HORSE BREEDING Sample storage

Storage of semen in the oven

Even in horse breeding, laboratory equipment is indispensable. In the laboratory of Ludo Philippaerts on the Dorperheide stud farm, the fresh semen of breeding stallions is stored in an oven at 37 °C.

Carmen Van Waeyenberghe, **Memmert** distributor in Belgium, interviewed the famous show jumper for AtmoSAFE.

World-class riders know why they primarily owe their success to their four-legged partners. If the horse contributes its personality and shows strength, jumping power, sensitivity and focus, it ideally only needs little help from his rider on the course. Although a show jumper naturally has a strong and trusting bond to all of his horses, the career of most riders is particularly shaped by one very special horse. For **Ludo Philippaerts**, it was his stallion **Darco**. The Belgian top rider, who took part in four Olympic Games and numerous World Equestrian Games, European

The **Dorperheide stud** farm uses the **Memmert oven** UNE 200 for the **storage** of **semen** in **horse breeding**

championships and jumping competitions, achieved almost all of his successes with **Darco** or descendants of this famous Belgian warmblood.

Sperm count and mobility have to be just right

The **Philippaerts** family has a long tradition of equestrian sports. If **Ludo Philippaerts** is not on horseback himself or accompanies one of his sons Olivier and Nicola, both are also internationally successful, he dedicates his time to **horse breeding** on the **Dorperheide** stud farm or to trading of jumping and dressage horses.

From May to July, the equestrian sports world takes a summer break. During these months, the breeders on **Dorperheide store** the fresh **semen** of their breeding stallions in a **Memmert oven** at 37 °C. Before shipping, the morphology of each **semen** sample is tested. With the normal market prices of 1,000 € for the **semen** of a well-known breeding stallion, sperm count and mobility have to be just right.

Carmen Van Waeyenberghe, Voor't Labo Belgium, talking to an employee of **Ludo Philippaerts**

Darco is still producing offspring today

To increase the percentage of motile (mobile) sperms and get rid of impurities that could influence the **semen** quality during **storage** and cooling, the **semen** is mixed with a diluting agent and centrifuged at 15,000 rpm. The diluting agent then extracted using a vacuum pump before the semen is tested.

In the tournament season, breeders use deep-frozen **semen**. Safely packed in a vial placed in liquid nitrogen, the samples can be stored for years. This way, it is still possible to breed with **Darco** today, although the famous stallion died at the high age of 26 in 2006. If deep-frozen **semen** is ordered, the sample is defrosted in a **Memmert waterbath** at 37.5 °C and, in a thermally insulated box, shipped from the **Dorperheide stud farm** to its recipient as quickly as possible.

Ludo Philippaerts and two of his employees with Parco, a son of **Darco**

Laboratory equipment for storing and conditioning

Heating Oven U

Temperature control storage chamber IPS

Climate chamber CTC

Constant climate chamber HPP

AtmoSAFE would like to thank Carmen Van Waeyenberghe, Voor't Labo, **Ludo Philippaerts** and the entire staff of the **Dorperheide** stud farm for the friendly support in writing this article.

Overview of focal topics

- Horse breeding
- Ludo Philippaerts
- Dorperheide stud farm
- Darco
- Semen storage
- Sample storage
- Oven
- Waterbath

Picture credit: Stud Dorperheide and Voor't Labo

Autor: Memmert GmbH + Co. KG

Constant climate chamber HPP

Climate chamber ICH for stability tests

Humidity chamber HCP

Sample storage of marine sediments

On the research ship Belgica, an ICP cooled incubator is used to prepare marine sediments for subsequent onshore tests.

more information

---

www.atmosafe.net > Applications > Sample storage > Semen