# 107249-MEC-1468Dq-E-2000

## Mechanical Section Head

Holds a B. Sc. in Mechanical Power Engineering and has about 20 years experience in Planning and Design of Water & Wastewater Plants, Treatment Plants, Pumping Stations and Potable Water Networks. Preparation of Hydraulic Hammer Analysis and Design of Force Mains for many projects in Egypt & Gulf Countries. Has extensive experience in software applications such as Water CAD, Bentley Water Hammer, Arc GIS Water Gems & AutoCAD. Extensive knowledge in Codes and Standards; NFPA, ASTM, AWWA, HI, BS, ASHRE, ASMI, ISO.

### PERSONAL DATA

Nationality : Egyptian Gender : Female

### **EDUCATION**

B. Sc. in Mechanical Power Engineering, Ain Shams University, 2000

### **LANGUAGES**

Arabic : Native Language

English : Very Good

# **COMPUTER SKILLS**

: Windows, MS Office (Word, Excel, Power Point), Internet

: Visio

: MS Project: AutoCAD

: Bentley HAMMER and WATERCAD

# TRAINING COURSES AND CERTIFICATIONS

: Project Planning and Schedule.

: Resource management.

: BIM Diploma (2017).

: Primavera 6.3 (2015).

Technical Writing Report Course in 2013.

: Water & Gas Fire Fighting Systems Course (2011).

: Bentley HAMMER V8i and WATERCAD V8i Training Course (2007).

: Training in Enviro Civic Consulting Engineering in 1999-2000.

: Training in Egypt Airlines in Cairo Airport in 1998.

: Training in Delta Iron and Cast Iron Industries in 1997.

### CHRONOLOGICAL EXPERIENCE RECORD

Dates : From May 2018 till now

Employer : <u>EGYPTROL</u>

Projects : • Process systems "P&ID and hydraulic calculation" for MANTRAC - CHP

biogas genset 10MW Alexandria

Process systems "P&ID and hydraulic calculation" for MANTRAC -

14.5MW genset, Lagos - Nigeria

• GE substation 400KV SS at Tobrouk - Libya

• EPC gas compression plant at Badr petroleum site "oil & gas site"

GE power substation at Karbala pre-tender

Job title : Mechanical Section Head

Dates : From 2011 till May 2018

**Employer** : K & A Consultants (Khatib & Alami) – Egypt

Projects : • Qatar North Area as part of Public Work Authority (PWA)'s General Engineering Consultancy (GEC), for Local Roads and Drainage Projects

- Contract 2 which includes the following projects:

QN001: Roads and Infrastructures in Al-Shamal.

- QN021: Development of Roads & Infrastructure in Ain Snan Village.

- QN066: Development of Roads & Infrastructures in Al Khor.

- QN070: Development of Roads & Infrastructures in Al Leighwairya Village & Access Road.

 QN075: Development of Roads & Infrastructures in Madient Al Kabaan.

 QN077: Development of Roads & Infrastructures in Al Nasrinya Village and Access Road.

 Description: Design of Foul Sewage Pump Stations, Treated Sewage Effluent Pump Stations, Surface Water Pump Stations and their Attenuation Tanks.

#### KSA:

- Tathlith Wells Water treatment Plant (WTP of average capacity = 100,000 m³/day using RO System and Pressurized Sand Filters).
- Targes Dam Water Treatment Plant (WTP of average capacity = 80,000 m³/day using ACTI-Flow System and Carbon Filter).
- TANDAHA Dam Water Treatment Plant (WTP of average capacity of = 40,000 m3/day with Floating Intake and using Flocculation Unit).
- Qahma, Birk, Bark & (Zahban-Asser) Government Waste Water Treatment Plants (WWTP of average capacity = 10,000 m3/day for each using Extended Aeration and Pressurized Sand Filter).
- ISKAN Projects Infrastructures for Different Areas Wet Utilities (WWTP for small capacity with MBR System and All Wet Utilities Pump Stations).
- Design of Pump and Lift Stations for (Taief, Asser, Tabook, Madina Monawra, Qassim, Burida, Hail, Jazan, Riyadh, Abha and Makkah):
  - Multi types of Water and Sewage Pump Stations (Wet-Dry / Wet Installation) with capacities ranges (50 l/s - 2000 l/s). In

- addition; Site Layout Arrangement Design.
- Rehabilitation of pump and lift stations for Potable Water, Storm Water and Waste Water.
- Wells Pump Stations for more than 40 wells.
- Design of Elevated Tanks & Ground Reservoirs:
  - Concrete Elevated Tanks with volumes range (100 m3 1000 m3).
  - Concrete Ground Reservoirs with volumes range (100 m3 -125,000 m3).
  - Steel Ground Reservoirs with volumes range (5000 m3 200,000 m3).
  - Pre-stressed.
- Mechanical Technical Review for Al Madina Al Monwara Sewage Treatment Plant & Tabook Sewage Treatment Plant:
  - Al Madina Al Monwara Sewage Treatment Plant with capacity = 200,000 m3/day.
  - Tabook Sewage Treatment Plant with capacity = 90,000 m3/day.

#### Iraq:

- Baqouba Waste Water Treatment Plants Phase II (WWTP of average capacity = 32,000 m3/day using Extended Aeration Type).
- Nine Varieties Pump & Lift Stations (Water and Sewage Pump Stations).
- Dubai UAE: Dubai Land (Irrigation Pump Stations with capacities 500,000 m3/day & 320,000 m3/day).
- Oman: Quiryyat Water Pump Station (Water Pump Station with capacity = 3000 l/s).

Job title

Mechanical Design Manager

**Job Description** 

- Prepare Design Criteria, Methodology and Work Plan Report.
- Prepare the Concept, Preliminary and Detail Mechanical Design Reports, Mechanical Drawings, Calculations, Specs and bill of Quantities and Surge Analysis Reports.

Dates

From 2000 till 2011

**Employer** 

Great Cairo Water Company – Egypt

**Projects** 

- El Maadi Treatment Plant (Water Distribution for New Pump Stations in El Maadi Treatment Plant with its Two (2) Phases with capacity = 200,000 m3/day)
- Al Fostat Treatment Plant (Water Distribution for the New Stage in Al Fostat Treatment Plant with capacity 200,000 m3/day)
- Al Fostat Pump Station & Ain El Sera Boosters (Mechanical Studies for the existing situation of the Pump Stations, Booster & Elevated Tanks to increase their efficiency)
- Potable Water Network and Raw Water Network for Sarayat El Maadi (Design of New Networks)
- Transmission Pipe Line for the North West of Swiss Gulf Zone (Create the Hydraulic Model)
- Potable Water Master Plan Network for Cairo (Create the Hydraulic Model)

Job title

: Hydraulic Analysis Engineer - General Master Plan Department

Job Description

- Complete design of Potable Water & Raw Water Networks along with Mechanical Design for Pump Stations, Tanks & Reservoirs.
- Create Hydraulic models using Water CAD, Water Hammer.
- Evaluate Existing Potable Water & Raw Water Networks.
- Prepare complete studies for upgrading the Existing Treatment Plants with a Detailed Mechanical Design for each element.
- Review design and proposals receiving from any other consultants.

Dates : From 2010 till 2011 (part time)

**Employer** : Senior Consulting Engineering – Egypt

Projects : • Nubaria Treatment Plant upgrading (WWTP of average capacity =

1,000,000 m3/day)

 El-Suof & Mahmodia pump stations (Mechanical Design of the Pump Stations)

 Al-Arish Swage Pump Station & Gardaha Pump Station for Irrigation (Mechanical Design of the Pump Stations)

Job title : Senior Mechanical Engineer

**Job Description**: Prepare Mechanical Drawings, Calculations, Specs and bill of Quantities.

Dates : From 2009 till 2010 (part time)

**Employer** : AL DAR Consulting Engineering – Egypt

Projects : • Al Obour Water Treatment Plant (Mechanical Design of each element in

the treatment plant)

Telbana & Engak Waste Water Treatment Plant (WWTP of average
Telbana & Engak Waste Water Treatment Plant (WWTP of average)

capacity = 500,000 m3/day)

• El Tawteen Sewage Pump Station (Mechanical Design of the Pump

Station and Hammer Study)

New Sohag Sewage Pump Station (Mechanical Design of the Pump

Station and Hammer Study)

Job title : Senior Mechanical Engineer

**Job Description**: Prepare Mechanical Drawings, Calculations, Specs and bill of Quantities.

#### Field of experience:

- Preparation of Detailed Mechanical Design of Water, Sewerage, Drainage, Irrigation, Combined Pump Stations and Lift Stations with Good Value Engineering.
- Working as Specialist in Surge Analysis & Water Hammer Studies for Water Networks.
- Preparation of Mechanical Design for Reservoirs, Elevated Tanks, Steel Tanks and Pre-stressed Tanks.
- Preparation of Control Philosophy and P&ID (Process and Instrumentation Diagram) for each Mechanical Design.
- Preparation of Detailed Mechanical Design for Waste Water Treatment Plant, Water Treatment Plant (MBR, Extended aeration, MBBR & MABR).
- Preparation of Tender Documents including Mechanical Specifications and Bills of Quantities in both Arabic and English.
- Preparation of Detailed Design Reports, Work Plan, and Time Schedules.
- Review Mechanical Submittals for projects under Design Stage and

under Construction Stage.

- Relevant Skills:
  - Preparation of Mechanical & Hydraulic Detailed Design & Review.
  - Value engineering reports.
  - Resources Management.
  - Project Coordination.
  - Effective Communication.
  - Quality Assurance.
  - Cost Control.
  - Time Control.
  - Project Reporting.
  - Encourage and Develop Junior Engineers.
  - Promote a Culture of Collaborative Working within the Design Team.