

NADIM AHMED

snahmed129@yahoo.com

1-848-329-2165

SUMMARY OF QUALIFICATIONS

Proven 28 years of technical and management experience in mechanical design and provided consultancy services to several national and international companies in the following fields:

Engineering Designing:

- * **Product Designing, Re-Engineering and Reverse Engineering**
- * **Machine Designing, System Designing etc**
- * **Mould and Tool Designing**
- * **Hull Design for Ships**
- * **Structural Designing**
- * **Pressure Vessel, Storage Tank, Piping, Supports, Flanges and Valves designing**
- * **Finite Element Analysis: Static, Dynamic, Thermal, Vibration, Fracture, Fatigue, Impact, Contact and Design Simulation**
- * **Load Calculations for Air Handling Equipments**
- * **HVAC Ducting Designing and Layout**
- * **Design Automation**
- * **Dimensional Tolerancing for jigs and fixtures**
- * **Development of P&IDs, fabrication and manufacturing drawings and documents**

Project Management:

- * **Lead design teams on assigned projects; projects review at higher management level with clients; scheduling, planning and monitoring of design projects**
- * **Supervise teams for installation and construction projects**
- * **Resource and man-hour allocation and scheduling; Cost Estimating, Quality Assurance, Materials Selection, Procurement Approval and Documentations etc**
- * **Supervising subcontractors, suppliers and vendors to complete projects**
- * **Site inspection and preparing reports and documentation, appraisals, change requests, recommendations, etc**

EDUCATION

- * **Masters of Science (M.S) in Mechanical Designing & Engineering with Engineering Management, 1997, Northern Illinois University, USA 3.45/4 g.p.a**
- * **Bachelor of Engineering (B.E) in Mechanical Engineering, N.E.D University of Engineering and Technology, Karachi, 1991, 3.95/4 g.p.a**

COMPUTER TOOLS & SOFTWARES

AutoCAD, Creo, Catia, Solid Works, UG, Inventor, Mechanical Desktop, Solid Edges etc
I-Deas, Ansys, Pro-Mechanica, Abacus, LS-Dyna etc
API, ASME Sec VIII Div 1 & ASTM codes etc. Softwares used are PV-Elite, Compress etc
MS PROJECT & PRIMAVERA etc
Turbo CPP, Pro-Program, MathCAD etc

The following are the description of my professional experience in chronological order:

SANAFATE, Karachi, **General Manager Engineering** **1998-2012, 2018-2024**
Responsibilities

As a consultant I have professional experience with very heavy and world-renowned mechanical companies and industries, such as GE, Motorola, Olayan, Aramco, Toyota, Huawei, Worldcall, Flextronics, EILC, Suzuki, Pakistan Steel Mills, NDC, NCB, Telenor, Karachi Shipyards, Mobilink, Paktel, Siemens, Suparco, Honda etc. ranging from designing to supervision to management of wide range of projects by working closely with engineers, professionals and clients. Lead design teams on assigned projects; projects review at higher management level with managers and clients; Scheduling, Planning and Monitoring of design projects. As mentioned above I have professional experience on the best contemporary Designing and Analysis softwares available in the world

Projects and Accomplishments

General Electric: Designing of Energy Saver 2000 refrigeration system

Motorola: Designing of plastic components of Vulcan, Vader, Timeport Cellular Phone models

Indus Toyota Motors: Reverse-engineering of sheetmetal components such as fenders, doors
Up-gradation of CAD Center and employee training in CAD tools

NCB: Reverse Engineering of circular knitting machine

PCSIR: FE Analysis of satellite rocket-fuel-tank made of Kevlar-Epoxy

Aiolos (CARDIC): Designing of supersonic Cryogenic Wind Tunnel operating at -183C

NDC: Designing of rocket engines, un-manned aircraft, low-altitude flying systems, actuators;
long range projectiles; fracture analysis of structures carrying dynamic loads

Huzefa Engineering: Designing of billboards sizes from 20'X60' to 30'X100'

Tapal: Design automation for industrial sheds

LASMO: Computer aided FEA and design evaluation of oil rigs

Infratech: Designing and detailing of piping, supports, valves and related accessories for a glass wool factory with EILC

Aramco, Olayan Descon: Designing and Fatigue Analysis of several pressure vessels and storage tanks for petrochemical companies such as Aramco, Saudi Kayan etc

Siemens Pakistan: Designing of transformer canopies for generators

Avery: Designing of weigh bridges with sizes from 3MX10M to 3MX20M

Comintra: Reverse engineering of pinion & gear for marine ships using 3D CAD tools

Karachi Shipyard: Designing of 5-Axis milling machine, Ship Hulls, Gears and Pinion,

Agrotool Merin: Computer Aided FE Analysis and designing of biogas process tanks

Metalco: Design Automation for aluminum doors and windows using Pro-Program

Honda: Development of Mould Core and Cavity for plastic components of Honda motor cycle

Epic: Designing of low pressure Hydro Carbon storage tanks on API codes

PTC (through InfoCAD): Training of engineers and professionals in Pro-E

Dollar Industries: Up-gradation of CAD Center and employee training in CAD tools

Taha Engineering (Yamaha): Establishment of CAD Center & training in CAD tools

Tradesman International: Setup of CAD Center in Africa and training in CAD & FEA

Brothers Engineering Works: Up-gradation of CAD Center & advanced training in CAD tools

Faraz Industries: Up-gradation of CAD Center and advanced training in CAD & FEA tools

NED University: Upgradation of CAD Center and advanced training of hundreds of engineers in CAD and FEA tools, machine design and selection of engineering materials

Huawei Technologies, Telenor, Quebee, Siemens, Mobilink, WorldCall:

Design Automation for GSM foundations, towers and components based on ACI and ASTM codes; designing of MEP systems for the related sites

Over 650 PTML or Ufone site projects, 50 WorldCall site projects, 65 Telenor site projects, 20 PTCL site projects, 15 Quebee site projects, 150 Siemens site projects and 25 Mobilink site projects worth over US \$ 100 Millions

AAA Partnerships:

- * Complete MEP designing and installation supervision using ProCore software, for Silicon Village Capital Smart City Islamabad, buildings B-5 and B-7 and Jade Tower, One Capital, Lahore
- * 3D BIM Designing supervision and complete MEP designing and installation supervision for HMR Waterfront, Plot 6, Multiuse building 28 storeys, Phase 8, Karachi

NEXT: Supervised MEP Installation including Fire Prevention and Fire Fighting Systems, HVAC, Plumbing etc for the following projects:

Sultan Khalifa Al-Habtour, Plot 128-801, Al Khabaisi, Dubai, G+M+2

Ahmed Ali Al-Owais and Sons, Plot 128-369; Sumar

Al-Qusais, Damascus Road, Dubai, G+M+9; Dubailand

The Villas G+1, RJ-122, RC-075, RD-171 and others

Hotel Abdullah Abdul Aziz Muhammed Al-Zarooni and Jafar Al-Zarooni, Plot 1120474

Factory IPCL, Jabel Ali, G+M, Al-Ajmani, Plot 245-787

Al-Muhaisnah, Dubai, G+M+9+Gym

Kelle, Al-Khawaneej, Dubai G+6

Alawir, Dubai, Villa G+1

Other Projects:

- * Completed construction and complete MEP installation of 5 Storey Amenity Building, Gulshan-e-Maymar, Karachi
- * Completed construction and supervised MEP for many community bungalows etc
- * Completed construction and supervised complete MEP of industrial sheds and buildings in North Karachi Industrial Areas and S.I.T.E such as Tapal, Siemens etc
- * FE analysis of side road barriers in UAE etc

Auvitronics, Karachi, General Manager, RND

2016-2018

Responsibilities:

Supervision of designing and quality control that successfully integrate various mechanical components and systems related to Automotive by working closely with engineers, professionals and clients; Supervision and Management of fabrication tasks for all mechanical projects etc; Lead design teams on assigned projects; projects review at higher management level with directors and clients; Scheduling, Planning and Monitoring of design projects; Resource allocations to draftspersons, engineers and technical supervisors; Quality Assurance, Materials Selection, Procurement Approval and Documentations etc

Projects and Accomplishments:

- * Supervised designing and fabrication of EMI doors, components and equipments
- * Supervised designing of Nuclear Waste Radioactive containers
- * Supervised designing and production of plastic components for automobiles etc
- * Supervised production optimization of EPS components for automobiles
- * Supervised designing of electrical 3 Wheeler automobile
- * Supervised design optimization of plastic products for local industries

S&D ENGG, Florida, USA, Senior Manager Projects

2014-2016

Designing of aluminum cladding; glass, aluminum and steel panel structures such as partitions etc; HVAC ratings and designing for vapour compression, absorption systems and chillers; Plumbing; Fire alarms, fire prevention and suppression systems designing and installation; Development of CAD working drawings for fabrication and installation of such systems; Evaluation and rating of mechanical components and systems such as pumps, elevators etc for various residential and commercial buildings and industrial installations; Renovation of houses and amenities buildings such as motels, hotels etc

ORIENTALS, Dubai, Manager Technical Responsibilities:

2012- 2014

Lead and manage teams on designing, fabrication and installation projects related to MEPs, Building Maintenance Units etc for buildings of upto 425 meters height, Façade and Curtain Walls etc., all kinds of Lift Machines and related Hydraulics and Drive Systems; Aluminum and Steel Structural design and installation supervision etc
Completed these projects which were related to the designing and installation supervision of the building maintenance system

Projects and Accomplishments:

Wadi Tower G+36, Plot no. 6465302, City of Arabia, Dubai U.A.E
Ajman Pearl Tower- 10 Buildings, Ajman, U.A.E
CEC D-109 Dubai Police Head Quarter Complex, Plot No. 800-2061, Al Awir, Dubai
R1017-Dubai City Hotel & Residence Building - Podium Skylights, Dubai
R1017-Dubai City Hotel & Residence Building - Entrance & Atrium, Dubai
Housing Bank HQ, Amman, Jordan
3 Residential Towers 3B+G+24 on Plot BT-A001,002, 003, Dubai
Ewan Hotel Building G+3P+M+12 Ajman, U.A.E
Ewan Ajman Suites Hotel, Ajman, UAE
TECOM Investment FZ-LLC Plot No. C003-008, Dubai, U.A.E.
Sulaiman Ahmad Bin Sulainman Plot No. 645-8056, Wadi Al Safa-3, Dubai, U.A.E.
Saraya's West Amman Hotel & Tower Project, Amman, Jordan
Luxury, Oasis & Spine Skylight - Mall of Qatar, Doha, Qatar
CMA Towers, Dubai, UAE

CATERPILLAR (Through Aerotek), Decatur IL, Product Design Engineer, 1997-1998

- * 3D CAD model development of mechanical components using Pro-E
- * Contact and Impact Analysis and product evaluation using IDEAS and Abacus
- * Re-engg and design modification of mechanical components for Motor Graders
- * Setting up tolerances and development of jigs and fixtures

Projects and Accomplishments:

Successfully completed design optimization of Front-Assembly of a model of Motor-Grader for better performance

STERLING ENGINEERING, IL Design Engineer, 1995-1997

General Motors (Posting for one year)

- * Providing design sketches and technical guidance for drawing and model preparation
- * 3D CAD model development of mechanical components using Unigraphics
- * Stress analysis of mechanical components using Ansys
- * Design modifications as per recommendations from FE Analysis

Shure Brothers (Posting for one year)

- * Designing and detailing of mechanical components using latest CAD technology
- * FE Analysis of related mechanical components and systems using I-DEAS

Projects and Accomplishments:

Successfully completed designing of braking mechanism and suspension system for EWS locomotive; designing of 6000 HP electric motor casing, braking system and gearing mechanism

PAKISTAN STEEL MILLS, Design Bureau, Trainee Design Engineer, Karachi 1991-1992

- * Re-engineering of power shafts and couplings
- * Detailing and dimensioning of mechanical components using AutoCAD

Projects and Accomplishments:

Successfully completed reverse engineering of shafts and couplings related to drives & powers

COMPUTER AIDED DESIGNING CAD EXPERTIES

- * **Computer Aided machine components, systems, assemblies and composites Designing**
- * **Computer Aided sheetmetal, associative drawings, complex surface developments etc**
- * **Computer Aided mould and tool designing**
- * **Computer Aided pipings, supports, flanges and valves designing**
- * **Computer Aided FEA structural stress analysis, static analysis, thermal analysis, vibration analysis, dynamic analysis, impact analysis, motion analysis etc**
- * **Design Automation to facilitate mechanical and structural designing process**
- * **While working throughout on contract basis and consultancy basis, I was posted at different industries and companies based on projects and tasks. This gave me an opportunity to work as a team with different kinds of people in a versatile working environment using different types of designing and analysis softwares**