Corporate profile
Turnkey Laboratory Solutions

- Research Labs.
- Polymer & Petrochemical Labs.
- Nano Technology Labs.
- Quality Control Labs.
- Educational Labs.
- Industrial Labs.
- Clean Rooms
- Negative Pressure Rooms
- Animal Test Rooms
- Operating Theatre & ICU

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Introduction
Technolab Solutions is a leading Saudi Arabian Co. focusing on Laboratories with wide range of Products & Services through our Global Partners. We ensure a “single window” for you to communicate and follow up during the tenure of the entire Project. This saves you & your team precious hours that would otherwise have been spent in coordination and communication. Our core team of design professionals and associates believe in “Aesthetics that work”. In other words, our innovative design solutions meet the highest standards in terms of contemporary looks and functionality.

Our Vision
To be a preferred turnkey laboratory solution provider in Middle East.

Our Mission
Our mission is to provide quality products & services through innovative suggestions to meet consistently customer needs.

Our Values
With uncompromising integrity as our foundation we will inspire, engage, create & deliver.

Brand Strategy
“Quality with Precision” refers to provide quality service in specified time frame; our committed brand strategy fragrance will inspire the next generation and future societies. The “Brand Platform” states the intention that, we intends to be the catalyst for a changing society. As society changes, so do TS change..

Our Focus

**EDUCATIONAL**
- Universities
- Colleges
- Schools
- Research Institutes
- R & D Centers

**INDUSTRIAL**
- Petrochemical
- Refineries
- Pharmaceutical
- Desalination & Power Plants
- Mining & Chemical
- Cement & Steel
- Food & Beverage

**MEDICAL**
- Medical Centers
- Hospitals
- Forensic Labs.
- Medical Research Institutes
Our Products & Services
We are keen to ensure that our products and services not only meet but exceed our customer’s quality expectations. We are dedicated to create value for our customers by providing technologically advanced solutions and services, we take pride in giving total solutions to ensure customer satisfaction almost anywhere, anytime no matter how complex and intricate the requirements may be.

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**technolabsolutions...**

- Laboratory Design & Consultancy
- Material Testing Machines
- Laboratory Furniture
- Clean Rooms & Special Labs.
- Petroleum Testing Instruments
- Civil & Electromechanical work for Labs.
- Environmental Testing Instruments
- Sample Preparation Instruments
- General Lab. Instruments
- Safety & Measuring Instruments
- NDT Instruments
Turnkey Solutions

When planning a turn-key laboratory, it is always best to have one company in charge of the coordination. This increases efficiency and helps in attaining the desired outcome. TS is aware that dealing with one company smooths the progress of the project as a whole, and helps keep the client updated regularly. Under TS management, all vendors must meet the same high standards.

Delivering a turn-key laboratory means assisting the client from the first steps on and gives support for the entire process. TS offers only one partner, who is sole point of contact to handle all aspects related with planning of utilities, selection of laboratory elements, construction, planning, selection of suitable laboratory furniture, best possible analytical instrument, in balance with performance and price.

Accordingly TS Turn-key laboratory solutions are guided by our professionals with many years of experience in the field of Laboratories.
**Conceptual Design**
- Identifying needs of customer and designing a solution to meet standards.
- Type of Labs.
- Space Planning (L x W), Ceiling Height
- Dry & Partition Walls
- Site Measurements (Door & Window locations)
- Fixed connections
- Environmental Analysis

**Consultancy**
First of all the clients’ needs and wishes have to be defined and, concerning to an efficient aim realization, they have to finalize. Study of equipment & function of labs, maximizing the space and are or research, endorsing the current regulations.
- How many work benches needed?
- Which function shall the particular work bench fulfill?
- Storage requirement?
- Movable / fixed furniture?
- Which guidelines / world standards to be consider?
- Which budget is available?

**Planning & Realization**
Safety, accessibility and utilization are the most important factors to consider when developing a highly functional laboratory. Our lab planner or architect creates the safest and most functional layout for your facility.

TS with extensive experience will guide you through such critical issues as selecting the correct chemical fume hood, mechanical interface, safely storing and using chemicals, emergency considerations and safety equipment.

We work closely with Clients’ project architects, facilities engineers, lab managers and end users to develop a plan to meet everyone’s needs.

**Lab. Furniture Design**
1. Parameters of Labs. to be considered.
2. Objectives (Customer needs & wishes)
3. Work surface material selection & Work place plan
4. Required Equipment’s Locations & load calculation
5. Required Services locations (Different type of Gases, Air, Electric, water, Drain etc.)
6. 2D & 3D drawings for visualization (Plan Layouts & Elevations)

**Civil & Electromechanical Works**
1. Dismantling / Relocation
2. False Ceiling Work
3. Partition Work
4. Flooring
5. I.T. Infrastructure (Cabling)
6. Security (CCTV, Fire Alarms)
7. Electrical HV & LV works
8. Water & Drain Piping
9. Gas piping with pressure control
10. Thermostats & Humidifiers
11. Audio Visual Application
12. Artworks & Accessories

**Integration**
Once the Scope of Work is defined for no. of Labs., Laboratory Furniture, Civil & EM works etc. then the most important part is to integrate all these task by utilizing a variety of tools, skilled technicians, defined objectives and proper project management.

In this highly sensitive step of consolidation of all involved parties, a huge coordination is needed in order to ensure that the project ends smoothly. We at TS has vast experience in this field which helps us not only identifying critical situation but also finding solutions with our expertise.
Project Mobilization & Management
After signing the contract, there are multiple processes involved before & after the project takes off.
1. Converting the cost estimate as presented in the bid into a project budget, and setting up mechanisms for accountability & implementation of the budget.
2. Mobilization of resources (Capital & Labour)
3. Appointing project managers / project supervisors for managing the project.
4. Fulfilling procedural & contractual obligations during each phase of the project.
5. Setting milestones and leading against time of each phase.
6. Maintaining proper documentation to ensure quality & smooth workflow.

Execution, Installation & Commissioning
1. Clearing Lab. Furniture at sea port
2. Offloading at site & Storage
3. Distribution to the desired locations
4. Aligning the furniture & worktops
5. Connecting to the services
6. Pressure testing, voltage testing
7. Fume Hood Installation & Calibration
8. Balancing Airflow in each lab.
9. Cleaning
10. Handover procedures

Equipment Supply & Installation
The optimal selection of laboratory equipment and systems depends on the clients’ needs and on its budget. TS works together with leading and well-known manufacturers of laboratory equipment. After knowing the specifications & application of each instrument, TS will procure and arrange equipment’s in coordination with the client to supply the equipment which meets clients expectations.

In every case the efficient and effective clients’ solution is strived. TS will ensure Client to provide pre installation requirement for each instrument & commission of Each instrument by qualified service engineers.

Training & After Sales Support
Training is provided by experts in the field. The first training takes place after commissioning in the laboratory. Operators learn more when they are given “hands on” training on their own equipment.

A network of sales & service staff, we provide extensive customer support.

Why technolabsolutions...?
- We ensure a “single window” for you to communicate and follow up during the tenure of the entire Project. This saves you & your team precious hours that would otherwise have been spent in coordination and communication.
- No Scheduling Multiple Contractors for various Tasks of the Same Project.
- No Waiting for Multiple contractors to complete their portion of the project.
- When planning a turn-key laboratory, it is always best to have one company in charge of the coordination.
- TS offers only one partner, who is sole point of contact to handle all aspects related with planning of utilities, selection of laboratory elements, construction, planning, selection of suitable laboratory furniture, best possible analytical instrument, in balance with performance and price.
- Our turn-key laboratory solutions are guided by our professionals with many years of experience in the field of Laboratories Kingdom wide.
- Our network of Sales & Service staff will provide extensive customer support.
Laboratory Products

**Laboratory Equipment**

TS is one of the leading supplier representing many renowned manufacturers who are forefront of providing various state of the art equipment’s. We deliver and install all lab. Instruments which will be needed for a complete lab. Setup.

Our professional pre sales team is well equipped for assisting the clients in equipment selection and our post sales service Engineers are factory trained professionals who will take care of Installation & After Sales Support.

**Our Suppliers**

TS deeply aware of the strategic importance to have an international network of reliable and qualified suppliers. Therefore, with each of our manufacturers we establish a real partnership, to make sure that they all meet the necessary quality standards.

Fulfilling the specific needs of the client is our main goal: therefore from our suppliers we demand the highest technical competence, credibility, competitiveness, punctuality, flexibility and prompt reaction to any additional requirement.

The following instruments we can offer & provide after sales support;

**Material Testing Machines**
- Universal Testing Machines (EM, Hydraulic & Servo Hydraulic)
- Fatigue Testing Machine & Impact Testing Machine
- Durometers & Torque Testing Machines
- Hardness Testers (Rockwell, Vickers, Brinell) & Image analysis system
- Melt Flow Indexer (MFI) & Capillary Rheometer
- Differential Scanning Calorimeter (DSC) & Dynamic Mech. Analy (DMA)
- Handheld XRF, Thermo Gravimetric Analysers (TGA)
- Microscopes (Industrial, Inverted, Stereo, Vertical)
- Creep, Asphalt testing

**Analytical Instruments**
- Chromatography
  - IC, GC, GCMS, HPLC, LCMS
- Spectroscopy
  - UV-VIS, IR, FTIR, NIR, Raman, AAS, ICP, ICP-OES, ICP-MS, OES
  - Flame Photometry, Bio photometer, Double Beam Spectro.
- Elemental Analysers
  - Mercury, Carbon, Sodium, Sulphur Analyzers
- Multi Element Analysers (TOC, TN, XRD, XRF & NMR)
- Microwave Digestion / Extraction Workstation
- Thermal Analysis, Surface Analysis, Oil & Grease Content Inst.

**General Lab. Instruments**
- CO2 / O2 & Shaking Incubator, Lab. Refrigerators
- Hotplate, Magnetic Stirrer & vortex mixer
- Cryogenic Refrigerator, Liquid N2 Tank, Dewars, Cryogenerator
- Water purification systems, Glassware washer, Ice Maker
- Furnaces (Muffle, Preheating, Ashing, Tube, Chamber, Melting, Retort, High Temp., Vacuum, Brazing, Clean Room)
- Ovens, High Temp. Oven
- Water baths, Autoclaves, Freezers, Incubators, Centrifuges, Mills

**Petroleum Testing Equipment’s**
- Flash Point, Cloud & Pour Point Testing
- Density & Viscosity Measuring Instruments
- Distillation, Titration, Filtration, Carbon residue test
- Water in oil, TBN, TAN, Insoluble, Compatibility,
- Machinery condition testing through used oil
- Penetrometer, Colorimeter, Carl Fischer Titrator,
- Sediment, Salt in Crude oil tester, Melting point analyser
- Oil condition monitoring, Calorimeter, Oxidation stability

**Environmental Testing Equipment’s**
- pH, Conductivity / Ion Meters, Wet Chemistry Analysers
- O2, Humidity, Moisture, Temperature, & Liquid Analysis
- Chambers (Humidity, Plant Growth & Environmental)
- Air Quality Stations (O3, NO2, CO, CO2, NOx,SO2, H2S, VOC & NMHC)
- Particle Monitor (PM10, PM2.5, PM1, TSP),
- Wind speed, Direction, Weather Station, Solar Radiation, Noise meter
- Stack emission, Flue Gas, Dust Monitors

**Sample Preparation Equipment’s**
- Abrasive Cutters (Manual & Automatic)
- Precision Saw with Micrometre for sample positioning
- Mounting Press (Manual, Hydraulic & Pneumatic)
- Mounting compounds for SEM, EDS & Micro Probe analysis
- Grinders / Polishers
- Lab. Presses, Sieve Shakers, Jaw Crushers, Mortar Grinders
- Samplers, Dividers, Mixers

**Safety & Measuring Equipment’s**
- Biological Safety Cabinets Class II, A2 / B2, Laminar Flow Cabinets
- Fume Hood of Different Type & Different Size
- Precision & Analytical Balances, Industrial Balances,
- Storage Cabinets (Flammables, Corrosives, Toxics, Noxious, Pesticides)
- Emergency Shower, Eye wash & First Aid Equipment’s

**NDT (Non Destructive Testing Equipment’s)**
- Coating Thickness Gages on Metals, Non Metals & Powder
- Adhesion Tester, Wall Thickness of Corrosion tanks & pipes
- Concrete Test Hammers, Rebar Locating, pull off tester, Corrosion & permeability testing machine
- Ultrasound Measuring devices & Flaw detectors
- Portable XRF machines,
Special Labs. (From Concept to Completion)

TS specialized in providing close tolerance control temperature and humidity environmental rooms supplied to our clients as a turnkey system. Complete “single source responsibility” of all aspects of each room including the room structure, mechanical systems, and controls are provided for every project.

Life Science research, Drug Discovery, Pharmaceutical R & D, pilot plant production, or full biopharmaceutical manufacturing all require specific environmental rooms for product development, stability testing, and production.

At TS, we provide the following solutions:

**Clean Rooms (Customized solutions)**

We specialize in design, installation, commissioning and provide most effective, architectural, mechanical & control system for a complete clean room as turnkey solution.

Our project team are very experienced in design, installation, commissioning of clean controlled environment facilities for an enormous range of applications including; Aseptic processing, Medical device manufacturing, Biotech processing, Food manufacturing & Packaging, Nano-technology, Semiconductor Processing, Academic research & Aerospace engineering, to name but a few.

We are committed to provide best value through innovative design and skilled installation and all our systems are configured to meet all cleanliness classification.

**Negative Pressure Rooms (NPR)**

This room is to Prevent Cross Contamination, we create NPR by balancing the rooms Ventilation system so that more air is mechanically exhausted than is supplied.

All NPR will be air tight except the door with a small opening to pass air from corridor, For this purpose all areas will be sealed (windows, light fixtures & electric outlets).

We design & test to make sure that contaminated air should not escape from the Negative pressure rooms to other parts of the facility.

**Environmental Rooms (Temp. & Humidity controlled)**

These rooms are designed to control temperature and humidity levels at very close tolerance control levels based on the requirements of each specific application.

Many Environmental rooms are utilized for medical and biopharmaceutical research and development, with other applications requiring close tolerance control for human performance test labs, film testing and development, materials testing, and stability testing.

**Animal Test Room (Animal House)**

There are lot of parameters should be considered while preparing Animal Test Room. The main consideration is the welfare of the animals which implies;

- Adequate heating & Lighting
- Ventilation & Hygiene

Animals would be needed for breeding and holding stock for experiment. Additional Rooms will be required for equipment’s & experiment procedures (surgery, injections etc).

As a turnkey supplier, we design, construct and provide Electromechanical services, Supply of Equipment’s, Static, Modular & Vented Cages, Material handling carts, Large Small & Avian cages solutions.
Need of Labs...  
Think of Technolabs...  

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