



Fertilisafe™

Multi-Zone
ART Workstation



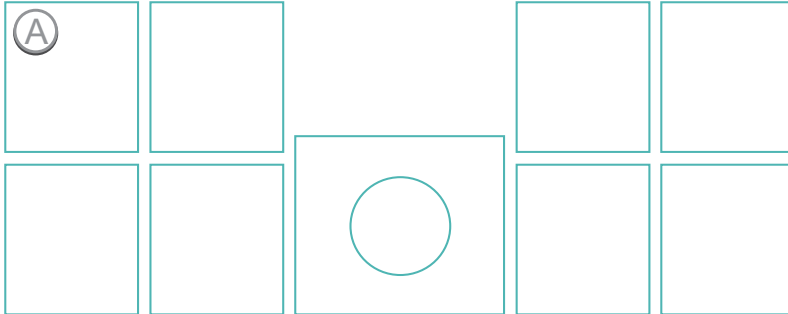
Designed in Denmark



Fertilisafe™ Multi-zone Workstation

The Most Advanced Workstation in Its Class

Next generation Multi-Zone (9+1) temperature regulation for ART



Multi-Zone Heating System

This is the most advanced system that helps embryologists in their daily work. 1 set point, 10 independent zones with their own heating elements and sensors allow excellent uniformity

Accuracy: $\pm 0.2^{\circ}\text{C}$

Uniformity: $\pm 0.2^{\circ}\text{C}$

Smart Power Injection

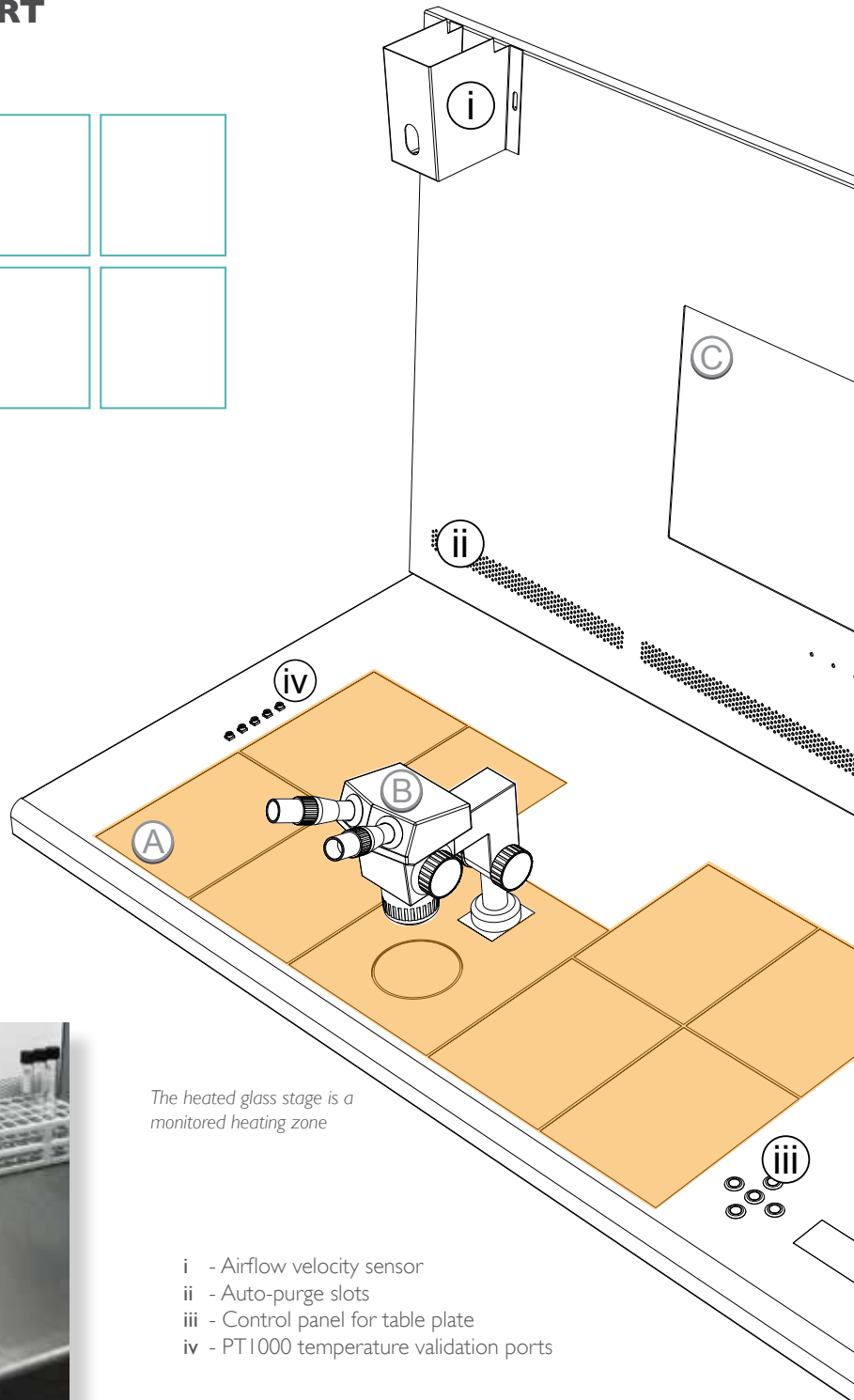
The heating system will automatically prioritize power distribution. This ensures effective temperature control with fast recovery.

Note: Zone 4 (warmed glass stage) has dedicated power supply to further enhance the temperature control and recovery in this zone.



Microscope Integration Provision

Having an integrated stereomicroscope in the work chamber makes it possible to keep the culture dishes at the right temperature at all times while observation and manipulation is carried out. Fewer movement steps will also reduce risk of accidents.



The heated glass stage is a monitored heating zone

- i - Airflow velocity sensor
- ii - Auto-purge slots
- iii - Control panel for table plate
- iv - PT1000 temperature validation ports

SC-I Light Source





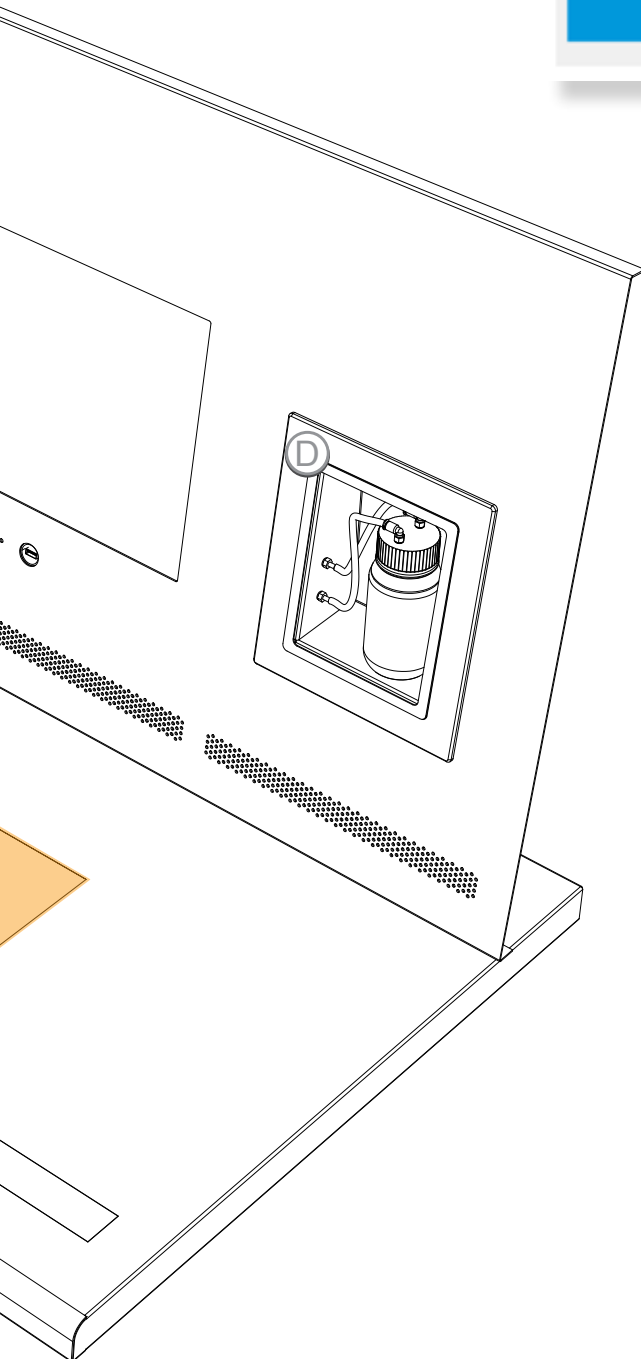
C1 Surveillance System

provides the user real-time information of zone performance and other work area parameters such as gas pressure and flow rate.

C2 Touchscreen Monitor

The touchscreen monitor is a fully functional Windows PC. It has WiFi and a USB port. Thus, it has many other uses:

- Microscope camera function to record and observe culture behavior in real time.
- Teleconference calls with colleagues in other sites for real time collaborative work (note: webcam is not supplied).



Humidification System

With digital flow control of pre-mixed gas, this enables complete environmental control of samples. Gas outlet is located on the work surface. The plastic cover encloses the humidified gas effectively and creates a small incubation environment.

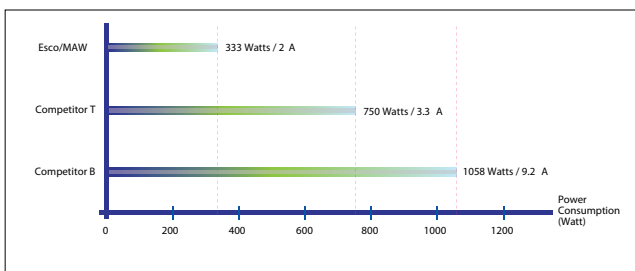
“Hand-in-hand in achieving high fertility success rates.”



Advanced workstation specifically designed for Assisted Reproductive Technology (ART) such as gamete or embryo manipulation during IVF.

High-tech components and features are designed in Denmark and made in Esco's production facilities in Europe.

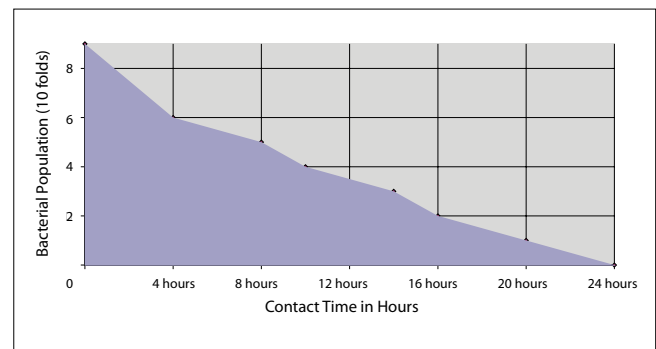
The workstation keeps true to Esco's world class expertise and quality in cleanroom technology.



Energy Efficiency Chart

Esco ART workstations utilize extremely efficient DC fans, allowing exceedingly low levels of power consumption that is unparalleled in the industry.

The result is greater cost-saving for the user without compromising performance.



Built-In Protection

External surface are powder coated with Esco **ISOCIDE™** to eliminate 99.9% of surface bacteria within 24 hours of exposure.

Air Cleanliness Standards (ISO 14644.1, Air Cleanliness Particle Limits) (No. of Particles / m ³)						
Particle Size (µm)	Cleanliness Class					
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
0.1	10	100	1000	10000	100000	1000000
0.2	2	24	237	2370	23700	237000
0.3	1	10	102	1020	10200	102000
0.5	-	4	35	352	3520	35200
1.0	-	-	8	83	832	8320
5.0	-	-	-	3	29	293

Superior Air Cleanliness

Esco workstations provide ISO Class 3 air cleanliness within the workzone as per ISO 14644.1, significantly cleaner than the conventional Class 4 classification.



Low Noise, Low Vibration

Esco Fertilisafe™ has state-of-the art design and features resulting in very low noise and vibration level that makes the workstation suitable for sensitive microscopic work.

- 2x smaller high-efficiency DC fans create lower noise and vibration than 1 big blower fan.
- Passive dampers located along the connection of the tableplate to the cabinet frame effectively dampen vibrations.

Fertilisafe™

Multi-zone ART Workstation

- Vertical laminar airflow providing sample protection
- Low noise energy-efficient DC fans
- Low vibration resulting from built-in dampers
- Provision for integration of most common microscopes
- Integrated heated glass stage
- Integrated SC-1 light source with dual-sided mirror and intensity control knob
- Selection of workstation support stands
- Selection between 4ft. (single) and 6ft. (single, dual or MP) models



MAW-4D_

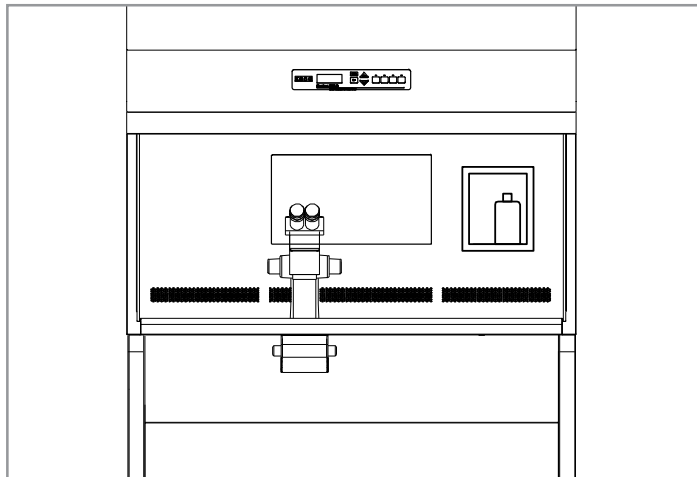
Width: 4ft

Microscope: Single

Basic Configuration

1 user

For small Laboratories



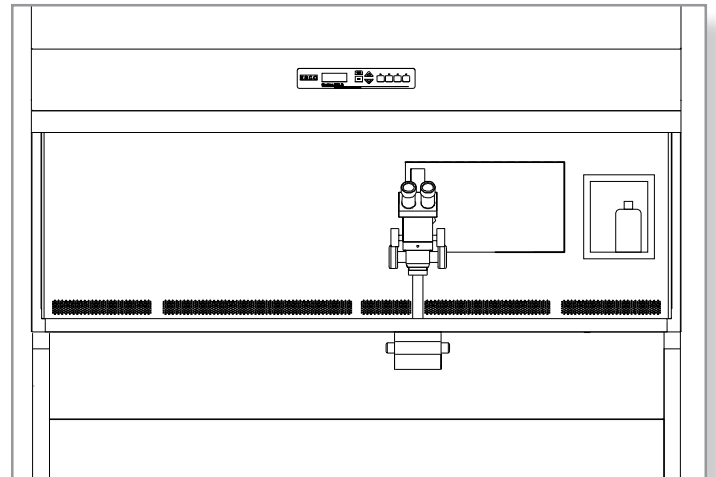
MAW-6D_

Width: 6ft

Microscope: Single

1 user

More space for other work



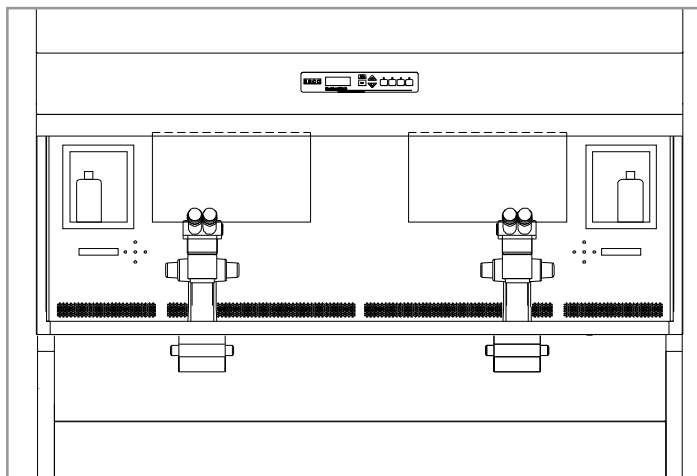
MAW-6D_-Dual

Width: 6ft

Microscope: Dual

2 users

For efficient use of space



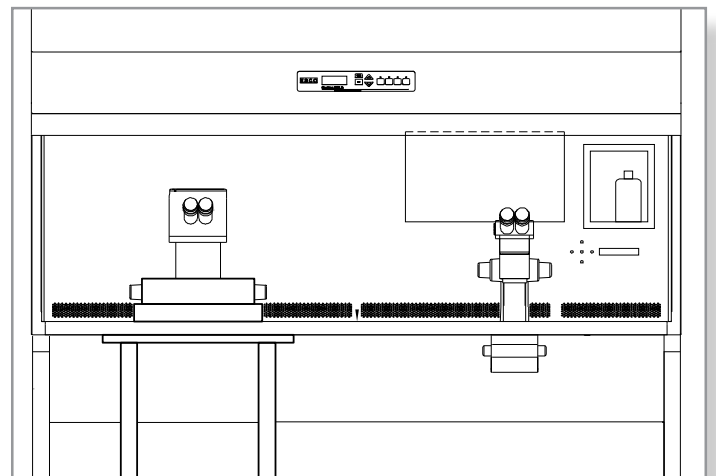
MAW-6D_-MP

Width: 6ft

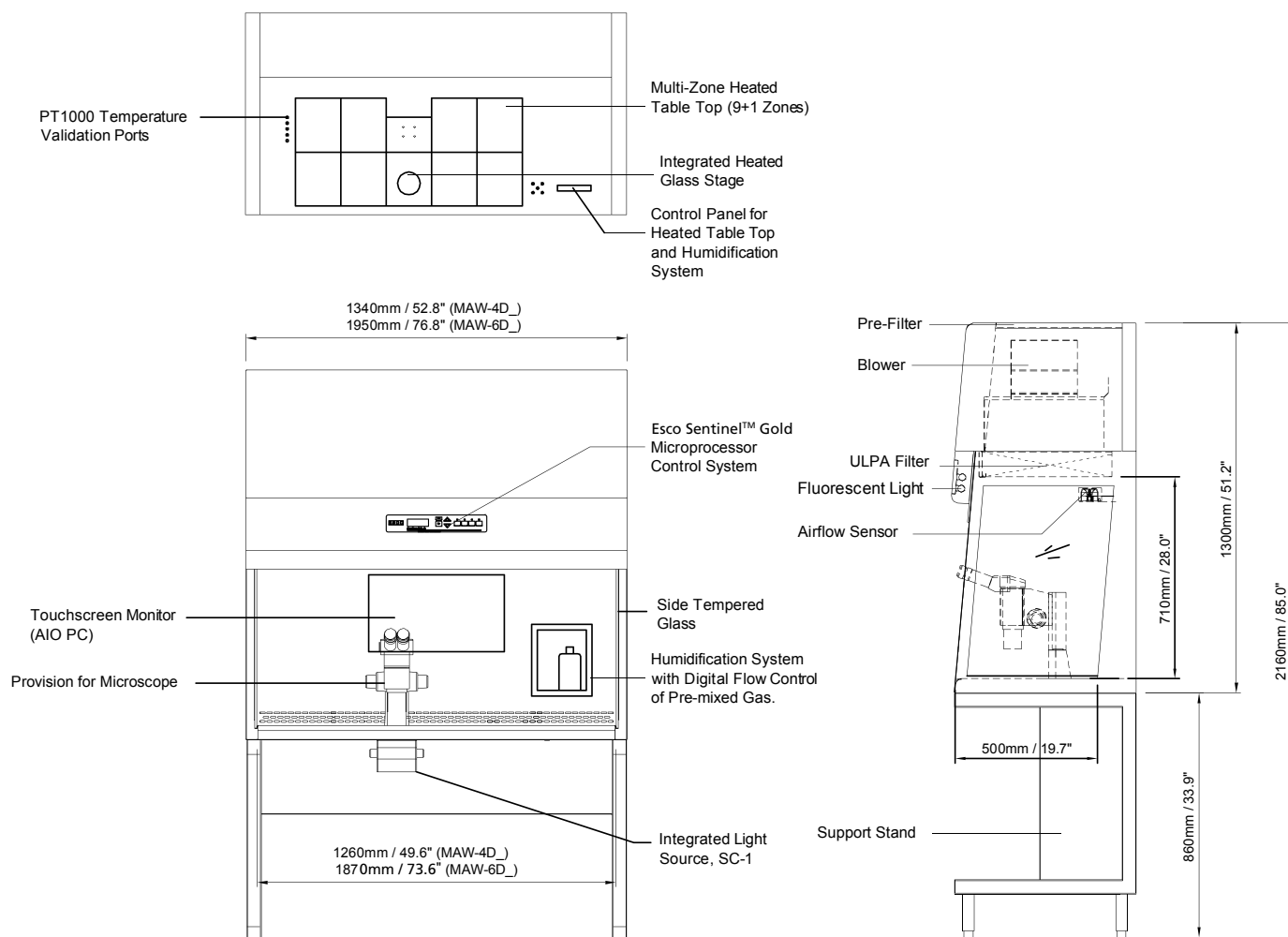
Microscope: 1 Stereomicroscope,
1 Inverted microscope set-up

Multi-purpose

Embryo inspection
& micromanipulation



Fertilisafe™ ART Workstation (MAW) Technical Specifications



Fertilisafe™ Workstation Technical Specification

Model	MAW-4D_	MAW-6D_	MAW-6D_-DUAL	MAW-6D_-MP
Work area dimensions* (width x depth x height)	1260 x 500 x 710 mm (49.6" x 19.7" x 28.0")	1870 x 500 x 710 mm (73.6" x 19.7" x 28.0")	1870 x 500 x 710 mm (73.6" x 19.7" x 28.0")	1870 x 500 x 710 mm (73.6" x 19.7" x 28.0")
Laminar air velocity	Average of 0.21m/s or 41 fpm (± 20%)			
Filter efficiency	>99.999% for particle size between 0.1 to 0.3 microns per IEST-RP-CC001.3 / H14 per EN 1822			
Noise level (per NSF 49)**	47 dBA	52 dBA	52 dBA	52 dBA
Pre-filter	Disposable and non-washable polyester fibers with 85% arrestance / EU3 rated			
Set of (9+1) heating zone	1 set	1 set	2 sets	1 set
Surveillance system	1 set	1 set	2 sets	1 set
Microscope	Position for 1 microscope	Position for 1 microscope	Position for 2 microscopes	Position for 1 microscope and 1 inverted microscope
Transmitted light source	1 set	1 set	2 sets	1 set
Humidification system***	1 set	1 set	2 sets	1 set
PT 1000 ports	5 ports	5 ports	10 ports	5 ports
Shipping dimensions (width x depth x height)	1450 x 750 x 1150mm (57.1" x 29.5" x 45.2")	2050 x 750 x 1150mm (80.7" x 29.5" x 45.2")	2050 x 750 x 1150mm (80.7" x 29.5" x 45.2")	2050 x 750 x 1150mm (80.7" x 29.5" x 45.2")
Shipping weight	140 kg (308.6 lbs)	182 kg (401.2 lbs)	182 kg (401.2 lbs)	182 kg (401.2 lbs)

* The actual MAW-6D_-MP's work area dimensions will be customized to fit the inverted microscope.

** Noise reading in open field condition / anechoic chamber. Noise reading in normal room varies by room size, layout, and background noise, but may reach roughly 3-4 dBA above these values.

*** 1 set of humidification system includes 1 water bottle with tubing, 1 sample carry tray and 1 plastic cover.

Ordering Information

CODE	DESCRIPTION
MAW-4D8	Esco Multi-Zone ART Workstation, 4ft (1.2M), 220V, 50 / 60Hz
MAW-6D8/MAW-6D8-DUAL/MAW-6D8-MP	Esco Multi-Zone ART Workstation, 6ft (1.8M), 220V, 50 / 60Hz
MAW-4D9	Esco Multi-Zone ART Workstation, 4ft (1.2M), 110V, 50 / 60Hz
MAW-6D9/MAW-6D9-DUAL/MAW-6D9-MP	Esco Multi-Zone ART Workstation, 6ft (1.8M), 110V, 50 / 60Hz
6FT MAIN BODY SUFFIX explanation	
DUAL - Dual stereomicroscope provision MP - Stereomicroscope + Inverted microscope/micromanipulator (i.e., antivibration zone for ICSI) provision	
MICROSCOPE PROVISION CODE	DESCRIPTION
NIKONCPSNULL	Nikon C-PS
NIKONCPS160	Nikon C-PS 160
OLYMPUSSZ(X)ST	Olympus SZX-ST
OLYPMUSSZ(TWO)ST	Olympus SZ2-ST
ZEISSTANDN	Zeiss stand N
ESCOSCOPE	Esco stereomicroscope MS-1
SUPPORT STAND CODE	DESCRIPTION
SMC-4AO	4ft. MAW support stand with castor wheels, overall height 711 mm
SMC-6AO	6ft. MAW support stand with castor wheels, overall height 711 mm
SML-4AO	4ft. MAW support stand with leveling feet, overall height 711 mm
SML-6AO	6ft. MAW support stand with leveling feet, overall height 711 mm
SMC-4BO	4ft. MAW support stand with castor wheels, overall height 860 mm
SMC-6BO	6ft. MAW support stand with castor wheels, overall height 860 mm
SML-4BO	4ft. MAW support stand with leveling feet, overall height 860 mm
SML-6BO	6ft. MAW support stand with leveling feet, overall height 860 mm

Indication for Use Statement:

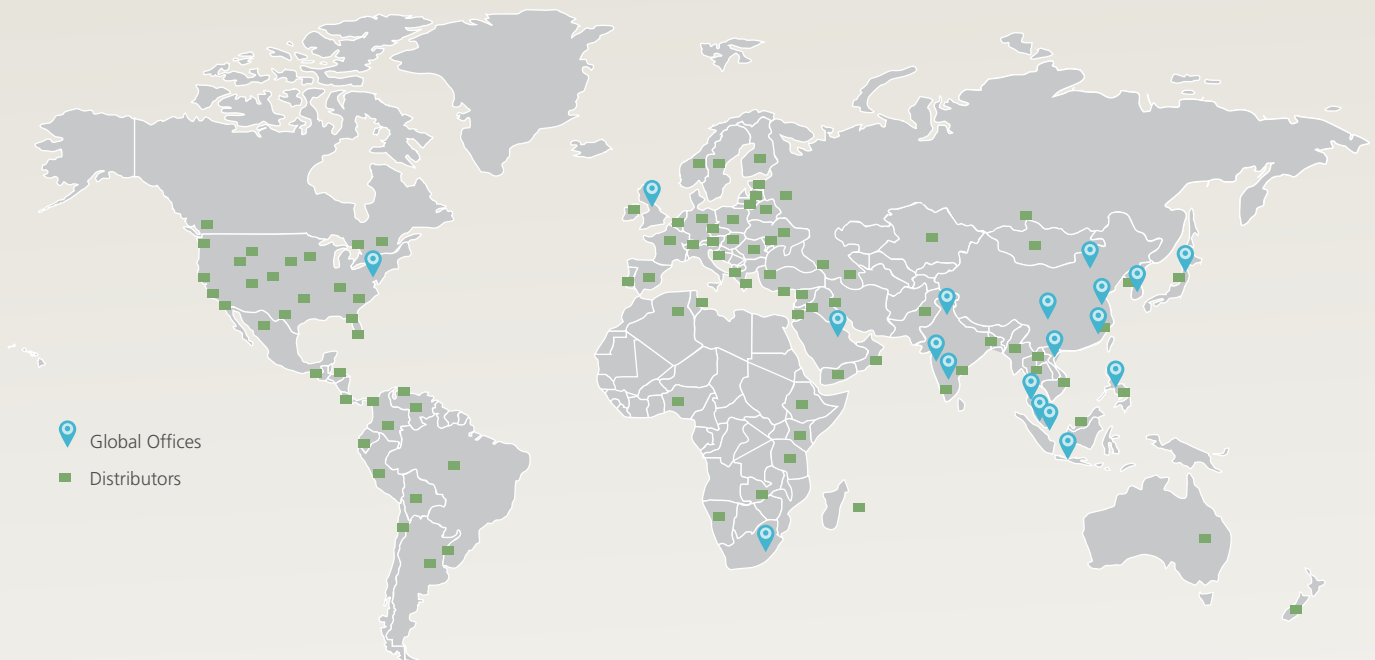
The Fertilisafe™ ART Workstation is a laminar flow workstation with controlled temperature and humidity working environment. The workstation is intended for work with gametes and / or embryos at or near body temperature in a multi-zone heated setup during in-vitro fertilization (IVF) / assisted production technology (ART) treatments.





Caution:

- Federal law restricts this device to sale by or on the order of a licensed healthcare practitioner.
- Only to be used by a trained and qualified professional. The device is sold under exemption specified in 21 CFR 801 Subpart D.

ESCO GLOBAL NETWORK



 Global Offices
 Distributors



Esco Medical Products:

ART Workstations
 CO₂ Incubators
 Miri® Multi-room Incubators
 Miri® TL (Time Lapse) Bench Top Incubators
 Miri® GA (Gas Analyser)
 Anti-Vibration Table (AVT)

Infertility is viewed as a problem that has social, psychological, and economic impacts to the afflicted individuals and couples. It is a global concern that knows no race or creed. It has been estimated that 1 in 6 couples would struggle with infertility at least once in their lifetime.

Esco Medical is one of the divisions of the Esco Group of Companies, the other two being the laboratory and pharmaceutical equipment divisions. Esco is now targeting innovative technological solutions for fertility clinics and laboratories. Esco Medical is positioned to become a leading manufacturer and innovator of high-quality equipment such as long-term embryo incubators, ART workstations, anti vibration table, time-lapse incubator and etc.

Esco Medical products are designed to develop 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. The primary focus of this division is to increase pregnancy success rates and patient satisfaction.



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