



Build on our credentials





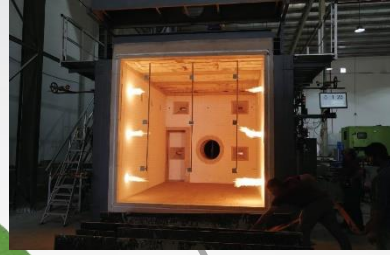
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Certification Firm



ACTS Geographical Reach



Dammam Fire Testing Lab – Established In 2019



Riyadh Branch & Main Lab Established In 2015



Al Khobar Branch & Main Lab Established In 2017



Tabuk Branch – January 2023

Tabuk –
NFOM- Red
Sea- Amaala

Riyadh

Dammam
AlKhobar

Jeddah

Makkah
Project



Jeddah Head Office & Main Lab Established In 2013

Accreditations



ISO 14001:2015

ISO 9001:2015



ISO 45001:2018



SASO



ISO 17020:2012



ISO 17025:2017

- **Approvals in KSA**

| Organization | Scope | Status |
|--|--------------------------------------|---------------|
| Royal Commission Of Jubail and Yanbu | General Approval | Approved |
| SABIC (Contractor) | General Approval | Approved |
| King Faisal University | General Approval | Approved |
| ARAMCO | Geotechnical Engineering Office | Approved |
| ARAMCO | Civil Testing Lab | Approved |
| Amana Jeddah | Soil And Materials | Approved |
| Amana Sharqiya | Soil - Pavement - Concrete | Approved |
| Amana Sharqiya | Geotechnical Investigation and study | Approved |
| Engineering Consultants Group | General Approval | Approved |
| BACS | General Approval | Approved |
| GACA (General Authority of Civil Aviation) | General Approval | Approved |
| Ma'aden | General Approval | Approved |
| BEC | General Approval | Approved |
| ANM Quality Management System | General Approval | Approved |
| PECSA | General Approval | Approved |
| Khatib & Alami (Ministry of Housing) | General Approval | Approved |
| MOT (Ministry of Transportation) | General Approval | Approved |



Some of ACTS Big Scale Projects

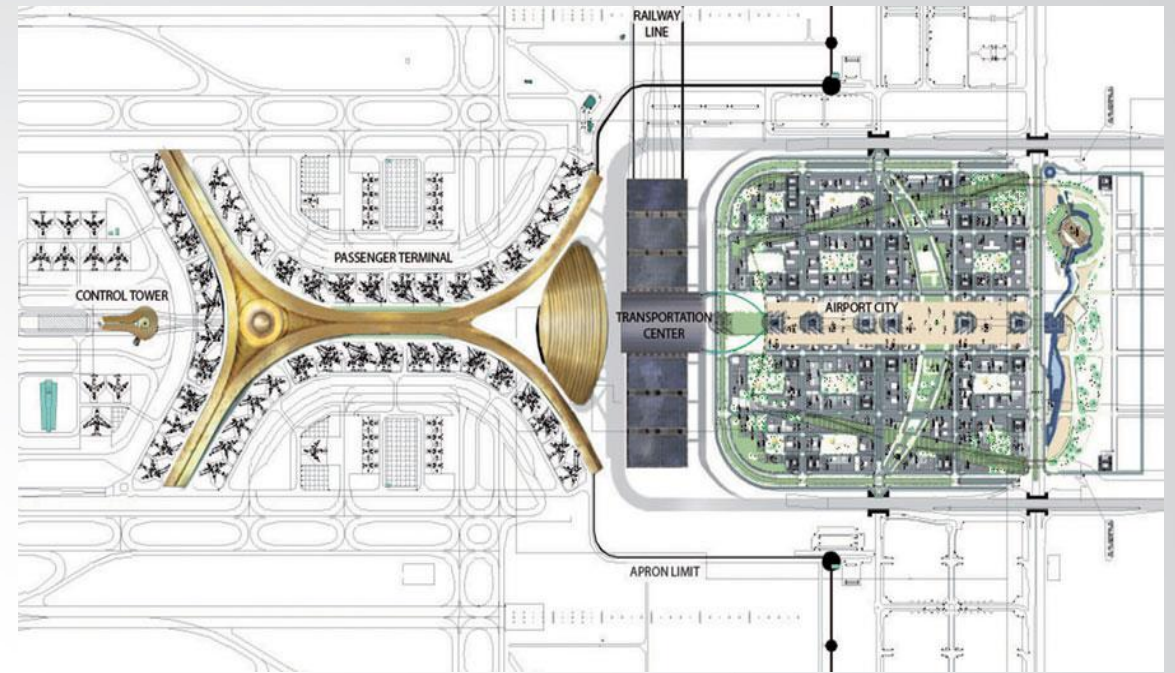
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King Abdul Aziz International Airport

Project Information

- > **300** Concrete QC Engineers & Technicians
- > **6,000,000** m³ of concrete tested
- Created a Technical Department to oversee the quality of the Services given
- Quality control pre- during and post casting of concrete



The Kingdom Tower Project

Project Highlights

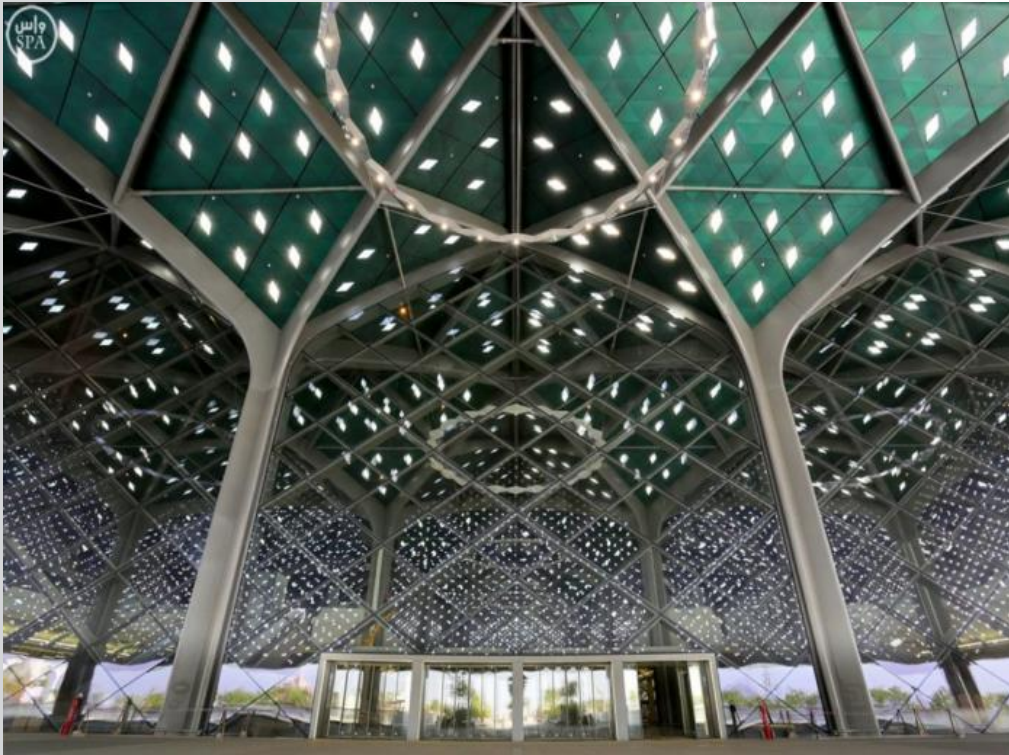
- Tallest Building in the World reaching a height of 1,006 meters
- **>800,000 m³** of concrete
- **>100,000 tons** of steel
- ACTS is deploying **>50 QC Technicians**
- Advanced Innovative Technologies used (First in KSA).



Haramain High-Speed Rail

Project Highlights

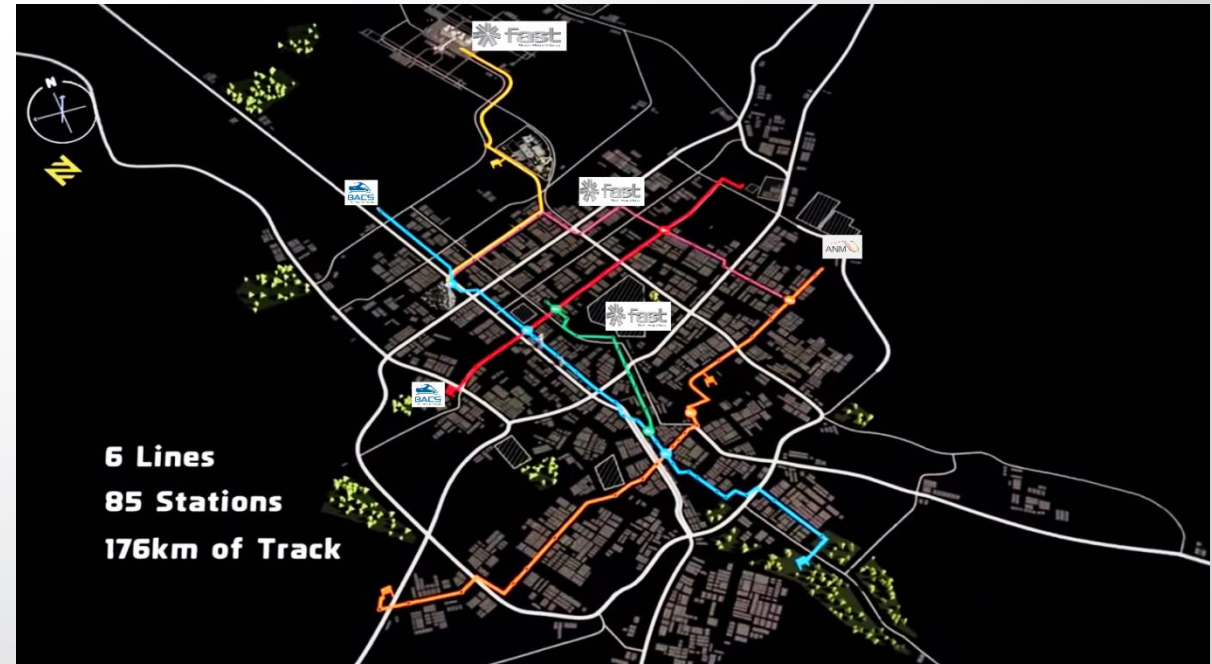
- Haramain High Speed Rail Project is a rail link that will connect Makkah and Madina via Jeddah
- ACTS deployed >30 QC Technicians



Riyadh Metro Project

Project Highlights

- Total of 6 Lines to construct all over Riyadh
- Deployed more than 150 QC Technicians for these projects
- Established 2 Fully Equipped Site Lab (Oruba and South Lab)
- Project Size is the whole city of Riyadh



Some of ACTS Projects -KSA



KAAR Project - Makah



Aramco Innovation Center



Jeddah Economic City

King Abdullah Financial District



Airport Maintenance Hangars



Some of ACTS Projects -KSA



AMAALA Project



Qidiyya Project



King Salman Park



Diriyah Gate Project



Diamond Tower

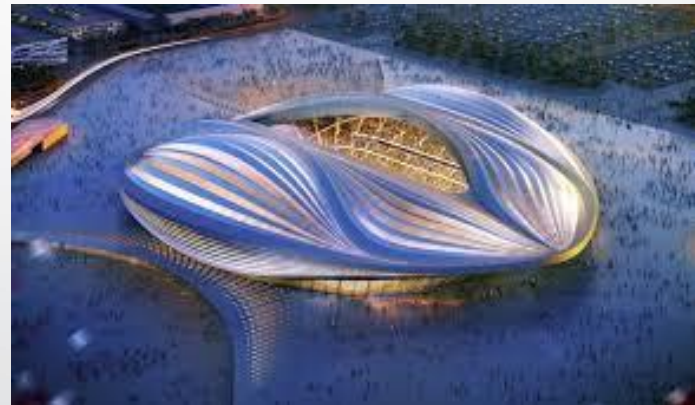
NEOM City

- ACTS involved in the following scope of work:
 - Geotechnical and geophysical investigations
 - Offshore investigations
 - Topography and Survey works



Some of ACTS Projects outside KSA

- Kuwait International Airport
- New Doha International Airport
- Doha Metro Project (Red, Green and Golden Lines)
- Qatar World cup stadiums
- Water Mega Reservoirs
- Dangote oil refinery in Nigeria
- Kigali Ring Road Corridor, RWANDA
- US embassy in Lebanon
- US embassy in Mozambique





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Materials Testing



**Concrete
Technology
Consultancy**



**Environmental
Testing**



**Underwater
Inspections and
Testing**



**Geotechnical
Engineering**



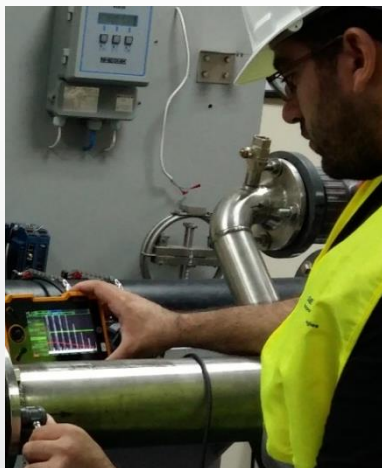
**Training,
Certification, and
Conferences**



**Durability and
Service Life
assessment**



**Structural Health
Monitoring
System**



**Metallurgy /
Welding Inspection
and Testing**



**Pavement and
Asphalt
Department**



**Construction Quality
and Technical
Inspections**



**Fire Resistance
Testing**



Fresh Concrete

Hardened Concrete

Soil & Rock

Aggregate Testing

Cementitious Material

Durability Testing

Steel Testing

Asphalt Testing

Elastomeric Materials





GEOTECHNICAL ENGINEERING

Services Offered

- Geotechnical Site Investigations
- Geotechnical Engineering
- Environmental Engineering, Monitoring & Apparatus
- Geophysical Surveys
- Foundation Inspection & Testing
- Pavement Survey & Assessment

Geotechnical Site Investigations

- Offshore & onshore drilling
- In-situ testing of rock and soil strata
- Laboratory testing of soil, rock and water
- Dewatering and pumping tests

Geotechnical Engineering

- Foundational analysis and design
- Shoring and retaining structures
- Anchoring and nailing systems
- Soil stabilization techniques
- Engineered fill and compaction
- Soil improvement

Environmental Engineering, Monitoring & Apparatus Installation

- Installing and monitoring environmental ground wells
- Air quality monitoring equipment
- Noise detection
- Environmental assessment and studies
- Landfills and waste disposal

Our proficient team of geotechnical engineers, geophysicists, and geologists are equipped with a solid knowhow in a wide range of subsurface conditions.





GEOTECHNICAL ENGINEERING

Advanced Software

- Plaxis 3D
- Plaxis 2D
- RS3

Shoring

- Wallap

Piling

- Shaft
- L-Pile
- Group

Slope Stability

- Slide2
- Dips

Foundation

- Settle3
- LiqIT

Data Management

- gINT

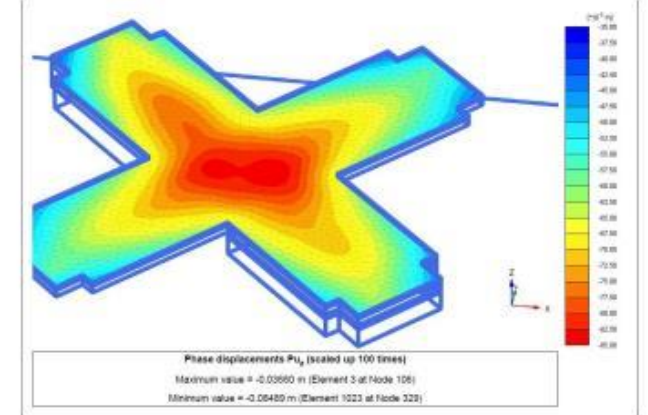
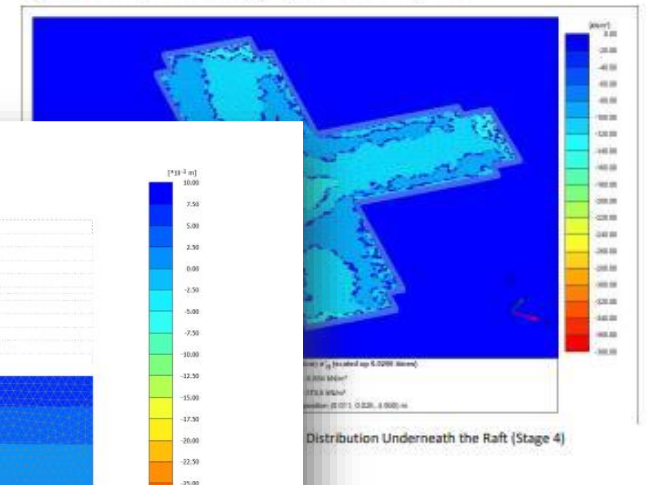
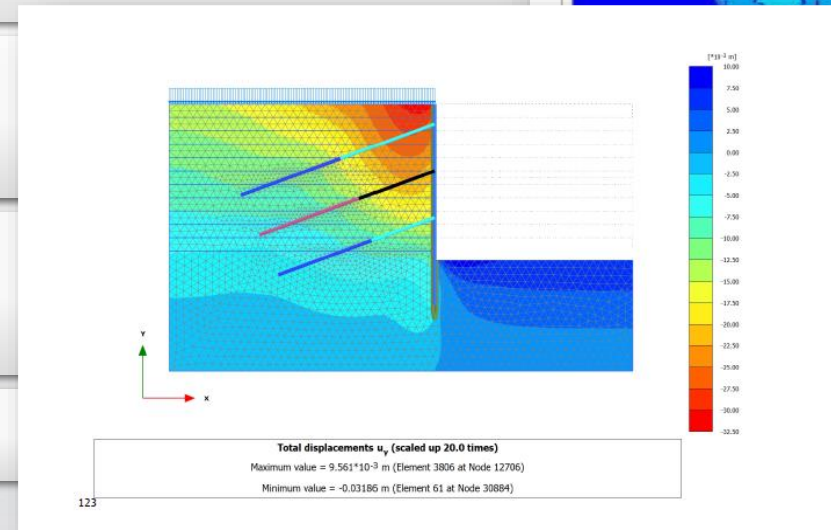


Figure 10: Phase displacements in Stage 4: Application of Building Loads





GEOTECHNICAL ENGINEERING

Geophysical Services

- Multi Channel Analysis of Surface Waves (MASW)
- Seismic Refraction / Refraction Tomography
- Seismic Reflection
- Refraction Microtremor
- Electrical Resistivity Imaging
- Microgravity
- Ground Penetrating Radar (GPR)
- Downhole/Crosshole Seismic
- Downhole Geophysics (Acoustic Televiwer, Natural Gamma, P-S Logging or Sonic Logging, etc.)

Foundation Inspection & Testing

- Pile inspection
- Pile Integrity Testing
- Crosshole Sonic Logging
- Dynamic load testing
- Caliper logging



Pavement Survey & Assessment

- Visual inspection and Non Destructive Testing
- Friction testing
- Static and Dynamic deflection measurements with our Heavy Weight Deflectometer (HWD)
- Determination of Pavement Classification Number (PCN) for ICAO certification
- Pavement management system design and implementation
- Ground penetrating radar (GPR) surveys
- Density measurements of pavements and base layers

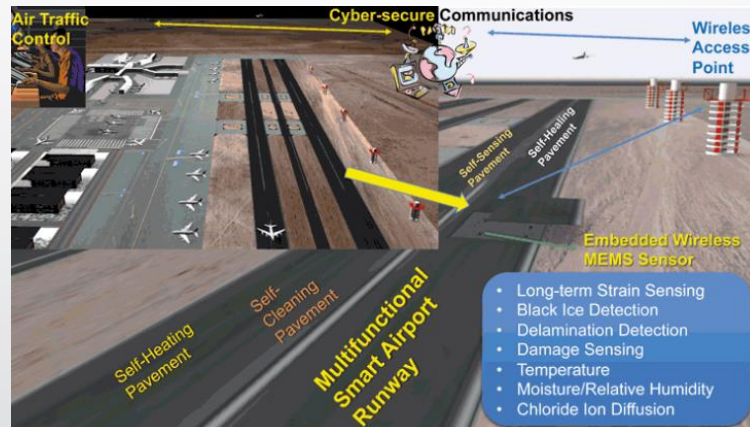
Heavy Pavement Survey

- In line with quality orientation, ACTS added as part of its consulting and engineering services HWD survey and analysis.

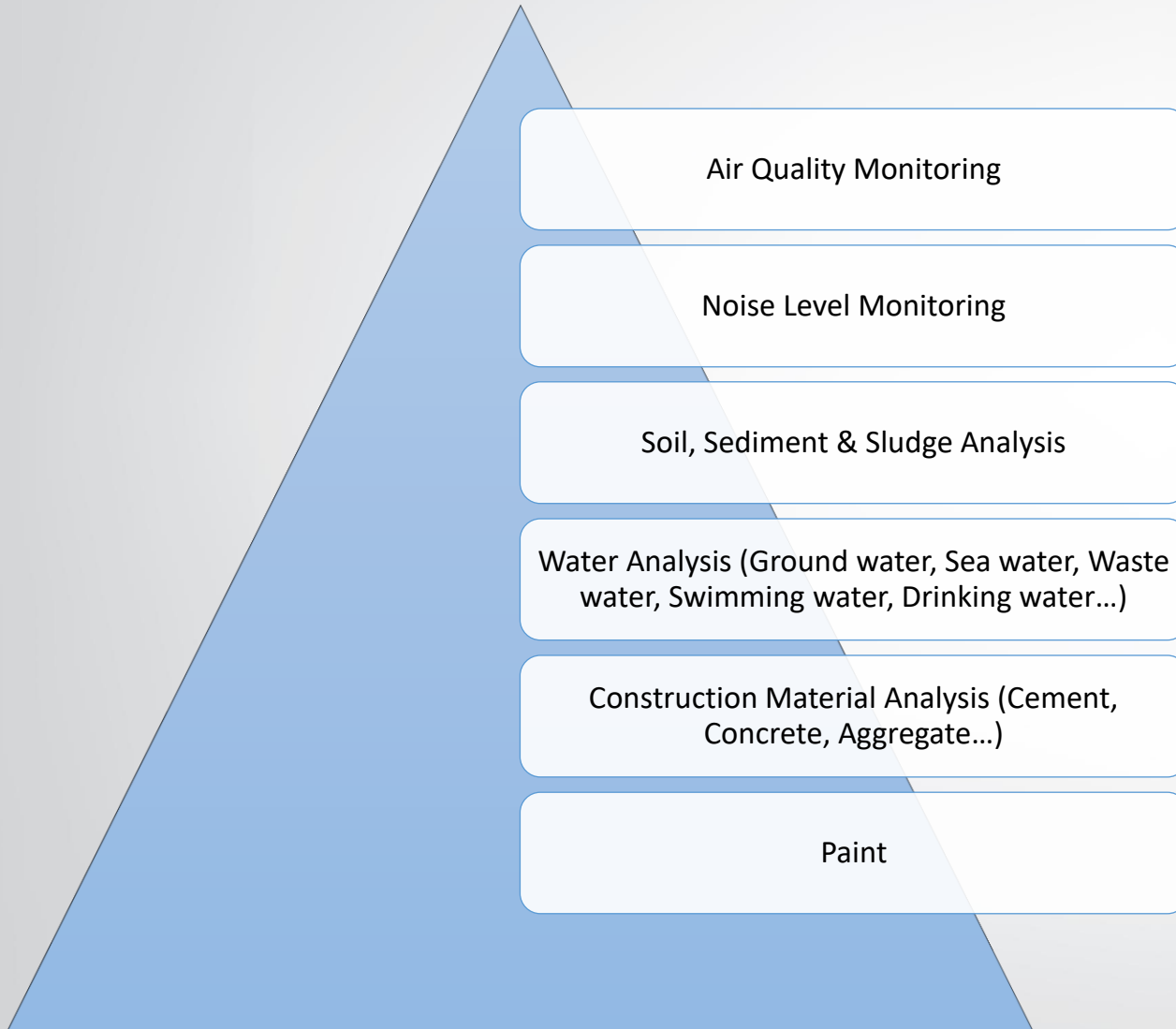


**ACTS Performs Smart Airfield
Pavement monitoring through
using a complete system of Micro-
electro-mechanical sensors and
Fiber optic sensor allowing live
monitoring
(Preventive Maintenance)**

Asphalt and Pavement Engineering



ACTS Environmental Analytical Services:



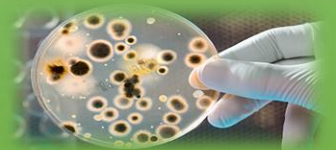
Types of Analysis



Physical



**Chemical
(Organic,
Inorganic)**



Microbiological



**Concrete
Production
Consultancy &
Materials
Development**



**Concrete
Consultancy
During
Construction**



**Concrete
Quality
Control**



**Third Party
Quality
Assurance
Inspections**



**Concrete Non-
Destructive
Testing &
Evaluation**



**Durability and
Service Life
assessment**



**Underwater
Inspections and
Testing for
Concrete
Structures**





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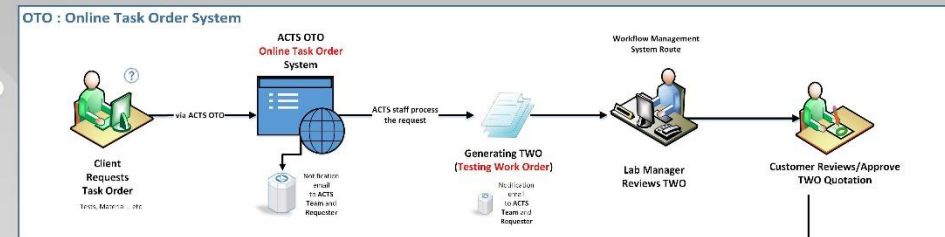


ACTS Digital Laboratory Systems

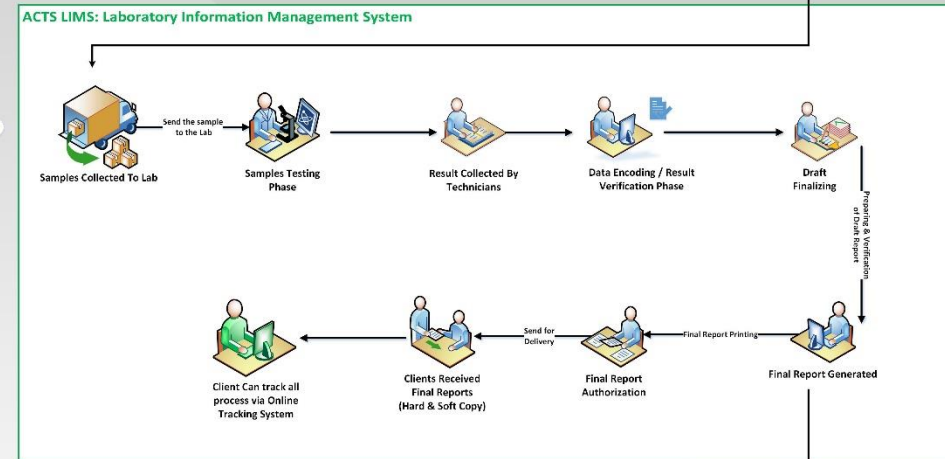
ACTS Lab systems allow effective and real time management of the flow of samples and associated data to improve lab efficiency and guarantee integrity

ACTS Digital Lab Systems

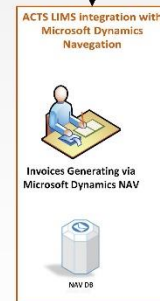
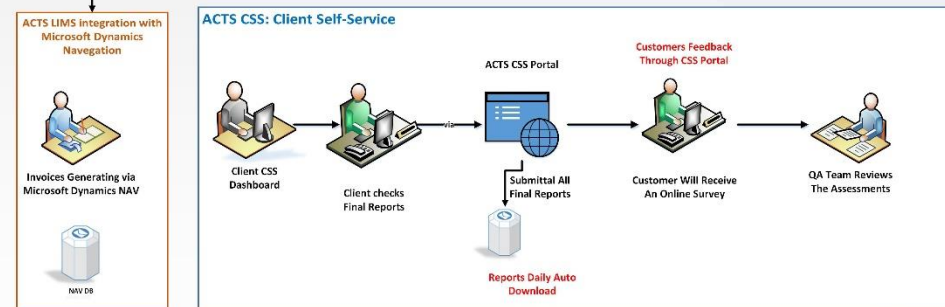
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LIMS



CSS





Pouring Operations System

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Concrete Pouring Operations Features

| Ticket No | Truck No | Departure | Arriavel | The Difference | Assign to | Status | |
|--------------------|----------|-----------|----------|----------------|-----------|--------|--|
| Premco Hamdaniyah | 532174 | 124 | 21:50 | 22:52 | 1:02 | QC1 | |
| Premco Hamdaniyah | 532176 | 136 | 22:10 | 23:12 | 1:02 | QC2 | |
| Premco Kaia | 908222 | 172 | 22:10 | 22:46 | 0:36 | QC2 | |
| Premco Kaia 9 / 10 | 898781 | 56 | 22:10 | 23:33 | 1:23 | QC3 | |
| Premco Kaia | 902118 | 175 | 22:13 | 23:10 | 0:57 | QC2 | |
| Premco Kaia 9 / 10 | 908223 | 79 | 22:20 | 23:01 | 0:41 | QC1 | |
| Premco Hamdaniyah | 532177 | 161 | 22:26 | 11:33 | -10:-53 | QC2 | |
| Premco Kaia | 908224 | 41 | 22:28 | 23:16 | 0:48 | QC2 | |
| Premco Kaia 9 / 10 | 898782 | 104 | 22:33 | 23:31 | 0:58 | QC3 | |
| Premco Kaia | 902119 | 132 | 22:36 | 23:29 | 0:53 | QC3 | |
| Premco Kaia | 896929 | 22 | 22:36 | 23:28 | 0:52 | QC2 | |
| Premco Hamdaniyah | 532178 | 122 | 22:39 | 23:29 | 0:50 | QC1 | |
| Premco Kaia 9 / 10 | 900770 | 68 | 22:40 | 23:48 | 1:08 | QC3 | |
| Premco Kaia | 908225 | 72 | 22:44 | 23:27 | 0:43 | QC1 | |
| Premco Kaia 9 / 10 | 898783 | 67 | 22:47 | 23:37 | 0:50 | QC2 | |
| Premco Hamdaniyah | 532179 | 142 | 22:50 | 23:50 | 1:00 | QC3 | |
| Premco Kaia | 908226 | 52 | 22:51 | 23:35 | 0:44 | QC2 | |
| Premco Kaia | 902120 | 169 | 22:53 | 23:40 | 0:47 | QC1 | |
| Premco Kaia | 908227 | 42 | 22:58 | 23:54 | 0:56 | QC3 | |
| Premco Hamdaniyah | 532180 | 121 | 23:02 | 0:03 | 1:01 | QC2 | |
| Premco Kaia | 902121 | 84 | 23:06 | 23:57 | 0:51 | QC1 | |
| Premco Kaia 9 / 10 | 900771 | 33 | 23:08 | 23:52 | 0:44 | QC3 | |
| Premco Kaia 9 / 10 | 900771 | 75 | 23:11 | 0:01 | 0:50 | QC2 | |
| Premco Kaia | 908228 | 21 | 23:11 | 23:55 | 24:44:00 | QC1 | |
| Premco Hamdaniyah | 532181 | 137 | 23:14 | 0:04 | 0:50 | QC2 | |
| Premco Kaia | 896930 | 127 | 23:17 | 0:11 | 0:54 | QC3 | |
| Premco Kaia 9 / 10 | 900772 | 118 | 23:20 | 0:12 | 0:52 | QC1 | |

Tracking System for Truck from Batch Plant to Kingdom Tower Project



Premco Hamdaniyah

| Total | In the way | Arrived |
|-------|------------|---------|
| 119 | 0 | 119 |



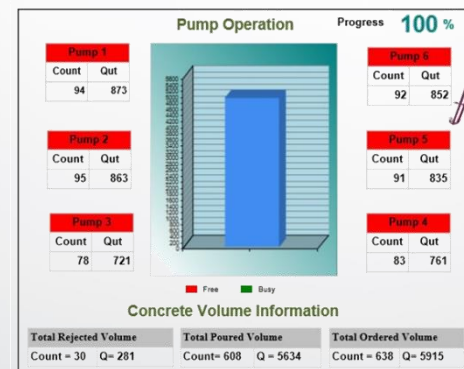
Premco KAIA 9/10

| Total | In the way | Arrived |
|-------|------------|---------|
| 186 | 0 | 186 |



Premco KAIA

| Total | In the way | Arrived |
|-------|------------|---------|
| 324 | 0 | 324 |



Thank You

Advanced Construction Technology Services (ACTS)

www.acts-int.com

Lebanon - Qatar - KSA – UAE – Oman – Kuwait – India - Africa

