

Holds a B. Sc. in Civil Engineering and has over 16 years experience working in all piping aspects from piping design to stress analysis.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 20/03/1988
Gender : Male
Residence : Heliopolis, Cairo

EDUCATION

: B. Sc. in Civil Engineering, Benha University, 2009
: Professional Engineer, Alberta – Canada, 2023

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet
: Caesar II (static, dynamic and seismic analysis of piping systems)
: CADWorx
: AutoCAD Plant 3D
: Codeware Compress
: PV Elite
: Smart 3D
: Spoolgen
: Smart Plant Review
: NavisWorks
: PDS

TRAINING COURSES AND CERTIFICATIONS

: Fundamentals of Engineering, AUC (American University in Cairo) (Oct. 2012).
: ASME B31.1 at the American University in Cairo.
: ASME B31.3 at the American University in Cairo.

- : ASME B&PV Section IX WELDING AND BRAZING at America University in Cairo.
- : ASME SECTION VIII DIVISION 1 DESIGN AND FABRICATION FOR PRESSURE VESSELS at America University in Cairo.
- : CAESAR II Fundamentals, CAESAR II Statics One, CAESAR II Statics Two and Dynamics I via Hexagon PPM (www.pipingdesignonline.com).
- : AutoPIPE Quick Start, Intermediate Modeling and Analysis and Advanced Modeling and Analysis via Bently (www.learn.bently.com).
- : AutoCAD P&ID Essential Training: User and Administrator via LinkedIn Learning.
- : AutoCAD Plant 3D Essential Training: Specs & Catalogs, User and Admin via LinkedIn Learning.
- : Plant Design System (PDS) at MGA Technology (in house) (Equipment modeling, piping designer, Drawing manager and Isometrics extraction).
- : Process plant layout and piping design at MGA Engineering (in house).
- : Piping specifications and material selection at MGA Engineering (in house).
- : PG Diploma in Piping Design Engineering via Udemy.
- : Piping Fabrication with Isometrics via Udemy.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From May 2024 till now

Employer : Arabian International Co. (AIC), Cairo – Egypt Branch

Projects :

- Jafurah Utilities Sulfur and Interconnecting System, Jufurah, KSA (SAUDI ARAMCO)
- Jafurah Gas Compression Plants and Produced Water Injection Station, Jufurah, KSA (SAUDI ARAMCO)
- Amiral Petrochemical Complex, Jubail, KSA (SAUDI ARAMCO)
- Riyas NGL Fractionation Facilities, Jufurah, KSA (SAUDI ARAMCO)

Job title : Lead Piping Engineer

Dates : From Feb. 2010 till Apr. 2024

Employer : MGA ENGINEERING – Cairo, Egypt Branch

Projects :

- CNRL Horizon Project, Primary Separation Cell, Fort McMurray, Alberta, Canada
- CNRL Horizon Project, Slurry Preparation Plants Train 3, Fort McMurray, Alberta, Canada
- Imperial Oil Resources Kearl Oil Sands Project, Slurry Preparation Plants, Fort McMurray, Alberta, Canada
- Imperial Oil Resources Kearl Oil Sands Project, Emergency Dump Bond, Fort McMurray, Alberta, Canada
- Kearl Crusher Maintenance Building C-07, Fort McMurray, Alberta, Canada
- JVD-C10 Optimization Package, Fort McMurray, Alberta, Canada
- Iron Ore Company (IOC), Labrador and Newfoundland, Canada
- American Dream Meadowlands, New Jersey, USA
- Takraf-Proyecto Antucoya, Chile
- Sizer Module OPP1 and OPP2, Saskatchewan, Canada
- FWS-Solio (LCF), Quebec, Canada

- FWS-Lafarge Kent Assessment Ave Vancouver, British Columbia, Canada
- Sandvik C2025, Port moody, British Columbia, Canada
- Petrobras Waste Flue Gas Recovery Project, Brazil

Job title : Senior Piping Design Engineer

Further experiences : Freelancer (from Feb. 2010 till now):

- SAGAMU LDZ Phase 2, Transit Gas Nigeria Limited, Lagos, Nigeria
- Lusail Iconic Stadium, Lusail, Qatar
- GREENMANTRA Chemical Plant, Ontario, Canada
- Calgary Cancer Center, Calgary, Canada
- Cellcentric Fuel Cell Lab, Burnaby, British Columbia, Canada
- Plug Power Vista, Bethlehem, New York, USA
- ECT2 Skid of Salt Brine Concentrating System, Cordova, Illinois, USA
- Wastewater Treatment Plant, Tofino, British Columbia, Canada
- LGH Acute Care Facility, North Vancouver, British Columbia, Canada

Responsibilities:

- Develop layout of systems and equipment with project team members. Contacts equipment suppliers as necessary. Coordination occurs primarily through interpersonal communication in project meetings and one-on-one.
- Coordinate with Project Manager and surveyors to establish limits of laser scans to develop as-built models of existing plants. Work with surveyors to establish units of measure and coordinate system benchmarks, identify key reference elements, and elements to be extracted from the point cloud to develop the appropriate amount of detail for the as-built model.
- Work with process engineer to size and select system components.
- Work to meet client deadlines including balancing multiple priorities and responding to changes in deadline, scope and design as they occur. Often works on two or more projects in a given time period, depending upon project size and deadline.
- Delegate work, identifies specific tasks, and balances work for CAD Technicians, other designers, and engineering groups among several projects to meet client demands and individual project deadlines. Provide appropriate level of training and, as necessary, review work for completeness and accuracy.
- Work with Project Manager and Process Engineer to a) write and edit design specifications; b) respond to Requests for Information (RFIs) incorporating information from project documents, specifications, shop drawings and design criteria; and c) write meeting notes.
- Provide leadership for CAD coordination on projects, including initial project set-up, confirming project CAD standards, providing assistance in finding more effective ways to convert drawings, communicates requirements to the project design team.
- Led the team, which reviewed and validated a series of piping systems and fired heater radiant tube assembly designs for soundness of engineering and adequacy of the pipe support.
- Carry out the design and performed pipe stress analysis for the tubes of a series of fired heaters to the requirements of API 530, API 560,

ASME Sections I and II and ASME B31.3.

- As a specialized group member performed pipe stress analyses using specialized software for various dynamic combinations of high frequency/amplitude vibration, water hammer, thermal and high fluid density loading phenomena unique to the industry.
- Recommend changes in the piping design to bring the predicted pipe stresses to within Piping Code allowable stress values.
- Implement client proprietary piping data into specialized pipe design software to permit rapid data access and utilization during pipe modeling and document generation.
- Prepare piping material takes off (MTO).
- Solve technical problems in fabrication and erection stages.
- Pressure vessel design using ASME Section VIII Div. 1 and 2.

- Field of experience :**
- Develop system designs and layouts from conceptual plans.
 - Interpret information defined in basis of design as well as information gathered from field surveys, process engineers, industry standards and clients.
 - Work with project team to ensure CAD standards are implemented consistently to create quality documents.
 - Train and mentor others through participating on specific project teams, conducting quality reviews, and providing training.
 - Collaborate with Process Engineering Manager to identify and develop more efficient tools and methods for CAD related elements of the design process.
 - Codes: ASME B31.1, ASME B31.3, ASME B31.9, ASME B31.11, CSA Z662, WRC 297, EN 13480, ASME Section VIII Division 1&2, API530, API RP 2a, ASME Section IX and API 560.
 - Professional Affiliations:
 - The Association of Professional Engineers and Geoscientists of Alberta (APEGA)
 - Egyptian Syndicate of Engineers
 - American Society of Mechanical Engineers
 - NCEES