

Holds B. Sc., M. Sc. and PhD in Mechanical Engineering and has over 10 years of extensive experience in the design of mechanical systems and installations using international and national codes, for major projects covering administration buildings, high rise buildings, airports, tourist resorts, hotels, commercial malls, healthcare facilities and others. Excellent knowledge of ASHRAE, SMACNA, NFPA and Modern Plumbing standards.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 31/08/1981
Gender : Male
Marital Status : Married
Residence : Benha

EDUCATION

: B. Sc. in Mechanical Engineering, Ain Shams University, 2003
: M. Sc. in Mechanical Engineering, 2011
: PhD in Mechanical Engineering, 2014

LANGUAGES

Arabic : Native Language
English : Excellent
French : Fair

COMPUTER SKILLS

: Windows, MS Office, Internet

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jan. 2014 till now
Employer : DAR EL-HANDASA
Job title : Senior Mechanical Engineer
Job Description : Participated in carrying out design safety reviews as well as reviewing, coordinating and approving mechanical shop drawing and material submittals for the following projects:

- King Abdullah Bin Abdel Aziz Extension for the Holy Haram, Saudi Arabia: Supervision of construction for an extension to the Makkah Holy Haram to accommodate additional 800,000 worshipers, comprising a new building of 4 praying levels with a capacity of 300,000 worshipers, connected at its ground, first and roof floors to the First Saudi Extension

of Makkah Haram, and includes a basement level for electromechanical services; state-of-the-art technology in natural and artificial climate and lighting controls; security, crowd management, and sound distribution and control systems; structural health monitoring sensors; cleaning equipments; interactive signage; and high end interior finishing works. The project provides internal courtyards covered with 12 operable skylights, 6 fixed ones, 4 fixed domes of 18 m diameter each, and one 36 m diameter sliding dome above the 24 m wide and 26 m high ceremonial spine connecting the north and south piazzas through a 59 m wide main gate at the north end flanked by 2 new minarets (135 m high each) on its left and right sides and a 30 m wide gate at the south end. The project also comprises 194,000 m² external praying piazzas accommodating 314,000 worshipers with 2,500 toilet cubicles and 850 ablution points beneath them; a service building of 6 overlapped radial steps accommodating 8,750 toilets, 5,370 ablution points, 2 helipads, service and solid waste management facilities, authorities' offices and a 110,000 m² praying area at its roof level for 165,000 worshipers; several bridges (total of 42,750 m²) linking the new building to the service building and to the existing Holy Haram; a service road below the external piazzas and dedicated service culverts carrying all infrastructure utility networks.

- King Abdul Aziz International Airport, Saudi Arabia: Project management, design review (according to LEED requirements), construction management and supervision for a new airport based on a new phased master plan up to the year 2035 (Phase 1 up to 2012), comprising a new passenger terminal complex (670,000 m²) with a capacity of 30 million passengers per annum to replace the existing North and South Terminals; facility design to cater for both domestic and international operations, A380 aircrafts and full hub capability with latest systems and equipment; integrated provision for a planned railway station and an automated passenger mover (APM); airfield upgrading, new parallel taxiways, control tower and related systems; state-of-the-art navigation aid and communication installations, FIDS, departure control, life safety aspects and public address systems; Baggage Handling System (BHS), support buildings and facilities, complete landscaping, major utility networks, new landside roads and interchanges; program coordination for related projects, including fuel tank farm, desalination plant, upgrading of existing terminals, sewage treatment plant; and planning and infrastructure for a major landside commercial zone, complementing the main development. Tasks also included noise and air quality modelling.

Dates : From Jan. 2012 till Dec. 2013
Employer : DIYAR SAUDIA CONSULTANTS
Job title : Senior Mechanical Engineer

Dates : From Jan. 2008 till Dec. 2011
Employer : DELTA CONSULTANT (Saudi Arabian Consultant Firm)
Job title : Senior Mechanical Engineer

Dates : From Dec. 2006 till Jan. 2008
Employer : Zuhair Fayez Partnership (Cairo Branch)
Job title : Project HVAC Engineer
Job Description : HVAC design.

Dates : From May 2006 till Nov. 2006
Employer : Al Kifah Holding Co. – KSA
Job Description : Project Mechanical Engineer

Dates : From Apr. 2004 till May 2006
Employer : Egyptian Consulting House (ECH)
Job title : Mechanical Engineer

Accomplished Projects:

- Medical Projects:
 - King Faisal Specialist Hospital and Research Center – Jeddah.
 - A.C.C. Building, Rehab and Diabetics Building - King Abdul-Aziz Medical City.
 - Pathology and Medical Laboratories, Riyadh.
 - Rehabilitation, Diabetics and Laboratories, Riyadh.
 - Faculty of Medical Science for King Khaled University Campus – Abha.
 - Faculty of Dentistry for King Faysel University Campus – Alkhuber.
 - Applied Health Collages for King Khaled University Campus.
- Hotels & Malls:
 - Millennium Hotel, Riyadh – KSA.
 - Holyday Inn Hotel, Aljubail – KSA.
 - Holyday Inn Mall, Aljubail – KSA.
 - Holyday Inn Hyper, Aljubail – KSA.
 - Riyadh Hotel, KSA.
 - Al Takaood Hotel, Riyadh.
 - Meridien Hotel (Upgrade the existing Building), KSA.
 - Khamis Mashyt Mall.
 - Nagran Mall.
 - Hafr Al Baten Mall.
 - Hotel No (175) – Madina.
 - Hotel No (5041) – Madina.
 - Hotel No (163) – Madina.
 - Hotel No (148) – Madina.
 - El-Safwa Towers – Makka.
 - Ukiah Tower – Dammam.
 - Al-Mosa Tower – Dammam.
 - Alkifah Malls – Dammam.
- Universities:
 - Technical Office (King Abdulaziz City for Science & Technology).
 - Saudi Civil Aviation Academy, KSA.
 - King Fahd University, Agriculture Collage.
 - Technical Institute of Girls, KSA.
 - Al-Emam University School for Boys, Girls and Kinder with Complex Buildings.

- Saudi Aviation Technology College.
- Al Jouf University (Faculty of (Preparation Year - Sciences - Computer Society)).
- Al Jouf University (Faculty of Law & Faculty of Science).
- Al Jouf University (Residential & Administration Building).
- Faculty of Dentistry for King Khaled University Campus – Abha.
- Faculty of Education for King Khaled University Campus – Abha.
- Faculty of Science for King Khaled University Campus – Abha.
- Faculty of Engineering for King Khaled University Campus – Abha.
- Faculty of Education for King Faysel University Campus – Alkhuber.
- Faculty of Computer Girls for Qassim University.
- Faculty of Computer Boys Qassim University.
- Faculty of Arabic and Elshariaa Qassim University.
- English Language Center – Female for King Khaled University Campus – Abha.
- Administration & Residential Buildings:
 - Communications & Information Technology Commission – Head Quarters Building.
 - Arab National Bank - Alkhuber & Jiddah.
 - Buildings for Ministry of Defense.
 - Hyundai (New Cairo) Down Town, Egypt.
 - Al Kady Villa.& Al Nafisa Villa, KSA.
 - Al Swillam Residence, KSA.
 - Almosa Office Building, Riyadh.
 - Different types of Villas (Al-Eissa, Al-Sadoon, Ojan, Al-Kady, Al-Ankary).
 - Sadoon Mosque.
 - Union Air Factory – Egypt.
 - International Egyptian Company for Cars (Renault) – Egypt.

General Responsibilities:

- Planning & budgeting.
- Scheduling of material and shop drawings approval and material procurement and delivery.
- Progress monitoring.
- Weekly and monthly progress reports.
- Daily work programs.
- Time sheets, cost and labors productivity control.
- Coordination with other services.
- Technical evaluation of suppliers' offers.
- Preparation & submission of material and shop drawings approval requests, obtaining formal approvals and ordering the approved material.
- Quality Control.
- Liaising with consultant and client.
- Project monthly payments and payment certificates for subcontracted work.
- Testing and commissioning.
- Preparation of as built drawings.
- Operation and maintenance during liability period.

Summary:

- Extensive experience in the design of mechanical systems and installations using international and national codes, for major projects covering administration buildings, high rise buildings, airports, tourist resorts, hotels, commercial malls, healthcare facilities and others. Excellent knowledge of ASHRAE, SMACNA, NFPA and Modern Plumbing standards.
- Well versed in the preparation of technical specifications and tender evaluation reports, review of shop drawings and technical submittals, making design decisions and recommendations coordinated with project requirements, resolving technical issues through technical and coordination meetings, providing solutions to difficult problems involving unusual technical complexity, providing guidance to other designers and technicians.
- Expertise has been acquired in HVAC load estimation using advanced airconditioning programmes (Carrier E-20 HAP, Duct Link, Pipe Design, etc.); design of various types of air-conditioning systems (chilled water, DX Package, VAV, Terminal Units, etc.); preparing primary cost estimates and running costs for all different systems; use of HVAC and ventilation equipment selection programmes; preparing requests for quotations for equipment and materials, and sending to selected suppliers; reviewing contracts' scope of works and specifications; preparing flow diagrams and layouts; preparing equipment/material approval requests and follow-up on approvals; updating mechanical design and construction drawings; project planning and budgeting; scheduling material and shop drawing approvals, and material procurement and delivery; progress monitoring; preparing weekly and monthly progress reports, and daily work programmes; cost and labour productivity control; technical coordination with other services; technical evaluation of suppliers' offers; quality control of executed works; liaison with Client and other project parties; preparing monthly payments and payment certificates for subcontracted works; handling testing, commissioning, operation and maintenance activities; preparing as-built drawings; etc.
- Experience in Mechanical systems, in the estimation / design / supervision field:
 - HVAC load estimation using advanced air conditioning programs (carrier e-20 HAP, duct link, pipe design etc.).
 - Designer of all air conditioning systems (chilled water system, Dx package system, VAV system, terminal units.....).
 - Prepare primary cost estimation and running cost for all different systems.
 - Using all HVAC and ventilation equipments selection programs.
 - Good selector from companies' manuals and submittal.
 - Good ex. preparing specification & bill of quantity.
 - Preparation of requests for quotations for equipment and materials and sending to selected suppliers.
 - Review contract scope of work and specifications.
 - Preparation of flow diagrams and layouts.
 - Preparation of equipment / material approval requests and follow up on approvals.
 - Update all design and construction drawings related to HVAC systems and follow up on approvals (for commercial, residential &

- industrial building).
- Excellent knowledge of ASHRAE, SMACNA, NFPA and Modern Plumbing standards.