

## Healthcare Facility Testing & Verification

Independent inspection of electrical, life-safety and cleanroom systems for Syrian hospitals and clinics



*Measuring particle counting for Patient-area electrical safety and biomedical equipment verification — independent measurement against IEC and NFPA standards.*

Hospitals and clinics across Syria are being rebuilt, re-equipped and brought back into clinical service. New panels, generators, theatres and isolated-power supplies are installed alongside older infrastructure that has not been independently tested for years. In a healthcare environment, an undetected fault is not a maintenance issue — it is a patient-safety event. Mizan provides the independent measurement and reporting that confirms each critical system meets international standards before patients are connected to it.

### ▪ Why It Matters

Healthcare concentrates the most demanding electrical and environmental requirements in any built sector:

- Patients are directly connected to mains-powered equipment with reduced resistance to leakage current.
- Power interruptions stop ventilators, infusion pumps and theatre lights.
- Theatres, ICUs and labs depend on controlled air quality to limit infection.

### ▪ What We Verify

Mizan inspects the full chain that keeps a healthcare facility safe and operational:

- Electrical safety of patient-critical areas and biomedical equipment.
- Cleanroom performance of theatres, ICUs and isolation rooms.
- Emergency power, earthing and lightning-protection systems.

**From the first generator restart to the day the operating theatre is commissioned — every measurement traceable, every report defensible.**



#### WEBSITE

[www.mizanlab.com](http://www.mizanlab.com)  
[info@mizanlab.com](mailto:info@mizanlab.com)



#### ADDRESS

Al-Hamraa Street, C19  
Building 5



#### PHONE

+963 11 3337421  
+963 11 3323508

## Scope of Services

A structured testing programme covering the safety-critical systems of a hospital, executed on site by qualified engineers with calibrated instruments.

### Electrical Safety in Patient Areas

- Periodic and post-repair testing of medical equipment per IEC 62353, EN 50678 / EN 50699.
- Type-test verification to IEC 60601-1 and the IEC 60601-2 collateral standards.
- Inspection of medical-location installations per IEC 60364-7-710 (Group 1 / Group 2).
- NFPA 99 compliance review of distribution and risk categorisation.

### Cleanrooms, Theatres & HVAC

- Cleanroom classification and qualification to ISO 14644-1 and -2.
- Operational tests to ISO 14644-3: HEPA integrity, air-change rates, recovery, pressure cascades.
- Temperature, humidity, differential-pressure and air-velocity surveys.
- HVAC verification against ASHRAE 170 for healthcare ventilation.

### Emergency Power, Earthing & Lightning

- Generator load, transfer-time and run-up testing to NFPA 110.
- UPS performance and battery autonomy on life-safety circuits.
- Earth resistance, continuity and equipotential bonding in medical locations.
- Lightning-protection inspection to the IEC 62305 series.

## Technical Reports to IEC, EN, NFPA & ISO Standards

Every site visit is documented in a structured report that ties each measurement to the standard it verifies, identifies deviations and gives a clear corrective-action path before re-test.

### The technical reports issued by Mizan include the following:

- IEC 60601 / IEC 62353 medical-equipment electrical safety reports.
- EN 50678 / EN 50699 periodic and post-repair test records.
- NFPA 99 healthcare-facility electrical-systems compliance review.
- IEC 60364-7-710 medical-location installation verification.
- ISO 14644 cleanroom classification and operational-test reports.
- NFPA 110 emergency and standby power-system test report.
- IEC 62305 lightning-protection and earthing inspection report.



*Using Particle Counter for Cleanroom classification and operational-test*

**Restoring Syrian healthcare on a foundation of measurement, evidence and international standards.**



**WEBSITE**  
www.mizanlab.com  
info@mizanlab.com



**ADDRESS**  
Al-Hamraa Street, C19  
Building 5



**PHONE**  
+963 11 3337421  
+963 11 3323508