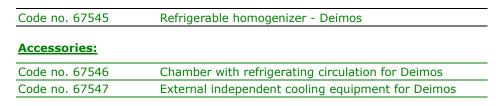
# SAMPLE PREPARATION

# Refrigerable homogenizer - Deimos

Deimos is the new homogenizer based on microsegmented knives for the preparation of food samples to the analysis of their chemical contents. Reliable and easy to use, it can be accessoried with its useful homogenizing chamber with an integrated water refrigerating system to keep the sample temperature cool, thus avoiding its over-heating and its consequent loss of relative humidity, which would yield to wrong results of the analysis.

#### **Technical features:**

- Made in AISI 304 stainless steel
- Homogenizing chamber in stainless steel 18/10, with handles
- Transparent cover, with an inspection hole
- Adjustable speed of the knives from 1,100 to 1,600 rpm
- Excellent thermal insulation between the engine and the chamber
- Optional chamber with integrated refrigerating system with liquid circulation, connectable to the tap water or to an external independent cooling equipment
- Safety devices: NVR, microswitch on the cover, 24-Volt function keys
- Chamber capacity: 3.3 liters
- Dimensions: 38x32x27 cm (wxdxh) Weight: 10 Kg.
- ◆ Power supply: 220 V 50 Hz. Other voltages: available upon request







# Carrez I and II - Solutions for the sample preparation for enzymatic kits

The composition of these ready-to-use Carrez I and II solutions is optimized for the use with all enzymatic kits. The application of these reagents to the sample preparation allows the operator to obtain a better precipitation (clarification) of the sample solution; furthermore, the test protocol will be fully respected to achieve the perfect standardization of the procedure and the improvement of the analytical performances.

- Standardized and ready-to-use solutions
- Excellent for the use with enzymatic kits of all main brands
- Optimized composition according to most typical analytical protocols and procedures
- Perfect clarifications of all samples are achieved
- Long shelf life
- Storage at room temperature
- Very competitive price





Code no. AST50500	Carrez I, 1 liter, optimized solution for the use with enzymatic kits
Code no. AST50600	Carrez II, 1 liter, optimized solution for the use with enzymatic kits



# **OSMOMETRY**

# Single-sample osmometer - OsmoSpecial 1

OsmoSpecial 1 is a single-sample semiautomatic osmometer for the quick and accurate analysis of osmolality in biological and pharmaceutical liquids or any other solutions, based on the cryoscopic point determination. The automatic reading and interpretation of the results occur when the sample temperature plateau is reached, according to all the international references.

# **Technical features:**

- Capacity: single sample
- Visualization of the osmolality value and the freezing point
- Cooling system with electronically controlled Peltier cells
- No need of cooling liquid
- Forced ventilation
- ♦ Working room temperature: from +5°C to +36°C
- Automatic calibration
- Lash and agitation width adjustment controlled by software
- Results in mOsm/Kg units and °C
- Sample volume: from 50 to 200 μl (with disposable plastic tubes)
- Analysis time: about 3 minutes
- Instrument warm up time: 5 minutes
- Measurement range: from 0 to 1,500 mOsm/Kg
- Resolution: 1 mOsm/Kg
- Repeatability and reproducibility: ±2 mOsm/Kg (< 600 mOsm/Kg) or ±0.5% (> 600 mOsm/Kg)
- Dimensions: 285x380x450 mm (wxdxh) with head up
- Weight: about 10 Kg.
- Power supply: 110/220 V 50/60 Hz 100 W

Code no. 68699 Single-sample osmometer - OsmoSpecial 1
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Check standard, 324 mOsm, 250 ml
Calibration standard, 100 mOsm, 125 ml
Calibration standard, 900 mOsm, 125 ml
Calibration standard, various concentrations
Disposable sample tubes, volume from 30 µl, 500 pieces
100-place sample tubes holder, in plastic, for plastic tubes
Automatic micropipette, 10 – 100 μl adjustable volume
Automatic micropipette, 100 – 1,000 μl adjustable volume
Yellow disposable tips, 1,000 pieces
Blue disposable tips, 1,000 pieces



# Single-sample osmometer - Cryobasic 1

Automatic osmometer for the quick and accurate analysis of osmolality in biological and pharmaceutical liquids or any other solutions, based on the cryoscopic point determination. The automatic reading and interpretation of the results occur when the sample temperature plateau is reached, according to all the international references.

- Capacity: single sample
- Visualization of the osmolality value and the freezing point
- Cooling system with electronically controlled Peltier cells
- Automatic renewal of the cooling liquid by means of continuous recirculations
- Forced ventilation
- Working room temperature: from +5°C to +36°C
- Automatic calibration
- RS232 data exit Optional thermal printer
- Software-piloted agitation and whip stroke
- Results in mOsm and °C
- Sample volume: from 30 (suggested: 50) to 200 μl (with disposable plastic tubes)
- Analysis time: about 2-3 minutes
- Instrument pre-heating time: 5 minutes
- Measurement range: from 0 to 3,000 mOsm/Kg
- Resolution: 1 mOsm/Kg
- Repeatability and reproducibility: ±2.5 mOsm/Kg (< 600 mOsm/Kg) or ±0.5% (> 600 mOsm/Kg)
- Dimensions and weight: 28x43x36 cm (wxdxh) with lowered head 18.5 Kg.
- Power supply: 110/220 V 50/60 Hz 100 W

Code no. 68399	Single-sample osmometer - Cryobasic 1	
		Our own
Accessories:		production
Code no. 63225/OSM	Check standard, 324 mOsm, 250 ml	
Code no. STD2101	Calibration standard, 100 mOsm, 125 ml	
Code no. STD2109	Calibration standard, 900 mOsm, 125 ml	V
Code no. STD2120	Calibration standard, 2,000 mOsm, 125 ml	
Code no. STD2125	Calibration standard, 2,500 mOsm, 125 ml	
Code no. STD2130	Calibration standard, 3,000 mOsm, 125 ml	
Code no. 67210	Cooling liquid, 1 liter	
Code no. 67200	Cooling liquid, 250 ml	
Code no. 2030N	Disposable sample tubes, volume from 30 $\mu$ l, 500 pieces	
Code no. 563	100-place sample tubes holder, in plastic, for plastic tubes	
Code no. EP-50	EP-50 thermal printer	
Code no. 67219	Thermal paper roll for EP-50 printer	
Code no. 9042401009	Automatic micropipette, 10 – 100 μl adjustable volume	
Code no. 9042401322	Automatic micropipette, 100 – 1,000 µl adjustable volume	
Code no. 37460	Yellow disposable tips, 1,000 pieces	
Code no. 37465	Blue disposable tips, 1,000 pieces	





# 20-sample automatic osmometer - Cryobasic 20

Cryobasic 20 combines the superb performances of its single-sample version with the convenience of the 20-place autosampler carousel. Excellent for larger daily routines.

#### **Technical features:**

- Capacity: 20-place autosampler carousel
- Provided with EP-50 thermal printer
- Results are automatically visualized and printed, along with the sample numbers
- Sample volume: from 50 to 200 μl (with disposable plastic tubes)
- Dimensions: 28x43x36 cm (wxdxh) with lowered head
- Other features: as for Cryobasic 1



Cod. no. 68293	20-sample osmometer - Cryobasic 20	

#### **Accessories:**

As for Cryobasic 1



# 40-sample automatic osmometer - CryoStyle 40

Automatic osmometer with a 40-sample autosampler carousel for the quick and accurate determination of the osmolality values in liquids and other solutions, based on the cryoscopic point detection. CryoStyle 40 applies the same excellent technology of the Cryobasic product range, by adding some innovative features such as the touch-screen display and the display visualization of the freezing temperature plateau achievement during the analysis. Ideal for high routinary charges. Supplied with a thermal printer.

#### **Technical features:**

- Capacity: 40-place autosampler carousel
- Provided with EP-50 thermal printer
- Results are automatically visualized and printed, along with the sample number
- Touch-screen display to move along the user-friendly menu
- Real-time displayed graph creation of the freezing point achievement
- Stable memory for more than 2,000 sample results
- User password to protect the calibration data
- Sizes: 32x57x30 cm (wxdxh) with lowered head
- Weight: 16 Kg.
- Power supply: 110/220 V 50/60 Hz 200 W
- Other features: as for Cryobasic 1



Code no. 68193 40-sample osmometer – CryoStyle 40

#### **Accessories:**

As for Cryobasic 1





# 40-sample double-headed osmometer - CryoStyle 40 Double

CryoStyle 40 Double osmometer is the ideal solution to satisfy the highest needs for quick and accurate results in osmometry: the double head allows the analysis of 2 samples at the same time and the innovative features of the CryoStyle product range get this instrument easier to use.

# **Technical features:**

- Sample volume: 2 2.5 ml (with reusable glass tubes)
- Measurement range: from 0 to 1,500 mOsm/Kg
- Other features: as for CryoStyle 40
- Auxiliary water circulation system to operate when room temperatures is >27°C





Code no. 68195	40-sample double-headed osmometer - CryoStyle 40 Double

Code no. 67205	Calibrated glass tubes, 12 pieces
Code no. 67251	24-place tube holder, in ABS
Code no. 67241	50-place tube holder, in stainless steel
Other accessories, as for Cryobasic 1	



# **DRY INCUBATION - ANTIBIOTIC TEST**

# Dry incubator - ThermoSmart

ThermoSmart is the new dry incubator produced by Astori Tecnica for accurate incubations of up to 10 sample tubes, simultaneously. It is particularly developed for the determination of antibiotics in milk samples with tube tests such as Delvotest® SP, Eclipse Farm or similar ones. Very simple and easy to use.

#### **Technical features:**

- 4 10 holes for 10 test-tubes
- Diameter of the tubes: 11 mm
- Digital adjustment of the temperature value
- Display with red LED's, 3 figures
- Temperature range: from room value to 67°C
- Resolution: 0.1°CAccuracy: ±0.5°C
- Power supply: 220 V 50 Hz.





Code no. 65486 ThermoSmart, 10-place dry incubator



# MILK ADULTERATION FOR ADDED WHEY

# Lateral-flow strip test - Stick c-GMP

The Stick c-GMP's are 3 immunochromatographic kits based on the easy-to-use test-strip format for the determination of added whey in milk and powdered milk. It detects the presence of the casein-GlycoMacroPeptide (c-GMP), present in huge amounts in whey due to the casein enzymatic degradation during the cheese manufacturing process. Not adulterated milk does not include this substance, if not in low traces. Stick c-GMP can detect the adulteration with sensitivity of 1%, 2% or 4% in milk samples. The test can be performed in 5 minutes only, after a quick sample pre-treatment. The 3 available kits sizes differ in number and in the package of the strips.



- Easy-to-use lateral-flow immunochromatographic test
- Based on a specific monoclonal antibody anti-cGMP
- Applicable on milk and powdered milk samples
- Sensitivity of 1%, 2% or 4%, at user's choice
- Results in 5 minutes and swift procedure
- Interpretation by eye: no need of special equipments to read the results
- Easy interpretation, thanks to the difference coloured lines (Control: blue Positive: red)
- ◆ The kits can be stored at room temperature (2° 30°C)
- 3 different packages for different user's needs

Code no. 903400515	Stick c-GMP, 5 individually sealed strips
Code no. 903405001	Stick c-GMP, tube with 50 strips
Code no. 903405015	Stick c-GMP, 50 individually sealed strips





# MILK ADULTERATION FOR ADDED NEUTRALIZERS

# Rapid test - Neutralizers Test

The new Neutralizers Test manufactured by Astori Tecnica allows the immediate colorimetric determination of the presence of added neutralizers (such as NaOH, KOH, carbonates, bicarbonates, ammonia, various alkalis, etc.) in milk, whey or cream. These prohibited substances may be added to unfresh or badly preserved milk with the tricky purpose to correct its pH and acidity values to optimal ones, and so pretend the milk is freshly milked or perfectly preserved.

The test is very easy to perform: it can be done everywhere, without any particular scientific tool: the sample is poured into a supplied sample tube up to its lower mark, then some ethanol is dispensed in it up to the upper mark and 2-3 drops of a specific and ready-to-use reagent are added. A prompt colorimetric reaction shows the test result, clearly and undoubtedly.



#### **Technical features:**

- Simple colorimetric and visual interpretation
- Rapid test: 3 easy steps and results in less than a minute
- It can be performed everywhere, without any laboratory
- No need of accessories or particular abilities
- It detects the additions of all neutralizing agents
- \$\psi\$ 50-test kits, with a low cost/test
- Storage at room temperature
- Long stability: 12 months from the production date



Code no. 63099 Neutralizers Test, 50 tests



# **VERIFICATION OF UHT-TREATMENT**

# Verification of UHT-treatment in cow milk/cream - Perossitest Kit

Perossitest is a complete kit for the quick qualitative determination of peroxidase enzyme in cow milk or cream, according to Rothenfusser method.

Perossitest is very easy to use and sensitive: it is widely used to confirm that the sample has been correctly UHT-treated.

Perossitest requires no laboratory equipment: the test result is colorimetric and its interpretation is clear and immediate and could be done by eye.

#### **Technical features:**

- Very rapid test: it takes a few minutes
- Easy to use
- No equipment is required
- Colorimetric interpretation: violet (presence of peroxidase) or white (absence of peroxidase)
- Test interpretation is done by eye





Code no. 63098

Perossitest Kit, about 150 tests



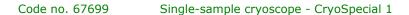
# **CRIOSCOPY**

# "Entry-level" single-sample cryoscope - CryoSpecial 1

New "entry-level" cryoscope for the quick determination of the freezing point variation in milk and cream samples due to the presence of added water, based on plateau reading. Analytical performaces according to the recent IDF-ISO 5764:2009 and AFNOR international regulations. This equipment has a reading head with manual movement and the automatic beginning/end of the analysis: it is the perfect solution for all dairies and milk laboratories with a limited budget or a small number of test/day.

#### **Technical features:**

- Capacity: single sample
- Visualization of the freezing point and the added water percentage
- Cooling system with electronically controlled Peltier cells
- No need of cooling liquid
- Forced ventilation
- Working room temperature: from +5°C to +36°C
- Automatic calibration
- Software-piloted agitation and whip stroke
- Results in °C, °Hortvet and water% units, selectable by the user
- Sample volume: 2 2.5 ml
- Analysis time: about 3 minutes Instrument pre-heating time: 5 minutes
- Resolution: ±0.0005°C Reproducibility (on bovine milk): ±0.0025°C
- Dimensions: 285x380x450 mm (wxdxh) with head up Weight: about 10 Kg.
- Power supply: 110/220 V 50/60 Hz 90 W







# Single-sample cryoscope - CryoSmart 1

Automatic instrument for the quick determination of the freezing point variation in milk samples due to the presence of added water. Based on plateau reading, according to the recent IDF-ISO 5764:2009 and AFNOR international regulations. This cryoscope includes the "lactose-free milk" function to control the process of removal of lactose in milk, whey and cream.

- Automatic renewal of the cooling liquid by means of continuous recirculations
- RS232 data exit Optional thermal printer
- Analysis time: about 2 minutes
- "Lactose-free milk" function to control the removal of lactose in milk and cream
- Dimensions: 28x43x36 cm (wxdxh) with lowered head Weight: 18.5 Kg.
- Power supply: 110/220 V 50/60 Hz 100 W
- Other features: as for CryoSpecial 1



Code no. 67499 Single-sample cryoscope - CryoSmart 1	
Accessories:	
Code no. EP-50	EP-50 thermal printer
Code no. 67219	Thermal paper roll for EP-50 printer
Code no. 67900/ENG	CryoSoft, cryoscopy data handling software (English version)





# 20-sample automatic cryoscope - CryoSmart 20

CryoSmart 20 combines the superb performances of its single-sample version with the convenience of the 20-place autosampler carousel. Also this model is according to the IDF-ISO 5764:2009 and AFNOR rules. Excellent for larger daily routines. This cryoscope includes the "lactose-free milk" function to control the process of removal of lactose in milk, whey and cream.

#### **Technical features:**

- Capacity: 20-place autosampler carousel
- Results are automatically visualized and printed, along with the sample numbers
- Provided with EP-50 thermal printer
- Dimensions: 28x43x36 cm (wxdxh), with lowered head
- Weight: 18.5 Kg.
- Other features: as for CryoSmart 1

Code no. 67393 CryoSmart 20





# 40-sample automatic cryoscope - CryoStyle 40

Automatic cryoscope with a 40-sample autosampler carousel for the quick and accurate determination of the freezing point variation on milk samples, due to the presence of added water, according to the IDF-ISO 5764:2009 and AFNOR regulations. CryoStyle 40 applies the same excellent technology of the CryoSmart product range, by adding some innovative features such as the touch-screen display and the display visualization of the freezing temperature plateau achievement during the analysis. Ideal for high routinary charges. Supplied with a thermal printer.

This cryoscope includes the "lactose-free milk" function to control the process of removal of lactose in milk, whey and cream.

#### **Technical features:**

- Capacity: 40-place autosampler carousel
- Provided with EP-50 thermal printer
- Results are automatically visualized and printed, along with the sample number
- Touch-screen display to move along the user-friendly menu
- Real-time displayed graph creation of the freezing point achievement
- Dimensions: 32x57x30 cm (wxdxh) with lowered head Weight: 16 Kg.
- Power supply: 110/220 V 50/60 Hz 200 W
- Other features: as for CryoSmart 1





Code no. 67163 40-sample cryoscope – CryoStyle 40



# 40-sample double-headed cryoscope - CryoStyle 40 Double

CryoStyle 40 Double cryoscope is the ideal solution to satisfy the highest needs for quick and accurate results in the determination of added water in milk: the double head allows the analysis of 2 samples at the same time and the innovative features of the CryoStyle product range get this instrument easier to use. This cryoscope includes the "lactose-free milk" function to control the process of removal of lactose in milk, whey and cream.

#### **Technical features:**

- As for CryoStyle 40
- Auxiliary water circulation system to operate when room temperatures is >27°C





Code no. 67165 40-sample double-headed cryoscope – CryoStyle 40 Double

# Standards and accessories for cryoscopes

This cryoscopy accessories and standards range has a high quality level and extremely competitive prices. All standards are lot-specific certified and have a long-term ensured shelf life. The calibrated sample tubes are manufactured in full agreement with the recent IDF-ISO cryoscopy international regulation. All this product range can be used on any cryoscope.



Code no. 67205	Calibrated cryoscopy glass tubes, 12 pieces	
Code no. 67251	24-place tube holder, in ABS	Exclusive
Code no. 67241	50-place tube holder, in stainless steel	distribution
Code no. 63220	Check standard for crioscopy -0.512°C, 250 ml	
Code no. 63215	Calibration standard for cryoscopy -0.408°C, 250 ml	
Code no. 63225	Calibration standard for crioscopy -0.600°C, 250 ml	
Code no. STD2105	Certified Calibration Standard, -0.929°C, 125 ml (to b	e used with the "lactose-free milk" function)
Code no. 67210	Cooling liquid, 1,000 ml	
Code no. 67200	Cooling liquid, 250 ml	
Code no. 67226	Precision micropipette, 2/2.5 ml volume	
Code no. 37470	Plastic disposable tips, 2/2.5 ml volume, 1,000 pieces	S



# **FAT**

# Gerber centrifuge - Astor 8 Digit

The new Astor 8 Digit centrifuge, with 8-butyrometer capacity, is completely digital and built in full compliance with all advanced safety rules and with the Gerber method for the quantitative determination of fat in milk and dairy samples. The concept of this equipment is simple, easy-to-use and very safe for the operator. All the structure and the butyrometer-adapters are made in an anti-acid material.

- External structure in anti-acid painted metal
- Lid with a rounded window for the inspection of the chamber during the centrifugation time
- Safety block of the lid if the rotor is moving
- Electronic brake of the motor to cut the stopping time
- Digital display showing the active heating, open/close lid, set time, countdown, brake on, end of the cycle
- Digital set of the centrifugation time: from 0 to 60 minutes or continuous cycle
- Backlit on/off switch and separate keys to open the lid and to switch the heating on/off
- Coloured LED lights showing the reaching of the right temperature (violet) and the unblocked lid (green)
- Capacity: max. 8 butyrometers
- Supplied with 8 anti-acid, easy-to-dismount/clean adapters for butyrometers
- Pre-selected temperature at 65°C, according to Gerber method
- Pre-heating time: max. 20 minutes
- Perfect temperature homogeneity in the tubes
- ◆ Centrifugal force: 350 g ± 50 g, according to Gerber method
- Dimensions/weight: 49x41x26 (H) cm, 18 Kg.
- Power supply: 230 V or 115 V, 50 or 60 Hz
- Power consumption: max. 840 W





Code no. 60356	8-place digital Gerber centrifuge - Astor 8 Digit	
Accessories:		
<del></del>		

Code no. 66536	28-place stainless steel holder for butyrometers
Various codes	Gerber glass butyrometers, caps and accessories (upon request)



# Multi-method centrifuge - Astor Multi

Astor Multi is a centrifuge for different dairy/food analyses, such as Gerber, Babcock, Mojonnier, dissolution/sedimentation test and normal separations. This new equipment includes a digital regulator with wide display that allows the user to set the desired temperature of the internal chamber, to adjust the centrifugal speed and establish a duration time; pre-set values according to the official Gerber, Mojonnier and Babcock methods are stored in unchangeable memories, so that the operator can easily recall them. Astor Multi has been studied to ensure the highest safety standards for the operator. Accessory rotors and specific tube holders are available, so that the centrifuge can be properly configurated.





- Digital display with 2 alphanumeric raws
- 4 pre-set methods: Gerber, Babcock, Mojonnier and Sedimentation Test
- 1 free memory for any customized application
- Different values of temperature, time and speed can be set
- Range of adjustable temperature: from room value to 75°C
- Range of adjustable speed: from 500 to 1,300 rpm, with 1-rpm steps
- Range of adjustable time: from 1 to 9,999 min., with 1-minute steps
- 2 accessory rotors and 2 different accessory tube/bottle holders
- Dimensions: 70x60x37 cm (wxdxh) Weight: 44 Kg., without rotors
- Weight of the accessory rotors: Rotor G/B/S = 7.5 Kg.; Rotor M = 1.7 Kg.
- Power consumption: 1,500 W











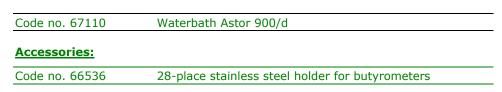


Code no. 60350	Multi-method centrifuge – Astor Multi	
Accessories:	production	
Code no. RT60350GBS	Rotor G/B/S for Gerber, Babcock, Sedimentation test and centrifugal tubes, 24 places (holders/adapters are not included)	
Code no. RT60350M	Rotor M for Mojonnier, 8 places	
Code no. PP6035002	G/S holder, for one Gerber or Sedimentation Tube (max. 24 holders/Rotor G/B/S)	
Code no. PB6035002	B holder, for one Babcock bottle (max 24 holders/Rotor G/B/S)	
Various codes	Babcock/Gerber/Mojonnier/Sedimentation glass tubes and accessories (upon request)	

# **Gerber method – Waterbath Astor 900/D**

Waterbath with insulated stainless steel tank and sloping lid to avoid the water condensation. The thermostatic unit allows to adjust and keep temperatures up to 95°C with a high precision level. The equipment is supplied with a safety device to avoid the over-temperature inconvenients due to the lack of water in the tank or to a system failure.

- Temperature range: from 5°C over the room temperature up to 100°C
- Temperature control: by means of a digital thermal regulator
- Resolution: 0.1°C Precision: ±0.2°C
- External dimensions: 54x34x32 cm (wxdxh)
- Internal dimensions of the tank: 35x19x25 cm (wxdxh)
- Power supply: 220 V 50 Hz. 1.000 W. Other voltages: upon request









# Gerber method - Universal waterbath AstorBath

AstorBath waterbath can be used in many different applications thanks to its very high tank in stainless steel. Its digital thermal regulator ensures that the selected temperature value is accurately kept, up to 100°C. AstorBath is the ideal solution for the Gerber method, as butyrometers can be kept below the water level up to their scale. Other applications cover the reductase test, melting and thermostating of culture media, samples, bottles and other containers, etc.

#### **Technical features:**

- Structure in fiberglass and tank in stainless steel
- Digital thermal regulator Resolution: 0.1°C
- Safety device to prevent over-temperatures due to the water lack
- Temperature range: from room temperature to 100°C
- Precision: better than ±1°C
- ◆ Internal size and volume of the tank: 29x23x20 (h) cm 13 liters
- External dimensions: 34x32x28 (h) cm
- Weight, without accessories: 6.3 Kg.
- ◆ Power supply: 220 V 50 Hz. 1,100 W. Other voltages: upon request

-	
Code no. 67116	Universal waterbath AstorBath



#### **Accessories:**

Code no. COP67116	Lid in stainless steel
Code no. COP67116A02	Stainless steel lid, high shape, only to be used with holder PB67116
Code no. COP67116AUNI02	Stainless steel lid, high shape for generic purposes (not to be used with PB67116)
Code no. PB67116	24-place stainless steel holder for butyrometers

# Gerber method - Universal waterbath AstorBath XL

AstorBath XL waterbath can be used in many different applications thanks to its large and very high tank in stainless steel. Its digital thermal regulator ensures that the selected temperature value is accurately kept, up to 100°C. AstorBath XL is the ideal solution for the Gerber method, as butyrometers can be kept below the water level up to their scale. Other applications cover the reductase test, melting and thermostating of culture media, samples, bottles and other containers, etc.

## **Technical features:**

- Stove painted metallic structure and tank in stainless steel
- Digital thermal regulator Resolution: 0.1°C
- Safety device to prevent over-temperatures due to the water lack
- Temperature range: from room temperature to 100°C
- Precision: better than ±1°C
- ◆ Internal size and volume of the tank: 50x30x20 (h) cm 26 liters
- External dimensions: 546x400x280 (h) mm
- Weight, without accessories: 14.5 Kg.
- Power supply: 220 V 50 Hz. 2,200 W. Other voltages: upon request

Code no. 67116XL	Universal waterbath AstorBath XL

# Our own production

Code no. COP67116	Flat lid in polycarbonate
Code no. COPA67116XL	Stainless steel lid, high shape
Code no. 66536	28-place stainless steel holder for butyrometers



# Gerber method - Shaking waterbath Astor 28/56

Astor 28/56 shaking waterbath keeps the butyrometers constantly agitated at the proper selected temperature. Thus, it is perfect in the analysis of hard and seasoned cheeses according to the Gerber method. This equipment can be used to shake any other container, such as tubes, flasks, beakers, etc. Special holders are available upon request.

#### **Technical features:**

- Stainless steel, powder painted, external structure
- Anti-condensation hinged lid, with cock for water draining
- Tank in stainless steel, with 18-liter capacity
- Up to two 28-place holders for butyrometers can be shaked
- Digital thermal regulator Resolution: 0.1°C
- Temperature range: adjustable from room temperature to 99.9°C
- Temperature measurement by means of a PT100 precision probe
- Visual alarm for insufficient level of the water
- Agitation speed and width: 200 rpm 24 mm
- Tank size: 45x30x16 cm (wxdxh)
- External size: 77x40x38 cm (wxdxh) Weight: 20 Kg.
- Protection level: IP 54
- ◆ Power supply: 220 V 50 Hz. 1,530 W Other voltages: upon request

Code no. 66531	Shaking waterbath - Astor 28/56	





Code no. 66546	28-place stainless steel holder for butyrometers
Various codes	Stainless steel holder for tubes, flasks, beakers, etc. (please, specify the sizes)



# PROTEINS, WHEYPROTEINS AND CASEIN

# Kjeldahl 6-place digestor – DIGI-6

Compact and sturdy digestor to perform up to 6 simultaneous mineralizations according to the Kjeldahl method. Its concept ensures excellent heating uniformity and efficiency, by reducing the heat loss to a minimum and decreasing the power consumption. The digital thermal regulator can be adjusted very easily: it is provided with a safety protection system against the over-temperatures. The provided tube holder allows a quick handling of the sample tubes: thanks to its two lateral handles, the operator can position and extract the tubes, easily and safely. The acid fumes are gathered by the glass caps and conveyed through the anti-acid Viton hoses to the chosen neutralization or elimination system.

#### **Technical features:**

- External structure in stainless steel
- Adjustable digital thermal regulator
- Temperature range: from room temperature up to 450°C
- Over-temperature protection system
- Designed for the maximum operator's safety
- Excellent heating uniformity and efficiency
- Every kind of 250 ml distillation tube can be applied
- Provided with a fume gathering and conveying system
- Easily connectable to a scrubber (optional)
- Supplied with 6 glass caps
- Rack in stainless steel for an easy and safe handling for the tubes
- ◆ Power supply: 220 V 50 Hz. Other voltages: upon request

Code no. 67185	Kjeldahl 6-place digestor – DIGI-6	



Code no. RACK67185	Additional stainless steel rack for sample tubes
Various codes	Glass distillation tubes, 250 ml, different kinds (please, specify)



# **DRY MATTER/HUMIDITY**

# Forced air oven - Europa

Europa forced air oven, made in stainless steel, combines its reliability and sturdiness to a high thermal accuracy and precision. It is the ideal solution to perform official analyses of dry matter/humidity and to run dry sterilization procedures.

#### **Technical features:**

- P.I.D. digital thermal regulator, adjustable from 50° and 250°C
- ◆ Resolution: 1.0°C Precision: ±1.0°C at 110°C
- Timer-switch, adjustable up to 120 minutes, with position for continuous operation
- Stainless steel structure, chamber in enamelled steel
- Glass door and internal light
- 3 side supports for trays in stainless steel
- Provided with 2 trays
- Warning light for the element operation
- Outlet hole in the bottom of the chamber, with external drip tray
- Inner volume: 35 liters
- Dimensions: 62x43x41 cm (wxdxh) Weight: 27 Kg.
- ₱ Power supply: 220 V 50 Hz. Other voltages: upon request



Code no. 67170 Forced air oven - Europa



# **AUTOMATIC MILK ANALYZERS**

# Quick analyzer for fat, proteins, lactose, salts, density and SNF - Speedy Lab

Automatic instrument for the quick determination of the traditional contents in milk samples. Based on a special application of the ultrasonic technique, Speedy Lab requires no sample preparation, homogenization or heating, consumables or chemicals. Its high flexibility and reliability, along with a very competitive price, put Speedy Lab on the top of the user's choices for the laboratory routinary milk analyses. Excellent to cover the small and medium daily routines.

#### **Technical features:**

- 3 calibration channels for 3 different kinds of samples
- New and user-friendly menu
- Enhanced and easy calibration procedures, by means of the keyboard
- Results in about 90 seconds, without the user's presence
- Aspiration of the sample by means of a precision pump from any kind of container (bottle, tube, etc.)
- Extendable sampling hose, up to 40 cm total length
- Separation of the inlet hose from the outlet one
- No carry-over among samples is possible
- Measurement ranges (w/w): fat 0.01% 25.00%; proteins 2.00% 7.00%; lactose 0.01% 6.00%; SNF 3.00% 15.00%; salt 0.40% 1.50%; density 1,000 1,160 Kg/m³
- $\Phi$  Accuracy: fat  $\pm 0.10\%$ ; proteins and SNF  $\pm 0.15\%$ ; lactose  $\pm 0.20\%$ ; salt  $\pm 0.05\%$ ; density  $\pm 0.3$  Kg/m<sup>3</sup>
- Free calibration and data handling software for PC
- RS232 data exit for PC or printer connection
- USB port for PC connection
- Sample volume: 15 ml
- Working temperature and humidity: 10°C 35°C; 30% 80%
- Dimensions: 230x230x205 mm (wxdxh) Weight: 4.5 Kg.
- Power supply: 12 VDC for 110/240 VAC voltage 50/60 Hz 65 W
- Car plug: upon request





Code no. 67600	Speedy Lab		

Code no. EP-50	EP-50 thermal printer
Code no. 67219	Thermal paper roll for EP-50 printer
Code no. 340290ACD	Liquid acid washing solution, 43-ml vial, concentrated for 10 liters
Code no. 340290ALC	Liquid alkaline washing solution, 43-ml vial, concentrated for 10 liters



# **SOMATIC CELLS**

# **NucleoCounter SCC-100**

NucleoCounter SCC-100 is a new somatic cell counter for official analyses in any kind of milk samples, according to the FIL-IDF-ISO 148 international regulation. Based on the fluorescence microscopy and on the use of special, disposable cassettes, which dose the milk sample and put it in contact with the built-in, pre-dosed reagents, this instrument does not need to be calibrated. After placing the cassette inside the equipment and pressing one key only, the result appears on the display and it is printed within a few seconds. The analysis is completed in 3 simple steps: introduction of the sample, positioning of the cassette, pressure on the RUN key.

#### **Technical features:**

Code no. 9000200

- Full compliance to FIL-IDF 148 official regulation
- Excellent accuracy and precision on every kind of milk
- Immediate analysis, in less than 30 seconds
- No calibration required, neither when installing nor later
- No maintenance or service required
- No need to handle and dispose of carcinogenic or toxic chemicals
- Ready for the test just 5 seconds after switching on
- Compact, light and reliable instrument
- The operator's work is reduced to a minimum
- Suitable to every routine, even the smallest one
- USB data exit for the connection to a thermal printer (optional)
- Optional SomaticView® software for data handling and storage
- Sample volume: 500 μl Sample temperature: room temperature
- Dimensions: 22x38x26 cm (wxdxh) without the printer Weight: 3 Kg.
- ₱ Power supply: 220 V 50 Hz. <25 W. Other voltages: upon request</p>

NucleoCounter SCC-100





Accessories:	
Code no. 9410008	SCC-100 Cassettes, 100 pieces parted in 10 bags
Code no. 9100200	Reagent C, 500 ml
Code no. 36140	Eppendorf disposable tubes, 1.5 ml, with cap, 1,000 pieces
Code no. 086700296	20-place tube holder
Code no. 086471108	Transferpette precision micropipette, 500 μl
Code no. 37465	Blue disposable tips, 1,000 pieces
Code no. NEOS-S2B-PS	80-column thermal printer
Code no. RCT60X55	Paper roll for 80-column thermal printer
Code no. 9000SOF	SomaticView® software



# **MICROBIOLOGY AND HYGIENE**

# **Incubator - Triton**

Triton 35-liter incubator combines its reliability and sturdiness to a high thermal accuracy and precision. It is the ideal solution to perform bacteriological analyses with low/middle routinary charges.

#### **Technical features:**

- Glass door
- Stainless steel structure, chamber in enamelled steel
- 3 side supports with 2 provided stainless steel trays
- Internal light in the incubation chamber
- P.I.D. digital thermal regulator, selectable from room temperature up to 60°C
- Warning light for the element operation
- Outlet hole in the bottom of the chamber, with external drip tray
- Inner volume: 35 liters
- Dimensions: 62x43x41 cm (wxdxh)
- Weight: 27 Kg.
- Power supply: 220 V 50 Hz. Other voltages: upon request







Code no. 233148
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# 130-liter refrigerated thermostat - HotCold140

HotCold140 is a wide-range refrigerated thermostat, able to be set either at higher or lower temperatures than room value. It ensures the best temperature uniformity in every place within the thermostated chamber, thanks to the special heating/refrigerating unit with a forced ventilation system. Moreover, the digital thermal regulator allows the selected temperature to be accurately kept and monitored. Ideal for bacteriological and environmental analyses (B.O.D. included) under every daily routinary work.

#### **Technical features:**

- Digital thermal regulator, adjustable from 5°C to 55°C
- White painted metallic structure
- Internal chamber in lucid ABS
- Reversible door
- Internal light
- Side supports for trays at different heights
- Provided with 2 grilles + glass tray at the bottom
- Forced ventilation system CFC-free
- Resolution: ±0.1°C
- Temperature stability: ±1.0°C
- Internal volume: 125 liters
- Dimensions: 55x58x92 cm (wxdxh) Weight: 32 Kg.
- Visual/acoustic alarm for over/low-temperature, unworking probe and open
  - door
- Power supply: 220 Volts 50 Hz Energy Class A+





Code no. 67253	HotCold140	
Accessories:		
Various codes	Internal electric socket, etc.	

# 240-liter refrigerated thermostat - HotCold240

HotCold240 is an equipment for 2 different possible usages: refrigerated thermostat and high-precision incubator, with an excellent temperature uniformity ability in every place of the thermostated chamber thanks to the cooling/heating unit with a forced ventilation system. The digital thermal regulator ensures that the selected temperature is accurately kept and monitored. Ideal for bacteriological and environmental analyses (B.O.D. included), germination and shelf-life studies, etc.

#### **Technical features:**

- Provided with 4 grilles + glass tray at the bottom
- Internal volume: 240 liters
- Dimensions: 55x55x150 cm (wxdxh)
- Weight: 51 Kg.
- Other features: same as for HotCold140





Code no. 67256 HotCold240

#### **Accessories:**

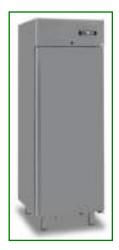
As for HotCold140



# High-capacity refrigerated thermostats, incubators, refrigerators and freezers

This Astori's new line of high-volume laboratory equipments with an excellent temperature accuracy and uniformity level is the ideal solution to any laboratory purpose and to special and delicate applications, such as bacteriological, shelf-life and germination studies, as well as the storage of pharmaceutical products and drugs. Their useful volume ranges from about 500 up to 1,400 liters.

- Digital thermal regulator, fully adjustable
- Structure coated with AISI 304 stainless steel
- Thermal insulation with polyurethane CFC-free
- Special versions with glass doors, upon request
- Side supports for trays at different heights
- Provided with stainless steel, round-holed, trays
- Reversible doors with built-in handles
- Adjustable legs in stainless steel Internal light
- Heating unit with tangential laminar flow (when applicable), and refrigeration with central fan (when applicable)
- Internal chamber with rounded corners, radial-based, to allow the best cleaning/sanification
- Temperature ranges: 0° 37°C (refrigerated thermostats); Amb. 60°C (incubators); 0°C 10°C or -2° 8°C (refrigerators); -18°C -22°C or -14° -20°C (freezers)
- Resolution: ±0.1°C







Various codes	Refrigerated thermostats, incubators, refrigerators and freezers, 500 – 1,400 lts. volume
Accessories:	
Code no. 1032	Additional tray
Various codes	Temperature recorder, glass door, safety device with alarms, key-lock for 1 door



# Colony counter – Astor 20

Astor 20 is a modern colony counter: its transparent, back-lit, Petri dish holder is sensitive to pressure, so that Astor 20 progressively enumerates the grown colonies each time the plate on the holder is hit by a common marker pen. Simply, there is no need of a special, dedicated and wired marker pen anymore: any common one can be used. The holder is back-lit by LEDs, which offer a better light diffusion, a higher reliability and a ridiculous power consumption (2 W). Astor 20 can hold Petri dishes up to 110 mm diameter.

#### **Technical features:**

- Clear 5-figure display with automatic enumeration and Reset key
- Acoustic signal for each count confirmation
- Back-lit transparent Petri dish holder
- Enumeration by pressure: no wired dedicated marker pen is needed
- Diameter of the Petri dish holder: 110 mm
- LED technology: 2-Watt total power consumption
- Power voltage: 110 or 220 V





Code no. 67175	Colony counter - Astor 20
Accessories:	
Code no. 66131	Lamp with pantograph hinged arm and magnifying lens

# Thermostatic unit - Astor 800/D

Astor 800/D is a precision thermostatic unit, with digital thermal regulator, suitable to be mounted on tanks for the creation of customized waterbaths. Its use is excellent for thermostating and heating up culture media, ELISA microplates, samples or any other laboratory product.

#### **Technical features:**

- External structure made in stove enamelled and painted metal
- Temperature control by means of a digital thermal regulator
- Digital display with 0,1°C resolution
- Water agitating and mixing fan
- Suitable to different tanks (available as accessories, only)
- Safety device against the over-temperatures caused by lack of water
- Adjustable temperature range: from room temperature +5°C up to 100°C
- Precision: better than 0.2°C
- ₱ Power supply: 220 V 50 Hz. 1,000 W. Other voltages: upon request





	Code no. 67118	Thermostatic unit - Astor 800 D	
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Code no. H150024	8-liter polycarbonate tank, 26x32x15 (h) cm
Code no. 4113	15-liter polycarbonate tank, 49x29x15 (h) cm
Various codes	Stainless steel holder for tubes, flasks, beakers, etc., different sizes (please, specify)



#### Universal waterbath - AstorBath

AstorBath waterbath can be used in many different applications thanks to its very high tank in stainless steel. Its digital thermal regulator ensures that the selected temperature value is accurately kept, up to 100°C. AstorBath is the ideal solution for all microbiological and laboratory uses, as even high tubes and bottles can be easily placed under the water level. Other applications cover the reductase test, melting culture media, thermostating samples, bottles and other containers, etc.

#### **Technical features:**

- Structure in fiberglass and tank in stainless steel
- Digital thermal regulator Resolution: 0.1°C
- Safety device to prevent over-temperatures due to the water lack
- Temperature range: from room temperature to 100°C
- Precision: better than ±1°C
- ₱ Internal size and volume of the tank: 29x23x20 (h) cm 13 liters
- External dimensions: 34x32x28 (h) cm
- Weight, without accessories: 6.3 Kg.
- ₱ Power supply: 220 V 50 Hz. 1,100 W. Other voltages: upon request

Code no. 67116 Universal waterbath AstorBa	
Code no. 07110 Universal Waterbath Astorba	h





#### **Accessories:**

Code no. COP67116	Lid in stainless steel
Code no. COP67116A02	Stainless steel lid, high shape, only to be used with holder PB67116
Code no. COP67116AUNI02	Stainless steel lid, high shape for generic purposes (not to be used with PB67116)
Code no. PB67116	24-place stainless steel holder for butyrometers

# Gerber method - Universal waterbath AstorBath XL

AstorBath XL waterbath can be used in many different applications thanks to its large and very high tank in stainless steel. Its digital thermal regulator ensures that the selected temperature value is accurately kept, up to 100°C. AstorBath XL is the ideal solution for the Gerber method, as butyrometers can be kept below the water level up to their scale. Other applications cover the reductase test, melting and thermostating of culture media, samples, bottles and other containers, etc.

# **Technical features:**

- Stove painted metallic structure and tank in stainless steel
- Digital thermal regulator Resolution: 0.1°C
- Safety device to prevent over-temperatures due to the water lack
- Temperature range: from room temperature to 100°C
- Precision: better than ±1°C
- ₱ Internal size and volume of the tank: 50x30x20 (h) cm 26 liters
- External dimensions: 546x400x280 (h) mm
- Weight, without accessories: 14.5 Kg.
- ◆ Power supply: 220 V 50 Hz. 2,200 W. Other voltages: upon request

Code no. 67116XL	Universal waterbath AstorBath XL



Code no. COP67116	Flat lid in polycarbonate
Code no. COPA67116XL	Stainless steel lid, high shape
Code no. 66536	28-place stainless steel holder for butyrometers



# Waterbath - Astor 900/D

Waterbath with insulated stainless steel tank and sloping lid to avoid the water condensation. The thermostatic unit allows to adjust and keep temperatures up to 95°C with a high precision level. The equipment is supplied with a safety device to avoid the over-temperature inconvenients due to the lack of water in the tank or to a system failure.

#### **Technical features:**

- ◆ Temperature range: from 5°C over the room temperature up to 100°C
- Temperature control: by means of a digital thermal regulator
- Resolution: 0.1°C Precision: ±0.2°C
- External dimensions: 54x34x32 cm (wxdxh)
- Internal dimensions of the tank: 35x19x25 cm (wxdxh)
- ◆ Power supply: 220 V 50 Hz. 1,000 W. Other voltages: upon request



Code no. 67110 Waterbath - Astor 900/d

#### **Accessories:**

Various codes Stainless steel holder for tubes, flasks, beakers, etc. (please, specify sizes)

# Lab blender - BL Smart

The new BL Smart time-programmable Lab Blender is particularly suitable to homogenise food and feed samples prior to microbiological analyses. It reduces the risk of the membrane cells breakage meanwhile ensuring an excellent mixing result. Suitable to any kind of culture and any kind of sample.

#### **Technical features:**

- External structure made in stove painted steel
- Mixing action by means of 2 flat hammers, pressing the sample bag with an alternative movement - Constant speed: 205 hits/minute
- Water proof lid closure
- Digital timer to set the homogenization time from 1 to 9,999 seconds, with 1-second steps
- Continuous homogenization can be set
- 3 different homogenization times can be set and stored in memory
- Visualization of the remaining time until the end of the process
- Traditional sample sterile bags, 18x30 cm, can be used
- Sample volume in the bag: from 80 to 400 ml
- Dimensions: 240x445x365 mm (wxdxh) Weight: 32.5 Kg.
- Power supply: 220 V 50 Hz 150 W. Other voltages upon request.





Code no. 65550	Lab blender – BL Smart	

Code no. 66495	Lab blender sterile bags, 18x30 cm, 500 pieces
Code no. 66398	Lab blender pre-printed sterile bags, 18x30 cm, 2,500 pieces
Code no. 50028	Lab blender re-closable sterile bags, 18x30 cm, 1,500 pieces
Code no. 9101401001	Lab blender resistant sterile bags with total filter, 18x30 cm, 500 pieces
Code no. 66410	Lab blender sterile bags with lateral filter, 18x30 cm, 500 pieces
Code no. 66396	10-place bags hanging holder, with sticks to hang



# Fully programmable Lab blender – BL Style

The new BL Style Lab Blender, fully programmable for homogenisation speed and time, is the ideal equipment for the treatment of food and feed samples prior to microbiological analyses, as it strongly reduces the risk of the membrane cells breakage meanwhile ensuring an excellent homogenisation of all kinds of sample.

#### **Technical features:**

- 3 different homogenisation speeds and 3 different times can be programmed and stored in memory, independently
- Weight: 33.5 Kg.
- Other features: as for BL Smart Lab Blender.





Code no. 65560 Fully programmable Lab blender – BL Style

#### **Accessories:**

As for BL Smart Lab Blender

# 20-liter benchtop autoclave - AstorClave

The AstorClave vapour autoclave is an excellent solution for every laboratory, as it simplifies all sterilization processes of small sized objects, tools and materials such as culture media, glassware, contaminated samples, etc.. The internal chamber – made in stainless steel for the easiest cleaning procedure – has a 20-liter capacity and it can be accessoried with its optional stainless steel perforated basket with handle, that gets the vertical charging much easier. The presence of a sensor for the lack of water and an automatic valve ensures the maximum safety of the equipment even in case of failures of the control system. AstorClave is suitable for sterilization cycles at 121°C and 1 atm, according to the 97/23/CE European Directive.

- Vapour bench-top autoclave for sterilization cycles at 121°C and 1 atm
- External anti-acid painted structure, made in steel
- Vertical sterilization chamber in stainless steel, with capacity of 20 liters
- Stainless steel lid with a safety mechanical closure
- Manometer for controlling the working pressure in the chamber
- Automatic safety valve, calibrated for a max. pressure of 1,4 atm
- Safety water lack sensor in the chamber, with manual reset
- Adjustable timer: from 0 to 120 minutes
- Back-lit ON/OFF switch
- Warning lights for working resistor (green) and water lack (red)
- Perforated stainless steel basket (optional) with handle, 24x27 cm (dxh)
- External dimensions: 420x385x470 (h) mm
- Internal dimensions: 28x33 cm (dxh)
- Weight: 19.2 Kg.
- Made in full conformity to the 97/23/CE European Directive
- Power supply: 220 V 50 Hz 1,500 W











# SHELF LIFE/STABILITY

# Climatic chamber - Triton

Entirely built in stainless steel, Triton climatic chamber combines excellent reliability and sturdiness to a superb thermal stability. Perfect for shelf life studies on food samples at temperature values from ambient to 60°C.

# **Technical features:**

- Glass door
- Stainless steel structure, chamber in enamelled steel
- 3 side supports with 2 provided stainless steel trays
- Internal light in the incubation chamber
- Warning light for the element operation
- Outlet hole in the bottom of the chamber, with external drip tray
- P.I.D. digital thermal regulator, selectable from room temperature up to 60°C
- ♠ Resolution: ±0.1°C Precision: ±0.1°C at 60°C
- Inner volume: 35 liters
- Dimensions: 62x43x41 cm (wxdxh) Weight: 27 Kg.
- ◆ Power supply: 220 V 50 Hz. Other voltages: upon request



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# 130-liter refrigerated climatic chamber - HotCold140

HotCold140 is a wide-range refrigerated climatic chamber, able to be set either at higher or lower temperatures than room value. It ensures the best temperature uniformity in every place within the thermostated chamber, thanks to the special heating/refrigerating unit with a forced ventilation system. Moreover, the digital thermal regulator allows the selected temperature to be accurately kept and monitored. Ideal for shelf-life studies under every daily routinary work.

#### **Technical features:**

- Digital thermal regulator, adjustable from 5°C to 55°C
- White painted metallic structure
- Internal chamber in lucid ABS
- Reversible door Internal light
- Side supports for trays at different heights
- Provided with 2 grilles + glass tray at the bottom
- Forced ventilation system CFC-free
- Resolution: ±0.1°C
- Temperature stability: ±1.0°C
- Internal volume: 130 liters
- Dimensions: 55x58x92 cm (wxdxh) Weight: 32 Kg.
- Visual/acoustic alarm for over/low-temperature, unworking probe and open
  - door
- Power supply: 220 Volts 50 Hz Energy Class A+





Code no. 67253	HotCold140	
Accessories:		
Various codes	Internal electric socket, etc	

## 240-liter refrigerated climatic chamber - HotCold240

HotCold240 is a wide-range refrigerated climatic chamber, able to be set either at higher or lower temperatures than room value. Its excellent temperature uniformity ability in every place of the thermostated chamber is obtained thanks to the cooling/heating unit with a forced ventilation system. The digital thermal regulator ensures that the selected temperature is accurately kept and monitored. Ideal for shelf-life studies under every daily routinary work.

#### **Technical features:**

- Provided with 4 grilles + glass tray at the bottom
- Internal volume: 240 liters
- Dimensions: 55x55x150 cm (wxdxh)
- Weight: 51 Kg.
- Other features: same as for HotCold140





Code no. 67256 HotCold240

#### **Accessories:**

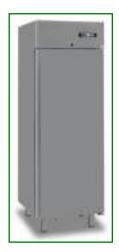
As for HotCold140



# High-capacity climatic chambers

This Astori's new line of high-volume laboratory equipments with an excellent temperature accuracy and uniformity level is the ideal solution to any kind of routinary work, such as food, pharmaceutical and cosmetics shelf-life evaluations, as well as germination studies. Their useful volume ranges from about 500 up to 1,400 liters.

- Digital thermal regulator, fully adjustable
- Structure coated with AISI 304 stainless steel
- Thermal insulation with polyurethane CFC-free
- Special versions with glass doors, upon request
- Side supports for trays at different heights
- Provided with stainless steel, round-holed, trays
- Reversible doors with built-in handles
- Adjustable legs in stainless steel Internal light
- Heating unit with tangential laminar flow and refrigeration with central fan (in refrigerated chambers, only)
- Internal chamber with rounded corners, radial-based, to allow the best cleaning/sanification
- Temperature ranges: 0° 37°C (refrigerated chambers); Amb. 60°C (not-refrigerated chambers)
- Resolution: ±0.1°C







Various codes	Refrigerated and not-refrigerated climatic chambers, 500 – 1,400 lts. volume	
Accessories:		
Code no. 1032	Additional tray	
Various codes	us codes Temperature recorder, glass door, safety device with alarms, key-lock for 1 door	



# **OENOLOGY DISTILLERS**

# Alcoholic content - OH Glasschem stills

The determination of the alcoholic content in wine samples is a routinary analysis in the beverage labs and in the wine industries. The new OH stills at 1, 2, 3 or 6 places enable the operator to perform one or more distillations at the same time with greater advantages than with a traditional distillation apparatus.

#### **Technical features:**

- 1, 2, 3 or 6-place versions, to satisfy different analytical needs
- All kinds of wine and liquor samples can be distilled
- Automatic cutout of the distillation when the receiver flask is 95% full
- A longer distillation head ensures only water and alcohol are distilled over
- No glassware to be detached during normal use: no leakage error
- The high-efficiency electrical heating avoids useless dispersions of heat
- Constant heat input from distillation to distillation
- Distillation time: 7 minutes for 50 ml and 24 minutes for 250 ml
- Dimensions and weight: 60x20x70 (wxdxh) cm About 15 Kg.
- ₱ Power supply: 220/250 V 50 Hz 630 W/distillation head





Code no. 500001	1-place OH Glasschem still	
Code no. 500002	2-place OH Glasschem still	
Code no. 500003	3-place OH Glasschem still	
Code no. 500006	6-place OH Glasschem still	

#### Sulfur dioxide content - SO<sub>2</sub> Glasschem stills

The determination of sulfur dioxide in wine and grape juices is one of the most frequent analysis in oenology. If a single-sample still is available, the productivity is limited and quite poor. The new SO<sub>2</sub> Glasschem stills at 2, 4, 6 or 8 places allow simultaneous and very efficient distillations, with an extremely affordable price. The new design, the flow-rate control system of the air stream, the high efficiency of the wine heating and the absence of sulfur leaks in the environment get these new instruments really unique.

#### **Technical features:**

- 2, 4, 6 or 8-place versions, for simultaneous analyses of more samples
- All kinds of wine and grape juice samples can be distilled
- Constant flow-rate of the air stream due to a precision control system
- No more SO<sub>2</sub> leaks in the environment, thanks to vacuum aspiration
- High-efficiency electrical heating avoids useless dispersions of heat
- Space ergonomical design: very compact dimensions
- Distillation time: 10 minutes, either for free SO<sub>2</sub> or for bound SO<sub>2</sub>
- ₱ Power supply: 220/250 V 50 Hz 100 W/head



Exclusive distribution

Code no. 500022	2-place SO <sub>2</sub> Glasschem still	
Code no. 500024	4-place SO <sub>2</sub> Glasschem still	
Code no. 500026	6-place SO₂ Glasschem still	
Code no. 500028	8-place SO <sub>2</sub> Glasschem still	



# Volatile acidity content - VA Glasschem stills

The new VA Glasschem stills at 1, 3, 4 or 6 places allow simultaneous and very efficient distillations, with an extremely affordable price. The new design, the autodraining system for eliminating the old wine at the end of the distillation, the high efficiency of the wine heating and the absence of gas leakages in the environment get these new instruments really unique.

#### **Technical features:**

- 1, 3, 4 or 6-place versions, to satisfy different analytical needs
- All kinds of wine samples can be distilled
- Automatic separation and draining of old wine samples at the end of the procedure
- Several distillations can be run in a row, without completely draining the boiler
- 25% faster distillation time Low water consumption
- High-efficiency electrical heating avoids useless dispersions of heat
- Constant heat input from distillation to distillation Schermo LCD
- Distillation time: 12 minutes
- Dimensions and weight: VA1 = 30x20x75 (wxdxh) cm, 7 Kg. VA3 = 45x40x75 cm, 12 Kg. VA6 = 75x40x75 cm, 20 Kg.
- Power supply: 220/250 V 50 Hz



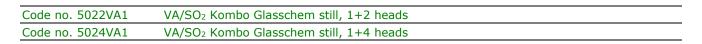


Code no. 5000VA1	1-place VA Glasschem still	
Code no. 5000VA3	3-place VA Glasschem still	
Code no. 5000VA4	4-place VA Glasschem still	
Code no. 5000VA6	6-place VA Glasschem still	

# Sulfer, volatile acidity and alcohol content - VA/SO<sub>2</sub> Kombo Glasschem stills

VA/SO $_2$  Kombo Glasschem stills consist of a distillation unit for volatile acidity, combined with 2 or 4 units to determine the sulfur. These instruments are certainly the ideal solution for wine industries and third-parties laboratories which must perform distillations of more parameters, simultaneously: VA/SO $_2$  Kombo Glasschem stills allow the additional analysis of the alcoholic content, with an accuracy better than 0,2%, thanks to the optional Alcohol Determination Kit. The new design, the autodraining system for eliminating the old wine sample at the end of the distillation for volatile acidity, the flow-rate control system of the air stream for SO $_2$ , the high efficiency of the wine heating and the absence of gas leaks in the environment get these new equipments really unique.

- "All-in-one" instruments, for volatile acidity, SO2 and alcoholic content analyses
- 25% faster distillation time for volatile acidity Applicable at all wine samples
- Automatic separation and draining of old samples at the end of the procedure
- Several volatile acidity distillations can be run in a row, without adding cold water
- Alcoholic content analysis thanks to the optional kit (accuracy <0.2%)</p>
- High-efficiency electrical heating avoids useless dispersions of the heat
- Constant heat input from distillation to distillation
- 4 2 available versions: VA/SO<sub>2</sub> Kombo 1+2 (1 VA + 2 SO<sub>2</sub> units), VA/SO<sub>2</sub> Kombo 1+4 (1 VA + 4 SO<sub>2</sub> units)
- Distillation time: 12 min/sample for volatile acidity, 10 minutes for free SO<sub>2</sub> and 10 minutes for bound SO<sub>2</sub>. 5 minutes for alcohol distillation and 5 minutes for the boiling point determination
- Sizes and weight: 45x30x75 (wxdxh) cm, 15 Kg. 52x30x75 cm, 17 Kg.
- Power supply: 220/250 V 50 Hz









# Sulfer, volatile acidity and alcoholic content - VA/SO<sub>2</sub>/OH Kombo stills

VA/SO $_2$ /OH Kombo Glasschem stills consist of a distillation unit for the alcoholic content combined with a head for volatile acidity and 2 or 4 units to determine the sulfur. VA/SO $_2$ /OH Kombo Glasschem stills are certainly the ideal solution for wine industries and third-parties laboratories which must perform distillations of more parameters, simultaneously. Their "all-in-one" ability, their new design, the autodraining system for eliminating the old wine sample at the end of the distillation for volatile acidity, the automatic stop at the end of the alcoholic distillation process, the flow-rate control system of the air stream for SO $_2$ , the high efficiency of the wine heating and the absence of gas leaks in the environment get these new equipments really unique.

- "All-in-one" instruments, for volatile acidity, SO<sub>2</sub> and alcoholic content analyses
- 2 or 4 independent distillation heads for sulfer
- 25% faster distillation time for volatile acidity Applicable at all wine samples
- Automatic separation and draining of old samples at the end of the VA distillation
- Several volatile acidity distillations can be run in a row, without adding cold water
- Automatic stop at the end of the alcoholic distillation process
- High-efficiency electrical heating avoids useless dispersions of the heat
- Constant heat input from distillation to distillation
- 2 available versions: VA/SO<sub>2</sub> Kombo 1+2+1 (1 VA + 2 SO<sub>2</sub> + 1 OH units), VA/SO<sub>2</sub> Kombo 1+4+1 (1 VA + 4 SO<sub>2</sub> + 1 OH units)
- Distillation time: 12 min/sample for volatile acidity, 10 minutes for free SO<sub>2</sub> and 10 minutes for bound SO<sub>2</sub>, 12 minutes for the alcoholic content distillation

Code no. 5022VA1/OH1	VA/SO <sub>2</sub> /OH Kombo Glasschem still, 1+2+1 heads
Code no. 5024VA1/OH1	VA/SO <sub>2</sub> /OH Kombo Glasschem still, 1+4+1 heads





# **ALLERGENS AND GLUTEN ELISA KITS**

# Allergens ELISA kits

The Allergens ELISA kits allow quantitative determinations of specific allergens in all food and wine samples (according to OIV 2012). Their excellent analytical performances help food laboratories run these tests in a quick time and with the best reliability of the results. Their 48-well or 96-well sizes with individually breakable wells in most of the available kits cuts the waste of material and money. All kits offer a valuable support to make analyses of allergens in full compliance to the European law 2003/89/CE and other international regulations, like OIV in wines.

- ELISA kits, with excellent sensitivity and specificity
- Easy-to-use kits
- Quick extraction times and swift test protocols
- Suitable to all kinds of food and wine samples (according to OIV 2012)
- 48-well or 96-well formats, with individually breakable wells in most of the available kits
- Long shelf-life

Code no. AST1105E	Casein ELISA kit, 48 wells
Code no. AST1100E	Egg White ELISA kit, 48 wells
Code no. AST1110E	Peanut ELISA kit, 48 wells
Code no. AST1115E	Crustacean (Tropomiosine) ELISA kit, 48 wells
Code no. AST1117E	Hazelnut ELISA kit, 48 wells
Code no. AST1120E	Sesame ELISA kit, 48 wells
Code no. AST1125E	Soy ELISA kit, 48 wells
Code no. AST1108E	Casein ELISA kit, 96 wells
Code no. AST1101E	Egg White ELISA kit, 96 wells
Code no. AST1111E	Peanut ELISA kit, 96 wells
Code no. AST1116E	Crustacean (Tropomiosine) ELISA kit, 96 wells
Code no. AST1118E	Hazelnut ELISA kit, 96 wells
Code no. AST1121E	Sesame ELISA kit, 96 wells
Code no. AST1126E	Soy ELISA kit, 96 wells
Code no. AST600148	Coconut ELISA kit, 48 wells
Code no. AST600348	Lupine ELISA kit, 48 wells
Code no. AST600848	Mustard ELISA kit, 48 wells
Code no. AST600948	Macadamia ELISA kit, 48 wells
Code no. AST601048	Cashew ELISA kit, 48 wells
Code no. AST601348	Walnut ELISA kit, 48 wells
Code no. AST601848	Almond ELISA kit, 48 wells
Code no. AST601948	Pistachio ELISA kit, 48 wells
Code no. AST602548	Ovalbumin High Sensitivity ELISA kit, 48 wells (according to OIV limits)
Code no. AST602648	Lysozyme High Sensitivity ELISA kit, 48 wells (according to OIV limits)
Code no. AST603148	Casein High Sensitivity ELISA kit, 48 wells (according to OIV limits)
Code no. AST603448	Beta-Lactoglobuline ELISA kit, 48 wells
Code no. AST604048	Bovine Seroalbumin (BSA) ELISA kit, 48 wells
Code no. AST605648	Fish ELISA kit, 48 wells
Code no. AST600196	Coconut ELISA kit, 96 wells
Code no. AST600396	Lupine ELISA kit, 96 wells



Mustard ELISA kit, 96 wells
Macadamia ELISA kit, 96 wells
Cashew ELISA kit, 96 wells
Walnut ELISA kit, 96 wells
Almond ELISA kit, 96 wells
Pistachio ELISA kit, 96 wells
Ovalbumin High Sensitivity ELISA kit, 96 wells (according to OIV limits)
Lysozyme High Sensitivity ELISA kit, 96 wells (according to OIV limits)
Casein High Sensitivity ELISA kit, 96 wells (according to OIV limits)
Beta-Lactoglobuline ELISA kit, 96 wells
Bovine Seroalbumin (BSA) ELISA kit, 96 wells
Fish ELISA kit, 96 wells

#### **Accessories:**

Code no. AST1106E	WC Buffer, extraction additive for Casein kit with wine samples, 25 tests
Code no. AST1107E	HM Buffer, extraction additive powder for Casein kit with ham samples, 50 tests
Code no. AST1112E	PL Buffer, extraction additive for Casein kit with samples including polyphenols, 15 tests
Code no. AST1123E	PL Buffer, extraction additive for Casein kit with samples including polyphenols, 50 tests
Code no. AST1119E	HEP Additive, for Hazelnut kit with samples including cocoa and red fruits, 30 tests
Code no. AST1127E	SC extraction additive powder for Soy kit with samples including cocoa, 50 tests

# Gluten ELISA kit

The determination of gluten in food samples has been acquiring more and more importance in recent years. The requirement for a low cost – high volume quantitative gluten screening test has now become mandatory. Astori Tecnica's new Gluten ELISA Kit allows end users to run high-performance analyses on all types of food samples and raw materials, with excellent specificity towards the gliadins of all the cereals listed by Codex Alimentarius, without cross-reactivity, with a sensitivity of 2 ppm of gliadins (equal to 4 ppm of gluten). The available formats with 48 or 96 individual wells add further savings to the very low cost/test of the Gluten ELISA Kit.



#### **Technical features:**

- Indirect competitive ELISA test
- Based on the latest generation of polyclonal antibody
- High specificity towards the gliadins (gluten) of all the cereals listed by Codex Alimentarius
- Detection limit: about 1 ppm of gliadins (equal to 2 ppm of gluten)
- Calibration curve with 5 standards: 0, 2, 10, 50, 80 ppm of gliadins
- Reading of the results by means of a common ELISA photometer with filter at 450 nm
- Very sensitive and specific ELISA kit
- Applicable to all food and raw material samples, thanks to two special supplements
- Quick extraction times of the samples and fast test procedure
- Individual wells: no waste of unused test material
- Very low cost/test
- Long shelf-life

Code no. AST1130E	Gluten ELISA kit, 48 wells (extractions supplements are not included)
Code no. AST1131E	Gluten ELISA kit, 96 wells (extractions supplements are not included)

## Accessories:

Code no. AST1128E	TEMCO Supplement, for extractions with Gluten kit with cooked samples, 50 extractions
Code no. AST1129E	AEMCR Supplement, extraction additive for Gluten kit with raw samples, 50 extractions

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# **AFLATOXINS/MYCOTOXINS KITS**

# Quick Afla M1 Strip Test - Rapid kit for Aflatoxin M1 determination in milk

The new Quick Afla M1 Strip Test kit allows the rapid and visual qualitative/semiquantitative determination (10 minutes) of Aflatoxin M1 in milk samples according to European limits (50 ppt). The assay can be realized in 2 easy steps: the milk sample is added to a reaction well which contains a lyophilized reagent, mixed and incubated at room temperature for 5 minutes. Then a test strip is inserted in the reaction well and incubated for another 5-minute step. The test requires no incubator! All that is needed for the analysis comes with the kit, including a reusable 200 µL micropipette and the disposable tips: therefore the test can be performed everywhere. The Quick Afla M1 Strip Test kit can be stored at 2°-8°C for 12 months from date of production.



#### **Technical features:**

- 10'-rapid test: it can be performed everywhere in 2 easy steps
- No need of any incubator at all
- It can be performed on every bench regardless of the room temperature
- Very simple interpretation of results, either visual or with RDS-1500 PRO Reader
- Qualitative/semiquantitative results with cutoff at 50 ppt (European limit)
- Quantitative results with RDS-1500 PRO Strip Reader, from 10 to 350 ppt approx.
- Suitable to every kind of milk, even if preservatives are present
- Preusable 200 μL micropipette always included in the kit
- Low cost/test and long shelf life

Code no. ASTM1/96 Quick Afla M1 Strip Test, rapid kit for Aflatoxin M1 in milk samples, 96 test

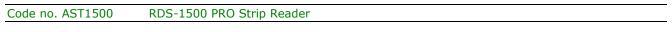


# Quantitative reader for Quick Afla M1 Strip Test - RDS-1500 PRO Strip Reader

All results of the Quick Afla M1 Strip Test kit become quantitative and are interpreted objectively and accurately by the handheld RDS-1500 PRO Strip Reader. Its easiness of use, IP67 compliance, reduced dimensions and light weight allow its use everywhere. RDS-1500 PRO includes a pre-programmed interpretation software for the Quick Afla M1 Strip Test, with a lot of useful functions that can be swiftly selected thanks to the wide LCD touch-screen display. Its software can be quickly updated to include new tests or to optimize/customize the analytical performances.

#### **Technical features:**

- Inmediate reading and interpretation
- Portable device: IP67 protection, small dimensions, light weight and easy to use
- Wide LCD touch-screen display
- Pre-programmed software for the Quick Afla M1 Strip Test interpretation
- Quantitative results in the range 10 350 ppt (not suitable to US/FDA limit of 500 ppt)
- Stable memory of hundreds of results and data on its removable SD storage card
- IP67-compliant for protection from the elements
- USB exit for the connection to a PC or printer
- Supplied with the user-friendly Data Manager Desktop Suite Software for easy viewing, printing, archiving, and exporting of test results
- Long litium-ion battery life, rechargeable by means of the supplied charger





Code no. AST1505 Portable thermal printer for RDS-1500 PRO Strip Reader





# Aflatoxins/Mycotoxins ELISA kits

The Aflatoxins/Mycotoxins ELISA kits proposed by Astori Tecnica allow either qualitative or quantitative determinations of these toxins. All of them are based on cutting edge technology, with excellent analytical performances such as high specificity and exquisite sensitivity. Their reliability is impressive with a wide range of possible commodities, from grains and flours to complex food, feed and beverage samples. Their individually breakable wells avoid wasting test material and money.

- Wide range of quantitative ELISA kits, with excellent sensitivity and specificity
- Ready-to-use reagents
- Quick extraction times and swift test protocols
- Suitable to different kinds of grains, flours, food, feed, dairy and beverage samples
- Availability of kits for "difficult" matrices and for specific kinds of samples
- Individually breakable wells
- Long shelf-life



Code no. 941AFL01M96	Total Aflatoxins ELISA kit, 96 wells (Rapid, 20 minutes)
Code no. 981AFL01LM96	Total Aflatoxins (LOW MATRIX) ELISA kit, 96 wells
Code no. 941BAFL01B196	Aflatoxin B1 (Rapid, 20 minutes) ELISA kit, 96 wells
Code no. 981BAFL01LM96	Aflatoxin B1 (LOW MATRIX) ELISA kit, 96 wells
Code no. 961AFLM01M96	Aflatoxin M1 ELISA kit, 96 wells
Code no. 991AFLM01U96	Aflatoxin M1 ELISA kit, 96 wells, for urine samples
Code no. 941DON01M96	Deoxynivalenol (DON) (Rapid, 20 minutes) ELISA kit, 96 wells
Code no. 9410CH01M96	Ochratoxin (Rapid, 20 minutes) ELISA kit, 96 wells
Code no. 981OCH01ALC96	Ochratoxin ELISA kit, 96 wells, for alcoholic beverages
Code no. 961OCH01COF96	Ochratoxin ELISA kit, 96 wells, for coffee, cocoa and spices
Code no. 991OCH01MS96	Ochratoxin ELISA kit, 96 wells, for milk and serum
Code no. 951FUM01C96	Fumonisin (Rapid, 20 minutes) ELISA kit, 96 wells
Code no. 951ZEA01N96	Zearalenone (Rapid, 30 minutes) ELISA kit, 96 wells



# **K-CASEIN B IN COW MILK**

# Kappa Test ELISA kit

The new Kappa Test determinates the amount of Type-B k-Casein in cow milk, regardless of the cow breed.

It has been demonstrated that milk containing only k-Casein B (obtained from cows belonging to the type-B genetic variant) gives a higher cheese yield then milk with only type-A or AB k-Casein.

Furthermore, in comparison to these less profitable variants, k-Casein B milk coagulates in a shorter time and gives firmer curds which can be more easily processed and drained, whose cohesion gives cheese with better rheological properties and higher calcium and phosphorus contents. Even the general structure and the sensorial properties of cheese, milk and yogurt improve.

Kappa Test allows the dairy industries to monitor all incoming bulk milk and to set a quality policy addressed to individual farmers, aimed to prize those ones who select their cows and provide milk with only or mainly k-Casein B.



#### **Technical features:**

- Traditional ELISA test in microplate of 12 x 8 wells
- Accurate results within about 4 hours
- No need to pre-treat the milk samples
- Useful to analyze bulk cow milk or milk from individual farmers/cows, regardless of the breed
- Frozen or preserved milk samples do not affect the results
- Kappa Test allows to set a prize policy based on higher contents of k-Casein B
- Kappa Test allows to get better yields, better curd firmness and higher quality



Code no. TESTKAPPA

Kappa Test ELISA Kit, 96 wells





# **TECHNICAL SERVICE**

# Technical service - Repairs and training courses

Our technical service includes the ability to repair all the instruments we manufacture and distribute, both during the warranty period or and after its expiry date. Our technical engineers are able to perform quick and efficient service and modifications upon request. All our foreign distributors can schedule a training course at our facilities to learn how to handle and solve any technical inconvenient by their own, in order to improve their local ability and their service quality.

#### Features of the service:

- Quick and reliable interventions
- Emergency technical consulences, even on the phone
- Warranty upon every repair
- Availability of spare parts
- Extremely competitive prices
- Training courses to our foreign distributors can be scheduled any time, upon request



# Technical service - Calibrations and application studies

Astori's technical engineers can perform accurate calibration procedures on almost any kind of equipments for temperature measurements (for example.: thermometers, thermal regulators on ovens, thermostats, refrigerators, freezers, waterbaths, etc.), on all balances and all the instruments from our own production, by providing the customer with an Astori's official calibration certificate. Moreover, special application studies on our manufactured instruments can be achieved, upon request.

#### **Features of the service:**

- Quick and reliable interventions
- All procedures are performed by using officially certified standards
- A calibration report or certificate is supplied upon request
- Extremely competitive prices





# **SALES CONDITIONS**

#### **HOW TO ORDER**

All orders must be exclusively addressed to: ASTORI TECNICA s.n.c. - Via Stelle, 11 -25020 Poncarale (BS) - Italy. All order transmissions must be done in writing, by means of ordinary mail, fax (no. +39 030 26.40.812) or e-mail (info@astorioscar.com). In case of orders by phone, they are subdued to their next written confirmation. Proforma Invoices, whether including the transportation costs or not, can be required to Astori Tecnica prior to each order.

#### **PAYMENTS**

Payments must be done in advance, by confirmed bank transfers. Our invoices, if no complaint occurs from our Customer within 8 days from their receipt, are to be regarded as definitively accepted. Special payment terms for exceptional orders must be agreed in writing and prior to the delivery of the goods; in these cases, if the terms are expired and the payments are not honoured, a fee percentage will be applied according to the current bank rate at that particular time. The sale is considered done once the payment has been confirmed and received by Astori Tecnica; our Customers must not re-sell or borrow or deal with the received goods in case of a skipped or missed or delayed payment, as these actions will hurt our property rights.

#### **DELIVERIES**

The agreed delivery terms must be considered approximate and without any obligation from Astori Tecnica's side. A possible delivery delay caused by problems not generated from our responsibility, willingness or negligence cannot be used as a reason to cancel the order, to postpone an agreed special payment term or to sue Astori Tecnica for damages of any sort.

#### **SHIPMENTS**

All goods are sold under ex-works (our offices and stock, located in Poncarale (BS) -Italy) conditions. If required, Astori Tecnica can take care of the shipments whose costs will be invoiced to the purchaser. We decline all responsibilities about the shipments: the goods will be forwarded at the purchaser's risk and danger, according to Italian laws and regulations. If the Customer asks Astori Tecnica to take care of the shipment, we will choose the most correct and proper delivery way according to our experience, but without having or acquiring any responsibility upon it.

#### WARRANTY

The warranty period covers 12 months from date of invoice. The warranty only covers the factory defects/failures: any inconvenient due to normal use or wear of the equipment and of any part is excluded. All shipment costs to return the parts or the defective units under warranty conditions are at purchaser's charge.

All shipment costs for replacing parts and/or equipments under warranty conditions are also at purchaser's charge.

#### RETURNS

Any return of the goods must be authorized by Astori Tecnica in advance, independently from the reason. When agreed, the return procedure must be performed by stating the original transportation document data in writing.

#### **COMPLAINTS**

Any complaint about our supplies must reach Astori Tecnica within 8 days from the receipt of the goods. Delayed complaints will not be accepted.

**COMPETENT FORUM** In case of legal actions, the Forum in Brescia is competent.

## **NOTES**

When placing an order, the purchaser automatically and fully accepts all Astori Tecnica's sales conditions, as described here and without restrictions or changes.

Our company keeps the right to introduce, whenever is needed and without any warning, proper and reasonable modifications and innovations upon the items included in this catalogue.

Since the print techniques and the constant technological improvements on our products can lead to differences in the colours, shapes, design and technical features of the articles showed in this catalogue, Astori Tecnica will communicate and describe any possible variation to the Customers at the time of a Proforma Invoice creation or at the time of an order receipt.