

Collectis

Automatic boar semen collection system

A STEP AHEAD



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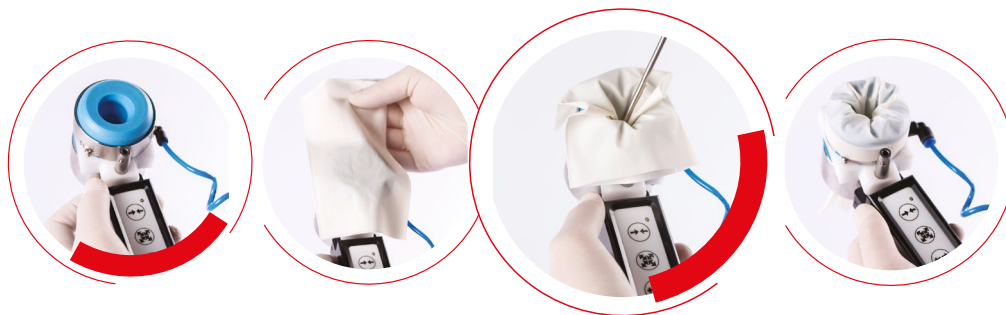
Automatic boar semen collection system

A totally unique electro-pneumatically operated vagina

The heart of the Collectis system is the artificial vagina operated by an electro-pneumatic system with a pulsating mode that replicates uterine stimulation.

This totally unique technology provides a level of efficiency that is at least equal to manual collection thanks to perfect stimulation of the animal.

With Collectis, the stimulation is identical throughout a collection session, whereas with manual collection, it depends on the technician performing it and his level of fatigue or stress.



Preparation

For the preparation process, the artificial vagina is placed on the handle.

A disposable liner is inserted in the open vagina, thereby protecting the vagina and enhancing comfort for the boar.



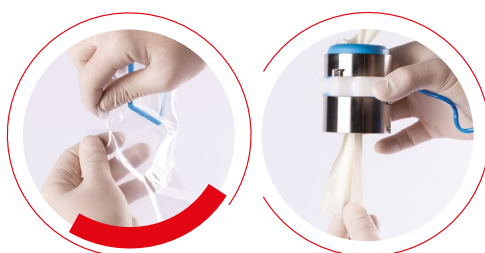
Set-up

The boar's penis is inserted in the open vagina.

The technician then closes the vagina, which maintains the penis in place for the collection process. They then remove the handle from the artificial vagina.

The filtering cone and the collection bag are fitted onto the vagina. The assembly is placed in a reception container mounted on the dummy.

The technician can then activate the pulsating function of the vagina.



Semen recovery process

Once the boar has removed its penis, the bag containing the semen is separated from the cone, sealed, identified and sent to the laboratory.

The liner is removed from underneath the vagina. It is then ready for a new collection. No cleaning operations are required between boars.

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Priority on health and safety

With Collectis, semen never comes into contact with the external environment, ensuring it is protected from bacterial contamination.

Bacterial contamination, a health risk

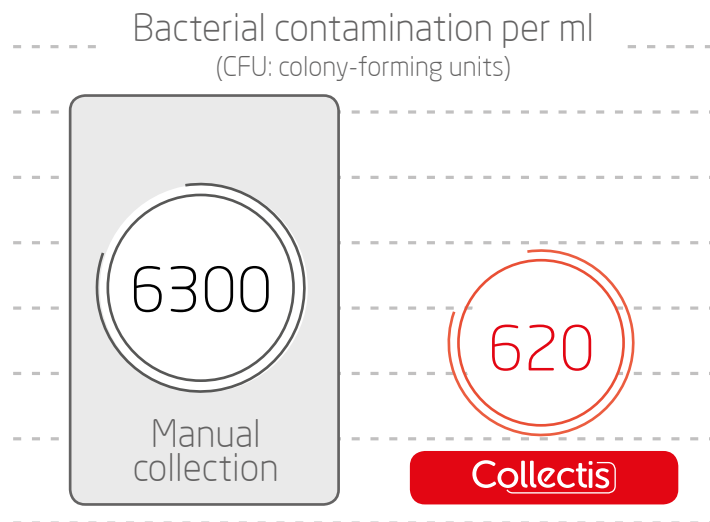
Reducing bacterial contamination during the semen collection process ensures better preservation and reduces risks of economic losses:

- Higher conception rate
- Fewer sow non-productive days
- Reduced vaginal discharges



Bacterial concentration divided by 10

A study has shown that bacterial concentration in the ejaculate collected is significantly reduced.



Comparison between manual collection and Collectis

Study carried out on boars with an average age of two. 50% were collected manually, and 50% were collected using Collectis.



“Using the Collectis system makes it possible to reduce bacterial contamination ten-fold. Collectis significantly improves hygiene conditions during the collection process and thereby contributes directly to preserving the semen. This improves reproduction rates at the farm.⁽¹⁾”

(1) Efficacy evaluation of Collectis to prevent semen contamination - comparison trial on 55 ejaculates.
Gartner, Becker, Martlbauer Veterinary Faculty of Munich (Germany), Microbiology department - Biere, NBG AI center Landshut (Germany)- Genes Diffusion (France)

The economic impact of Collectis

Collectis increases the profitability of boar semen production sites through two specific features: protection from bacteria and increased productivity.

Protection from bacteria, a guarantee of savings

Several studies show the influence of the bacterial load in semen on reproduction performance levels.

Collectis makes it possible to control bacterial load during semen collection, thereby increasing the number of viable and marketable doses.

Enhanced productivity thanks to automation

With two Collectis systems and four dummies, a single operator can collect semen up to 4 boars simultaneously. The automated process and the presence of a safety alarm enable the operator to carry out other tasks at the same time. The average number of collections per hour per operator is thereby increased by 40% on average, while the number of doses produced remains stable. This represents a significant reduction in labor costs.

Comparison of work efficiency⁽²⁾

	Manual collection	Collectis
Number of collections	37,264	34,450
Average daily collection time (hours)	5.30 hours	4.00 hours
Average number of technicians per day	14.17	11.32
Average number of collections per day	239	233
Average number of collections per hour per operator	3.07	5.82
Total collection hours per year	24,164	14,000

10,000 hours saved per year when using Collectis



“Depending on what kind of investment that is made for building transformations, the total return can be estimated between 2 and 4 years.⁽³⁾”



: (2) Source: Sergio Barrabes Aneas, Ben Bouvier, B Gary—ICBSP 2007
 : This study was carried out with 10 Collectis in three insemination centers over a six-month period.
 : (3) Testimonial from the CIPQ, a Canadian swine insemination center

More flexibility, less stress

The comfort provided by an automated system

Collectis makes each collection process perfectly reproducible, which makes the technician's job less repetitive, more comfortable, less stressful and less tiring while increasing technician productivity. Less fatigue also means fewer mistakes and accidents.

Automation considerably reduces the risk of musculoskeletal disorders.

Improved working conditions


Collectis safeguards the collection process, because contact between the technician and the boar is limited. The technician can hence make the most of the time freed up to conduct blood samplings in complete safety during the collection process, whereas they are usually carried out in the boar pens.

Manual collection requires know-how and a specific profile. Collectis makes the different roles more interchangeable, providing more flexibility and reducing stress levels within teams. In addition, the learning process is faster, facilitating the search for new employees and the subsequent induction process.

Animal well-being

To make the conditions as natural as possible for the boar:

- The vagina of the Collectis has been designed to replicate the female's tract stimulation perfectly
- The smart support for the vagina has been specially designed to accompany the boar's movements during the collection process.



The working conditions are improved for the technicians and managers alike, and the system enhances the animal's well-being.



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Collectis products

Premium pack

- **Collectis**
1 control box, 2 control handles,
2 vagina support kits
- **Accessories**
2 specific dummies

Ultra pack

- **Collectis**
1 control box, 2 control handles,
2 vagina support kits
- **Accessories**
2 specific dummies, 2 non-skid mats
- **Starter kit**
6 artificial vaginas, 1000 liners, 900 collection cones
- **Services**
Installation and training by an after-sales technician,
collection room layout plans and recommendations



A specific dummy for the Collectis system

The dummy provided with the Collectis system has many advantages:

- Manufactured with stainless steel, washable and decontaminable materials
- Ergonomically designed: the height can be adjusted to suit the boar's body shape
- After collection, the semen is kept safe underneath the dummy
- Silent dummy to reduce stress for the boar