



MAGAPOR



More than 30 years providing practical and innovative solutions for swine artificial insemination

Our entrepreneurial and innovative spirit drives the R&D department. We have a multidisciplinary team of biochemists, veterinarians, engineers and computer scientists working to improve our products and designing and developing new solutions for our sector.

Our hallmark is founded on three key attributes and aspects of the company's philosophy:

• Specialists in swine reproduction

Unique products Technical service with a clear aim of improving



Magapor corporate catalogue. We reserve the right to amend this catalogue. All rights reserved. © Magapor, S.L. The products, services and information in this document may be subject to change and/or variation with regard to the texts and images shown.



Magapor

Specialists in swine reproduction

Magapor's exclusive dedication to swine farming allows us to be specialists in our work.

Dedication

Technical Service for our customers

Constant customer support and our commitment to transfer knowledge to the sector are a part of who we are.

Trust

Our strict quality controls

We analyse the quality of our products in the manufacture of extenders, RTC (reproductive toxic controls) controls in plastic blisters or biological contact controls.

R&D

Unique and exclusive products and services

R&D is one of the fundamental pillars of Magapor, which has allowed us to introduce practical solutions to the market.

Technology

Smart equipment with traceability

Our engineers and programmers develop all the equipment under the premises of simplicity and traceability in their use.

Security

We work using biosecurity protocols

All our production processes are performed under biosecurity protocols, such as repairs, which are carried out in facilities other than the main plant.



GESIPOR 360

The best software for the comprehensive management of the production of semen doses





















BOARS

ANALYSIS

DILUTION

PACKAGING

TRACING

PLANNING

GENETICS

OPERATORS





PERSONALISED REPORTS CENTRE REPORTS **PRODUCTIVITY** EXTRACTION MONITORING







+ **ORDERS** MODULE



DELIVERY NOTES STOCKS TRANSPORTATION DATA







+ TRACKING MODULE



HEALTH PLAN TRACEABILITY **VISITS** WAREHOUSE







> Perfectly adaptable to user needs, it offers full control over all Boar Stud production parameters.

- Forecasts and schedules extractions.
- · Standardises and records production processes (analysis, dilution and packaging).
- Manage orders and delivery notes.
- Allows full traceability of dose production.
- · Monitors and controls the Boar Stud health plan.
- Provides all data through customised reports.

Characteristics:

- Multi-user and multi-centre.
- Connectivity with equipment (see Magapor Integrated System functionalities).
- Online and offline mode.

Advantages:

- Avoids human error.
- User-friendly.
- On-going development by our IT and R&D departments.



EASY TO USE, AND CHECK D



MAGAPOR INTEGRATED SYSTEM

Total automation: Planning + Collection + Analysis + Dilution + Packaging





Gesipor enables integration and automation of all processes involved in the production of semen doses, with accurate traceability from collection to the farm, using the Magapor Integrated System work concept.

The information flow is preserved and managed through the Gesipor software, for total control and analysis of the results.





ZEBRA PRINTER Thermal printer to link with Gesipor.



PRE-CUT LABELS





BARCODE READER Automatic data entry in Gesipor.



ERGOS

Collection dummy



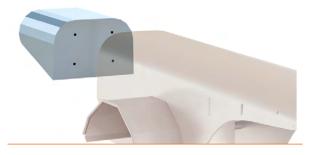


- Versatile: for both manual collection and automatic collection with Autocollect.
- Ergonomic: comfortable and
- safe for the boar, anchored to the ground for more secure support.
- Resistant, quick and easy to clean: built from stainless steel.
- Suitable for any boar: adjustable height with optional extenders.



ERGOS GUARD

Stainless steel guard to protect the Autocollect from possible impacts.



ERGOS EXTENSION

Extender for larger boars. Built from stainless steel.



AUTOCOLLECT

System for the automated collection of ejaculate



PRODUCTION PER BOAR BY UP TO 40%

It consists of a mobile guide, which can be installed inside the Ergos dummy, and mobile elements to attach the Autocollect Cervix and thermos

- It has a fixed or free movement position for the animal.
- The boar gets off after ejaculating.
- Its position protects the collection thermos from any blows by the boar.



> Advantages of the Ergos dummy + Autocollect

- Increases dose production per boar by up to 40%.
- Allows the operator to collect from two boars at the same time
- Reduces the variability of results between operators, standardising the collection process.
- Suitable for all breeds and facilities.

- Facilitates and optimises the operator's work.
- Hygienic: reduces the risk of bacterial contamination of the ejaculate.



AUTOCOLLECT CERVIX

Comfort and hygiene

- Disposable, which protects and prevents any injury to the boar's penis, allowing a perfect fit and improving stimulation.
- Prevents possible contamination by improving hygiene during collection.

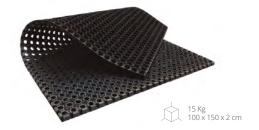




> ERGOS MOBILITY Mobile dummy

- Easy portability.Comfortable for the boar.
- Strong, built from stainless steel.
- Hygienic, easy to clean.





NON-SLIP MAT



COLLECTION THERMOS











FILTERS











GSP READER

Instantly identifies the operator and the boar.



GSP PRINTER

Bluetooth thermal printer. LABELS







GSP KEYRING

For operator identification.



MAGAPOR INTEGRATED SYSTEM



GSP EARTAGS

For boar identification.



















MAGAVISION

CASA system that quickly and accurately evaluates semen quality







- > CASA system for the evaluation of semen quality, specifically for boar semen, which enables an objective and standardised analysis of the main semen quality parameters:
- Motility (masal or individual, depending on the version)
- Concentration
- Abnormal forms

Full and simple analysis of ejaculate:

- Objective and exact.
- Quick analysis; less than 2 minutes.
- Provides the number of doses.
- Performs a parametrised analysis of the movement intensity.
- All the data can be archived in the Gesipor database.



COUNTING CHAMBER

5 analyses per chamber.





MICROPIPETTE 0,5µL to 10µL



MAGASLIDE

Hot plate



- Equipped with a PID regulator that provides very precise temperature control and more gradual heating, while reducing oscillations.
- Regulator precision 0.1°C.
- Built from stainless steel.
- Equal distribution of temperature over the plate's entire surface.







MAGACELL

Colorimeter



Calculation of the number of semen doses.

- Instant absorbance readings or direct dose data.
- LCD high contrast digital reader.
- Speed and precision when calculating the number of doses.



CUVETTES

Standard square section cuvette. Colourless and transparent under ultraviolet light. 100 units/box





MICROSCOPES

Ergonomic, highly robust and stable, with coaxial controls on both sides for macro and micrometric focusing.



MASTER 3 Binocular Microscope

Objectives: 4X - 10X - 40X - 100X





MASTER 5 Trinocular Microscope

Offers the possibility to incorporate phase contrast. Objectives: 4X - 10X - 20X - 40X - 100X





IMMERSION OIL





EOSIN-NIGROSIN



25 ml



BÜRKER CHAMBER



PIPETTES



SLIDES AND COVERS



MICROPIPETTES AND TIPS



HIGH PERFORMANCE EXTENDERS

Spermax, Duragen and Vitasem



The high performance of Spermax, Duragen or Vitasem, offers maximum protection, maximises the fertilising capacity of the semen doses and decisively contributes to the production results of pig farms.



Demanding and differentiating quality controls

Magapor implements the most rigorous quality controls for its high performance extenders.



RAW MATERIALS

- Technical specifications of raw material
- Supplier selection
- Reception: validation of stock
- Control of Raw Materials
 - The Raw Materials comply with the Ph Eur, BP and USP (European, British and American Pharmacopoeias)
 - Heavy metal analysis
 - Sample repository

PRODUCTION

- Production in clean room
 - UNE-EN ISO 9001 Quality Control Certified and the extenders are produced according to GMP (Good Manufacturing Practice) standards.
 - Metrological control
- Quarantine
- Validation and control of the final product
 - Organoleptic control
 - Physicochemical analysis
 - Microbiological analysis
 - In vitro validation
- Analysis of the final product

Magapor extenders are animal protein free.

POST PRODUCTION

- Product for sale
- Customer satisfaction
- Analysis of doses
 - Quality parameters
 - More than 9000 boars
 - Microbiology
 - Antibiograms
- Sample repository
- Re-validation test of the formula
 - Comparison using flow cytometry







SPERMAX

Spermax is the latest extender developed by Magapor.

Its innovative formula contains antioxidants, membrane protectors and latest generation energy precursors.

- Maintains mitochondrial activity under optimal conditions for interaction of the sperm with the female's reproductive tract.
- Protects sperm during storage and transport, guaranteeing maximum vitality at fertilisation.
- Provides maximum energy for sperm and long-term protection for semen doses.
- Improved antibacterial action.

Spermax is synonymous with peace of mind during storage and transport over short and long distances, guaranteeing the best result.



DURAGEN

Duragen offers significant dose protection for the best results.

Its formula is a balanced combination of anti-oxidants and membrane protectors that:

- Offers additional protection against lipo-peroxidation of the sperm membranes.
- Avoids premature sperm capacitation in the most demanding situations.
- Has a broader antibacterial action, ensuring greater protection.

Duragen protects against the thermal stress that sperm can undergo. It is an ideal extender to produce doses by dilution in two steps.



VITASEM

Vitasem was our first high performance extender.

It represents a quantitative and qualitative leap compared to short and medium-term extenders. Vitasem's success is based on its formula, which:

- Protects sperm from changes in the environment.
- Includes anti-oxidants and membrane protectors.
- Has an antibiotic combination that ensures preservation of the doses.

Vitasem ensures correct preservation of the semen doses.





	CASE	BOX
1 l itre	25 sachets	12 cases
5 litres	20 sachets	4 cases
100 litres		3 sacks

	CAJL	DOX	
1 l itre	11 x 28 x 12 cm - 1,2 Kg	30 x 46 x 38 cm - 16 Kg	
5 litres	20 x 30 x 16 cm - 4,6 Kg	30 x 40 x 35 cm - 19 Kg	
100 litres		19 x 37 x 21 cm - 13,5 Kg	



OPTIMAL pH

STABILISATION TIME

OPTIMAL OSMOLALITY 290 - 320 (mOsm/Kg)

CONDUCTIVITY

° BRIX

6.9 - 7.5



° BRIX

OPTIM-IA & BIOPIG

Magapor extenders for semen preservation



OPTIME A

Biological solution with exclusive Magapor formula for preservation of semen. Its formulation boosts antibacterial and buffering capacity and consequently increases safety levels in the semen doses produced.

Manufactured under Magapor quality standards.

OPTIM-IA



BORG

Enhanced BTS extender with broad-spectrum antibiotic protection.

Manufactured under Magapor quality standards.

BIO PIG

OPTIMILA.	OPTIMAL pH	STABILISATION TIME	OPTIMAL OSMOLALITY	CONDUCTIVITY
DIORIG	6,9 - 7,5	15 - 20 min	325 - 350 (mOsm/Kg)	5,50 - 8

AVAILABLE
FORMATS

	CASE	BOX
1 l itre	25 sachets	12 cases
5 litres	20 sachets	4 cases
100 Litroc		2 cacks



	CASE	BOX
1 litre	11 x 28 x 12 cm - 1,4 Kg	30 x 46 x 38 cm - 17 Kg
5 litres	20 x 30 x 16 cm - 5 Kg	30 x 40 x 35 cm - 21 Kg
100 Litros		19 v 37 v 21 cm - 15 Kg





DICOL

Extender for semen collection





Dicol is a **unique extender on the market** formulated by Magapor to resolve contamination problems.

It is used as a collection extender during the collection phase, which guarantees rapid sanitisation of the ejaculate and controls bacterial contamination, before final dilution with the usual Magapor extenders.

Case: 10 x 28 x 12 cm 1,4 Kg Box: 30 x 46 x 38 cm 17 Kg





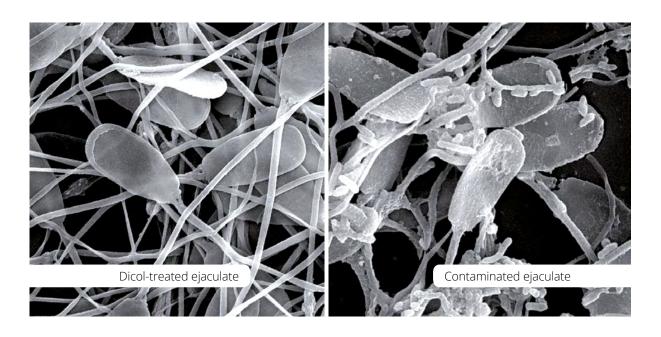
BOAR STUDS WITH CONTAMINATION ISSUES HAVE BEEN ABLE TO CONTINUE WORKING WITH GOOD PRODUCTIVE RESULTS ON THE FARM THANKS TO THE USE OF DICOL

 OPTIMAL pH
 STABILISATION TIME

 6,9 - 7,5
 15 - 20 min

 OPTIMAL OSMOLALITY
 CONDUCTIVITY
 ° BRIX

 290 - 320 (mOsm/Kg)
 8,5 - 11
 3,8 - 4,5





EXTENDERBOX

Equipment for the preparation of reconstituted extender

PROVIDES THE REQUIRED AMOUNT OF EXTENDER AT THE DESIRED TEMPERATURE, RECONSTITUTED PRECISELY AND WITH NO WAITING TIME





$(\in$







Performance and productivity:

- Heats only the water necessary.
- Constant flow of water and extender.
- Extender with a flow of 90 L/h.

Precision:

• Exact dosage (+/- 1gr).

Safety and hygiene:

• Its closed circuit prevents the risk of water contamination.

TECHNICAL CHARACTERISTICS

£

230 V - 50-60 Hz - 2500w Maximum flow 2 L/min Maximum scale capacity 12 Kg Resolution +/- 1gr





NEXTEN 300

Osmosis, dilution and dispensing equipment for reconstituted extender









It completely manages the reconstituted extender manufacturing process from osmosis of the water to precise dispensing of the extender, controlling its conductivity and temperature.

Hygiene:

• Automatic cleaning of equipment.

Speed

 Prepares 60 litres of dilution every 10 minutes.

Connectivity:

• Can be connected to the control PC for remote or in-situ operation.

Nexten 300 comes equipped with:

- Reverse osmosis equipment.
- Water tank (300 litres).
- Continuous flow heater.
- Dilution tank (60 litres).
- Probes (conductivity and water temperature).
- 3 Ultraviolet lamps.





E-DISPENSER

Maximum precision dosing equipment



> Dispenses the required volume at high speed and very precisely thanks to the built-in high flow peristaltic pump and precision scales.

Connectivity.

Allows job data entry via:

- Touch screen.
- PC connected via Ethernet. Transmission of work orders via Gesipor 3.0.
- Bar code reading.









TECHNICAL CHARACTERISTICS

50/60 Hz | 450W | 110/230 V

Nominal/max flow 10-15
L/min (distilled water)

Maximum scales capacity
and resolution 12 kg +/- 1gr

EASYDIL

Tank for preparing reconstituted extender



- > Device designed for warming and mixing up to 100 L of extender.
 - Made entirely from stainless steel.
 - Features magnetic stirrer.
 - PID type temperature controller for precise regulation with an error margin of less than 0.1°C.
 - Orifices in the cover for filling and emptying the fluid.
 - Low electricity consumption.

TECHNICAL CHARACTERISTICS









230 V | 50/60 Hz Nominal power 750W Precision +/- 0,1°C Stirrer speed 0-400 rpm Warm-up time: 100 L 3-4 hours



OSMO6

Reverse osmosis equipment

Device that produces type II (ASTM) distilled water using drinking water from the public supply.

- Equipped with a reverse osmosis pump (from 240 L/day).
- Easily assembled housing for access to filters and their easy replacement.
- Instantaneous reading of conductivity at 3 points.
- Connection via RS232 serial port.
- Stainless steel tank with level sensor and ultraviolet lamp, from 100 litres (optional)









OSMO6 uses a series of filters and regularly to obtain the highest quality of produced water:

- Granular activated carbon pretreatment cartridges.
- Resin cartridges.
- Amicrobic cartridge.
- Reverse osmosis membrane

The resistivity of the purified water produced is ≥ 5 M Ω .cm at 25°C. The water produced meets or exceeds ASTM, CAP, CLSI and ISO 3696/BS 3997 quality standards.





BM 20 Water bath

- Built entirely from stainless steel.
- Capacity 20 litres.
- Digital temperature control, with a high precision regulator, accurate to 0.1°C.
- Temperature range, 30–40°C.











DISTILLED WATER

Type 2 distilled water.



SEMEN DYES

For marking doses.





JARS AND FLASK BAGS

For 3 and 5 L.



SAVOGERM

pH neutral soap.





GLOVES

Disposable vinyl or latex gloves.



100L BAG

100 litre disposable plastic bag.



BAGMATIC

Automatic packaging and labelling of semen doses, 950 units/hour





> Quick and precise packaging:

- Packs 950 units/hour.
- High dosing precision +/- 1 g in case of working with a scales.

Software and connectivity:

- Auto-check function for rapid incident diagnosis.
- Can operate independently from a PC.

Easy to clean:

- Built from stainless steel and anodized aluminium.
- Labeller housed inside the device, accessible through a removable tray, which prevents splashing.

Easy use and maintenance:

- Low maintenance mechanics.
- Equipped with a bag presence detector.
- Uses the first and last bag on the roll.
- » Can operate with Hygitube disposable filling tube.

Operates with both Semenbag (up to 90 mL) and Smallbag (up to 45 mL)

Optional:

AUXILIARY CLAMP WEIGHING SCALES

TECHNICAL CHARACTERISTICS



110/230 V - 50/60 Hz - 200 W Working pressure 6-8 bar













SIMPLYMATIC

Automatic packaging of semen doses, 900 units/hour

SIMPLE AND INTUITIVE SOLUTION FOR AUTOMATING PACKAGING PROCESSES











> Quick, simple and resistant:

- Robust construction in aluminium and stainless steel profiles that facilitate cleaning operations.
- Touch screen for interactive control and information on the status of the device.

TECHNICAL CHARACTERISTICS



110/230 V - 50/60 Hz - 180 W Working pressure 6-8 bar 1250 bag roll

SIMPLYBAG Simple packaging of semen doses



- Sealed using manual clamp.
- Manual support for 6 blisters and blister roll.
- Aluminium structure.



6 Kg 50 x 40 x 16 cm



Disposable filling tube for Bagmatic and Simplybag





Designed to ensure the pumping of diluted semen in optimal sanitary conditions and avoid contamination issues.

- Eliminates the risk of cross contamination.
- Recommended maximum use: 1500 doses.

5 units / 0,6 Kg 28 x 26 x 7 cm 100 units / 14 Kg 60 x 40 x 55 cm



SEMENBAG & SMALLBAG



Semen dose packaging bags with reprotoxicity control (RTC)



> Produced under the strictest of quality controls, Semenbag and Smallbag preserve their contents under the best conditions.

Packaging and formats developed for your comfort at the Boar Stud

- Automatic Semenbags and Smallbags come in rolls of 1250
- units, saving you time when changing rolls.
- Exterior packaging designed to save space and be more practical when replacing the roll.



SEMENBAG AUTOMATIC





SMALLBAG AUTOMATIC







SEMENBAG MANUAL

Precut







RTC

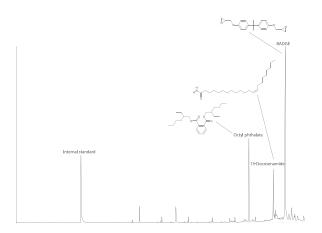
Reproductive Toxicity Control





RTC is a set of quality control tools that Magapor carries out at a chemical and biological level, in partnership with the University of Zaragoza, on its packaging to offer a "safe for reproduction" product.

This strict process guarantees a product controlled for the presence of Phthalates, Bisphenol A, Badge, Cyclic lactone and PVC that could develop reprotoxic effects by means of migration to the semen doses.





RAW MATERIALS

- Raw material specification 10/2011CE
- Evaluation and selection of suppliers
- Control of raw material reception
- Sample repository
- Quarantine
- Reprotoxic analysis of raw material
 - Molecular control.

PRODUCTION

- Manufacturing process
 - Own facilities.
 - Metrological controls.
 - Product traceability.
- Quarantine
- Quality control Finished product
 - Sperm functionality test.
 - In vitro fertilisation test.

POST PRODUCTION

· Product for sale

Customer feedback.





SEMEN COOLERS

Equipment for preservation of semen doses, avoiding thermal shock and keeping doses in optimal condition.

- Temperature regulation with a neutral zone that reduces energy consumption and extends the compressor's life.
- · Air recirculation for a perfectly balanced temperature.
- Thermostat with alarm.
- Temperature resolution 0.1°C.
- Interior temperature range 15-40°C.







Z-100

- Nominal volume: 130 Litres.
- Optimal Semenbag doses: 200
- Nominal power: 65 W

Z-300

- Nominal volume: 286 Litres.
- Optimal Semenbag doses: 450
- Nominal power: 125 W

Z-450

- Nominal volume: 344 Litres.
- Optimal Semenbag doses: 650
- Nominal power: 270 W





COOL BOX

NT-30 and NT-15

- Peltier cell thermoelectric heating and cooling.
- Digital regulator with resolution 0.1°C
- Built-in neutral zone that reduces the power consumption of the box and extends its useful life.
- A+ rating that reduces energy consumption by 25%.
- Nominal power: 75 / 65-80 W.
- Voltage: 220 VAC/12-24 DC.
- Frequency: 50/60 Hz.
- Consumption: 4 A.
- Nominal volume: NT-30 34 L NT-15: 14L.
- Optimal Semenbag doses: NT-30 120 NT-15: 60.

NT-110

- Heating and cooling by gas compression circuit.
- Digital regulator with resolution 0.1°C
- Built-in neutral zone that reduces the power consumption of the box and extends its useful life.
- CFC-free cooling element.
- A+ rating that reduces energy consumption by 25%.
- Nominal power: 220/75 W.
- Voltage: 100-240 VAC/12-24 DC.
- Frequency: 50/60 Hz.
- Consumption: 10 A.
- Nominal volume: 95 Litres.
- Optimal Semenbag doses: 435.





10 Kg 54 x 36 x 46 cm

11,2 Kg 58 x 40 x 49 cm $(\in$

7 Kg 44 x 33 x 29 cm

7,4 Kg 48 x 32 x 36 cm



 $C \in$

33 Kg 96 x 53 x 47 cm

38 Kg 100 x 58 x 53 cm



DATALOGGER USB

Temperature reading and storage.

DATAPAD

For direct reading and configuration.





FOAM CATHETER With/without adapter

With adapter: 800 units/box
Without adapter: 1000 units/box





GILT FOAM CATHETER







YELLOW SPIRAL CATHETER







ORANGE SPIRAL CATHETER









IGREEN CATHETER

Ecocatheter

The first catheter with biodegradable tube for swine artificial insemination









CATHETERS FOR POSTCERVICAL INSEMINATION

More than 20 years working in postcervical artificial insemination





MAGAPLUS S

• Design and flexibility for easy insemination and harmless to the sow.







MAGAPLUS

• Use of a guiding catheter is not necessary.









MAGAPLUS N

 Specific length and diameter for nulliparous sows.







MAGAPLUS DD

• Double deposition probe for deep intrauterine insemination.







MAGASCAN

Wi-Fi ultrasound machine

- Depth: 100-180mm adjustable
- Transmission to mobile device (tablet or smartphone)
- Measurements of distance, area and obstetrics.
- Waterproof probe and tablet.
- High quality image.
- Includes 7" tablet and protective casing.
- With carry case.









RACCORD CATHETER

For auto-insemination

• Length: 490 mm









HIGIPAL Hygiene wipes













ESPERMAPLUS

Exclusive nutritional supplement for boars



Specially designed to ensure an optimal supply of essential micronutrients, vitamins and amino acids necessary to maximise sperm production in boars.

BOARS ALWAYS
IN OPTIMAL
CONDITIONS







MAGAPOR APP

The knowledge base is updated in real time for swine breeding professionals





II Parameters

You can compare the main semen quality parameters of your boar stud with a database of more than 9000 boars, updated in real time

2 Publications

Access a library of technical publications on the most relevant topics influencing swine reproduction, constantly updated





Surveys

Consult and comment on different swine reproduction issues, compared with answers from previous periods to see changes in trends and the different ways of working around the world

and much more...

Anstant access to your extender batch validation reports, news, photos ... and all this in 18 languages!







Magapor S.L. www.magapor.com







