



MICROSCOPY & IMAGING SYSTEMS

TIME LAPSE

WORKSTATIONS

ICSI STATIONS

CLINICAL LASERS

STERILIZATION

INCUBATORS

IVF LAB EQUIPMENT



IVF & GENETICS SUPPLIES



**Diamond
SPECTRUM**

شركة الطيف الماسية للأجهزة العلمية والمختبرات
Diamond Spectrum for Scientific & Laboratory Equipment Co.

PART OF TAAWON GROUP

CHOICE OF EXCELLENCE

CHOICE OF EXCELLENCE

ABOUT TAAWON GROUP

TAAWON GROUP

Taawon Group is specialized in the supplies of excellence level of high quality, compatible and best value laboratory and industrial equipment, disposables & chemical products in different market segments such as pharmaceuticals and bio-pharmaceuticals, food & beverage, chemicals & petrochemicals, oil & gas, academic institutions & reseatch centers, IVF & geneticas labs, hospitals & medical labs, environmental & testing labs and last but not least forensics labs.

Taawon Group was established in 2008 where the headquarter is based in Jordan and the group has expanded its activities internationally to reach Saudi Arabia (Diamond Spectrum), United Arab Emirates (Altayf Althahabi) and Poland (Parameter EU). This was a result of the emerged need for a local supplier of laboratory supplies has arised and increased.

We are focused at customers needs and we place their expectations at the central of our plans and actions. We understand the similarities and differences of markerts worldwide thats why we actively and continuously seek out improvements to the local and global markets.

We understand customers interests and deep concerns which we support to meet their goals with conviction. We embrace our work by adopting a target-focused, process-oriented and solution-driven approach besides facilitating cooperation among employees and customers. We value our customers by listening carefully, playing an active role and offering critical analysis as well as addressing conflicts dealing with them sensibly.

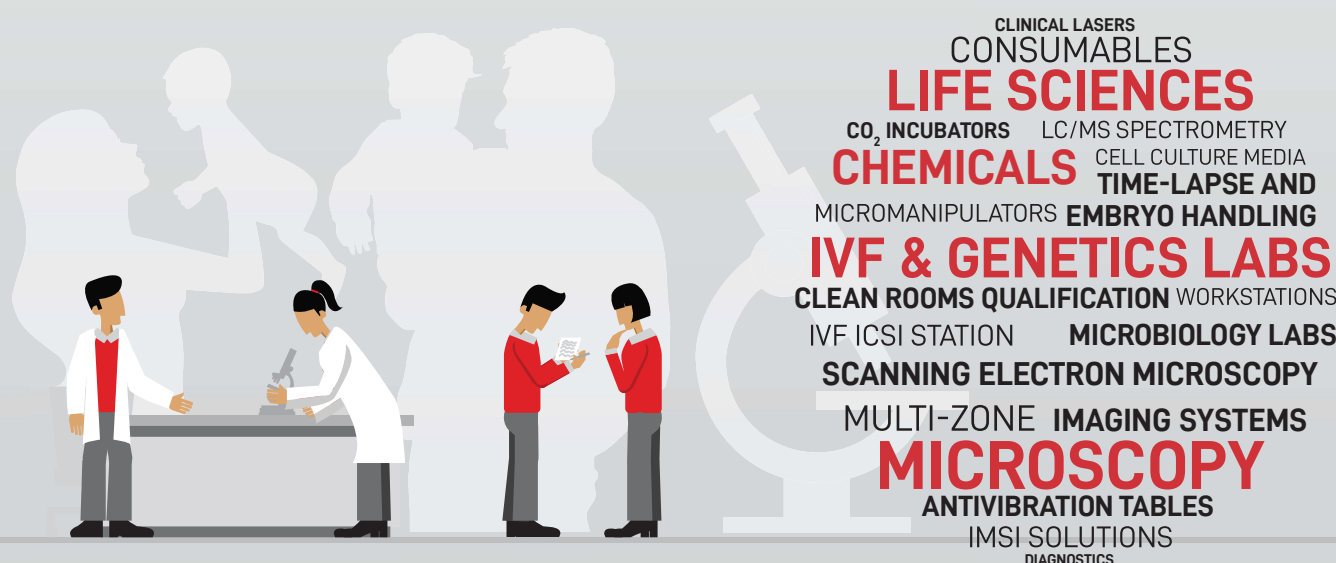


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IN VITRO FERTILIZATION (IVF) LABORATORY



INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

ESCO provides high-quality equipment such as long-term embryo incubators, ART workstations, anti-vibration tables, time-lapse incubators and they continuously develop advanced technologies to meet the increasing demand of the IVF industry.

INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

FULL RANGE OF EQUIPMENT FOR YOUR IVF LAB

Time-Lapse

With Miri® TL6 and Miri® TL12 Time-Lapse Systems, you will never miss a significant event in embryo development with the continuous monitoring system

It is a multi-room incubator with a built-in camera and microscope that allows embryologists to view the development of the embryo from fertilization until the day of transfer without any disturbances.



MIRI® II Multiroom Incubator

The Esco Medical MIRI® II-12 Multiroom Incubator is intended to be used to provide a stable culture environment at or near body temperature and CO2 and N2 gasses for the development of gametes and embryos during In Vitro Fertilization (IVF) and Assisted Reproduction Technology (ART) treatments.



Mini MIRI® Incubators

Built on the sturdy and dependable MIRI® architecture by Esco Medical, the Mini MIRI® Incubator offers a consistent culture environment. Direct heat regulation in the compact design aids in preventing vapor condensation, enables faster temperature and gas recovery, and overall provides better and a more precise temperature uniformity.



MIRI® Humidity Multiroom Incubator

The MIRI® Humidity is a six chamber multiroom benchtop incubator that provides a humidified environment for embryo culture. The robust design enables for quick temperature and gas recovery for optimal embryo culture while preventing vapor condensation.



AVT Anti Vibration Table

The Anti Vibration Table (AVT) features an anti-vibration mechanism for passive dampening of the microscope.



INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

FULL RANGE OF EQUIPMENT FOR YOUR IVF LAB

Multi-Zone ART Workstation Class II

Class II workstation can be utilized in handling gametes and embryos from patients with communicable diseases while providing sample, user and environmental protection. It has multiple heating zones that enable precise temperature control across the work surface, with provision of a built-in microscope and integrated MIRI® chambers.



Multi-Zone ART Workstation

Vertical laminar flow workstations with multiple heating zones that enable precise temperature control across the work surface, with the provision to have a built-in microscope and integrated MIRI® chambers. Available in different sizes and configurations.



Airstream® Laminar Flow Bench

Vertical laminar flow workstation providing sample protection. It offers ISO Class 3 workzone with 10x efficiency of its HEPA filters. It has the latest generation of DC ECM motor to improve energy efficiency. In Andrology, laminar flow benches can be used to handle sperm samples of patients.



MIRI® GA Gas and Temperature Validation Unit

MIRI GA® is a tabletop device that is designed to perform easy and continuous external gas and temperature validation of IVF incubators. This device can be used to validate different varieties of Esco Medical IVF incubators such as MIRI® Time-lapse Incubator, MIRI® Multiroom Incubator, Mini MIRI® Incubators, and other brands of IVF incubators.



AVT Anti Vibration Table

The Anti Vibration Table (AVT) features an anti-vibration mechanism for passive dampening of the microscope.



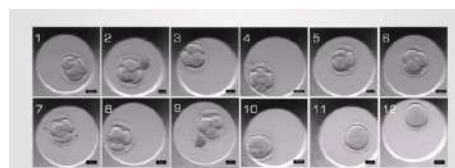
INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

TIME-LAPSE EMBRYO INCUBATOR

The Heated Lid prevents condensation, enhances temperature regulation and recovery and creates uniformity between the top and the bottom lid.



The Multi-room System with individual chambers allows embryologists to culture embryos within one independent environmentally stable chamber for each patient.



Miri® TL can continuously capture time-lapse images of your embryo as it develops using a built-in camera and a microscope.



As images are digitally-stored, a video can be generated to enable a more objective and reliable grading of the embryo. The Time-Lapse video enables a detailed scoring of embryos cultured for better prediction of future development and implantation potential.



Easily change parameter settings with a reliable touch-screen display. Configuration is as simple as you need it to be.



INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

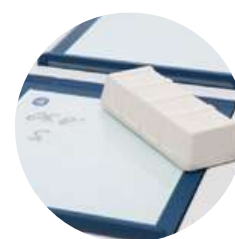
MIRI® BENCHTOP MULTI-ROOM INCUBATOR



The heated chamber lids prevent condensation, enhance temperature regulation/recovery, and ensure temperature uniformity between the top and bottom of the chamber



The Heated bottom provides direct heat transfer to the cultures through the optimization plate for stable heat regulation. It also comes with Optional SAFE Sens® Integration for continuous pH monitoring.



the glass lid tops, while acting as chamber insulators, can be written on which is a very useful feature for organization.



Six and Twelve independent MIRI® chambers, with precise temperature and gas regulation: Opening any chamber does not affect the environment in other chambers. Temperature or gas fluctuation caused by opening the lid have no impact on the rest of the system

Mute Button that temporarily mutes alarm messages and sounds for five (5) minutes.



Superior gas system works with premix gas or %100 CO₂ gas, with NDIR CO₂ sensor to regulate CO₂ levels. HEPA-VOC gas filtration system ensure clean gas recirculation

INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

FERTILISAFE™ MULTI-ZONE WORKSTATION

The touchscreen monitor is a fully functional Windows PC with additional features;

- Observe and record culture behavior in real time via microscope camera function.
- Enable teleconference calls with colleagues in other sites for real time collaborative work (Note: Webcam is not supplied).

The heated glass stage has a dedicated and uninterrupted power supply to further enhance the temperature control and recovery in this zone.

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

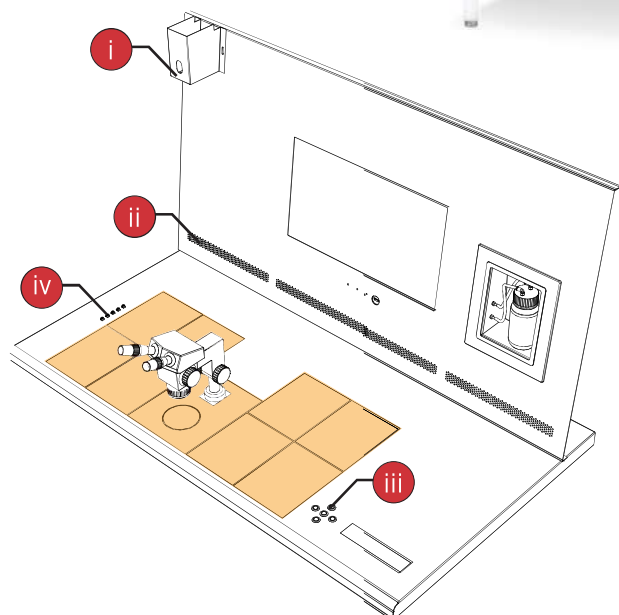


The Humidification System allows digital control of pre-mixed gas, which enables complete environmental control for the samples.

Gas outlet port is located on the table surface and the plastic cover will enclose the humidified gas which creates a small "incubator".



Your specimens are more secured than ever with the integrated Miri chambers, known for its stable and precise temperature output.



Multi-Zone Heating System with Four (4) Temperature Modes

1 set point, 10 independent zones with their own heating elements and sensors allow excellent uniformity. The heating system will automatically prioritize power distribution to ensure effective temperature control with fast recovery.

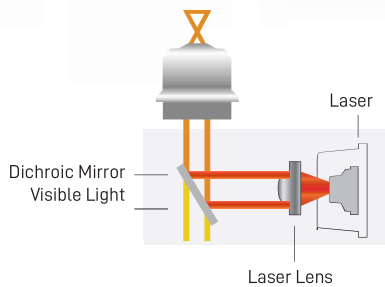
The heated glass stage is a monitored heating zone with

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

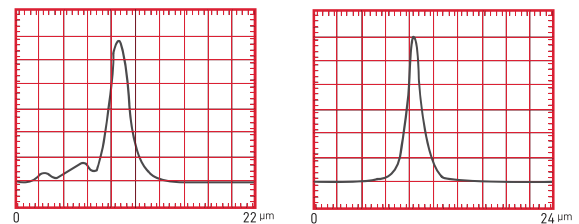
Hamilton Thorne designs, manufactures and distributes precision laser devices and advanced image analysis systems for the fertility, stem cell and development biology research markets.

CLINICAL LASERS

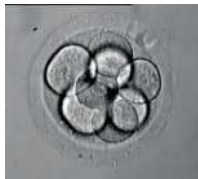
ZILOS-tk laser is integrated into the objective which is attached directly to the turret of the inverted microscope, leaving both the fluorescent and filter cube ports open for normal use.



The laser is integrated as part of the objective to guarantee optical alignment, to provide protection against dust and to sustain the alignment for the life time of the laser.



The Laser beam should be aligned perfectly with the visible light with all laser components built into the objective, this way, safety can be guaranteed and maintained.



Power 140 mw

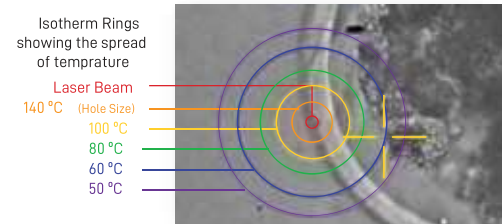


Power 300 mw

The laser is designed with the specimen safety as No. 1 criteria, utilizing high power laser and factory aligned laser optics integrated into the laser objective, this assured the shortest shot time is needed and there by reducing the heat impact from the laser to minimum.

ZILOS-TK® Laser

It is an integrated Laser and 40x Objective Combination; Compact, portable and unique! The ZILOS-tk laser is integrated into the objective then the ZILOS-tk laser-objective is attached directly to the turret of all current and older models of the inverted microscope.



The patented isothermal rings is a validated algorithm that calculates how far the heat resulting from the laser shots will spread deep into the specimen.

Hamilton Thorne designs, manufactures and distributes precision laser devices and advanced image analysis systems for the fertility, stem cell and development biology research markets.

CLINICAL LASERS

LYKOS with Dynamic Targeting System™ (DTS) represents the next generation of clinical lasers for Assisted Reproductive Technology.

With precise targeting features, automated calibration and built-in quality control reporting, LYKOS with DTS provides computer-controlled accuracy and enhanced ease-of-use

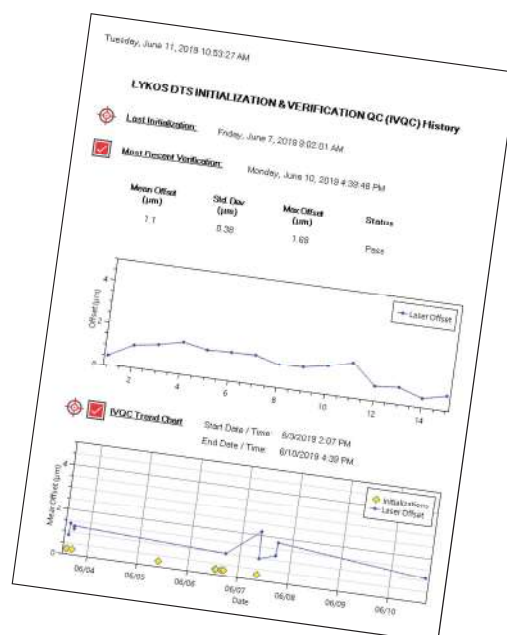


- Single Shot: Click any single point on the screen and a single laser pulse will be applied to that exact point.
- Line / Curve: Draw a straight line of any length and then select and drag to create a curve.
- Freehand: Any freeform path may be drawn by clicking and dragging the mouse pointer.
- Multipoint: Click up to 10 non-connected locations to apply laser. Each point may have a different laser setting.
- Rectangle: Click and drag to draw a rectangle of any proportion.



Built-in Quality Control Reporting: With the built-in quality control reporting, you can view the results of the daily verification in both numerical and graphical form. In addition, a Trend Chart lets you see the results over a selected period of time.

DTS Verification: The DTS positioning can be easily verified prior to use and the results of the verification saved.



The world's largest manufacturer of serial-production environmental simulation chambers for scientific or industrial laboratories

TEMPERATURE, CLIMATE & ENVIRONMENTAL SIMULATION CHAMBERS

CO₂ incubators

CO₂ incubators with hot air sterilization are contamination-proof due to 180 °C hot air sterilization and reliably pH-stable thanks to the drift-free infrared CO₂ measurements conducted in real time.



Cooling incubators

Every KB Series cooling incubator makes safe, reproducible incubation possible, even at high ambient temperatures as they are gentle on samples and provide high-quality performance.



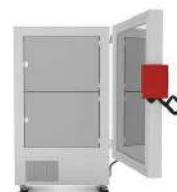
Growth chambers

The KBW Series growth chambers create ideal conditions for the culture using light and temperature thanks to homogeneous light in combination with a constant temperature and humidity



Ultra-low temperature freezers

the BINDER ultra-low freezer guarantees absolute temperature stability during vaccine storage. Especially when storing vaccines that require a cold chain



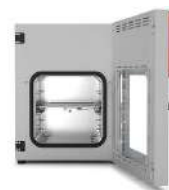
Drying and heating chambers

The heating oven series is a reliable and powerful unit ideal for tasks in basic research, as well as in human and veterinary medicine.



Vacuum drying chambers

enable effective drying without residue or damaging the material being dried where the samples and similar materials incorporating flammable and non-flammable solvents can be dried, depending on the individual use.



Constant climate chambers

reliable all-in-one solution for photostability testing in a single chamber. Wide temperature and humidity ranges can be realized with Series KMF chambers – ideal for complex stress tests at 85 °C and 85% RH, for example



Dynamic climate chambers

Dynamic climate chambers Series is suitable for complex temperature profiles in the range of -40 °C or -70 °C to 180 °C. and can also regulate humidity in the range of 10 % to 98 % RH.



INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

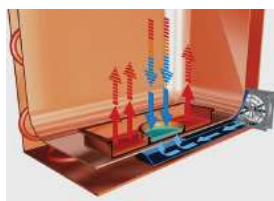
TEMPERATURE, CLIMATE & ENVIRONMENTAL SIMULATION CHAMBERS



Heat jacket

This heated jacket heats the incubator chamber directly from all directions, resulting in a fast temperature recovery time and more uniform heat distribution.

Intuitive Touchscreen Controller
Internal data recording, can be read out in open format via USB interface.



Premadry humidification
Binder technique to prevent condensation with cold spot integrated to condensate the excess humidity

The new drift free CO₂ sensor technology
the new detector and source are inherently stable without the need for compensation with direct access to the sensor making maintenance easier



3 perforated shelves, stainless steel.

Lockable door handle.

170 liters of extra space in the interior while maintaining the same footprint.



DuoDoor™ system: Unit door and glass door can be opened with one handle.

Multi-layer security concept, meeting any laboratory staff's needs beyond expectations



- Temperature range: ambient temperature plus 4 °C to 60 °C
- Humidity range: 90 to %95 RH
- CO₂ control range: 0 to 20 vol% CO₂
- O₂ control range: 0.2 to 20 vol% O₂ for versions with O₂ control
- Maximum usable space with minimal footprint and excellent ease of use
- Minimum risk of contamination thanks to uncompromising hot-air sterilization

INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

QUALITY CONTROL SOFTWARES

Quality Control - ROTRONIC

The RMS Monitoring system from Rotronic for IVF Laboratories consists of data loggers that come in small housing and wireless interface and an interface between the wireless data logger and the server software that can manage up to 60 data loggers simultaneously.



MedITEX IVF Software

MedITEX IVF is a platform that enables you to collect all data relevant to diagnostics and therapy.

MediTEX IVF consists of the functions; EMR - Electronic medical record, Practice management and organization and data validation and prospectivity.



Molecular Devices delivers innovative bioanalytical solutions for protein and cell biology in life science research, pharmaceutical and biotherapeutic development.

SINGLE & MULTI-MODE MICROPLATE READER

Single-mode Microplate Reader

The three most common read modes in a single-mode microplate reader are absorbance, fluorescence, and luminescence



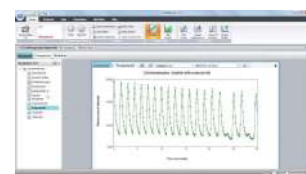
Multi-mode Microplate Reader

multi-mode plate readers provide great flexibility and include absorbance, fluorescence and luminescence with configurable options for fluorescence polarization (FP), time-resolved fluorescence (TRF), FRET, and AlphaScreen.



SoftMax Pro Software

provides ready-to-run protocols, analysis algorithms, and 21 different curve fit options.



FLIPR Penta High-Throughput Cellular Screening System

The FLIPR Penta High-Throughput Cellular Screening System allows you to measure and analyze peaks of human-derived induced pluripotent stem cells (hiPSCs), differentiated into cardiomyocytes and neurons, up to 100 times per second.



Axon Instruments Patch-Clamp Systems

Axopatch 200B Capacitor, MultiClamp 700B, Axoclamp 900A, Axon Digidata 1550B Low-Noise Data Acquisition System and pCLAMP 11 Software Suite.



Cellular Imaging Systems

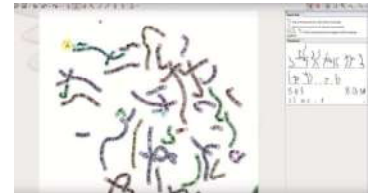
ImageXpress Pico, ImageXpress Nano, ImageXpress Micro 4, ImageXpress Micro Confocal for high-content imaging and cell imaging, from samples to results in minutes.



GENETICS LABORATORY SOLUTIONS

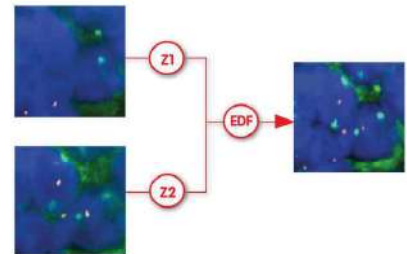
LUCIA KARYO - LIM & LUCIA CYTOGENETICS

LUCIA Karyo is a powerful feature-rich software that provides a capable helper for all kinds and sizes of cytogenetic laboratories.



LUCIA FISH/mFISH - LIM & LUCIA CYTOGENETICS

Image acquisition with different levels of user control, from fully-automatic to fully-manual.



Microarray

Microarray technology has greatly contributed to research in many areas including functional biology, genomics, transcriptomics, and proteomics, both in plants and animals.



Lucia Metaphase Finder

The Metaphase Finder system comes in a very compact set and offers flexibility comfort and seamless work flow.



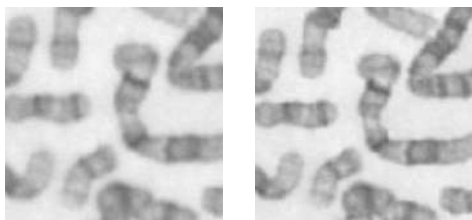
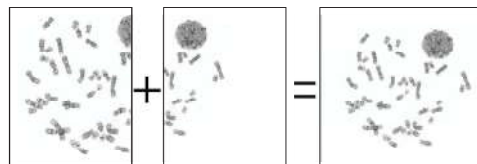
INNOVATIVE SOLUTIONS FOR FERTILITY CLINICS & LABS

LUCIA CYTOGENETIC SOFTWARE



LUCIA Karyo is a powerful feature-rich software created by experienced programmers who work in tight cooperation with experts on biology and cytogenetics. The whole team's top priority is to provide a capable helper for all kinds and sizes of cytogenetic laboratories.

A single click is all what you need to capture images and LUCIA will do the rest of camera correction and image enhancement.

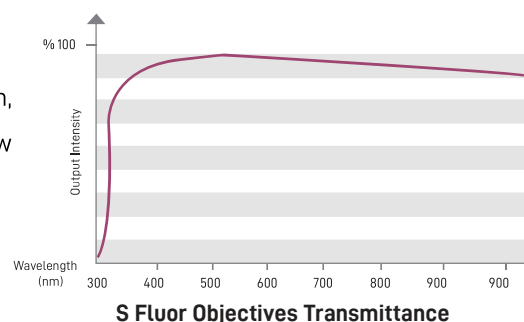


Dedicated Karyotyping Objective

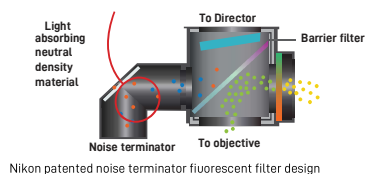
Specialized 100x objective dedicated for karyotyping application which offers the highest possible resolution.

Superior Fluorescent Objectives

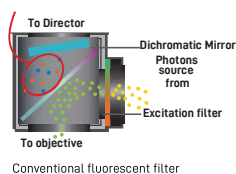
CFI super fluor lenses provide the highest ultraviolet transmission, exceptionally high N.A., chromatic correction, transmission below 340nm and low auto-fluorescence.



Stray light terminated away from the eyepieces eliminating the Noise



Stray light reflected from the filter toward the eyepieces creating Noise



5 Times Less Fluorescence Noise

The noise terminator is installed to process excitation light (stray light) that passed through the dichroic mirror, thereby preventing the light leaking into the observation side.

With LUCIA Reporting is easier

- Standard user interface to most document editors
- External objects and images can be inserted to the report
- Easy system data insertion
- Conditional karyogram usage
- Unlimited undo history

IMT International provides IVF management technologies and quality management systems to fertility clinics, donor banks and other Assisted Reproductive Technology (ART) centres.

IVF MANAGEMENT TECHNOLOGIES

IMT Matcher

Matcher electronic witnessing system is a barcode-based witnessing, labelling, workflow scheduling and traceability system, specifically created for IVF clinics and donor banks to help prevent errors through misidentification of patients and their gametes and embryos.

Matcher provides complete electronic traceability, recording the 'who, what, where and when' at every step, including photographs of all procedures taking place during a cycle of treatment and with the new visual patient workflow scheduler, clinics have a real-time 'traffic light' overview of daily cycle tasks and patient cycle status.



IMT VitMaster

VitMaster is a simple to use, portable device which delivers ultra rapid vitrification of material for improved post-thaw results over traditional LN2 plunging techniques.

It is designed for embryos, oocytes and other cell types, and is used in human and animal assisted reproductive technology fields, as well as other biological facilities.

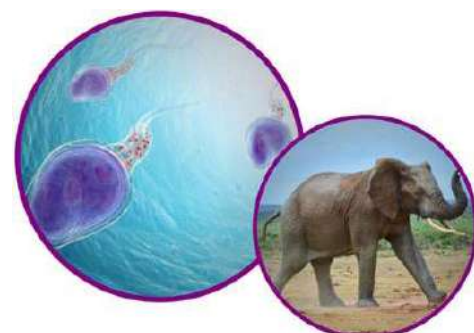
VitMaster minimises cell damage during cryopreservation by safely vitrifying cells at a cooling rate faster than traditional plunging, enabling high post-thaw survival rates for sensitive cells including oocytes and embryos at all stages of development.



IMT Harmony Cryo

Harmony Cryo is a multithermal gradient (MTG) directional freezing system that offers complete control over key parameters in the cryo preservation process, resulting in fast protocol optimisation and potential increases in post-thaw survival and viability.

The configurability of the device itself allows for fast protocol optimisation to maximise cell survival. This enables larger scale deployment, saves time and limits wastage of scarce resources, improving efficiency and cost of research projects.





LABORATORY STERILIZATION SOLUTIONS



STEAM STERILIZATION APPARATUS & SYSTEMS

FEDEGARI had gained a worldwide reputation for reliability and quality in the production of innovative steam sterilization apparatus and systems, thanks to the knowhow acquired and the experience and technologies developed in over 50 years' activity in this sector.

STEAM STERILIZATION APPARATUS & SYSTEMS

STERILIZERS & WASHERS

Saturated Steam Vertical Sterilizers

The innovative FVA/A1, FVS and FVG series of vertical automatic steam sterilizers have been designed to meet the strictest requirements of the most demanding applications.



Saturated Steam Horizontal Bench Top Sterilizers

The FOB series are suitable for many different applications, making it the perfect choice to satisfy modern laboratory needs. FOB series autoclaves combines technology and know-how, and can be used by very different laboratories.



Stand-alone Lab Sterilizer

The FOB4 Lab Sterilizer is suitable for the use in laboratory for many different applications, such as:

FOB5 Lab Sterilizer presents a great flexibility of use, ranging from quality assurance laboratories in pharmaceutical or food industries, to BSL4 – 3 laboratories in research centres and/or hospitals.



Lab Glassware Washer

FGW Lab Glassware Washer uses a steam generator to improve washing performances: steam has an optimized emollient effect on greasy and sticky dirt.



STEAM STERILIZATION APPARATUS & SYSTEMS

EXPERIENCE TRUE STERILIZATION



Filter
Decontamination of
exhaust air with
sterile filter.



Large volume sterilization
Specially designed with ergonomical
features for easy handling of large
volume sterilization treating
materials and goods as glassware
and plastic ware, media preparation,
liquids in open and sealed containers,
mixed regular and biohazard wastes,
as well as porous loads, packed
instruments, textiles, rubber
articles, etc. for hospital use.



Thema4Lab
Controller

Process

Thema4Lab process controller
is a revolutionary solution,
Engineered and pre-validated
by Fedegari according to
GAMP 5.

This innovative and pioneering
system guarantees a reliable
and cost-effective process
development and is already
available on FOB5 steam
sterilizers and FGW glassware
washers.



Stainless Steel Plates
High efficient preheating
and drying system
guaranteed by the AISI
316 L stainless steel plate
heat exchanger

Performance
Improved performances
thanks to more efficient
and faster processing.

Configuration

All models can be configured using a
wide range of process and software
options and an extensive choice of
accessories.

GMP / GLP compatible data management
offering full traceability and
documentation meeting the most stringent
worldwide safety and quality standards.

Options for compliance to EN 285 and HTM.



Valving system
Sanitary diaphragm valve in 316L
stainless steel with pneumatic
actuator for maximum reliability
and tightness.

Separate steam generator.





WEIGHING SOLUTIONS AND METERS

METTLER TOLEDO

WEIGHING SOLUTIONS AND ANALYTICAL INSTRUMENTS

Complete outstanding quality and functionality are delivered through the world's leaders comprehensive range of laboratory balances and analytical instruments that provides users with flexibility and precision.

WEIGHING SOLUTIONS AND ANALYTICAL INSTRUMENTS

ANALYTICAL BALANCES

METTLER TOLEDO analytical and semi analytical balance measures mass to a high degree of precision.

It has a weighing capacity in the range of 100-500 g (typically 200 g) and a readability of 0.001–0.1 mg. Analytical balance sensitivity requires it to be protected by a draft shield or an enclosure.

METTLER TOLEDO XPE, XSE and XS analytical balances are equipped with the SmartGrid weighing pan minimising air turbulence and therefore shorten stabilization times and allowing faster weighing results.

The MinWeigh function of METTLER TOLEDO analytical balances, installed by a certified technician, monitors the minimum sample weight of the balance. If a weighing is below the determined acceptable minimum value, the balance display turns red.



PRECISION BALANCES

METTLER TOLEDO electronic precision balances offer a wide range of weighing capacities, with maximum capacities up to 64 kg.

They allow readability in the range of 1 mg (0.001 g) to 1 g, or 3-0 decimal places. High precision laboratory balances can extend this accuracy to 4 decimal places, on the display of the precision balance.

The innovative SmartPan™ weighing pan used by METTLER TOLEDO' XPR and XSR precision balances provides extraordinary stability and significantly reduces the impact of air currents on results. Repeatability is improved by up to %50 and even on 1 mg precision balances, accurate results can be acquired without a draft shield.



WEIGHING SOLUTIONS AND ANALYTICAL INSTRUMENTS

PH, ORP, ION CONCENTRATION, DISSOLVED OXYGEN (DO, BOD) OR CONDUCTIVITY

Bench-top Meters

Professional and high performance meters for a wide range of applications. Perfect combination of precise measurement technologies and ease-of-use.



Portable Meters

High-end (IP67) meters engineered to provide users with fast quality data, one-handed operation, and durability.



Electrodes & Sensors

These electrodes & sensors combine innovative technologies and a tradition in glass-blowing for fast, accurate and reliable measurements.



Buffer Solutions & Electrolytes

Traceable to primary standards and come with a quality inspection certificate, which guarantees the stated values and traceability.





PIPETTING SYSTEMS

METTLER TOLEDO

PIPETTES & PIPETTING SYSTEMS

METTLER TOLEDO is the technology leader in the unmatched, very precise and accurate liquid handling laboratory instruments and solutions which guarantee better results at higher sensitivities.

PIPETTES & PIPETTING SYSTEMS

PIPETTES

Single Channel Pipette Pipet-Lite XLS

With proven accuracy and precision, Pipet-Lite XLS+ single channel pipette is among the most ergonomic manual pipettes available.



Multichannel Pipette Pipet-Lite XLS

Multichannel Pipette Pipet-Lite XLS+ new liquid ends are made of durable, lightweight materials and new mechanical designs.



Multichannel Adjustable Spacer Pipet-Lite XLS

For speed, ease and accuracy, nothing beats the Rainin Pipet-Lite XLS Adjustable Spacer pipette for streamlining complex workflows.



Single Channel Electronic Pipette E4 XLS

With the Rainin E4 XLS+ Single Channel Electronic Pipette, METTLER TOLEDO has set the standard for simplicity and performance in electronic pipetting.



Electronic Multichannel Pipette E4 XLS

Multi-dispense, mixing and other pipetting modes on the E4 XLS+ multichannel pipette are easy to use and minimize setup time for high throughput work.



PIPETTES & PIPETTING SYSTEMS

PIPETTES

Electronic Adjustable Spacer Multichannel Pipette E4 XLS

Reduce up to 98% of your pipetting steps when transferring multiple samples between plates, tubes and other vessels.



Pipette Tips

Made from 100% virgin polypropylene in a fully automated, Class 100,000 clean room facility.



LiteTouch System and Universal Fit

Rainin tips optimize work with different kinds of pipettes:

- LTS: Rainin LiteTouch System™ pipettes
- UNV: Universal-fit pipettes, by Rainin and other manufacturers.

Unique to Rainin, the LiteTouch System connects a specially shaped nozzle to a perfectly matched LTS tip to deliver the industry's lowest tip mounting and ejection forces. The result: fewer repetitive stress injuries and more comfort while pipetting.



Before LTS

After LTS

Pipette Management

Control your pipettes with SmartStand and EasyDirect Software.



High-throughput Pipetting

From completely manual to semi-automated, Rainin -384/96well pipettors and consumables deliver outstanding performance.





IN VITRO FERTILIZATION (IVF) & GENETICS LABORATORIES



NARISHIGE

MICROSCOPY & IMAGING SOLUTIONS

Fertility treatment is a cutting-edge process, in which we contribute by delivering the highest level of specialty in equipment and supplies so the most exhaustive testing process comes in handy.

MICROSCOPY & IMAGING SOLUTIONS

ICSI STATION & IMSI IMAGING METHOD

ICSI Station - NIKON & NARISHIGE

The ICSI Station consists of Nikon Ti inverted microscope, Narishige micromanipulators, TokaiHit glass hotstage and the Nikon NAMC objectives

The NTX is a dedicated micromanipulator set for the Ti2 inverted microscope that allows effortless setup and easy adjustment of the pipette holder.



(IMSI) - High magnification light microscopy imaging method

Intracytoplasmic morphologically selected sperm injection (IMSI) is a technique in the in vitro fertilization (IVF) field used to select the healthiest sperm for intracytoplasmic sperm injection (ICSI).

This technique has been shown to increase pregnancy rates and reduce abortion rates compared to routine ICSI-IVF.



The easy switching between IMSI and ICSI is made by simply rotating the nose piece to change the view.

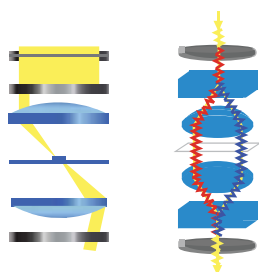


With Nikon, IMSI is performed on the microscope binoculars without the need to switch your view to the camera monitor.



Photos courtesy of Farah Hospital, IVF lab
Amman - Jordan

The main objective in configuring a microscope for IMSI is to achieve magnifications of at least 6000x. This may be achieved using a Nikon inverted microscope equipped with high resolution Normarski optics (100x oil or 60x oil Plan Apo VC) enhanced by a videozoom and digital imaging.



There are two ways to view 3D images; oblique illumination and DIC.

The first one compromises the resolution while Nikon IMSI solution is based on DIC which does not affect of the image resolution.



Spindle Observation System

A polarized light technique for detailed observation of spindle bodies for oocyte assessment and elimination of spindle damage during sperm injection. Easily switch between Spindle Observation mode and Emboss Contrast or NAMC.

MICROSCOPY & IMAGING SOLUTIONS

INTRACYTOPLASMIC SPERM INJECTION (ICSI) STATION



The junction positions of the microscope's support section and the supporting parts of the motor-driven manipulator are set depending on each pipette's angle, and the angle of the pipette holder can be easily adjusted.

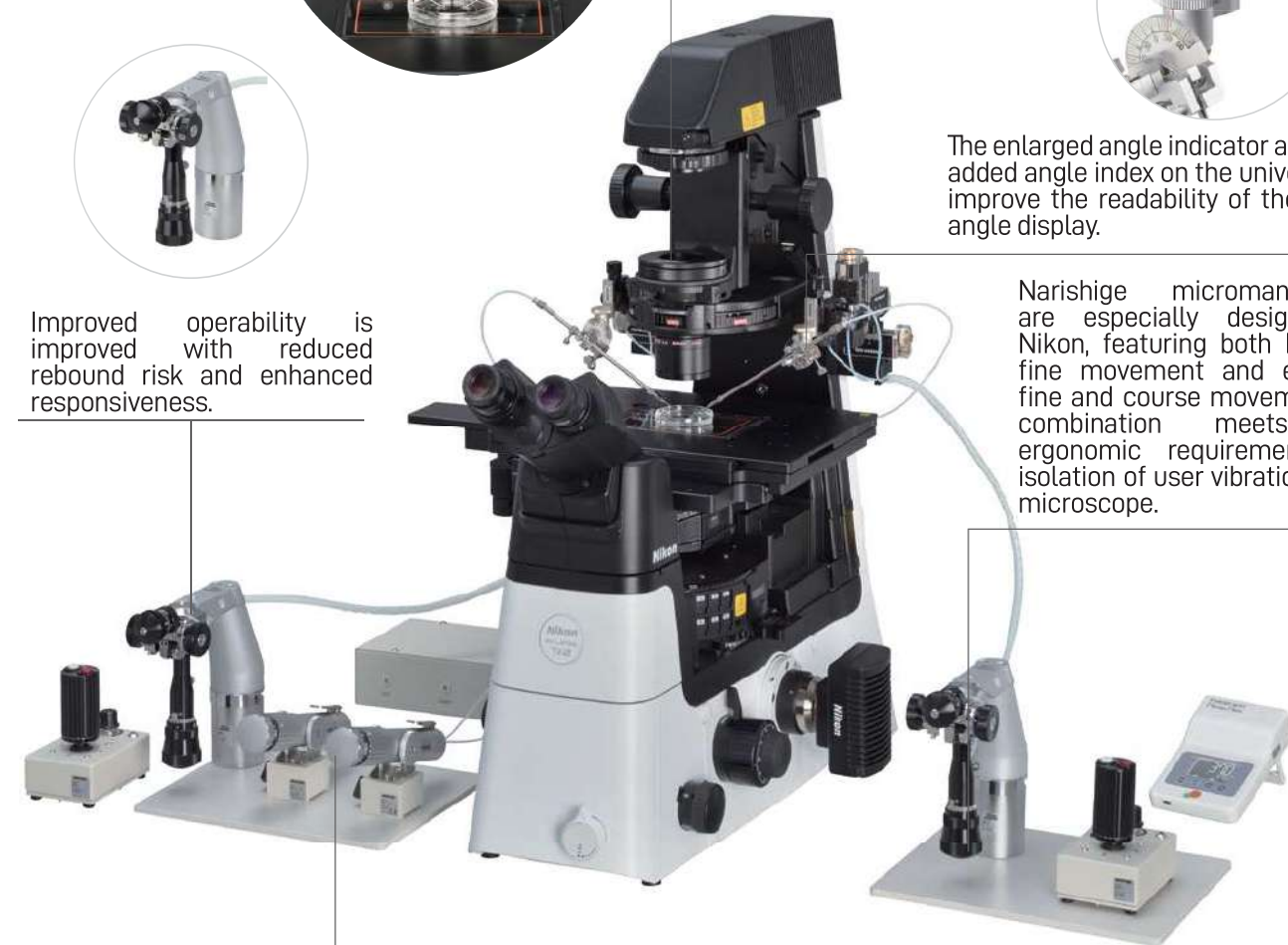


The enlarged angle indicator and newly added angle index on the universal joint improve the readability of the pipette angle display.

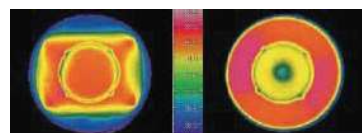


Improved operability is improved with reduced rebound risk and enhanced responsiveness.

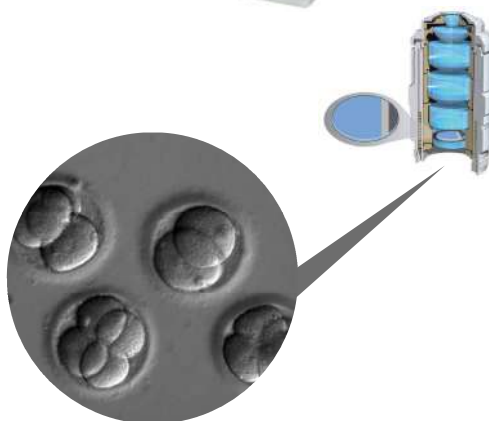
Narishige micromanipulators are especially designed for Nikon, featuring both hydraulic fine movement and electrical fine and course movement. This combination meets user ergonomic requirements and isolation of user vibration on the microscope.



Pneumatic Microinjector, Oil-type Microinjector and Pneumatic Injector.



TokaiHit hotstage is made of special break resistance glass with high optical transparency and offers a uniform and precise temperature control which is not achievable using the metal hot stage.





REPRODUCTIVE MEDICAL SOLUTIONS

GYNEMED

CELL CULTURE MEDIA AND INSEMINATION

GYNAMED serve high-class medical products in the field of reproductive medicine, meeting the highest standards and demands of quality, representing the latest state of scientific development.

CELL CULTURE MEDIA AND INSEMINATION

EMBRYO CULTURE, OOCYTE HANDLING, SPERM PROCESSING

Media for Embryo Culture - GM501 Cult

Ready-to-use bicarbonate-buffered culture media, designed for fertilisation and for human embryo culture from day 1 to blastocyst stage. It can also be used for embryo transfer.



Media for Embryo Culture - GM501 Mineral Oil

Ready-to-use oil for covering the medium during IVF/ICSI treatment. GM501 Mineral Oil protects the medium from evaporation and thereby stabilizes pH and temperature.



Media for Oocyte Handling - GM501 Flush

Ready-to-use medium for flushing the ovarian follicles during aspiration and/or oocyte pick-up intended for extracorporeal fertilization procedures.



Media for Oocyte Handling - GM501 Wash

Ready-to-use medium designed for washing procedures of human oocytes and embryos and any short-term handling procedures outside the incubator like washing after Hyaluronidase treatment (denudation), ICSI, polar body or blastomere biopsy and others.



Media for Oocyte Handling - GM501 Hyaluronidase

Ready-to-use solution designed to facilitate the mechanical removal of cumulus cells. Hyaluronidase digests the extracellular matrix in the cumulus-oocyte complex consisting of hyaluronic acid.



In-Vitro-Diagnostics - GM508 CultActive

A bicarbonate-buffered reagent designed to investigate oocytes of patients with failed fertilization after previous Intracytoplasmatic Sperm Injection cycles.



CELL CULTURE MEDIA AND INSEMINATION

EMBRYO CULTURE, OOCYTE HANDLING, SPERM PROCESSING

Media for Sperm Processing - GM501 SpermAir

Ready-to-use medium designed for all human sperm-preparation (e.g. density gradient centrifugation), sperm-washing and swim-up techniques as well as for testicular tissue.



Media for Sperm Processing - GM501 SpermActive

Ready-to-use medium designed for all human sperm preparation, sperm washing and swim up techniques like density-gradient centrifugation as well as for testicular tissue.



Media for Sperm Processing - GM501 Collagenase

Designed for digestion of human testicular tissue obtained by testicular biopsy (TESE). Using Collagenase, it is possible to degrade testicular tissue in single cells to facilitate the isolation of sperm cells, that can be used for the microinjection into oocytes (ICSI).



Media for Sperm Processing - Bromelain in Dulbecco's PBS

Designed for liquefaction of viscous semen samples prior to semen analysis and preparation for further IVF treatment.



Media for Sperm Processing - GM501 Gradient %45 und %90

A gradient system for semen preparation. GM501 Gradient 45 % and 90 % can be used in combination with IUI, IVF and ICSI.



In-Vitro-Diagnostics - GM501 SpermMobil

A HEPES-buffered reagent containing low bicarbonate. It is used for in-vitro examination of sperms of necrozoospermic ejaculates as well as of immotile sperms isolated from testicular tissue (TESE).



CELL CULTURE MEDIA AND INSEMINATION

EMBRYO CULTURE, OOCYTE HANDLING, SPERM PROCESSING

Media for Sperm Processing - GM501 PVP

Ready-to-use medium to reduce the motility of sperm, making it easier to catch them with an ICSI pipette.



In-Vitro-Diagnostics/ Miscellaneous - GM501 HSA

(10 % human serum albumin) is intended for use in assisted reproductive procedures which include gamete and embryo manipulation. These procedures include the use of GM501 HSA solution as a supplement for culture medium.



Media for Cryopreservation - GM501 GentleVit

A set of ready-to-use media for vitrification and warming of human oocytes and embryos.



Media for Cryopreservation - GM501 VitriStore

A set of ready-to-use media for vitrification and thawing of human embryos.



Media for Cryopreservation - GM501 EmbryoStore

A set of ready-to-use media for freezing and thawing human embryos between 2PN and 4 cell stage.



Media for Cryopreservation - GM501 SpermStore

A medium for freezing human sperm including epididymal or testicular sperm.



CELL CULTURE MEDIA AND INSEMINATION

EMBRYO CULTURE, OOCYTE HANDLING, SPERM PROCESSING

Oocyte Aspiration Needle

Available as single or double lumen sets. The single lumen needles are available with or without flushing (~3way-valve).

The double lumen needles can be used for concurrent aspiration and flushing (stopcock directly connected to handle).



DENU-Tips

The DENU-Tips are used for the manipulation and transfer of oocytes and embryos during IVF/ICSI procedures.



Holding micropipettes

Holding micropipettes are used for the fixation of oocytes and embryos during micromanipulation. Available straight or with bending angle.



Biopsy micropipettes

Biopsy micropipettes are used to perform biopsies on the embryo (blastomere and trophectoderm) or the oocyte (polar body) for Preimplantation Genetic Screening (PGS).



Injection micropipettes

ICSI (intracytoplasmic Sperm Injection) micropipettes are used to aspirate and inject the sperm directly into the oocyte.





INSTALLATION, QUALIFICATION, VALIDATION & REPAIR

OUR SERVICE TEAM

We understand the importance of adequate services and the need for a properly qualified service team to perform their tasks as expected along with the continuous changing of technologies.

Therefore, our service team receives professional training through dedicated training programs provided by our manufacturing partners and by Diamond Spectrum internal programs.

INSTALLATION AND COMMISSIONING

It is one of our responsibilities to serve a complete successful installation and commissioning of the equipment we supply; That also includes staff training on the operation of the instrument and other optional services.

CUSTOMER TRAINING

We offer training on the application and the preventive maintenance of all the equipment we supply.

MAINTENANCE & REPAIR

Maintenance and repair are performed by a well trained team of engineers and technicians. With the aid from manufacturing companies manuals, most repairs can be done at customers' sites or at Diamond Spectrum's workshop if needed which is fully equipped with specialized tools and instruments for different tasks.

CALIBRATION & CONTRACTS

We offer calibration services for selected instruments such as weighing solutions, titrators, particle counters, humidity sensors and thermal analysis. For some instruments we offer to do the adjustment based on calibration reports generated.

We also offer annual contracts that includes routine visits and emergency calls, it also includes different options for quality control assistance.



INSTALLATION, QUALIFICATION, VALIDATION & REPAIR

QUALIFICATION

Qualification is a critical step to which we are dedicated to perform for pharmaceutical industries including all the instruments and equipment we supply. we also perform qualification in other sectors as well.

SUPPORTING APPLICATIONS & REGULATIONS

With the continuously evolving technologies and the need to comply with local and international regulations and requirements, we update our staff and our clients knowledge and skills constantly to be part of our contribution and support for our customers within our field of specialty

TRAINING

Training is performed by qualified trainer's of Diamond Spectrum's team.

our trainers have training experience with different industrial and medical sectors along with special training they have received from different manufacturing companies.

CERTIFICATES

Trainees who attend our training programs will receive certificates of attendee with details about the training and training period.

Trainees who apply and pass training exams will receive training certificate with training program details.

TRAINING VENUES

Training for small groups (up to 7 persons) can be conducted at our training room and work shop in Diamond Spectrum offices, for theoretical and practical parts. For larger number of participants training can be arranged at selected proper locations.

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