

# IVF Combined Catalogue Overview

**ESCO** **allwin**<sup>®</sup>  
MEDICAL Medical Devices  
An Escalife Sciences Group Company



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# Introduction

**Esco Medical** and **Allwin Medical** together deliver a comprehensive, end-to-end IVF workflow solution, integrating laboratory equipment, digital traceability, AI-enabled systems, and consumables into one cohesive ecosystem.

Esco Medical provides European-designed and manufactured multiroom and time-lapse incubators, IVF workstations, and witnessing and traceability systems that support connected, data-driven laboratory workflows. Allwin Medical complements this with a comprehensive portfolio of specialized IVF consumables, including embryo transfer catheters, oocyte pickup needles, insemination catheters, vitrification devices, denudation tips, and other critical laboratory disposables.

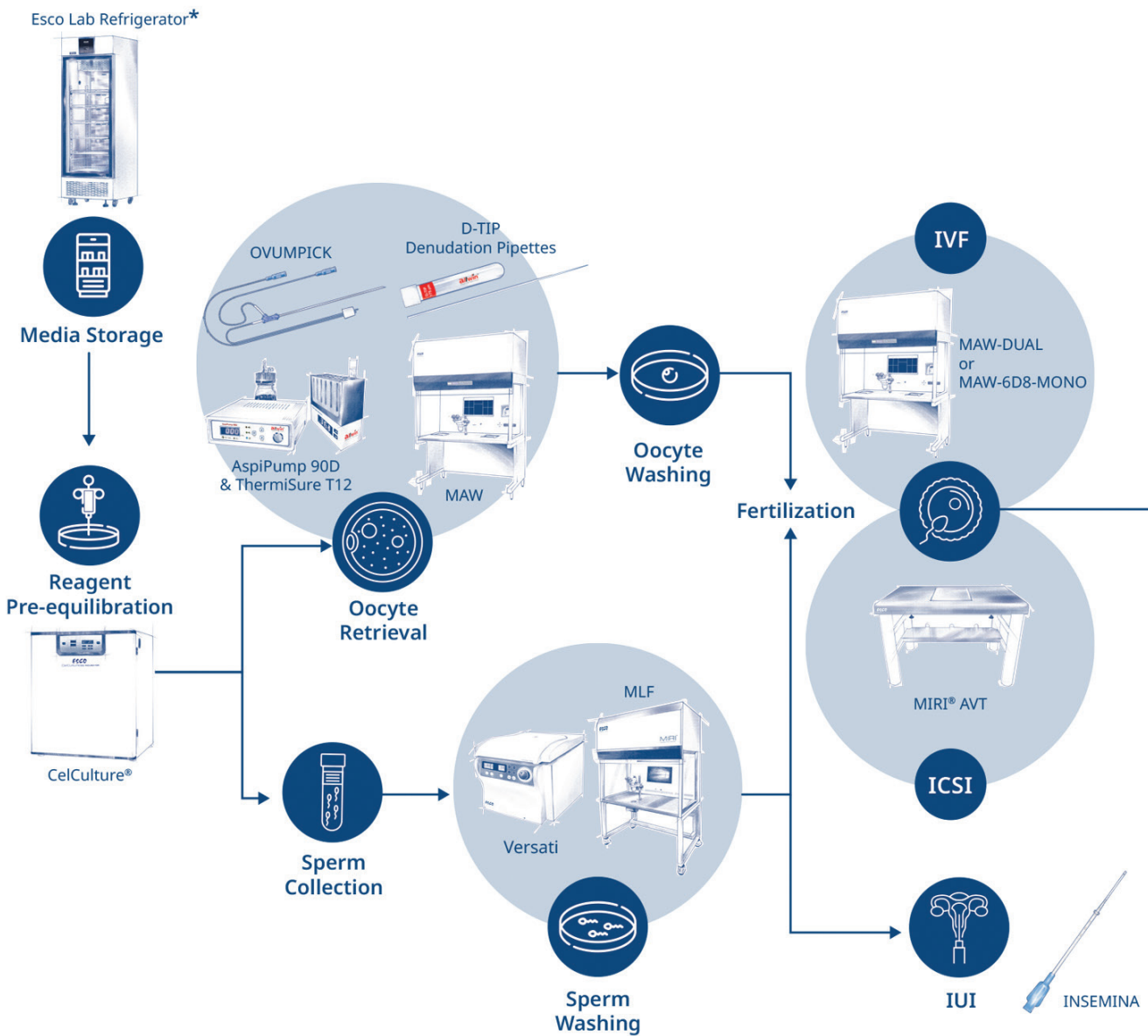
Together, the two brands help IVF clinics standardize workflows, strengthen traceability, reduce operational complexity, and focus on delivering clinical excellence.

As part of the **Esco Lifesciences Group**, Esco Medical and Allwin Medical reflect our commitment to advancing reproductive health through innovative, integrated solutions.

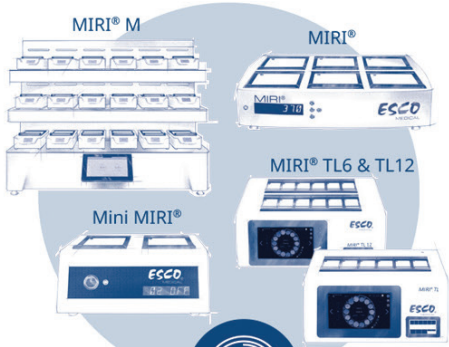


# Digital + AI + Consumables

## Comprehensive Workflow Solutions



\*This product is not classified as a medical device.



Embryo Culture



Embryo Assessment Selection

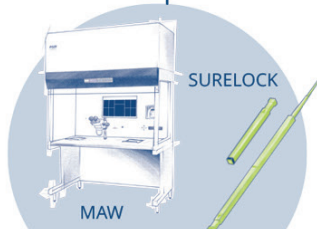
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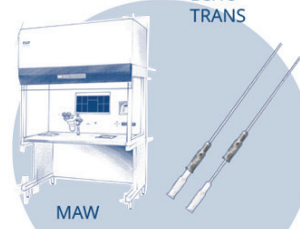
Embryo Thawing



Embryo Storage



Cryopreservation



Embryo Transfer

ECHO TRANS

### Traced by MIRI® Evidence Solution



MIRI® Evidence



RFID Label



RFID Reader

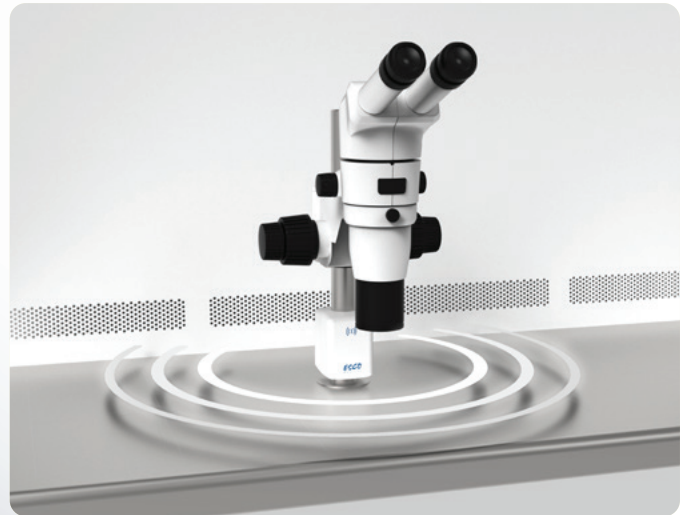


Witnessing Software

# MIRI® Evidence RFID Witnessing and Traceability System



Witnessing and traceability systems are an essential safeguard, ensuring that the right gametes, embryos, and patient information are correctly identified and utilized throughout the laboratory procedures. The MIRI® Evidence RFID witnessing and traceability system assures embryologists/clinicians and provides a detailed chain of custody for the complete cycle process.



- Enhancing working accuracy by preventing mistakes from being made throughout a cycle.
- Reduced risk of legal dispute by providing a detailed chain of custody record of the cycle. The chain of custody serves as a valuable resource, allowing embryologists to review and analyze the steps taken, ensuring adherence to protocols, and facilitating continuous improvement.
- Offering a sense of working security, knowing the correct gametes and embryos are always being handled. Embryologists can approach their work confidently, focusing on providing the best patient care while minimizing the possibility of mix-ups or errors.

# Preparation and Gamete Collection



Media Storage



Reagent Pre-equilibration



Oocyte Retrieval



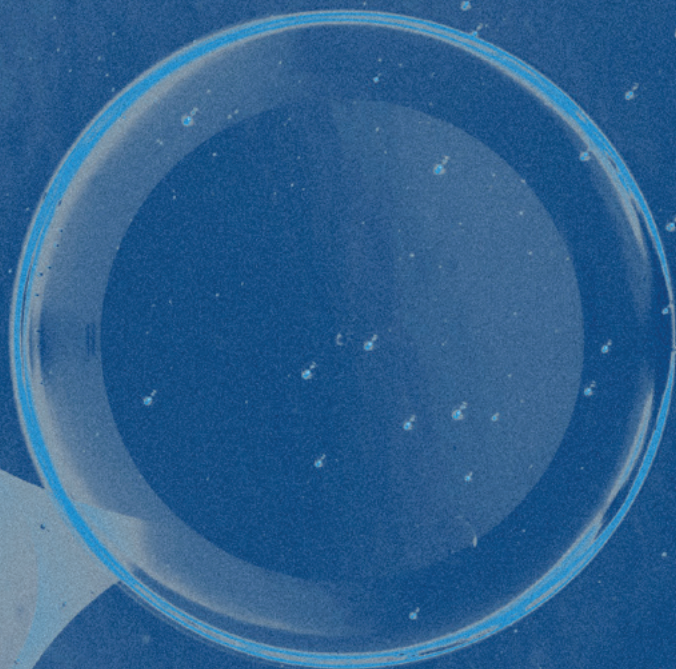
Sperm Collection



Oocyte Washing



Sperm Washing





## Media Storage



## Esco Laboratory Refrigerator



Esco Laboratory Refrigerators offer energy-efficient, reliable cold storage designed for scientific, clinical, and pharmaceutical environments. Certified temperature uniformity of  $\pm 3^{\circ}\text{C}$  is maintained across an extended range of operating conditions, supported by an anti-condensation design for most application environments. Backed by CE certification and intelligent safety features such as 72 hours post-power-failure monitoring and alarm, these refrigerators deliver dependable performance and long-term value, making them a reliable equipment for modern laboratories worldwide.

### Key Features

- Built-In safety and sample protection
- Stable Temperature Control in Wide Ambient Conditions
- User-Friendly Operation and Monitoring
- Crafted Design for Flexible Storage
- Comprehensive Safety and Monitoring Systems
- Eco and User-Friendly Operation

*This product is not classified as a medical device.*



## Reagent Pre-equilibration



## CelCulture<sup>®</sup> CO<sub>2</sub> Incubator



CelCulture<sup>®</sup> is equipped with a 90°C Moist Heat Decontamination System evaluated by HPA-UK. This incubator utilizes its ULPA filter to keep the chamber at ISO Class 5 cleanliness. It offers rapid parameter recovery and has ISOCIDETM antimicrobial coating. It can be fitted with an optional Inner Door Kit (which reduces contamination risk) and other accessories for specialized applications. In addition, it can be set up on a floor stand with casters, a roller base, or a floor stand with adjustable feet.

CelCulture<sup>®</sup> CO<sub>2</sub> Incubators are available in 3 sizes: 50 L, 170 L, and 240 L.

# Oocyte Retrieval

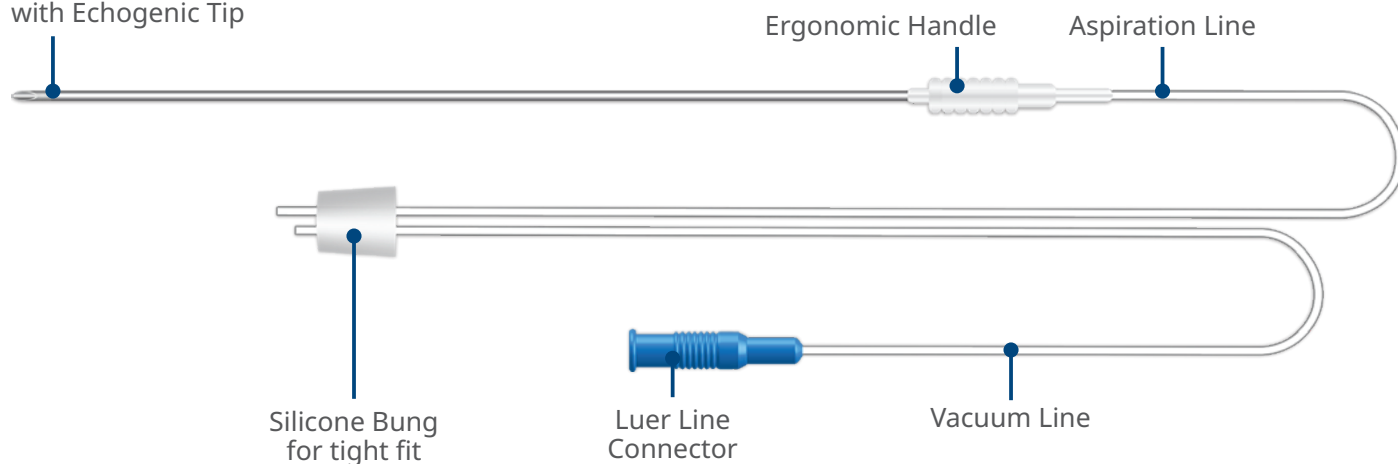
## ACE Single Lumen Ovum Pickup Needle



The ACE Single Lumen Ovum Pickup Needle is used for laparoscopic or ultrasound-guided transvaginal retrieval of oocytes from ovarian follicles. This product is MEA and LAL tested.

- Echogenic Tip
- Silicone Bung for a tight fit
- Non-coring Needle
- With Luer Lock Connector
- Ergonomic Handle
- 100 cm Aspiration Line

Tri-facet geometry with Echogenic Tip



## Multi-Zone ART Workstation



**This is the only workstation with built-in incubation chambers and a tri-gas mixer.**

### Multi-Zone Heating System

One setpoint for up to 12 independent zones per working area with their own heating elements and sensors allows for excellent uniformity.

### Less Noise, Less Vibrations

The Multi-Zone ART Workstation's state-of-the-art design and features deliver less noise and less vibrations, which makes it suitable for sensitive microscopic work.

### Superior Air Cleanliness

Multi-Zone ART Workstations provide ISO Class 3 air cleanliness within the workzone due to compliance with the ISO 14644-1 standard.

### Stainless-Steel Table-top

The main material used in the table-top surface is stainless-steel, which ensures its strength and rigidity.

Also used in:



# AspiPump 90D and ThermiSure T12



- High vacuum, low flow pump capable of operating at normal vacuum levels ranging from -10mmHg to -300mmHg and boost vacuum levels from -300mmHg to -500mmHg, with adjustable vacuum settings in increments of -1mmHg.
- Red LED display for easy readability.
- Equipped with a dual foot pedal featuring color coding: Yellow for boost operation and blue for normal operation.
- The Aspi Suction Bottle with Connector (100ml), Aspi Suction Line with Luer Lock Connectors (200cm), and Aspi Hydrophobic Filter Set are provided sterile & intended for single use only.



# D-TIP Denudation Pipettes



The Device is intended to be used for denudation i.e. to remove cumulus oocytes complexes from oocytes before procedure, "Intracytoplasmic Sperm Injection (ICSI)" and handling or manipulating of oocytes and embryos in Assisted reproduction technique (ART). This product is MEA and LAL tested.

- Designed to adapt to surfaces with flexibility, lowering the risk of scratching or breaking
- Precisely engineered for delicate and accurate handling
- Different Color code for different sizes of pipette
- Endotoxin Tested (LAL test) 20EU/device
- Mouse Embryo Assay (MEA)  $\geq 80\%$
- Gamma Sterilized



- 130µm and 135µm
- 140µm and 145µm
- 155µm
- 175µm
- 275µm
- 300µm



## MIRI® Laminar Flow Cabinet



The MIRI® Laminar Flow Cabinet has been designed with the capability to maintain a controlled work surface for laboratory applications requiring a clean and sterile workspace, which is achieved through the use of vertical laminar airflow pattern. Clean filtered air travels from the top of the cabinet downwards onto the working surface. Laminar flow cabinets are ideal to be used for our customers who requires a clean and sterile workspace to provide good protection towards the sample.

### Key Features

- ULPA Filter (ISO Class 3 Work Zone)
- ISOCIDE™ Antimicrobial Powder Coating
- Built-in Monitor (optional)
- Integrated Microscope Pole (optional)
- Outstanding Sample Protection
- Energy Efficient



## Versati™ Tabletop Centrifuge



Versati™ Tabletop centrifuge stands out among the same-level products with its versatility, running features, and easy handling. It can be used with high-capacity and low-to-high-speed general-purpose centrifuge applications. It is suitable for the sperm purification process during animal IVF because of its adjustable temperature range (-20°C to +40°C).

### Key Features

- Compact Design
- Incredible Flexibility
- High Temperature Ramp Rate
- Fast Pre-cooling
- Overspeed Protection
- Over Temperature Protection

# Fertilization and Embryo Development



**Fertilization**  
IVF and ICSI



**IUI**



**Embryo Culture**



## Fertilization



### Multi-Zone ART Workstation

For IVF | See page 7 for full details.



### MIRI® AVT (Anti-Vibration Table)

For ICSI

The MIRI® AVT was designed specifically for micro-manipulation procedures.

The MIRI® AVT has a mechanism for passive dampening that isolates the microscope from vibrations during Intra-Cytoplasmic Sperm Injection (ICSI) procedures.

It is constructed with a stainless steel table-top, making it easy-to-use and almost maintenance-free.

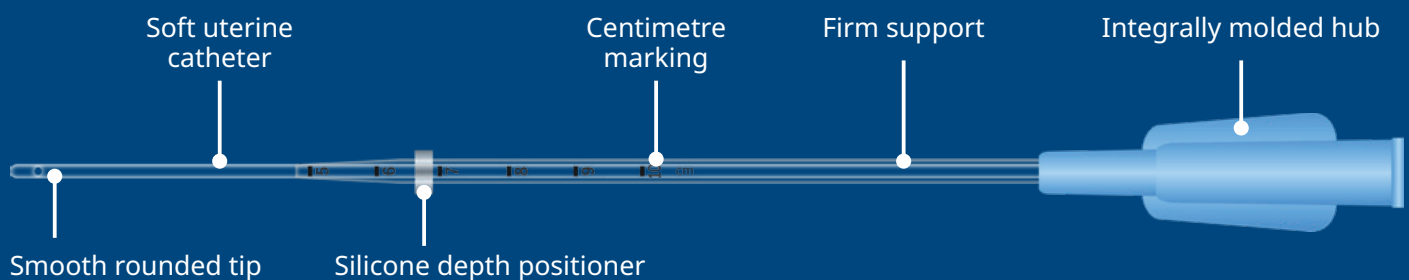


## IUI

### INSEMINA Intra Uterine Insemination Catheter

The INSEMINA Intra Uterine Insemination Catheter (Open Tip & Close Tip) is intended for the introduction of washed spermatozoa into the uterine cavity. This product is HSSA and LAL tested.

- A soft uterine catheter with firm support
- Integrally molded hub
- Silicone depth positioner for precise placement
- Open tip as well as closed tip (with two lateral holes) catheters available





## MIRI® Incubation System

### The Top-of-the-Line Features of the MIRI® Incubation System

- **Heated Lid**  
Prevents condensation. Enhances temperature regulation.
- **Completely Independent Chambers**  
Any disruption (e.g., temperature drop after opening the lid) has zero impact on the rest of the system.
- **Direct Heat Transfer**  
Provides superior temperature stability
- **Has a built-in gas mixer.**
- **Built-in pH measuring system and data logging system.**

## MIRI® M Multiroom IVF Incubator



### Ergonomic Design

Specially designed grip points for enhanced stability.

### Improved Incubation System

Stable temperature even when undocked up to 30 mins.

### Built-In Digital Traceability

Dish's movements and actions are continuously tracked anytime anywhere, docked or undocked.

### Advanced Alarm System

Informative conditions through expansive notifications and pop-ups, icons, and colors on screens and backlights.

### Improved Sample Transportation

Engineered with an improved, state-of-the-art transportation system, MIRI® M Chambers provide users with a larger, more ergonomic surface to hold onto, significantly enhancing grip and control during manual carrying.

Designed for ultimate mobility, MIRI® M Chambers allow embryos to stay in their optimal environment for extended periods - ensuring stability, minimizing disturbance and maintaining consistent incubation conditions. Unlike conventional incubators, which require samples to be relocated and risk environmental fluctuations, our innovative solution maintains stability and integrity right where you need it.

MIRI® M Chambers are equipped with a graphical display that prominently showcases patient information, ensuring seamless identification and traceability throughout the entire treatment process.

With this innovative feature, you can trust that each chamber remains assigned to the correct patient, minimizing errors and enhancing workflow efficiency. Designed for precision and peace of mind, our chamber sets a new standard in secure and reliable sample management.



# MIRI® TL Time-Lapse Incubator



## Time-Lapse Monitoring

Time-Lapse video monitoring enables detailed scoring of cultured embryos to better predict embryo development and implantation potential.

## Comes in Two Variants

- MIRI® TL6: Six Individual Chambers.
- MIRI® TL12: Twelve Individual Chambers.

## A Complete Incubation Environment

- Has a built-in gas mixer (for use of pure gas). Premixed gas is not supported in the system.
- Built-in pH measuring system and data logging system.

## Fast Recovery

- CO<sub>2</sub> recovery within an average of three (3) minutes.\*
- Temperature recovery within one (1) minute.\*

*\*If the lid has not been open for more than 10 seconds (based on internal testing; performance may vary depending on various factors and environmental conditions).*

## Two Temperature Mode Options

- **Single** - Uniform setpoints for all chambers
- **Multi** - Individual setpoints for each chamber.



Enhanced Image Quality  
supported by AI



# MIRI® Multiroom Incubator



- The gas in the MIRI® is recirculated through a VOC/HEPA Filtration system, which effectively removes Volatile Organic Compounds (VOCs) and particulates larger than 0.3 µm.
- Additionally, the gas is sterilized via a built-in UV light module.

# Preservation and Transfer



Cryopreservation



Embryo Storage



Embryo Thawing



Embryo Transfer



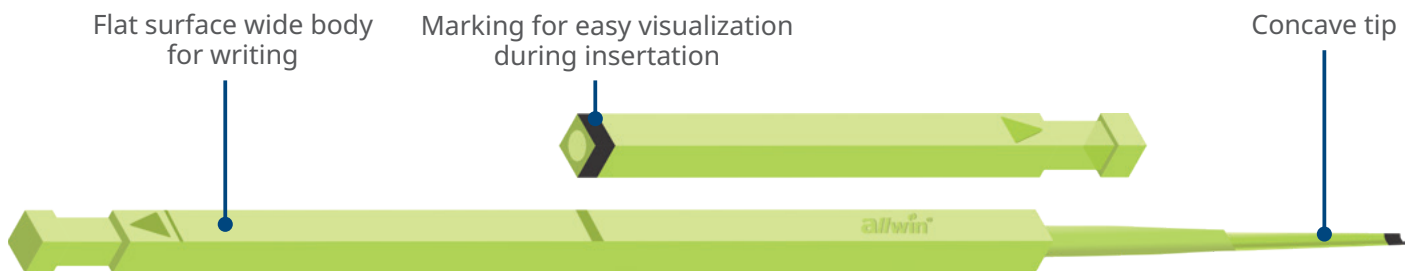
## Cryopreservation

### SURELOCK Vitrification Straw



The SURELOCK Vitrification Straw is a cryopreservation storage device. It is used in the vitrification procedure to contain and maintain oocytes and embryos. This product is MEA and LAL tested.

- Concave tip for exact and secure placement of specimen under microscope
- Secure air tight coupling
- Semi-transparent body and cap
- The arrow on top surface ensuring orientation during use
- Easy visibility under microscope
- 1 - cell MEA  $\geq$  80% expand blastocysts within 96h
- Endotoxin LAL tested
- Sterility: SAL  $10^{-6}$  - Gamma sterilized
- Vitrification of 1-cell stage of embryos
- Available in 5 colours



### Multi-Zone ART Workstation

See page 7 for full details.



## Embryo Storage

### Liquid Nitrogen Biological Container Round Canister Series



Liquid nitrogen (LN<sub>2</sub>) is known to provide a stable ultra-low temperature environment (-196°C) ideal for long-term sample storage. Esco Lifesciences' liquid nitrogen containers are designed to optimize efficiency by combining low static LN<sub>2</sub> evaporation rate with reliable medium-scale cryopreservation, making them ideal for safely storing cell samples over extended periods. Designed with a larger opening and easy-to-use storage racks, they are ideal for applications requiring long-term cryogenic storage and frequent sample access.

#### Key Features

- Low static LN<sub>2</sub> evaporation rate
- 5-year vacuum warranty
- Durable and lightweight aluminium alloy construction
- Safety lock lid for secure sample protection
- Wide neck for easy access and retrieval of samples
- Multi-layer insulation and vacuum design to minimize thermal transfer
- Available in various volume capacities to suit user's requirements

*This product is not classified as a medical device.*



## Embryo Thawing



### Multi-Zone ART Workstation

See page 7 for full details.



## Embryo Transfer

### ECHO TRANS Embryo Transfer Catheter



The ECHO TRANS Embryo Transfer Catheter is used to introduce in-vitro fertilized (IVF) embryos into the uterine cavity. This product is MEA and LAL tested.

- Echogenic inner catheter facilitates enhanced visibility under ultrasound
- A soft inner catheter with a smooth tip
- Marking on inner catheter and outer sheath
- Shapeable outer sheath
- Stylet for outer sheath available separately

Visible under ultrasound



Soft inner catheter with smooth tip

Marking on inner catheter



### Multi-Zone ART Workstation

See page 7 for full details.



# Driving Fertility Solutions with Sustainable Processes for a Healthier Generation

- A++ Energy Performance rating
- Heating sourced from district systems using 90% renewable energy
- Use of advanced water-saving technologies

 *Designed and Manufactured in Europe*



## Our Services



### Accreditation

Our Field Service Representatives undergo annual safety training and hold credentials such as NSF, TÜV NORD, NEBB, IFBA, and CETA-CNBT.



### Fast Response

On-site response within 24 hours for priority cases/ clients. Easy to reach customer service, through email and phone call



### Strong Global Network

We provide reliable services through our global network of Field Service Representatives, offering ready parts, technical support, field engineers, factory experts, and after-sales support.

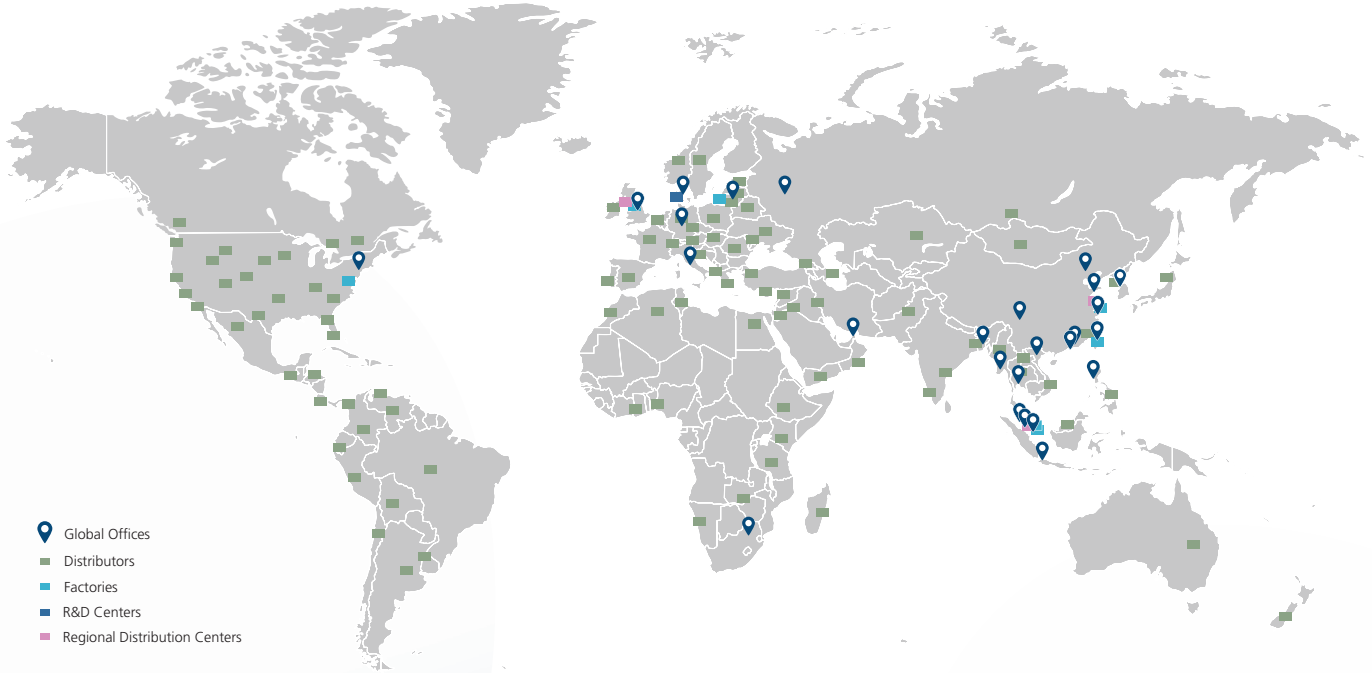


### Good Global Reputation

Our Service Team is dedicated to providing service of the highest standards. We provide timely, responsive service while meeting or even exceeding customer's expectations.



# ESCO LIFESCIENCES GROUP



*Infertility is a problem that has a significant social, psychological, and economic impact on afflicted individuals and couples. It is a global concern that knows no race or creed. It has been estimated that 1 in 6 couples struggle with infertility at least once in their lifetime.*

*Esco Medical is one of the divisions of the Esco Lifesciences Group. We provide innovative technological solutions for fertility clinics and laboratories. We aim to become the leading manufacturer of high-quality equipment such as long-term embryo incubators, ART workstations, anti-vibration tables, and time-lapse incubators.*

*Our products are designed with the Silent Embryo Hypothesis as a guiding principle. The Silent Embryo Hypothesis states that the less disturbed an embryo can remain, the better its developmental potential will be. Most of our products are designed in Denmark and made in the EU. Our primary focus is to increase pregnancy success rates and patient satisfaction.*



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