

# Fertility Equipment Overview

**ESCO**  
MEDICAL



# 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



*This equipment is a CE-marked device and is in conformity with the essential requirements of the medical devices EU regulation 2017/745.*



#### Ergonomic Design

Specially designed grip points for enhanced stability.

#### Movable Chambers

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.

### MIRI® TL Time-Lapse Incubator



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#### 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.\*

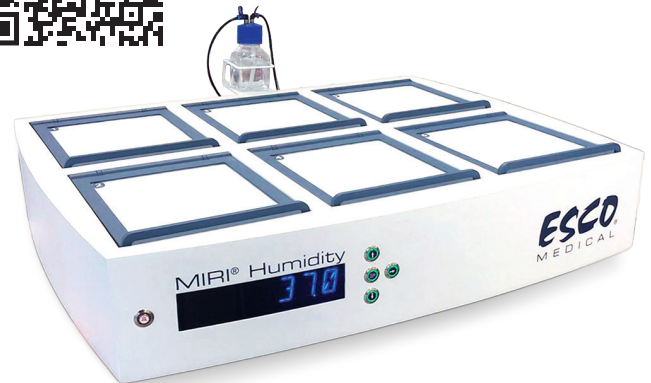
\*If the lid has not been open for more than 10 seconds (based on internal testing; performance may vary depending on various factors and environmental conditions).

#### Two Temperature Mode Options

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



## MIRI® Multiroom Incubators



### MIRI®

- 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.

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### MIRI® Humidity

- Built-in passive humidification system.
- The water bottle is located at the back of the unit for easier access.

## MIRI® II-12 Multiroom Incubator



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### One patient - One chamber

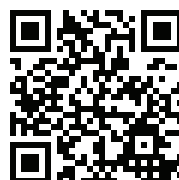
Dedicates one chamber for one patient to ultimately secure a minimum-stress environment for embryos.

### Intuitive and User-Friendly Touchscreen PC

Used to control and monitor important parameters simultaneously.

### Small footprint

Space-saving equipment for laboratories.



## CultureCoin®

### A culture dish, exclusively designed for the MIRI® TL

One (1) MIRI® TL chamber can hold one (1) CultureCoin®. Each dish can accommodate up to fourteen (14) embryos, each with a numbered well assignment. The MIRI® TL6 can hold up to 84 embryos, where MIRI® TL12 – up to 168 embryos.

## Mini MIRI® Multiroom Incubators



### Dual Chamber System

Any disruption (e.g. temperature drop after opening the lid) has zero impact on the rest of the system. Furthermore, calibration is much simpler since there is no crossover of heat from adjacent chamber.

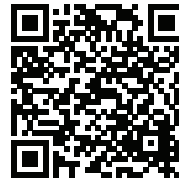
### Ergonomic Design

- You can write on the glass lid tops for easy patient designation.
- The Mini MIRI® has a large LED display that can be easily seen from a distance.

### Built-in Gas Mixer

Premixed gas is not required (but possible to use).

Comes in two models:



### Mini MIRI® Humidity

- Built-in passive humidification system.
- The water bottle is located on the side of the unit for easy refilling and control of the water level.

### Mini MIRI® Dry

Comes with a UV module and VOC/HEPA filter.

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

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



## MIRI® Evidence RFID Witnessing and Traceability System

MIRI® Evidence is redefining the way traceability in laboratory procedures is managed and stored in fertility clinics, eliminating errors, preventing system mix-ups, saving time, and helping clinics to comply with regulations. This IVF traceability tool provides a single, secure platform that ensures all patients are scheduled on time and documented properly - saving time and improving outcomes across the board.

The MIRI® Evidence workflow proposes tools to improve scheduling and documentation procedures, refining both clinical and administrative processes in a fertility clinic.





## 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.



## Stereomicroscope MS-1

The stereomicroscope MS-1 is a type of optical microscope that allows the user to see a three-dimensional view of a specimen. This Esco MS-1 Stereo Microscope is very useful in assessing oocyte and embryo morphology and viability. It has a built-in camera mount where you can place your camera set for a better viewing and documentation of images. Moreover, additional objective lenses (0,5x, 1,5x, 2x) can be screwed on the microscope head for additional magnification.

### Black and White Work Board

Enhances the specimen/sample viewing experience.

### PK-Mount and Camera Set

Allows to mount a digital camera which helps the user to take a better look at their specimen.

### Adjustable Interpupillary Distance

Enables the user to adjust the space between the eyepieces for a more pleasurable observation.

### Vertical Light Source

Adapted for the stereomicroscope, this type of light source enhances everyday embryo and gamete inspections.

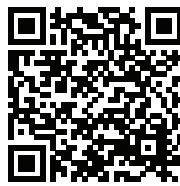


## MIRI® Laminar Flow Cabinet

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



## MIRI® AVT (Anti-Vibration Table)

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.

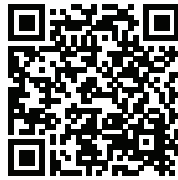


## Versati™ Tabletop Centrifuge

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.



## MIRI® GA Gas & Temperature Validation Unit

The MIRI® GA is a table-top device designed to make external incubator validation easier and safer.

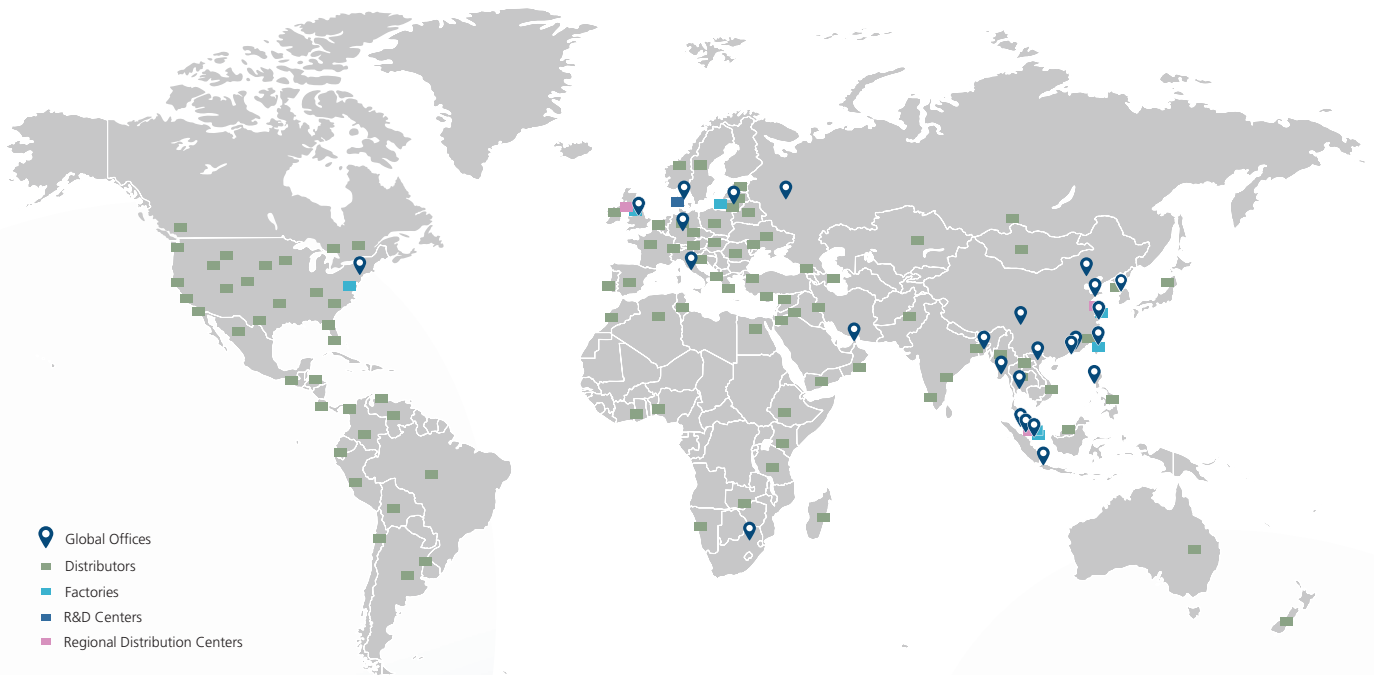
- Capable of monitoring the temperature (PT1000 connector) as well as gas concentration, flow, and pressure.
- Can validate up to 6 chambers simultaneously 24 hours a day.
- Has an adjustable flow rate which gives it the ability to properly sample small-volume incubation chambers.
- Comes with a full data logger software which is helpful in monitoring each parameter.

# Move Forward with Complete Confidence in Life.





# ESCO LIFESCIENCES GROUP



## Esco Medical Products:

MIRI® Multiroom Incubator  
MIRI® Humidity Multiroom Incubator  
MIRI® II-12 Multiroom Incubator  
Mini MIRI® Dry Multiroom Incubator  
Mini MIRI® Humidity Multiroom Incubator

MIRI® TL6 Time-Lapse Incubator  
MIRI® TL12 Time-Lapse Incubator  
Multi-Zone ART Workstation  
MIRI® Laminar Flow Cabinet  
MIRI® Evidence RFID Witnessing & Traceability System

CelCulture® CO<sub>2</sub> Incubator  
MIRI® GA (Gas and Temperature Validation Unit)  
MIRI® AVT  
CultureCoin®

*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.*

**ESCO**  
MEDICAL



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