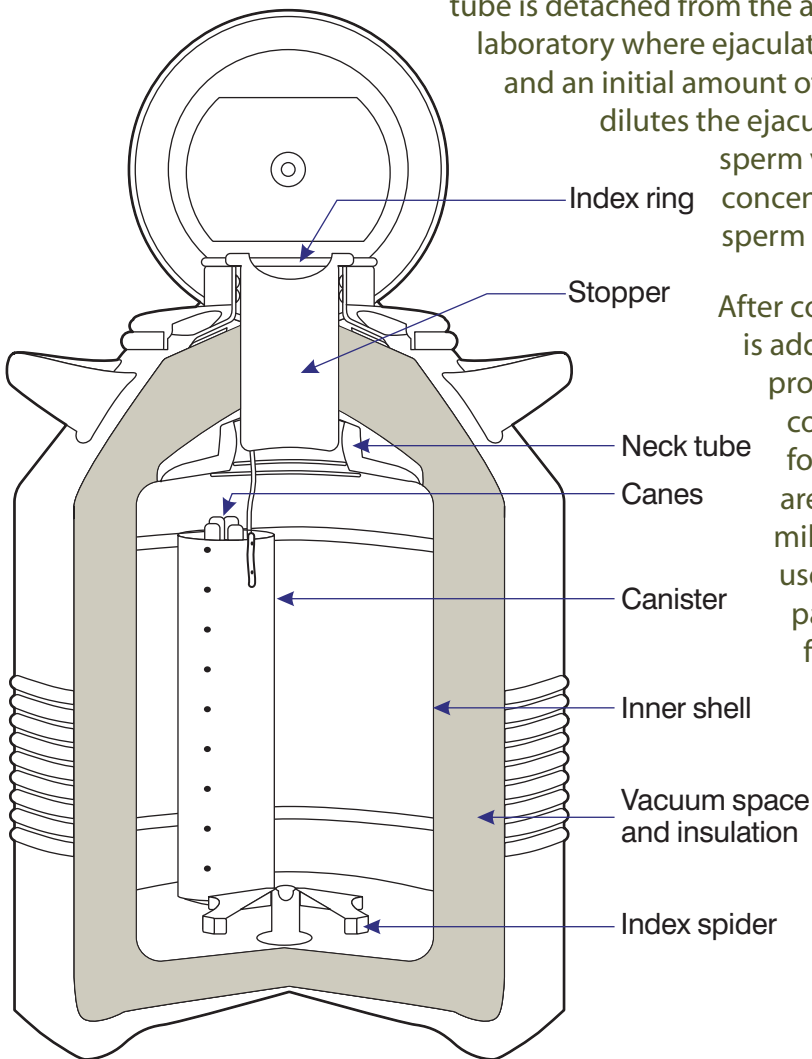


Semen Collection and Storage

Semen is collected by stimulating the bull to ejaculate into an artificial vagina with an attached collection tube. Average ejaculate volume is 4 to 6 millilitres, normally containing 6 to 8 billion sperm. Immediately after ejaculation, the collection tube is detached from the artificial vagina and sent to the laboratory where ejaculate volume is accurately measured and an initial amount of extender is added. Extender dilutes the ejaculate to facilitate examination of sperm viability, motility and concentration and later protects the sperm during freezing and thawing.

After cooling to 5°C, additional extender is added, diluting the semen to produce individual doses containing sufficient viable sperm for a single insemination. Doses are packaged in the 0.25 or 0.5 millilitre plastic straws which are used for insemination. After packaging and sealing, straws are frozen and stored in liquid nitrogen at -320°C.



Liquid Nitrogen Semen Storage Tank.