SITE™

IVF - DIVISION

OR &IVF Facility Design & Construction Division

Profile

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CERTIFIED ISO 9001:2015 CERTIFIED

An ISO 9001:2015 Certified Management Company

MEMBER

CTCB-I ceta ASHRAE OSHA Occupational Safety and Health Administration asrm eshre

Clean Air Services

An ISO 9001:2015 Certified Management Co.

An ISO 9001:2015 Certified Management Company

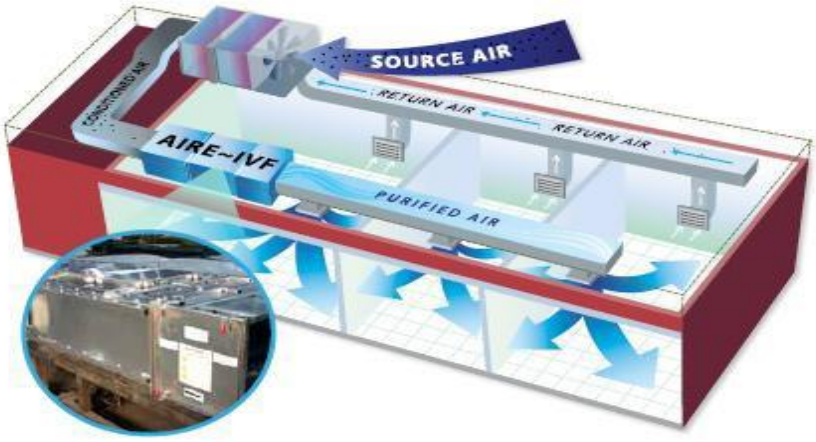
IVF Facility Air Management

- **Professional Facility Design Consultation & Turn Key Project execution.**
- **Pos/Neg Facility Air management construction with highest level of Embryology, IVF Lab, Processing Room ISO Class 7 & 8.**
- **QC Tests Validation & Certification (CBAHI/JCI/CHA/ISO/CAP)**

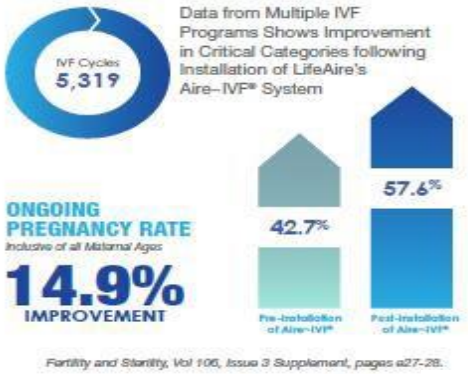
PERFECTLY PURE PROTECTION.

Scientifically Proven to Improve IVF Outcomes
Eliminating all known airborne pathogens that can affect healthy embryogenesis, LifeAire System's Aire-IVF is clinically proven to significantly improve clinical outcomes. Its patented multi-staged molecular media and UV technologies combine to neutralize up to 99.99% of biological and chemical contaminants within source and return air—in a single pass through the system.

No other system, in-room or in-duct, has the capability to continuously purify air at the levels *guaranteed* by LifeAire.



Whether part of new construction or integrated into an existing facility, Aire-IVF features an indoor design as well as all-weather option for rooftop installations. The system is available in three sizes to accommodate air volume outputs of 1000, 2000 and 4000 CFM.



Fertility and Sterility, Vol 106, Issue 3 Supplement, pages e27-28.

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asrm American Society for Reproductive Medicine

eshre SCIENCE MOVING PEOPLE MOVING SCIENCE

MEMBER

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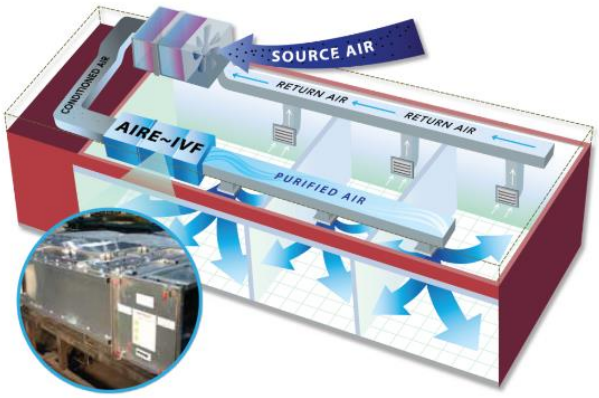
IVF - DIVISION

LifeAire® Systems

PRODUCTS / AIRE~IVF

Aire~IVF®

Air Purification for *In Vitro* Fertilization

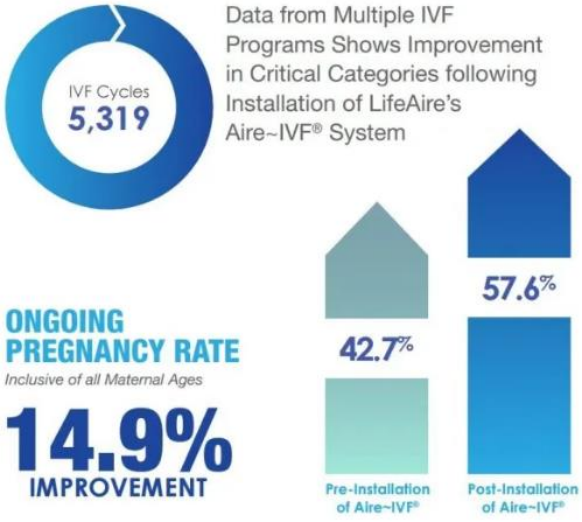


Scientifically Proven to Improve IVF Outcomes.

Eliminating all known airborne pathogens that can affect healthy embryogenesis, Aire~IVF is clinically proven to significantly improve clinical outcomes. Its patented multi-staged molecular media and UV technologies combine to neutralize up to 99.99% of biological and chemical contaminants within source and return air—in a single pass through the system. No other system, in-room or in-duct, has the capability to continuously purify air at the levels guaranteed by LifeAire.

Fits New Construction or Retrofit Applications.

Whether part of new construction or integrated into an existing facility, Aire~IVF features an indoor design as well as all-weather option for rooftop installations. The system is available in three sizes to accommodate air volume outputs of 1000, 2000 and 4000 CFM.



Technical Specifications

Design Specification Objectives	Total VOCs: <100 ppb	Biologicals: <1 cfu/m³	Particulates: ISO Class 6	Ozone: None

Aire~IVF 1000

- Supply Air Volume: max 1000 CFM
- In-Duct and All Weather Systems

Aire~IVF 2000

- Supply Air Volume: max 2000 CFM
- In-Duct and All Weather Systems

Aire~IVF 4000

- Supply Air Volume: max 4000 CFM
- In-Duct and All Weather Systems

*Data obtained during testing with certified/calibrated PPB RAE 3000 hand-held photoionization detector (PID).

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IVF LAB FACILITY AIR QUALITY MONITORING SYSTEM

Smart Air Quality Monitor, Indoor Air Quality Meter Detects CO2, PM2.5, PM1.0, TVOC, Temperature and Humidity Detector with Smart App and Intelligent Control

Precision Air Quality Detector for 6 Important Standards

Product Details

- Precision Air Quality Detector: Due to it's precision laser sensor, The air quality meters conveniently and accurately measures air quality metrics for 6 important standards, including CO2, PM2.5, PM1.0, TVOC, temperature and humidity.
- Wi-Fi Enabled & Smart App: Set alarms and enjoy remote monitoring with the gas detector via 2.4GHz Wi-Fi and the Tuya App. You can easily see the air quality index and change monitoring curve through the app.
- Easy to Read & Data Storage: Equipped with a large display, the indoor air quality monitor is easy to read from a distance. You can also monitor it from the app. With a 1 year history record, you can view past data graphs anytime you want.
- Intelligent Control: Set your target air quality and link to the app. Smart fans, air purifiers, humidifiers, and space heaters will turn on and off automatically when the indoor air quality changes, if you sync them to the app (if the device cannot link the app as it lacks a "smart" feature, you can purchase a smart plug separately to make it possible).
- Widely Used: The temperature humidity monitor feature can be helpful for air quality detection in daily life, especially for the care of children, those with allergies, the elderly, and pets. You can use the air quality monitor in a greenhouse to detect and adjust the overall air index and it also can be used in an industrial setting.

Product Technical Details

Style: modern
Power Source: DC
Color: White
Product Dimensions: 1.5"D x 7.1"W x 4.7"H
Alarm: Audible
Compatible Devices: iphone, Android phone
Sensor Type: Laser infrared sensor
Manufacturer: BROHOM USA/China
Part Number: ZN-PT02
Item Weight: 2.29 pounds
Item model number ZN-PT02
Shape: Rectangular
Voltage: 12 Volts
Included Components: air quality monitor, charging cable
Batteries Included: No
Batteries Required: No
Features & Benefits
Detects: CO2, PM2.5, PM1.0, TVOC, Temperature and Humidity
Wi-Fi enabled with Smart App for remote monitoring.
Easy to read and data storage for a year.
Intelligent control to link with other devices.
Suitable for Hospital, IVF Lab, Micro Electronics Facility, Food Industries, settings.

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Sefi-Medical Instruments

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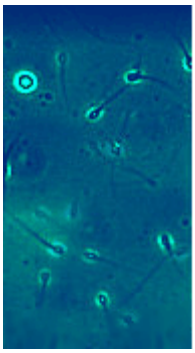
Makler® Counting Chamber



Unique Features and Advantages

Easy to use	Sperm count performed from undiluted specimen.
Fast results	The number of spermatozoa counted in any strip of 10 squares of the grid indicates their concentration in millions/mL. No additional factors are necessary for calculation.
Optimal depth	The depth of 10 microns eliminates blurring and allows sperm to move freely. The applied sample is observed in one focal plane.
Built-in grid	The grid is on the cover glass. This eliminates the need to insert a grid into the microscope eye piece and remove it when not required.
Economical	Reusable. Easily cleaned with a non-bleach disinfectant solution.
Self-controlled accuracy	Observation of color fringes at the four contact points, provides a self-controlled test for accuracy. The cover glass can never be raised by the applied sample.
Calibration unnecessary	Repeated use with complete accuracy without calibration.
Superior technology	Manufactured by state-of-the-art precision engineering. Checked individually by laser beam for precision and accuracy.

ASHRAE STANDARD 170 APPLIED TO HOSPITAL OPERATING ROOMS.

An Overview of Air Distribution and Filtration Requirements

The main goal of operating room air distribution design is to maintain a hygienic surgical zone around the patient and surgical team. Patient well-being is critical, and a well-designed air distribution system can help mitigate surgical site infections.

ANSI/ASHRAE/ASHE Standard 170 for the Ventilation of Health Care Facilities provides design parameters for operating rooms that help create a sterile surgical zone through the air distribution system. These parameters include filtration and air change rate as well as velocity and diffuser coverage requirements over the operating table or surgical zone.

Filtration

The latest edition of ASHRAE 170 was published in early 2021 and states that operating rooms require a minimum filter efficiency of MERV 16 (previously MERV 14), although HEPA filters are typically used in these spaces. Additionally, the standard now states that “in ORs or Class 3 imaging rooms designated for orthopedic procedures, transplants, neurosurgery, or dedicated burn unit procedures, HEPA filters shall be provided and located in the air terminal device.”

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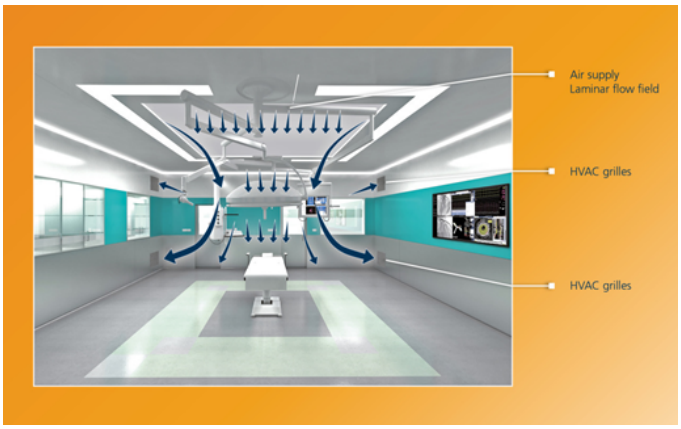
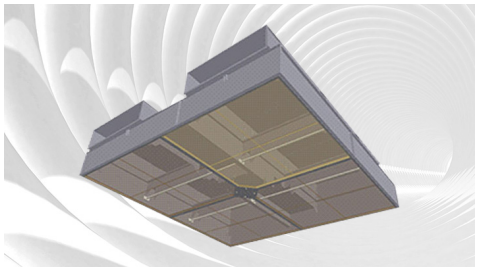
Primary Diffuser Array

A key design requirement within ASHRAE 170 for operating rooms is the primary supply diffuser array. This is recommended with the sole intent of creating a large sterile zone around the patient and medical staff. The standard dictates that the coverage area of the primary supply diffuser array should include the surgical table and extend a minimum of 12 in. beyond the footprint of the surgical table on each side and that no more than 30% of this area may be used for non diffuser uses. This recommendation ensures that enough clean, filtered air is dispensed above the patient while accommodating the complex medical equipment present in today's modern operating rooms.

The airflow in the primary diffuser array should be unidirectional and downward, with an average velocity of 25 to 35 cfm per sq. ft. ASHRAE Group E nonaspirating diffusers, or laminar flow diffusers, are used to meet this requirement. Additionally, operating rooms require positive pressurization of at least +0.01 in.w.g. as well as a minimum of 20 total air changes per hour, with a minimum of four of those air changes being outdoor air. Finally, a minimum of two (four recommended) low sidewall return or exhaust grilles should be placed symmetrically around the room to promote the desired airflow pattern.

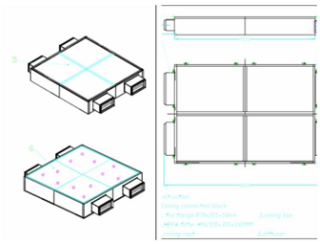




Specifications:

Laminar Air Flow Ceiling mount Air Supply System
Size: External Dimensions: 240 L X 240 W X 35 H cm – S/S Canopy
HEPA Filters: 12 Ea. 50LX50WX7H cm, Class 14, Efficiency 99.997% @ 0.3µm, Back pressure up to 200 Pa
Back up Germicidal U Lamp Assay: λ = 320ηm – 12ea
Air Flow Rate : up to 820 L/Sec @ Air Discharge velocity 10cm above face 0.20 to 0.45 m/s , Flow Rate per Square Meter Unit – 100 to 200 L/s m²
Power: 220V 50/60 V 200W, Supply Duct Inlet Size: 20WX40L – 04Ea

*Can be utilized to generate ISO Class 6 Clean environment air supply Positive Pressure Room (Technical installation & leak proof HEPA filters installation should be compliance)



OPERATING ROOM LAMINAR AIR FLOW STAINLESS STEEL FFU

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