

## **CASE STUDY Freezing Equine semen samples**

Equifreeze Ltd is based in Northants, UK that specialises in horse sperm collection on site. Delene Drape, director of the company, is investigating areas which could improve the post thaw reproductive potential and viability of frozen stallion sperm. In doing this she needs to collect, analyse, evaluate, extend, centrifuge and chill or freeze samples. Dr Draper used a portable Planer freezer - the IBF-100 - to collect semen for freezing and reported on her experiences.

“I am pleased to say that the IBF-100 pretty well lived up to my expectations. The all important freeze rate curves can be pre-programmed on to either a laptop or even on the machine so there is little wasted time. It was easy to transport to location, then to setup and simple to control. With no complicated cabling or fiddly switches the designers have succeeded in building with the user in mind”,

She also commented that the freeze runs appeared to be very accurate and the rates displayed on the computer screen enabled an easy analysis of procedures to observers. Delene continues: “The alerts and alarms on the machine are accompanied with clear explanations of what is occurring. The samples are easily loaded and you can also freeze samples of different sizes and volumes at the same time, allowing experimentation on freeze rates and sample volumes to be easily achieved.”

Data and freeze runs are simply stored and accessible for report writing and record keeping; this is catered for via the internal memory which holds the last 4 runs and allows for programming of the unit and downloading. The IBF has a battery or mains powered chamber which is mounted to a vapour shipper - a container with an absorbent liner for liquid nitrogen. “It has a quick turn-round between freeze runs so little time is wasted although for more than two or three runs a second newly charged ‘base’ would be needed.”

“When we came to examine the post thaw results of the samples we obtained from the controlled rate freezing in the IBF-100 they were very pleasing and the graph showed the post thaw viability results from seven different stallions’ samples, frozen in both 0.5ml and 0.25ml straws.”