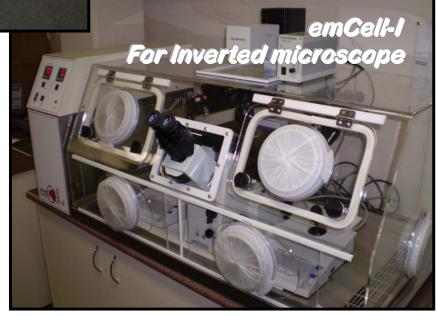


Microscope Work Chambers creating the right environment for Embryos & Cell cultures













emCell work chambers are microscopical work areas that provide long term stable environment for handling gametes, oocytes, embryos, stem cells and other tissues dependent on a controlled environment.

emCell work chambers have been developed in conjunction with leading IVF laboratories and knowledge gained from a decade of manufacture of the popular HD IVF Chamber.

The advancement in reproductive technology and stem cell sciences demands higher standards for cell environment and working conditions and our chambers meet these to provide, clean, safe, ergonomic design for long term microscopy.

emCell work chambers provide

- CO₂ controlled atmosphere with latest infra red CO₂ technology to maintain the PH of media and culture solutions.
- Uniform temperature within the enclosed area for safe long term microscopical evaluation.
- Humidified work area preventing desiccation of tissue.
- Fan circulated HePa filtered air, providing culture and operator safety from microbiological and viral organisms.
- Carbon filtered circulation, VOC free atmosphere for safe embryo development.
- Ergonomically designed for lab bench operation, or with optional mobile trolleys, which are height adjustable, for seated or standing operation.
- Unique on/off timer to conserve CO₂ and power and be in operation and ready as required.
- A balanced centrifugal fan air circulation. Airflow passes over the water tray, through microscope area, then is filtered by HePa and Charcoal filter and returned without vibration to the microscope area.

HD Scientific Supplies Pty Ltd www.hdscientific.com.au



(Stereo Microscopy)

The **emCell-S** is designed to accommodate most current models of stereo microscopes. The inbuilt illumination provides excellent cold light via a fibre optic lead to the microscope stage.

Microscope surround work areas are designed for the various microscope brands. They provide safe stable work areas and are level with the microscope stage.

Racks and supports on the work areas accommodate sterile pipettes and utensils.

A hinged side-opening, holds 2 warming blocks and allows undisturbed introduction of specimen tubes.

A water tray located at the end of the work area provides humidification when filled with sterile filtered water.



(Inverted light microscopy)

The **emCell-i** is designed to accommodate inverted tissue culture microscopes from varied manufactures. The chamber and base is large enough to simultaneously hold microscope with dual micromanipulation instruments, (ICSI) lasers (PGD), CCTV cameras and accessories (video Imaging). The unique sturdy design of the base allows vibration free operation at high magnification all under the strictly controlled fan circulated environment.

Various hinged doors and Iris arm ports allow comfortable access to all equipment and controls in the cell.



emCell-S Illumination



Carbon & HePa



Delay start Timer



Advanced door clamp



Cell Q-S large access door



Safe work area with racks



Height adjustable trolleys (Optional)

HD Scientific Supplies Pty Ltd www.hdscientific.com.au

Mobile height adjustable trolleys

emCell-s chambers can be located on either of the two optional height adjustable trolleys for flexibility, comfort and ergonomic use.

3			
1		35	
1		Ť	

IV HD TROLLEY-A

Type A. **Seated position**

(Recommended chair seat height adjustment (50-55cm)

Trolley top surface height adjustable.

(A) Minimum (A) Maximum

From 65cm To 85cm

Lab area required.

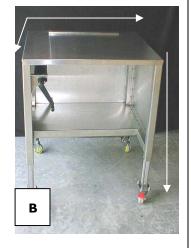
(B) With attached gas bottle stand(B) With-out gas bottle stand

123 X 70cm 108 X 70cm

Type B

For standing operation

For quick examination and viewing in procedure rooms



IV HD TROLLEY- B

Trolley top surface height adjustable.

(A) Minimum (A) Maximum

Lab area required.

(B) With attached gas bottle stand

(B) With-out gas bottle stand

From 95cm To 115cm

123 X 70cm

108 X 70cm

- Both trolleys are supplied with quality A grade rubber castors (2 front ones lockable).
- Manufactured of high grade stainless steel materials
- Stable height adjustment with hydraulic piston mechanism. (Distance of travel 20 cm)
- Stainless steel handles on both ends.
- Floor area and door access dimensions are 70cm depth (front to back) X 99cm wide.

The various microscope types/brands can influence the eyepiece height on the chamber

HD Scientific Supplies Pty Ltd www.hdscientific.com.au

Technical Specifications	emCell-S	emCell-i

		T-		
Overall canopy height	(mm)	412	530	
Overall instrument width	(mm)	985	1350	
Overall instrument depth (Front to back)	(mm)	700	660	
Overall instrument controller height	(mm)	550	550	
Internal work area:				
Width	(mm)	600	940	
Depth	(mm)	620	620	
Height	(mm)	355	485	
Arm port centre	(mm)		40	
Iris arm port opening	(mm)	12	20	
Iris arm port numbers		2	4	
Hinged front door/s		1	2	
Hinged tube access port		1	0	
Warming blocks aluminum		2	0	
Standard tube size aluminum blocks.	(mm)	12 dia X 95		
Inbuilt on/off timer	(h)	24	24	
Humidity water reservoir	(ml)	50	00	
Circulation fan	,	centri	fugal	
Over temperature thermostatic cut-out		1		
Inbuilt HePa filter for airborne allergens & part	iculates (0.3 micron)	Replacemen	nt 12 month	
Inbuilt VOC filter of carbon-zeolite	, ,	Replacemen		
		-		
Optional height adjustable trolleys for emo	ell-s	Type A for seated operation.	Type B for standing	
		operation	operation.	
Trolley size with 2 X handles & gas bottle star	nd (mm)	1230 X 700	1230 X 700	
Trolley size with 2 X handles without bottle sta		1080 X 700	1080 X 700	
Trolley seated eyepiece height adjustment	(mm	120-140		
Trolley standing eyepiece height adjustment	(mm)		150-170	
Trolley continual adjustment distance.	(mm)	200	200	
<u> </u>	,			
Optional CO2 gas bottle stand with rubber str	ap			
Stand area	(mm)	200 X 200		
Maximum weight	(Kg)	18		
<u> </u>	ν σ/			
Total weight with mobile trolley		140		
Total weight without mobile trolley	(Kg)	40	50	
Total weight packed for freight with trolley	(Kg)	260	200	
Total weight packed for freight without trolley	(Kg) (cubed	160/485	90	
weight Kg)	(3) (
Total wooden case size without trolley (cm)			120X85X85	
Total cubic volume packed with trolley (cm)		137×120× 156		
Power requirements		220/240 Volt 50Hz		
(with step-down transformer)		110/115 Volt 50/60 Hz		
Total current draw	(Watts)	820	670	
Fibre optic Illumination variable		21 Volt 150 Watt Halogen		
Temperature controller		Microprocesso	or-proportional	
Temperature sensor		R1		
Temperature range (C)		32 to 42° C		
Control accuracy (C)		0.1° C		
Temperature fluctuation throughout.	(C)	+/- 1		
Temperature stabilization time approx.	(Min)	60	90	
CO2 Controller		Microprocessor-proportional		
CO2 sensor		Infra		
CO2 range	(%)	0-1		
CO2 accuracy	(%)	0.		
	PSI/KPA)	10/		
(COL DOLLIO PIESSUIE Supply to controller	· • · · · · · · · · · · · · · · · · · ·	10/		
CO2 Stabilization time approv	(Min)	30	60	
CO2 Inlet	(Min)	30 6 mm tul	60 he fitting	
CO2 Stabilization time. approx CO2 Inlet CO2 line filter	(Min)	30 6 mm tul 0.3	be fitting	