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# Our Vision is built upon a vital constituent: "Service before Self"

This is a simple idea with massive profundity, which shall keep us resolute and persistent to serve the humanity by creating a collaborative culture, one that is primed to seize every opportunity and transform it into success.



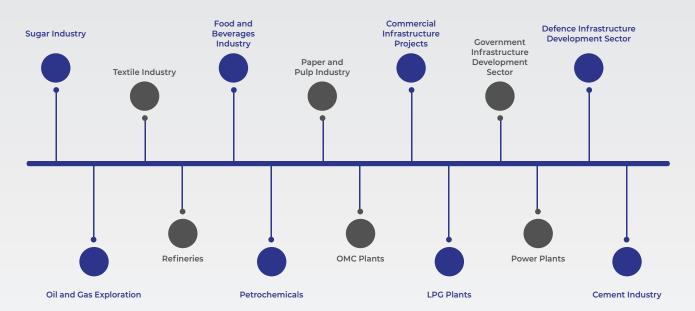
To establish an, "Organization of Individuals who are passionately committed to provide the finest services to the client, employees, vendors and partners. A team that works together with innovative and proven solutions with reliable safety and quality. Continue to value the importance of our relationships and to remain fair and true in our dealings."



- Company information
- Directors & Management
- Key Technical Personnel
- Business Sphere, Projects and Products

FABCON Design and Engineering (Pvt.) Ltd. is a multidisciplinary EPC Management Company, engaged in engineering, manufacturing and construction in the field of civil, mechanical, electrical and automation projects.

#### Our primary serving industries include:

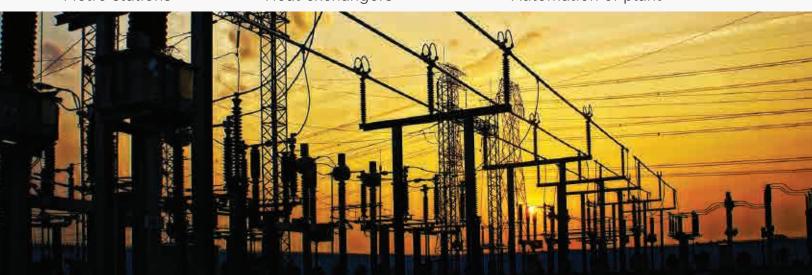


We are a total solutions provider with an impressive track record in construction of:

- High-rise buildings
- Road infrastructure
- Concrete foundations
- Pedestrian bridges
- Metro stations

- Pre-Engineered buildings
- Sugar plant on turnkey basis
   Overhead cranes
- HP, MP, LP Boilers
- Pressure vessels
- Heat exchangers

- API storage tanks
- General equipment of industry
- Electrical & Instrumentation
- Automation of plant



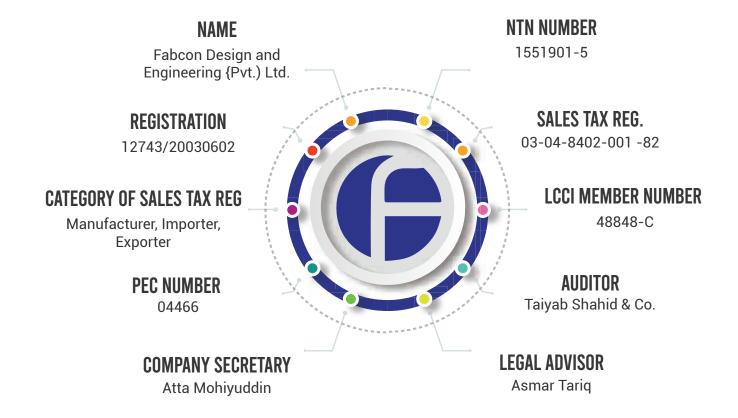
We have an in-house design facility supported by a team of consultants having rich experience in concerned fields. Our team has overall experience of 30 years. At FABCON, planning drives every aspect of a project—from schedule development and constructability reviews, to daily job safety analysis and regular design and estimate reviews. But it is how our planning seamlessly integrates with engineering that truly sets us apart. To turn concept in to product, we have a well-equipped fabrication facility located at Sunder Industrial Estate.

Through innovation designs, inflexible quality and precision standards, FABCON has earned a high level of reputation for excellence with goal to deliver most usable, cost effective, and accurate business solutions. Our core strategy is to provide the best products and solution that fulfills our client's needs and demands.

FABCON by its committed corporate strategy aims to build a world-class EPC workforce to deliver excellence and to create a business portfolio for long term sustainable growth.







- +92 423-529-7121-22 🔓 (FAX) +92 423 529 7123
- 227, Sunder Industrails Estate, Sunder Raiwind Road, Lahore

# **Board of Directors**



#### **Syed Sameen Aslam**

He is a seasoned businessman with a professional career of more than three (03) decades and a well-known individual in the industry of engineering and manufacturing. Being a proficient businessman, he has developed expertise in technical departments of design, engineering, quality control and project management for commercial, manufacturing, power plants and residential operations. Known as leader in safety training, office management, quality inspection, process improvement, inventory control, budgeting and resource workload distribution. Has an inborn instinct of solving both foreseen and unforeseen problems with documentation and business issues quickly and effectively. Besides his technical skills he has practiced in business development, marketing, supply chain management and cash flow management, giving him additional approach to start his own business venture. He is highly client centric with excellent relationship building. Through innovation and performance driven entrepreneurship he established FABCON in 2001 with a very limited capital. With his past experience of working in top most engineering companies of Pakistan and unique insight, he helped FABCON to attain height of excellence in few years. FABCON is now working in all mega projects of Government, Defence and Private Industries all over Pakistan. Being an effective communicator, a decorated champion of innovation and creativity, emotionally intelligent and data strategist Mr. Sameen has proved his mettle both as a leader and a great Mentor. Holding the belief "take from society, give back to society", Mr. Sameen is dedicated to helping people in need. He firmly believes that human resources are the most valuable asset of the Group and always cares for the development of employees. In addition to on-the-job training, the Group also encourages employees to continue learning. Furthermore, the Group promotes occupational safety actively and cares for the health of its employees.





#### **Syed Naeem Aslam**

Syed Naeem Aslam is Director of FABCON Design and Engineering (Pvt.) Ltd. He is civil engineer turned into successful businessman. His core strength is blend of civil engineering in the fields of power plants, chemical petrochemical plants. infrastructure development, aviation, roads, high rise buildings, hospitals, universities, convention centres, residential buildings etc. The vision behind this is to translate the concept of the national building into reality. Has served as leader in mechanical supervision of all aspects of construction projects related to power plants, harbor and related landscapes and private buildings including scheduling, monitoring construction construction costs and materials. Developed overseas suppliers via trade show and internet to decrease the overall cost of construction materials. Built a standard system of construction safety action course, eliminating a previously paper approach and reducing the time of daily safety check.

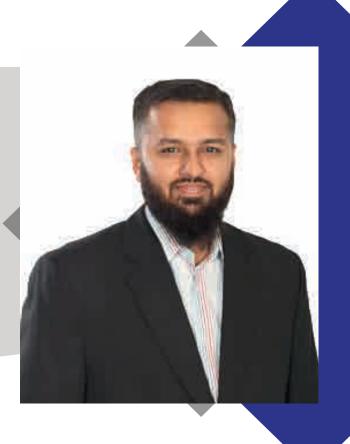
Leader in implementing practical applications of mechanical engineering principles and concepts.

Meticulous in defining and fulfilling operational requirements of mechanical systems in construction activities. Diligently developed research prototypes, tested equipments for manufacturing that exceed customer expectations.

#### **Muhammad Afzal**

Muhammad Afzal is Director of FABCON Design and Engineering (Pvt.) Ltd. He has a vast experience of over 30 years, spanning over field of supply chain management. He is skilled in integrating and optimization of all the steps required to manage the right amount of the right product and deliver it to the end user at the right time. Having vast area of network internationally and locally, he has developed supply chain expertise worldwide including procurement, integrated logistics support programs, freight forwarding, customs that exceed productivity goals. Has led and managed large cross-functional teams through an end-to-end project life cycle to implement new projects and systems. Leader in identifying and mitigating project issues related to supply chain management. A passionate kingpin who works closely with the teams, stakeholders and the vendors to ensure successful project implementation and proactively resolves any project delays, scope changes or any other discrepancies.

Has a proven ability to adapt and leverage fresh perspectives and breakthrough ideas to solve problems, improve processes and drive solutions.



# Anwar Ahmad

B.Sc. Mechanical Engineering MCS (Computer Science) Experience; 35+ years Professional PEC Engineer

#### **Executive member of Pakistan Engineering Congress**

An indefatigable engineer filled with never ending vim and vigor for mechanical and civil projects. A profound and comprehensive under-stander of technical elements of civil and mechanical engineering. Since his childhood he had a knack for solving practical problems. In his teens this curiosity led him to choose subjects that included elements of construction and engineering.

Relying on the fact "Engineers more than anyone else have the opportunity to shape and manipulate the world we live in", Engr. Anwar Ahmad has become one these era defining engineers that build "life support systems" for these communities.

Various masterpieces completed by Engr. Anwar Ahmad include;

- Mfg. & Installation of Steel pipe railing on top of new Muslim Town Flyover.
- Wending and carpeting main Gate to canteen chowk and inspection hut Road and officer road wild life park Lahore.
- Mfg. & Installation of Pedestrian overhead bridge at Kalma Chowk Lahore. (PMU C&W Deptt.)
  Mfg. Road side sign boards.
- Mfg. & Installation of Steel pipe railing on new jersey Barriers at Gujranwala Flyover.
- Reconditioning & Installation of 2 Nos Pedestrian overhead bridges at Sheikhupura
- Construction of Pedestrian Overhead Bridges in Daska City (Bridge No. 1 & 3) (H/way Div. Sialkot)
- Construction of Pedestrian Overhead Bridges in Daska City (Bridge No. 2 & 4) (H/way Div. Sialkot)
- Construction of Internal Road of Residences for Police (Bs 1-10) Rohi Nala Phobttian Chowk Raiwind road Lahore.
- Rehabilitation of /S.R to new Provincialized road Murree City "Jhika Gali to barrier upto GPO Chowk Length 3.02 Km.
- Rehabilitation of /S.R Murree Road "President House to "Jhika Gali Road i/c Govt: House Round About Length 2.17 Km.
- Rehabilitation / S.R Murree Road Bank Road Length 1.47 Km.
- Rehabilitation / S.R Murree Road "GPO to Kuldana Road.
- Reconditioning & Instillation of 465 Rft Pedestrian overhead bridge at Rawalpindi (M.M. Division Rawalpindi)
- Resurfacing of Road from Chunian Hujra Road.
- Resurfacing of Road For D.S.T of Niaz beg Raiwind, road from Raiwind to changa Manga, from Changa manga to Pattoki wanadhan Road.
- Development of Animal Safari Park improvement of existing facilities safari Zoo Lahore.
- Execution of Emergency Works during Worst flood in Punjab
- Installation and execution of 7 Floating types Bailey bridge equipment at Shah Jamal to Jatoi Road in district Muzaffargarh.
- 4 bailey bridges from Rajanpur to Hajipur road, 1 at Indus Highway to Uzman Bhandu Wali Road in Mile No. 38 District Rajanpur
- Boat Bridge in district Hafizabad, District D.G Khan, district Layyah.



#### Riaz A. Khan

#### **B.Sc. Chemical Engineering**

Experience; 38 years

Chemical Engineer by profession, having over 38 years of versatile experience in the field of plant operation/maintenance and project management in sugar, chemical and fertilizer industry.

Highly adaptive with chemical process systems and equipment. Has vast experience in supporting the entire production processes regarding quality inspections and cost improvement initiatives. Proven ability to use applied research and problem-solving skills for establishing the root cause of any chemical-related failure, as well as heading any investigations.

He has served as General Manager Mechanical in Pak Arab Fertilizer and Pak American Fertilizer. His last assignment was Group General Manager Manufacturing in Agri Tech limited. Mr. Khan was also the Project Manager for the Agri Tech expansion project, worth 72 Million US\$. Prior to Agri Tech, he undertook project of gas turbine/HRSG, and primary reformer installation and commissioning. Installation/commissioning of sulfuric acid plant in PAEC and process house of Kamalia sugar mills is also in his credit. He has also performed acquisition, rehabilitation and successful operation of DCP plant in Bulgaria. He has vast skill in team development, human resource management and strong grip on effective project execution.

Possessing a comprehensive technical and practical knowledge related to the field of chemical cum mechanical operations this maverick has executed the following key projects;

- Project Manager for the Agri Tech expansion project, worth 72 Million US\$.
- Installation/commissioning of sulfuric acid plant in PAEC.
- Performed acquisition, rehabilitation and successful operation of DCP plant in Bulgaria.
- Project Manager for retrofitting of 2 x 84tph, 65barg bagasse fired boiler at M/s Almoiz Sugar Industries.
  - Project Manager for retrofitting of 1 x 135tph, 65barg bagasse fired boiler at M/s Layyah Sugar Industries.
- Project Manager for greenfield project of 10,000TCD capacity sugar plant with 34.5MW co-generation power plant for M/s Alman Seyyam Sugar Mills.
- (1) Anjum Shakeel Gillani

CSS

Experience; 35 years

Syed Anjum Shakeel is Head Services of FABCON Design and Engineering (Pvt.) Ltd., He has done CSS and a valuable addition to the company. He has worked for government department about 35 years. During his tenure, he has worked with a large array of people and lead teams where effective people management comes into play with provision of large support to the department. He oversees the support operations of an organization while ensuring that there is effective information flow and that resources are employed efficiently throughout a business. He is organized, and detail orientated with good analytical skills to run day-to-day operations.

A high energy and result driven professional with commendable services in human and resource management. Excellent planning and organizational skills which have resulted in the optimum functioning of the department and the consistent achievement of customer service standards. His proven interpersonal and motivational ability ensure a strong team approach and the attainment of maximum performance levels and productivity.

#### Syed Muhammad Umer

#### **B.Sc. Chemical Engineering**

Experience; 8 years

Syed Muhammad Umer is a Chemical Engineer by profession, having over 08 years of versatile experience in the field of design, research, development, commercial proposal, project estimation and supply chain management. He has firm grip in process design of gas fired and solid fuel fired boilers. He possesses a thorough understanding of mechanical design and engineering drawings as well. He has handled complex proposals supported by risk assessment, cash flow, scope of supply definition, responsibility matrix and project schedule. He has served in development of several products through investigation and research.

Having vast area of network internationally and locally, he has done an outstanding job in international collaborations to provide complete EPC based solutions under one roof for valued clients. He has strong grasp on international sourcing of raw material and equipment. He has efficiently and effectively managed several foreign procurements including custom clearance at port by keeping grip of time, quality and budget.

Through his versatile perception and broad skills, he has also developed profound understanding in management of finance and accounting. He has also worked closely with financial team for management of cash flow of business and obtaining credit lines from the banks.

Outstanding projects include;

- Design management and supply chain management of 30tph, 45barg, bagasse fired boiler for M/s Hunza Distillers.
  - Design management and supply chain management of 30tph, 25barg bagasse fired boiler for M/s Chashma Sugar Mills Limited.
- Design management and supply chain management for metro bus rapid transit system (BRTS) Islamabad.
- Design management and supply chain management for retrofitting of 2 x 84tph, 65barg bagasse fired boiler at M/s Almoiz Sugar Industries.
- Design management and supply chain management for 50Mton, LPG Storage Tank for SSGC.
- Design management and supply chain management of 50Mton x 2nos. and 1ton x 100nos Chlorine Vessels for M/s lttehad Chemicals.
- Design management and supply chain management for retrofitting of 1 x 135tph, 65barg bagasse fired boiler at M/s Layyah Sugar Industries.
- Design management, supply chain management and financial management for greenfield project of complete 10,000TCD sugar plant with 34.5MW power plant for M/s Alman Seyyam Sugar Mill.
- Design management and supply chain management for 100tph, 25barg, 350 deg.C, Bagasse Fired, Boiler for Hunza Sugar Mills Unit-II.

# Zahoor Hussain Shah

#### **B.Sc. Mechanical Engineering**

Experience; 35 years

Mechanical Engineer by profession, having 35 years of experience in field of design of boilers, pressure vessels, heat exchangers, steel structure and API tanks. Has served in key posts in critical defence organizations like NDC, KRL, NESCOM and AWC.

During his service in defence organization, he has made valuable contributions in field of mechanical engineering. He has served in HMC as well in field of design and quality control of boilers and pressure vessels. Has proved a key role in development and establishment of quality procedures and systems for inspecting plans, quality trends, statistical plan price estimates and technical quality proposal plans at HMC. His strength lies in stress analysis, design calculations, basic design, FEED engineering, detail engineering, general layouts, piping plans, isometrics, fabrication drawings, costing, estimations, complete QC functions, re-rating, alterations, repairs, inspection, NDT and fitness-for-service analysis.

His key projects executed are as follows;

- Design and supervision of several mechanical equipment in Defence organizations.
- Design and supervision of 35tph, 50barg, duo fuel fired boiler for M/s Sarena Textile.
- Design and supervision of gobarg autoclave vessels for Defense organization.
- Design and supervision of 30tph, 45barg, bagasse fired boiler for M/s Hunza Distillers.
- Design and supervision of 30tph, 25barg bagasse fired boiler for M/s Chashma Sugar Mills Limited.

#### 🔔 Atta Mohy ud din

#### **B.Sc. Chemical Engineering**

#### **Experience**; 7 years

Atta Mohy ud din is Head of Projects and manages all projects at sites and workshop. He is a Chemical Engineer by profession and an enthusiastic, confident and reliable professional who has experience of managing technically complex projects and possesses a forward-thinking approach to the management of assignments. He possesses a track record of delivering complex projects with a global reach and is able to manage the project delivery team. He enjoys part of being in a successful team and thrives in challenging working conditions. He has firm grip on project budgets and project control through productive project planning. Through his innovative initiatives he has developed new templates for strategic plan, progress report and resolved issues to optimize the operational processes.

Has a firm and comprehensive understanding of the manufacturing process taking place inside the workshop. Inborn supervisory skills have led him to supervise a labor of over 300 at a young age. His project execution skills and his endeavors are matched to no one. Leadership, communication, scheduling, risk management, cost management, negotiation, critical thinking and task management are all familiar to him.

- Planning and Project Management of Process House Equipment for 10,000TCD Alman Seyyam Sugar Mill, D.I.Khan
- Planning and Project Management of 20,000BBL Crude Oil Storage Tank for POL, Chakwal.
- Planning and Project Management of 5,000BBL Raw Water Storage Tank for PEL, Badin.
- Planning and Project Management of 2x40,000BBL Crude Oil Storage Tank for OGDCL, NASHPA.
- Planning and Project Management of 100tph, 25barg, 350 deg.C, Bagasse Fired, Boiler for
- Hunza Sugar Mills Unit-II, Jhang.

# Muhammad Noman Butt

#### **B.Sc. Mechanical Engineering**

Experience; 07 years

A solution oriented mechanical design engineer having M.Sc. in Mechanical Engineer, with 07 years' experience of design of boilers, pressure vessels, overhead cranes, API tanks and pre-fabricated steel structures design. He has comprehensive understanding of design process and manufacturing methods. He has an ignited passion towards the design of mechanical parts and components related to small to large scale boilers and has currently developed proficiency in this particular field.

He is Qualified ASME design engineer having excellent knowledge of ASME Section IX, Welding, Brazing and Fusing Qualifications. He is well versed with ASME Section I, II, V, VIII, and IX, AWS Section D 1.1, 1.5 and 14.1, ASCE 7, AISC 303, 360, 341, CMAA 70 and 74, API 510 and 650, Pakistan Building Code 2007, and relevant Codes and standards. He monitors the quality control and quality assurance process throughout execution of the project.

Projects completed under his supervision are;

- Design of package type, chain grate, coal\_fired boilers of capacities 5tph to 30tph for textile, food, feed and chemical industry.
- Design of bus stations and pedestrian bridges for metro bus rapid transit system (BRTS) Islamabad.
- Design of 32Mton Double Girder Over Head Travelling Crane for m/s Gulf Sugar Mills.
- Design of retrofitting for 2 x 84tph, 65barg bagasse fired boiler at M/s Almoiz Sugar Industries.
- Design of 34.5MW co-generation power plant for M/s Alman Seyyam Sugar Mills.
- Design of 84tph, 90barg, 550°C High Pressure Boiler for M/s Alman Seyyam Sugar Mills.
- Design of 50Mton chlorine storage vessel for M/s lttehad Chemicals.
- Design of 1.9tph, Saturated Steam HRSG for M/s Sarena Textile Limited.
- Design of 100tph, 25barg, bagasse fired boiler for M/s Hunza Sugar Mills.

# Antonius Maria

More than 35 Years' Experience in Power and Steam systems. He is specialized designer of Boiler, HRSG's and WHRB design. He also has a vast experience of upgrading existing boiler and power system in various industries of Pakistan. He has designed boiler up to 220TPH/110Bar. He also has versatile exposure of change of boiler fuel, efficiency improvement and troubleshooting of existence power system. He is also aware of technical and financial feasibilities of new and existing power plant. He has understanding in all design stages including research and development right through to installation and final commissioning. He is a forward-thinking individual with the demonstrated capability to introduce new products and the process to meet new products with ever-changing design trends. He has also worked with Descon in several Power Plants and Boiler projects. His key projects executed are as follows:

- HSRG's of 64 units of capacity 2x51.3tph/18bar/370°C for 2\*9.5 MW power plant for textile industry.
- HSRG's of capacity 30tph/10bar for 1 OMW gas turbine for textile industry in Saudi Arabia.
- HSRG's of capacity 112tph/92bar/539°C, 14.2tph/4.1 bar/272°C for 220MW power plant.
- WHRB of 7.4tph/5bar/170°C for CO₂ recovery unit in UAE.
- WHRB of 1.8tph/11.2bar/205°C for CO₂ recovery unit in UAE.
- WHRB of 80tph/20.2bar/295°C behind incinerator for Saudi Arabia.
- D-type 63 tph, 45 barg water tube boiler for refinery.
- D-type 65 tph, 4.8 barg water tube boiler for refinery.
- Design of 154tph/ 66barg/ 485°C, bagasse fired dumping grate boiler for sugar mill.
- Design of 140tph/ 66barg/ 485°C, bagasse fired dumping grate boiler for sugar mills.
- Design of 84tph/ 66barg/ 485°C bagasse fired dumping grate boiler for sugar mils

# Muhammad Asghar

#### **B.Sc. Electrical Engineering**

Experience; 20 years

About 20 Years' experience in design, execution and commissioning activities regarding electrical, instrumentation and control system for boilers and power plants.

Provide electrical engineering support for design, integration and testing, including schematic capture and layout. A professional designer of schematics and block diagrams using AUTO CAD. Worked with manufacturing to help evaluate and optimize processes (lean manufacturing and ISO 9001). Assisted in writing production and field test procedures.

He has executed various number of projects including 225 MW Halmore Bhikki Power Plant. He also taken part in preparation of test reports according to ISO 9001 standard. He has a vast experience of E and I operational equipment. His expertise also includes testing and commissioning of battery chargers, VFD's, LV MCC Panels, and PFI Panels. He has also served Descon for many years.

Projects in which he served as an electrical design engineer include;

- 2x10 MW Power Plants and GIS substations for K Electric Limited
- 140 TPH @ 67 Bar(a) Bagasse Fired Boiler for JDW 26 MW Power Plan
- 150 TPH HRSG for Engro Fertilizer
- 46 TPH HRSG Plant for DH Fertilizers
- 40 TPH HRSG Plant for Fauji Fertilizers (FFC)
- Incinerator and HRSG for PARCO
- 225 MW Power Plant for Halmore Bhikki

# Abdullah Bin Ahmad

**B.Sc. Mechanical Engineer** 

M.Sc. Engineering Management

Experience; 2 years

An aspiring mechanical engineer with a passion driven aim to obtain a challenging leadership position. Has a perfect capability to implement large projects and unparalleled potential to portray problem solving skills and managerial skills. His academic record is a prolific evidence of his unearthed potential. His first-hand experience involves planning and implementing the design and construction of Kaplan Turbine to be a part of a Pico hydropower project involving run of a river system in UET. His thorough understanding of green supply chain management provides great opportunity to integrate the environmental aspects in the traditional supply chain practices.

During his course of work, he has completed some outstanding projects; projects;

- Managing the car bidding process in Coca Cola Icecek.
- Completion of the project on the entire vendor list consisting of 1800 vendors within 1.5 months record time of the Coca Cola Icecek.
- Clearing outstanding payments of vendors in Coca Cola Icecek.
- Indexing and filing of the whole procurement department in Coca Cola Icecek.
- Reducing the hot foil reel downtime and cooling time of Xperia hot foil machine by 12% using an action plan within 2 weeks in Packages.
- Performed ECRS on care cream job on Expert Cut machine in Packages.
- Calculated the amount of water need in various stations by performing calculations on chillers in terms of load and capacity for all the manufacturing facilities within the premises of Nestle Sheikhupura Factory.
- Overviewing and supervising the manufacturing of gantry sign boards and overhead bridges.

# Abdul Jabbar

#### **DAE Mechanical**

Experience; 36 years

Having joined our institute in early 2000 and still serving this institutes as a Head of Manufacturing. A true veteran when it comes to engineering having a rich experience in Design, Detail Engineering, Manufacturing, Site Erection, Commissioning and after Sales services of different engineering equipment's especially for Oil & Gas, Fertilizers, Power Plants, Sugar Plants, Cement Plants, Pharmaceutical, Pulp & Paper, Chemical Plants, Textile, Ceramics and Defense Production.

Hardworking, inquisitive and result-oriented mechanical design veteran who has carried out following projects;

- Shed PEB
- Rawalpindi Pedestrian Bridges
- Lahore Pedestrian Bridges.
- SS Air Dampers, Islamabad (4" φ, 8" φ, 12" φ, 16" φ)
- Oil Storage Tank, Pakistan Oil Limited Chakwal
- Waste Heat Recovery Boiler, Salena Textile Sheikhupura (1.9tph)
- Boiler (100 tph), Hunza-II Sugar Mill Jhang
- Chlorine Cylinder (1 Tn), Etihad Chemical Limited Lahore (1tn)
- Chlorine Storage Tank (50 Tn), Etihad Chemical Limited Lahore (50tn)
- ——Draw work, modification & amendment of drawings of Sugar Plant in brother engineering Pvt. Ltd
  - Juice Heater, Evaporator, Canty pan, Boiler (80 tph) in brother engineering pvt ltd.
- Draw work, modification & amendment of drawings of Sugar Plant in Hudaibiya Engineering Pvt ltd.
  - Draw work, modification & amendment of drawings of Paper Mill in Hudaibiya Engineering Pvt. Ltd.
- Chest Agitator, Pipe Line, Gate Valves, Head Box, Wire Box, Cylinder Mold, Felt Roller, Suction Box,
  - Press Roll, Dryers, Yante, Winder, Rewinder
- Chase of Road Roller Marking
- Road Roller wheels Marking
- Steam Drum, Water Drum Boiler & Headers marking
- Tube Plates of Heat Exchanger Marking
- Cement Plant Equipment Marking
- Sugar Mill Equipment Marking
- Structure of Bin Qassim Port Marking

# Syed Hassan Jawad

#### MBA, Supply Chain Management

Experience; 5 years

A dynamic and passionate individual, has experiences in Bank operations and public sector procurement. He has worked as a departmental coordinator at a public sector organization, managing its procurement of all goods and services. He has a creative and flexible approach in coordinating and communicating internally as a team player and externally with other individuals or organizations. He has a positive attitude towards learning new things and having new experiences in various fields.

# Adil Rehmat

#### **B.Sc. Metallurgy**

#### 25+ years of experience

An experienced individual who knows how to utilize the best of his abilities to achieve the desired results of an enlightened and progressive organization. Having a true veteran experience in the steel industry and furnace, this individual is considered to be a master of continuous casting method.

During his early career, on the course of his associate engineering he started to mend his abilities regarding the CCM and furnace in the Pakistan Steel Mill.

His experience includes;

- Shift-in-Charge of induction melting furnace in Alshafi Steel (Ittefag Sons Pvt. Ltd.)
  - Expert in scrap for steel making and cast iron making.
  - Scrap bending for 15MT/MF induction furnace.
- Manager production in Bangladesh Iron & Steel Co. (BSRM Group)
  - Specialized in making grades ASTM-A-615 G40, ASTM-A 615 G-60.
  - Specialized in making BS-4449(500W)
  - Specialized in making spring steel En-45 and En-48
  - Process control of refining steel by Ladle Refining Furnace (LRF).
- Cold and Hot commissioning of Amreli Steel (Pakistan)
  - DM Project manager in Crescent Steel and Allied Product ltd.
    - Completed Steel Melt Shop Project of 300MT Capacity per day in Jhang.
- Manager Production in Arabian Gulf Steel Industries UAE.
  - Designing and executing Steel Melt Shop and Rolling Mill Project having capacity of 150,000/annum.
  - Design and commissioning of Platinum Steel Mills of Production re-bar capacity 150,000 tpa

# Muhammad Awais Arif

#### **MBA Executive**

**B.Sc. Mechanical Engineering** 

Experience; 10+ years

An enthusiastic individual with loads of experience for erection and commissioning of Italian (NCO and Prime Metal), Turkish (BLS) and Indian (Preet) Steel plants and upgrading production with quality and providing well maintained system by applying Japanese Terminologies TPM (Total Productive Maintenance), TQM (Total Quality Management), 5S techniques and Kaizen.

Highly skilled individual in AutoCAD, HAP, PRIMAVERA, SAP and MATLAB softwares. Experience includes;

- Hot commissioning of 05 Sizes at Naveena Steel (PRIMETAL Plant Production capacity 270K TPY
- Supervision Erection, Commissioning and Hot Commissioning of Platinum Steel (Chinese Plant Production Capacity 150K TPY)
- Deputy Manager Production/Process & Mechanical Bar Mill in Mughal Iron and Steel Industries
- Manager Process Bar Mill in Dahrin and Metal Industries Riyadh, KSA.
- Senior Engineer Process Bar Mill in Mughal Steel Group of Industries

#### Engineer Nasir Hussain

#### **B.Sc. Electrical Engineering**

Experience: 20+

An erudite electrical engineering professional with integrity, leadership qualities, excellent project execution and administrative capabilities loads of experience in power and steel management sector.

Performance driven professional with over 2 decades of experience in planning, scheduling and commissioning of steel melt shop, rolling mills, grid stations etc.

Experience Includes;

- Technical Advisor Elect/ Automation at Agha Steel Industries
- General Manager at Agha Steel Industries Pvt Ltd
- Senior Manager (Electrical/Inst.) at Amreli Steels Ltd. Karachi
- Steel Plants (Melt Shop and Rolling Mills)
- Induction and Arc Furnaces
- Continuous Casting Machines
- Ladle Refining Furnaces
- Re-heating furnaces
- Furnace Transformers
- Scrape shredding and charging system
  - Billets charging and ejecting system
- Automatic Hot Rolling Mills
- Hot Wire rod plant
- Owner/Consultant of Electrical Automation in Naveena Steel Mills.
- Electrical/Automation consultant in Platinum Steel Mills LTD.
- General Manager Project in Agha Steel Industries.
- Planning, scheduling, installation and commissioning of
- 40 Ton Steel Melt Shop
- 40 Ton Hot Steel Rolling Mills
- 40 Ton Steel Wire Plant
- 10 MW Gas/Diesel Power Plant
  - HOD of Electrical/Inst. Deptt in AMRELI Steels LTD.
- Planning, scheduling, installation and commissioning of
- 63 MVA Grid Station
- 132 KV Transmission line / 132 KV Under Ground Cable
- Induction Furnaces / Furnace Transformers
- 2 MW Diesel Power Plant

#### MANZOOR PARVEZ

#### **B.Sc. Electrical Engineering**

Experience: 40

Technical Advisor to many steel companies such M/s Kamran Steel, Lahore. Kamran Steel is Revamping the project and enhancing the rolling capacity to 250,000 TPA. Induction steel melting furnaces and continues caster are planned. Hot billet charging directly charging from continues caster foreseen. Through valuable inputs, he has managed to add value to the plant by his product quality improvement skills.

- Advisory Services to various steel companies
- General Manager Dost Steels Limited (Pakistan) Project was rehabilitated under his superivsion and now has a production of 300,000 tons per annum.
- Mukalla Iron and Steel (Yemen) Automatic bar mill with annual production of 300,000 tons.
- Southern Electric Power Company 117 MW Independent Power Producer.
- Genertech Pakistan Limited (Nishat Group) Green Field Project 26.5 MW Captive Power Plant
- General Manager Nishat Tek (Nishat Group) Green Field Project 22.4 MW Captive Power Plant
- Chief Engineer Electrical Brother Steel Limited (Ittefaq Group) Green Field Project Bar/Wire Mill of 200,000 tons annual production.
- Chief Engineer Electrical Ittefaq Foundries Limited Steel melting furnaces.
- Head of Electrical Dept Shahryar Industrial Iranian Group (INSIG) 1.2 Million tons per annum capacity re-rolling mills, Ahwaz Iran.
- Electrical Dept In charge Sofian Cement Factory Tabriz Iran
- Sales Engineer General Electric Company (GEC)

#### 🔔 NISAR AHMAD

#### **B.Sc. Electrical Engineering** Experience: 32

- Project consist of 20 tones steel melting, CCM and re-rolling mill of PRIMETAL Italy with capacity of 1000 Tons/day and 300,000 TPA.
- Rehabilitation of the plant done after six years of stoppage. Complete testing and Commissioning carried out. Mill was tested for production for all range of products.
- project of re-rolling mill by AL MJHAR Trading LLC DUBAI. The project is state of art technology with capacity of 1000 Tons/day, 300,000TPA drive with rolling speed of 13 m/sec. Electrical system comprised of AC/DC drives of Siemens ITALY.
- Project of steel re-rolling mill with capacity of 1000 Tons/day, 300,000TPA at speed 13 m/sec AC/DC drives PLC control supplied by ANSALDO/POMINI ITALY.
- Manager Electrical Ghazi Power Limited, A power plant of 20.82 MW based on Diesel Engine with 3.47 MW each caterpillar 3600 series. USA
- Project of 26.5 MW based on Diesel Engines 5.3 MW each Niigata Japan.
- High and Low voltage switchgear Manufacturing Company. Installed various 132/11kv grids, power plants, switchgears and distribution system.
- Arc and Induction Furnaces. Various Arc furnaces of 3-5 Tons capacity exported to Bangladesh, and Sri Lanka.

# **2** ZAHID HUSSAIN ZAIDI

#### **B.Sc. Electrical Engineering**

Experience: 32

Certificate course in maintenance of heavy earth moving machinery and equipment from the Texas State Technical Institute USA under UNDP

scholarship in session 1979-1980

Certificate of Doctor of Motor from the Texas State Technical Institute USA under UNDP scholarship in session 1979-1980

Three years Diploma of Associate Engineer in Auto Diesel Technology from GCT Lahore .1969-1972 Comprehensive experience of more than 45 Years in mentioned fields

- A project of steel re-rolling mill Erection with capacity of 1000 Tons/day, 300,000TPA supplied by PRIMETALS, ITALY.
- Managed erection of 20Tons Induction Furnace supplied by Electrotherm.
- Managed erection of 50 tons/hr Billet Caster supplied by Electrotherm.
- Management of manpower for overall mechanical department
- Management of complete piping and structural jobs in the Melting bay
- A Project of steel re-rolling mill with capacity of 1000 Tons/day, 300,000TPA supplied by VAI POMINI, ITALY.
- A project of steel re-rolling mill planned by AL MJHAR Trading LLC DUBAI. This is state of art technology project with capacity of 1000 Tons/day and 300,000TPA supplied by SIEMENS, ITALY.
- A project of steel re-rolling mill with capacity of 1000 Tons/day, 300,000TPA supplied by ANSALDO/POMINI, ITALY.
- Responsible for AGS warehouse based in Quetta and also chief of seismic drilling operations in Lugai block Zobe, Baluchistan.
- Worked as Mechanical Engineer during erection and commissioning of 117 MW Independent power plant.
- Worked as in-charge of workshop Transport and power house.
- Worked as in-charge/Sr. Maintenance Engineer during erection and Commissioning of 50 MW power plant supplied by Siemens/Sulzer.
- Worked as Drilling Engineer on different Rocks.
- Westfalia, Separators, Maintenance, Overhauling Dismantling and Reassembling from Westfalia represent in Pakistan.
- Lube oil fundamentals & basic Lubricants from Shell Pakistan.
- Fire Fighting and Basic Safety course from Civil Defense, Lahore.
- Fire Fighting and Safety course from Southern Electric Power Company Ltd.
- SIEMENS DCS7 two-week training, Lahore.

# ZAHID SARFRAZ

#### **B.Sc. Electrical Engineering**

Experience: 23

Twenty-three (23) years of experience in reputable Organizations, which include Erection jobs, project monitoring contractual correspondence and Maintenance and troubleshooting on Mechanical system. Maintenance quality, safety and hazard prevention and staff/ manpower evaluation.

- Padding, leveling and aligning for erection of mechanical equipment.
- Assembling of rolling mill stands. Coupling of DC motors with stand reducers fitted as per manufacture recommendations. To supervise fabrication of 60 t/h pusher type furnace.
- To supervise fabrication of 16/3 tones cranes and 2 nos. 25t crane. Complete installation of water treatment plant pumps. Checking of civil foundation as per mechanical requirement.
- Installation, leveling and aligning of stands robot for stand assembly.
- Padding, leveling and aligning for erection of mechanical equipment.
- assembling of rolling mill stands.
- Coupling of DC motors with stand reducers fitted as per manufacture recommendations.
- To supervise fabrication of 55 t/h pusher type furnace.
- To supervise fabrication of 15/5 tones cranes and 2 no. 20t crane.
- Complete installation of water treatment plant pumps.
- To supervise grouting of all mechanical equipment.
- To supervise flushing of lubrication and hydraulic pipes.
- Complete installation of water treatment plant pumps.
- Start of base to complete installation cooling bed, rolling mill robots side, stand and cooling tower.
- Padding, leveling and aligning for erection of mechanical equipment.
- Assembling of rolling mill stands.
- Coupling of DC motors with stand reducers fitted as per manufacture recommendations.
- To supervise fabrication of 70 t/h pusher type furnace.
- To supervise fabrication of 20/5 tones cranes and 40t crane.
- Complete installation of water treatment plant pumps.
- Complete installation of water treatment plant pumps.
- 2x75 MW Gas Turbine Sets ,1x84 MW Steam Turbine Set
- Auxiliaries of Power Plant.
- Balance of Plant.
- Turbine alignment (GE+SCODA) and Leveling of sole plates, foundation structure installation.
- Generator alignment with Turbine.
- HP feed pumps and Cooling water Pumps (SIGMA) Installation.
- Gas conditioning System including Boilers, Heat exchangers, Pressure regulating valves installation.
- 4.5 MW (Cummins) Black start Generating sets installation.
- Water treatment and waste water treatment Plants (WABAG) Installation.
- Installation, Commissioning and 3000,6000,9000 and 12000 Hours Maintenance of Engines, Overhauling of MAN B&W Turbocharger, Rotary and Stationary Equipment such as Pumps, Compressors, Heat exchangers, Valves, Waste Heat Boilers Fuel Storage Tanks.



Fabcon has managed to gather international resources in field of design, engineering and manufacturing in order to enhance its capabilities and deliver with reliable and latest available technology. Few of our partners we have worked with in field of power plant, steel plant, boilers, pressure vessels, over head cranes etc. are briefed below;

# Greenfield research incorporated, Canada

Fabcon has international partners which have expertise of designing Power Plants and Boilers. Greenfield Research Incorporated (GRI) was established in 1992 to translate advanced research in energy and environment into products and services. The mission



of this company is to provide innovative, clean, affordable and sustainable options for generation of power from biomass, coal and waste products. Based in Halifax, Canada, GRI works closely with the CFB research laboratory of Dalhousie University and other similar laboratories around the world utilizing their vast pool of highly motivated scientific talents. GRI also operates an advanced research boiler in a thermal power plant for process and product development. GRI provides cost effective specialized investigative and R&D services to companies across the globe. Countries we work includes USA, Canada, France, Italy, Korea, Ireland, China, India, Brazil and Turkey.

# Planum Doo, Croatia

This company is being involved for engineering, monitoring and consulting with more than three decades of experience in boiler production. Their services include basic design and detail engineering, pre-bid engineering support, construction support (related to detail engineering).



# Alera International, Germany

As a technology provider, Alera not only offers licenses, but we also consult in the areas of energy and environmental technologies.

Alera's work ranges from advice on specific questions to long term cooperation including extensive engineering planning work and project management.

Alera is most experienced firm in Europe for developing technology for High Pressure Power Plants and Boilers based on solid fuels especially biomass.



#### SEPCO, China

SEPCO is affiliated to Power Construction Corporation of China, and is capable of providing one-stop service of EPC contracting for power station projects regarding survey, design, equipment completing, building and construction, commissioning and operation. By revenue, it is among the 100 largest construction contractors in the world in 2013



Founded in 1952, SEPCO Electric Power Construction Corporation ("SEPCO") is a wholly-owned subsidiary of Power Construction Corporation of China with total assets of USD 1.7 billion. The company has more than 20 qualifications such as Class-A general contracting in the construction of electric power, mechanical and electrical, building and petrochemical projects. The company is also equipped with the general contracting capability for the whole process covering investment, financing, survey and design, complete sets of equipment, construction and commissioning for the power energy, oil and gas chemical, energy-saving, environmental protection and infrastructure projects

# Qingdao Jieneng Group, China

They produce Jieneng Brand steam turbines below 200MW, with two categories of steam turbines for power station and industrial applications, and can meet the requirements of power generation, owns over 2200 sets of machining equipment with CNC and digital-display, with the annual productivity of over 500 sets/6 million KW, and No.1 market shares in medium and small-type steam turbines in China, is the strongest design and manufacturing supplier and contractor of the complete power station projects.



Fabcon is a sole partner of SWF Krantechnik Germany. SWF is one of the leading global players in crane and hoisting equipment. At all times and in all places, SWF applies to the highest and the most demanding standards. SWF hoists and components perform better, offer advantages and can do more than the average products on the market.

The SWF components have been designed to be as flexible and cost effective as possible; allowing us a solution adapted to customer needs by using standard equipment. This keeps the individual development and the cost that comes with it at a minimum.

# Jinan Boiler Group Co. ltd., China

Established in 1954, Jinan Boiler Group Co., Ltd. (Hereinafter called "JBG") is a large company with profound cultural foundation and prosperous developing strength. JBG has







become a world-renowned R&D base of CFB boilers and the largest manufacturing base of biomass fuel fired boilers, and made important contribution to industry development of Jinan City, Shandong Province and even China.

#### References

- 85t/h CFB boiler, MRT-TCC Sugar Investment Co., Ltd., Cambodia
- 30t/h and 35t/h CFB boilers, Premier Industrial Chemical Mfg. (Pvt.) Ltd., Pakistan
- 40.7t/h biomass boiler, VYNCKE Singapore project
- 240 t/h PC boiler, Shriram Alkali & Chemicals Co., India

#### Shandong Huayuan Boiler Co,. Ltd, China

Since its foundation in 1968, Shandong Huayuan Boiler Corporation, originaly named Linyi Boiler Maker, specializes in designing, manufacturing, selling and offering consultation services of boilers, possessing the certification on qualification in engineering design of the first/second kind pressure vessels, State Grade A boiler manufacturing, ISO 9001, and ASME.



#### Wuxi Zozen Boilers Co,. Ltd, China

Is one of the leading boiler manufacturers in China. Their products have been sold in more than over 100 countries and set up regional offices in various countries. OZEN is an AQSIQ approved boiler and pressure vessel manufacturer. We hold the ASME "S" and "U" Certificates and have earned ISO9001:2000 Certification.



#### **CERI**

Capital Engineering & Research Incorporation Ltd., (hereinafter referred to as "CERI") was founded in 1951 by the former Ministry of Metallurgical Industry of China as the first national metallurgical design institute in China Based on over 60 years experience in engineering and contracting for metallurgy industry, CERI can provide comprehensive consulting services including strategic planning,



technical and financial project evaluation, energy balance calculation and overall engineering design. CERI has provided consulting for hundreds of projects of large and medium-scale companies in China and overseas markets, e.g.

Hebei Steel (output 47,000,000t/y)

Baosteel (output 43,350,000t/y)

Tangshan Bohai Steel Co., Ltd. (output 15,000,000t/y)

PT. KRAKATAU Steel Company (output 1,200,000t/y)

TATA (output 29,550,000t/y)

#### **Husnain Associates**

An electrical engineering firm presenting different kinds of projects including residential, commercial, industrial and telecommunication



renowned projects include those of US-Apparel, Stylar International, Sapphire, Interloop, Honda etc. The company is headed by experienced and well known industrial professional Mr. Sabir Naseer. (BE Electrical)

# CORPORATE



**FABCON** is proud to provide our clients with the highest quality standards available throughout every aspect of its operations. This level of quality is maintained through the implementation of our "Quality Assurance Program." Our program is unsurpassed in assuring our clients that our products and services are provided in strict compliance with industry and client standards. We provide a complete corporate commitment to quality throughout the design, engineering, procurement, fabrication, construction and inspection process of each project.

#### **Quality Assurance and Quality Control**

The Company's quality objectives shall ensure that business development, procurement, fabrication, testing and inspection activities are undertaken on any given project are:

- Planned and performed to achieve the required quality within budget and schedule requirements.
- Following contractual and regulatory requirements.
- Performed correctly the first time to ensure cost effectiveness and efficiency.



Quality doesn't happen by chance. It takes a combination of dedicated employees with the right tools and skill sets, attentive management and a strong, clear quality program. FABCON strives to achieve error free engineering, procurement and construction deliverables every time.





Our comprehensive Quality Management System (QMS) defines our approach and is managed by a Senior Quality Manager. Within each office, FABCON has identified quality managers who work with project managers in many ways to assist in project specific quality program implementation and adherence. Key parts of the QMS include:

- On-going Employee Training Quality Checklists and Forms Standardized Workflows
- Quality Audits

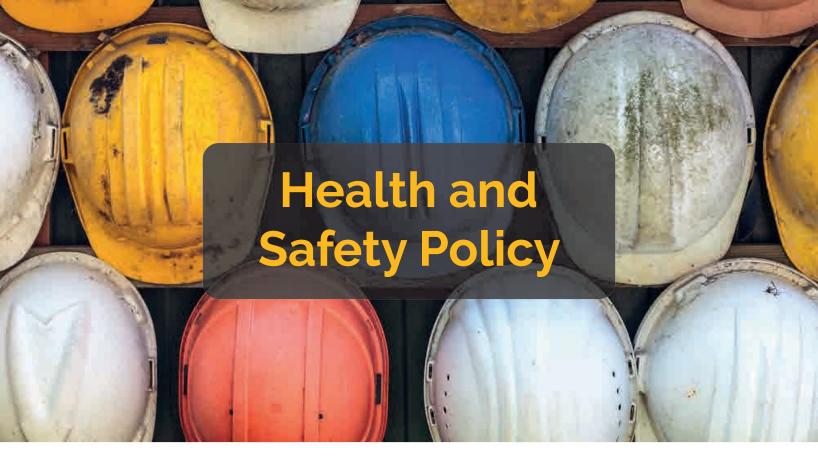
Continuous Learning and Improvement



Our Quality Process starts in the preliminary stages of design and isn't complete until our client is operating and satisfied. Some of our critical quality assurance and quality checking steps:

- ⋆ Development of a project specific QA/QC Plan
- ★ Conceptual review of all plans and technical design documentation
- ★ Team design reviews
- ⋆ Drawing and specification crosschecks
- ★ Equipment specification reviews
- ★ Constructability and operability reviews
- ★ Hazardous Operation review
- ★ Code/Programming internal function testing
- ★ Recovery plans for any product quality issues





Our CORE Values – Safety, Excellence and Integrity – motivates our movements and confirms that safety is core to every portion of our business. Our Zero Accident Statement is more than words, it guides the conduct of employees and contractors working on our job sites. We acknowledge that our company's staff and professionals are our biggest asset. FABCON is committed to the philosophy and practice of achieving and sustaining an accident-free work environment.

FABCON's Occupational Health and Safety Management System has been certified since 2010, in

accordance with the OHSAS 18001 International Standard. The OHSAS 18001 standard sets the framework for the systematic identification, assessment and management of risks for health and safety at workplaces; thus, contributing to the minimization of accident possibilities. Moreover, the certification requires the compliance with the relevant legislation and helps in the overall optimization of corporate performance.





Also, FABCON invests systematically in the implementation of modern, up-to-date methods for identifying, assessing, preventing and eliminating potential hazards at work, giving particular emphasis to Workplace Health and Safety issues, reflecting a desire to achieve outstanding performance and meet the target of "ZERO WORKPLACE INJURIES".

Our internal safety program includes:

- A daily job hazard analysis meeting.
- All staff and team members are trained to look at safety before beginning of any take to reduce risk.
- All team members are routinely trained and updated on the best safety practices.
- All team members are rewarded for operating in a safe and productive manner.
- All team member's hours are tracked diligently to prevent fatigue and mitigate the risks related to exhaustion or stress.
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#### **Environment protection policy**

We strive for continual improvement in this area so that we minimize our impact on the community and other groups who may be affected by our work. As such FABCON carries out all activities in a manner that provides consideration of the environment, health and wellbeing of those involved. We cooperate with relevant authorities and clients to meet statutory and contractual requirements. At FABCON every individual is responsible for providing a healthy, safe and environmentally clean work place. The goal is to promote sustainability and environmental awareness at all levels of the firm by:

- Complying with all applicable environmental legislation and sustainability commitments.
- Measuring and analyzing the carbon footprint of our business activities in conjunction with other climate change mitigation and adaptation efforts.
- Preventing pollution and reducing consumption of resources through waste management strategies that promote waste minimization, re-use, recovery and recycling, as appropriate.
- Incorporating energy efficiency measures into the firm's facilities and promoting efficient energy use in all areas of business activity.
- Adopt a procurement program that considers the environmental impact of products and services and supports the purchase of energy-efficient products.
- Develop our environmental management systems and processes to improve our environmental performance during manufacturing.

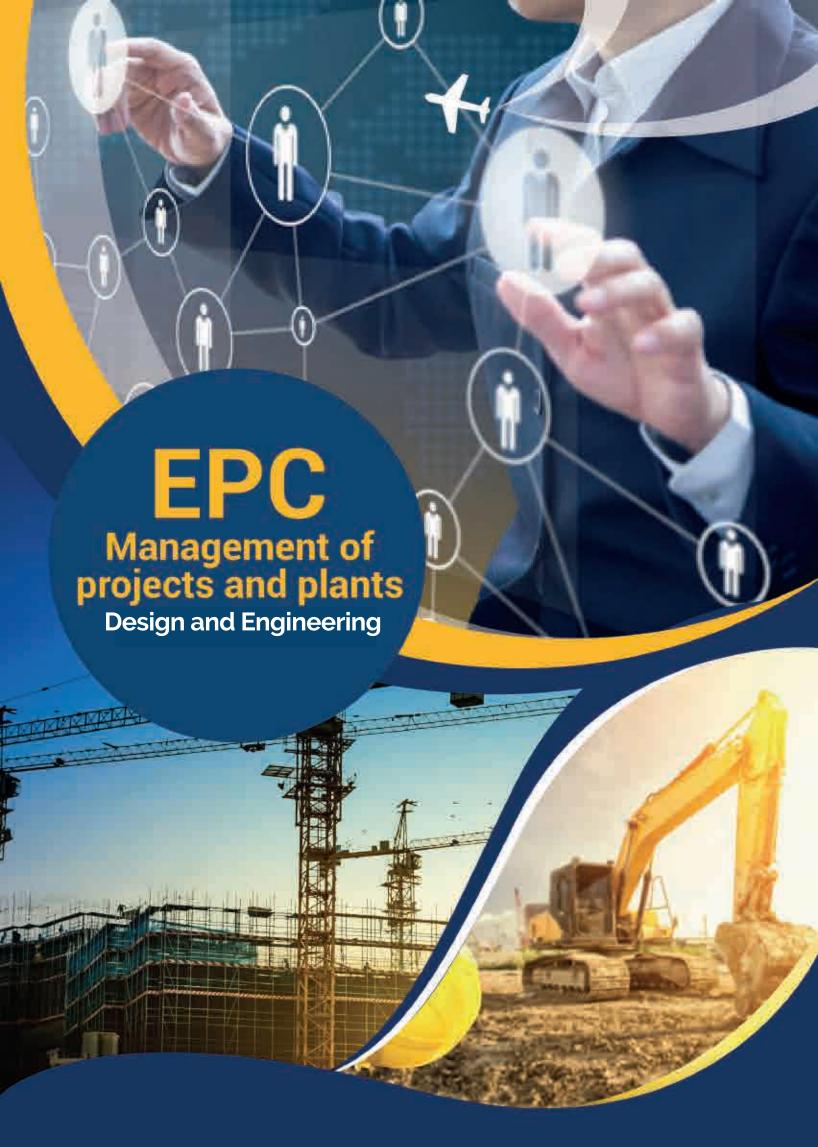


- Ensure that employees are aware of the environmental impacts of their work activities and encourage them through regular awareness and training to minimize those impacts.
- Considering environmental issues when leasing or purchasing property.

This Environmental Policy applies to our every operation. We will maintain an Environmental Management System, aligned with the main clauses of the ISO14001 standard, to provide a framework for implementing our Environmental Policy and auditing our progress. We will monitor and report on our environmental performance to our employees, clients and stakeholders.







# **EPC Management of Projects and Plants**

We approach each project with seamless processes that link engineering, construction, supply chain management, manufacturing, project management and installation activities. Our goal is to deliver safe, efficiently-managed, cost-effective projects that meet client requirements. Our approach to "Early Contract Involvement" breaks down the walls that traditionally exist between key stakeholders and encourages full communication and transparency between all parties who play a role in the success of the project at all phases of the project lifecycle.

# **R&D ABILITY**

Innovation has always been a part of FABCON's culture. Through the years, we've built a reputation of challenging convention. Where a solution didn't previously exist, we've created one, opening new frontiers for the industry along the way.

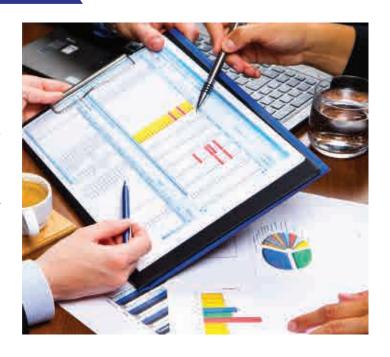
Our clients respect our competence and industry knowledge, but they also come to us because they trust that we will always drive innovation and the industry forward. And we have always responded to the challenges they've presented.



# **Feasibility Analysis**

With substantial expert resorces FABCON can become an extension of a client's team. In this analysis, we look at each project based on a certain set of criteria in order to better understand the project goals, develop a financial strategy and define the critical requirements in terms of financial feasibility and technical feasibility.

The feasibility analysis can take the form of a preliminary analysis or a comprehensive analysis



# **Preliminary Feasibility Analysis**

- No-cost engagement conducted with key stakeholders
- Assessment of design and constructability considerations
- Identification of key issues associated with design, construction, supply chain management, manufacturing and installation.
- Design best practices and recommendations

# **Comprehensive Feasibility Analysis**

- Cost-based engagement conducted with key stakeholders
- Assessment of financial and technical viability of the project

• Detailed analysis of key issues associated with design, construction, supply chain

management, manufacturing and installation.

Formal documentation of best practices and recommendations



# **Design and Engineering**

Backed by nearly 30 years of experience, FABCON offers comprehensive engineering services from conceptual design through startup and operation. Our engineering services include conceptual design, process design, front-end engineering and design (FEED), detailed engineering, project engineering, construction engineering, installation engineering, commissioning and start-up.

Our digital-centric approach transforms how we work together and the tools we use to increase efficiency and productivity and deliver sustainable solutions for our clients. Our engineering staff is composed of highly-experienced, dedicated professionals.

FABCON's engineering expertise extends around the world and across a variety of disciplines, adding value through every phase of a project. We assign specific types of project work in certain offices, allowing our engineers to develop specialized expertise. Then we connect the offices into a worldwide network of engineering centers located in Europe, Middle East,



Asia and Australia to serve the diverse geographic and technical needs of our clients while ensuring consistent standards.



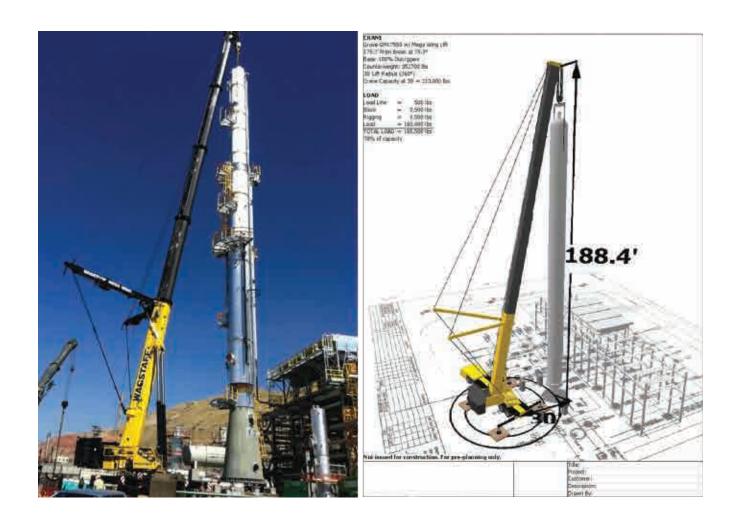
Our engineers and designers use sophisticated proprietary and in-house software to monitor and manage every phase of our projects, from concept design through construction and startup.

These tools allow us to efficiently and accurately develop schedules, allocate resources, monitor work progress, track costs and provide detailed reports for our clients. They enhance our ability to deliver projects on time, on budget and with superior results.

We believe our multi-disciplinary team offers our clients highly skilled professionals and the cutting edge in technology, systems and equipment. Our expertise extends to, but is not limited to:



- Layouts and general plans
- Civil design
- Process design
- Electrical design
- Installation and rigging design
- Architectural design
- Front-end engineering and design (FEED)
- Mechanical design and detail engineering
- Control and instrumentation design



# Procurement, Supply Chain and Logistics Management

Certainty of supply requires thorough planning, realistic timetables, sound expediting, a network of high-quality suppliers, service providers and an understanding of the sourcing market. At FABCON, global experience and long-term relationships are the basis for our procurement



strategy. Our in-depth understanding of international markets and our relationships with key suppliers allow us to provide the best materials and services on time and within budget. With procurement resources around the world, we have in-house resources to efficiently locate, evaluate, purchase and arrange for the transport of materials and services to any project site.



Our expertise spans the entire supply chain, from sourcing, contract management, purchasing and transportation logistics to inventory control, inspection and quality assurance. Every product and service we use must comply with our exacting quality and safety requirements. We utilize competitive bidding and negotiate long-term agreements to obtain competitive prices for

materials and services. We also do our homework, extensively researching markets and suppliers to ensure we prepare accurate estimates, select the best products and obtain the best prices.

Our engineers work with clients to select the technologies and equipment that best meet the project and cost requirements. Our project managers and procurement staff synchronize project schedules, materials orders and shipping logistics to minimize work delays. Procurement Services are focused on QCDC (Quality, Cost, Delivery and Compliance). Our aim is to achieve customer end goal of cutting costs, reducing lead time and reducing time to market through our value-based approaches.

# **Procurement Methodology**

- Profile Category
- Supply Market Analysis
- Develop Sourcing Strategy
- Supplier Selection
- Negotiation and Contract Management
- Detail tracking & expediting





# **Electrical and System Control**

**FABCON** offers complete design, construction, and service for all your power, electrical and system control needs. Our team understands the relationship between mechanical and electrical systems and can provide seamless system design and installation for a completely coordinated project. Whether it is design/build, plan and install, our years of experience creates a single source service for all MEP requirements.

#### Our expertise includes:

- Electrical Power System Studies, Design, and Details.
- Control System Design, Development, and Programming Software
- Equipment Specifications
- Grounding Studies, Design, and Details
- Lighting Design
- Instrumentation Design, P&IDs and Details
- Testing, Commissioning, and Start-up Support



### For Electrical services we offer:

- Power distribution, MV, LV Switchgears,
- Control panels and Motor Control Centers
   Underground Electrification, Grid Stations,
- Power House, Industry, Buildings and
- Services in Pakistan
- Power factor monitoring and correction systems
- Products of all brands (All Electrical Items such as Variable AC/DC drives, VFDs, Soft Starters, Motors, LV/MV Components i.e.



Circuit breakers, Contactors, Relays, Control Cables, Uninterrupted Power Supply (UPS), Voltage Stabilizers, Explosion Proof Motors, Energy Saving Motors)

• Solutions, Installation and Commissioning of all Electrical Scope

# For Instrumentation & Communication

#### **Industrial Control Systems**

Distributed Control Systems (DCS)

Supervisory Control and Data Acquisition (SCADA)

Remote Terminal Unit (RTU)

Process Logic Controller (PLC)

#### **Industrial Instrumentation Hardware**

Temperature Transmitters, Pressure Transmitters, Level Transmitters, Sensors etc.

Install, Calibrate (Bench & Field), Repair, Range, Test, Loop Check, etc.

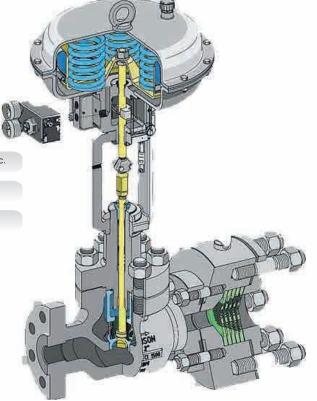
Experience with nearly every instrument manufacturer

#### **Instrumentation Support Hardware**

Conduit, Cable Tray, Junction Boxes

Field Bricks, Field Converters, Enclosures, etc.

Cable - Copper, Fiber, etc.



#### **Commissioning & Operation**

Testing



### **Civil Construction**

FABCON provides general construction services for new installation, facility upgrades and other specialized industrial, commercial and government projects. All projects follow required specifications and are completed in a timely and cost effective manner regardless of size, budget or timeline. Our team's strong commitment to excellence is backed by many years of

extensive experience. We offer a wide variety of civil construction services for the industrial worksite. Our integrated approach is designed to take a site from a field and develop it into a fully functioning facility. All of our civil contracting services emphasize safety, quality, efficiency, excellence in customer service, and results that are delivered on time and budget. From site preparation, concrete,



deep foundations and much more, we can handle your civil construction project whether large or small.

### **Residential and Commercial**

As an industry leader in the construction of residential and commercial multistory buildings, FABCON recognizes that safe, efficient delivery is essential to the success of every job. Our multistory building team is composed of dedicated, passionate staff with the experience,

industry knowledge, technique creativity, and resourcefulness to bring our clients' vision to life. We work closely with project stakeholders to exceed expectations, calling on local, national, and international resources to make it happen. We are well -positioned to take on the unique challenges of each project, bringing a broad understanding of the latest economic and emerging technology trends.



With the group's expertise, FABCON has completed many of the most complex and challenging multistory projects and has work underway at the Military sector including Army, Airforce and Navy located all over Pakistan.



As the leading builder of education and healthcare facilities, FABCON has worked on several education and healthcare projects, always keeping the end users in mind.

Our education and healthcare teams are made up of dedicated, passionate staff with the experience, industry knowledge, creativity, and resourcefulness to deliver on our promises to clients.



To deliver the best work and maximize value to our clients and partners, we draw on the best practices and lessons learned from our experiences. It is this breadth and depth of experience that has earned the company its reputation as a trusted, go-to builder for leading education and hospital systems.

### **Industrial Construction**

We navigate difficult construction scenarios on a case-by-case basis with professionalism and consistently produce solid results. Our team has worked in several industrial facilities self-performing all aspects of heavy construction and deep foundations. We are well versed in the daily permitting process as well as the strict safety requirements to work inside the fence line which we adhere to on all of our projects.



From start to finish, our team and fleet of equipment can install deep foundation support systems and retention structures, reinforce and pour concrete structures that bear on those foundations, and develop and grade the site per plans and specifications.

Whether you are planning for a new facility or looking at expanding an existing one, everything starts with earthwork. At FABCON we used modern controlled equipment to maximize production and make sure that the end grade is accurate to the hundredth of an inch.





# **Government Infrastructure Development**

FABCON has been involved in almost all the mega infrastructure projects executed in last decade. We have delivered and contributed in landmark projects including road construction, flyovers, underpasses, metro stations, buildings, dams and urban infrastructure. With an international vision FABCON has achieved development of national interest projects on "Fast Track" and within the budgets.



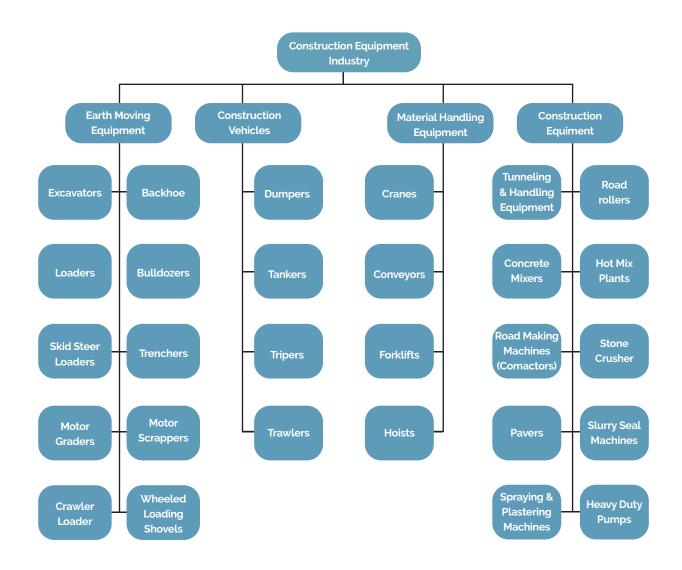
Our projects are technically demanding. We have the specialists whose expertise can take a project through every phase to successful completion. We adopt special technical solutions that save time and money. At FABCON you will find not only experienced civil engineers but also proven experts for the many specialized areas of construction, from social and transportation infrastructure to energy infrastructure.



# **Construction machinery and tools**

Heavy equipment is essential for construction jobs of almost any size, from home building to large-scale commercial and civil projects. Earth-moving equipment covers a broad range of machines that can excavate and grade soil and rock, along with other jobs. Earth movers and other heavy equipment help to speed not only earth work but also materials handling, demolition, and construction. FABCON manages state of the art construction equipment which provides a competitive operational benefit and adds to the high quality and timely completion of the project.





### EARTH MOVING MACHINERY CONSTRUCTION MACHINERY

| EXCAVATORS            |
|-----------------------|
| SHOVELS               |
| CLAMSHELL             |
| LOADERS               |
| SKID STEER LOADERS    |
| GRADERS               |
| CRAWLER LOADERS       |
| ВАСКНОЕ               |
| BULLDOZERS            |
| SCRAPERS              |
| WHEEL LOADING SHOVELS |

# MATERIAL HANDLING MACHINERY

| CRANES    |  |  |
|-----------|--|--|
| FORKLIFTS |  |  |



# Design, Manufacturing and Supply of Mechanical Equipment and Machinery

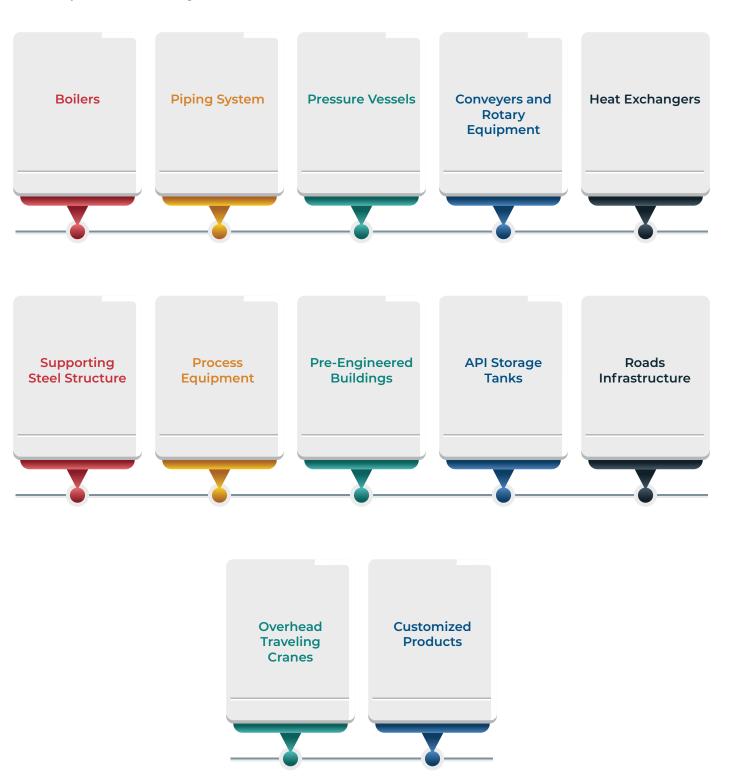
FABCON offers wide range of mechanical fabrication solutions for multidisciplinary industries. A full array of industrial products with decades of experience, FABCON has delivered highest quality products and emphasized on customer satisfaction.

Our managing team strives to sustain an environment where all of the team members endlessly improve their skills and sustain the highest level of proficiency in their respective areas. It was this consistent development of competence and talent that fueled our growth over the years as the scale of our projects increased in both size and complexity.



# Products

Over the years, our main target has always focused on the improvement of product quality, both regarding the design and the production features. Our company offers a full service to the clients, managing independently all the manufacturing stages of our products: design, manufacturing, machining, final tests and certification. The range of products undertaken by the company throughout its history fall into following class;



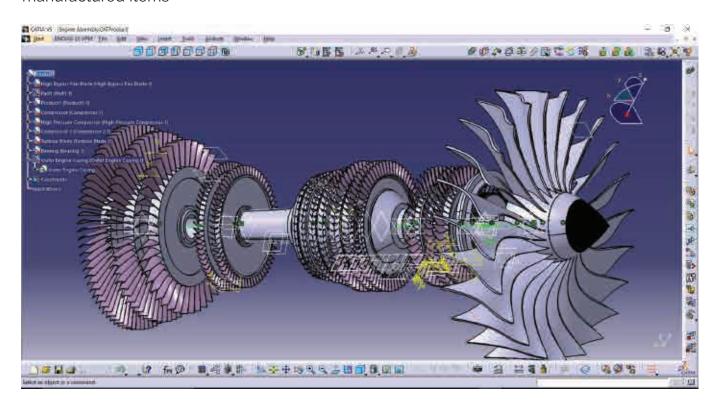
# **Engineering**

Our project engineering group is a team of professionals who design products for and provide services to a diverse range of clients in our region. Our projects are designed to be built and operate safely and include the latest technology and installation techniques. Our expertise extends to, but is not limited to:

#### **Basic and Detailed Engineering**

- Understanding the client needs
- Preparation of Technical Specifications
- Pre-Engineering
- Pre-Feasibility
- Process engineering
- Layout Drawings
- Single Line Diagrams
- P&IDs
- Process design of plant
- General arrangement and layout drawings
- Preparation of fabrication drawings for manufactured items

- Furnishing bill of materials for procurement
- Preparation of engineering specification for bought-out items
- Preparation of 3D designs
- Stress analysis of pipeline
- Preparation of instrument schedule,
   I/O List, Junction box schedule,
   cable schedule, interlocks &
   schemes and control Philosophy
- Preparation of operation and maintenance manual



# **Design Tools**

Modern softwares are essential tools for designers to perform tasks in shorter time from simulations to manufacturing. We at FABCON streamline our design and development processes by using latest software and design tools.

Our top engineering design picks cover civil, mechanical, structural, electrical engineering design needs and includes drafting software, simulation tools, modeling tools, engineering calculation and conversion tools, pocket reference, and other solutions specifically for design engineering.

- HYSYS /(Process simulators) AFT Arrow / Fathom / Impulse (steady-state & dynamic
- simulation of pipeline networks)
- HTRI/MT-EXCH/VESS/COMP 6258/LAYOUT (Design of heat exchangers, air coolers,
- pressure vessels, compressors)
- AVEVA PDMS (3D plant modeling)
- ETAP / NEPLAN / CYME (integrated design optimization and simulation for power
- systems) AMPERE PROFESSIONAL (electrical system's integrated design)
- TEKLA (3D modeling for steel works & concrete / analysis & design for steel works &
- concrete)
- FOUNDATION 3D/MAT 3D (design for concrete foundations)
- MS Project (Planning)
- SAP2000 for structural analysis and foundation loadings
- ASME Spreadsheets for stress analysis of pressure parts
- AutoCAD for detailing of boiler parts
- PPSD for process design of boiler island
- CESAR for piping stress analysis



# **Industrial Manufacturing Facility**

To meet the demand countrywide, FABCON has strategically located its industrial manufacturing facility in Sunder Industrial Estate, Lahore. The facility is comprised of 100,000 sqft. conditioned space covered in four bays with storage, lay down and painting area. This combined with design and admin block provides a total of 130,000 sqft. of qualified manufacturing space to better serve our clients and meet all of our corporate manufacturing requirements. FABCON provides ample set-up capacity and a flexible schedule to deliver quality fabrication for your project on time. We can work two operating shifts to produce over 1,000 tons of monthly production capacity.



#### **Facility Highlights:**

- 100,000sft working area
- Five (05) over-head travelling cranes of capacity to handle 100ton single load
- Segregated area for machine shop
- Segregated area for automatic welding
- Segregated area for auto oxy-fuel cutting
- Segregated area for sand-blasting and painting
- Segregated area for raw material storage and finished products
- Equipped, segregated, labeled storage area for consumables and tools

The facility is equipped with accurate, well maintained machinery for quality fabrication.

# **MACHINERY AT FACTORY**



Horizontal boring machine is a time-saving machine used to bore holes in highly rigid construction like machine bodies and gearboxes. A variety of operations can be carried out with the help of this machine-like surface milling, drilling, reaming, boring, turning and facing with the tool held in the facing head slide.

# Features:

| Bed Size:                      | 1830 mm         |
|--------------------------------|-----------------|
| Dimensions of the Rotary Table | 915 mm x 915 mm |
| Boring Size:                   | 100 mm          |
| Max Height of Spindle Axis:    | 2440 mm         |

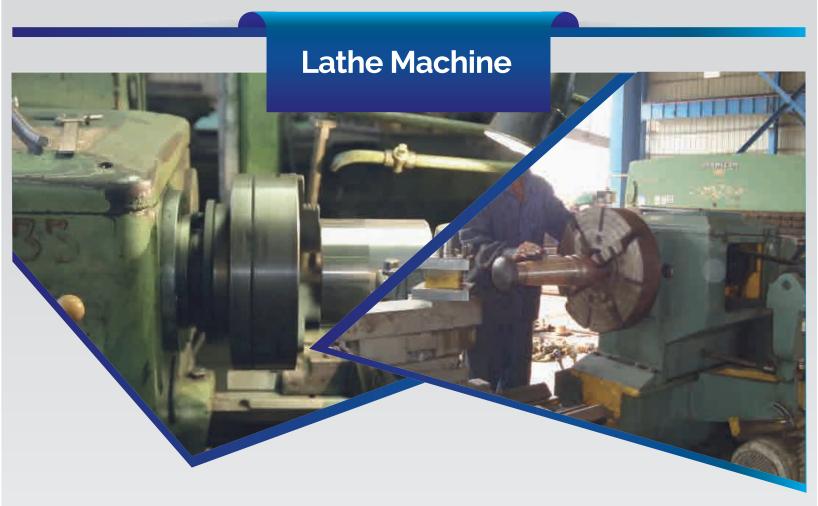


A radial drilling machine or radial arm press is a geared drill head that is mounted on an arm assembly that can be moved around to the extent of its arm reach. The drill head of the radial drilling machine can be moved, adjusted in height, and rotated. We have diverse types of radial drill machines depending on their capacities.

# Features:

| Table Size         | 915 mm x 1830 mm |
|--------------------|------------------|
| Arm Size           | 2130 mm          |
| Height             | 3050 mm          |
| Drilling Capacity  | 75 mm            |
| Table Size:        | 915 mm x 760 mm  |
| Arm Size:          | 1525 mmt         |
| Height:            | 2440 mm          |
| Drilling Capacity: | 75 mm            |

| Table Size:        | 1220 mm x 760 mm |
|--------------------|------------------|
| Arm Size:          | 2135 mm          |
| Height:            | 3050 mm          |
| Drilling Capacity: | 100 mm           |



A lathe machine is used to perform various operations such as cutting, sanding, knurling, drilling, facing and turning etc. Workpiece is rotated about an axis of rotation to perform these operations with tools applied to create an object with symmetry about that axis. We have diverse types of lathe machines depending on their capacities.

# **Features:**

Bed Size: 4570 mm

Chuck Size: 760 mm

Bed Size: 1830 mm

Chuck Size: 305 mm

Bed Size: 915 mm

Chuck Size: 165 mm

Bed Size: 3655 mm

Chuck Size: 150 mm

Bed Size: 915 mm

Chuck Size: 165 mm



Milling machine is used to remove material by using rotary cutters. Cutter is advanced into the workpiece and by varying the direction, cutter speed and pressure, required milling operation is performed. Small to large scale operations can be performed on it. We have diverse types of milling machines with different specifications.

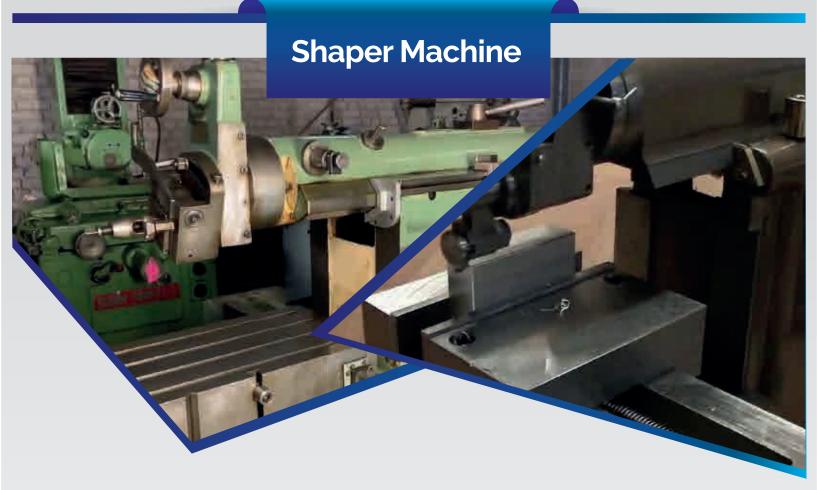
# **Features:**

| Bed Size: | 1220 mm | Chuck Size: | 165 mm |
|-----------|---------|-------------|--------|
|           |         |             |        |
| Bed Size: | 1220 mm | Chuck Size: | 165 mm |

- Ideal for the production of individual pieces and small batches.
- Capable of producing complex shapes with the use of multitooth, as well as a single point, cutting tools.
- Operation cost can be very modest given general-purpose equipment and cutters are used.

#### The advantages of the Milling machine:

- used to manufacture gears.
- Usually used to a machined flat surface but can also produce irregular surfaces.
- Used to produce the groove or slot.



A shaper machine is a type that uses linear relative motion between the workpiece and a single-point cutting tool to machine a linear toolpath. A metalworking shaper uses a cutter riding a ram that moves relative to a stationary workpiece, rather than the workpiece moving beneath the cutter. We have diverse types of shaper machines with different specifications.

# **Features:**

Length of Stroke: 455 mm Length of Stroke: 610 mm

- In the Shaper machine a single point cutting tool is rigidly mounted on the tool holder, which is mounted on the ram. The work piece is held rigidly in a vice (or clamped directly on the table).
- The ram reciprocates and thus cutting tool held in tool holder moves backward and forward on the work piece.
- In a standard shaper, cutting takes place during the forward stroke of the ram and the backward stroke remains idle.

#### **Application of Shaper Machine**

- To produce the straight and flat surfaces on the workpiece.
- To smooth the rough surfaces.
- It is used to create an internal partition or splines.



The larger version of the machine drill is termed as Pedestal or Pillar drill. This contains a long column that stands on the ground. The pedestal drill gives a number of benefits over a hand held drill, Controlled amount of pressure using a rotary feed handle, ability to hold the project at hand in place, and precise angle drilling a perfect 90° perpendicular holes in thicker material or precise angles by tilting the table.

**Features:** 

**Drilling Capacity** 

25 mm

# **Tool Grinding Machine**

Tool grinding machine is used to sharpen milling cutters and tool bits along with a host of other cutting tools. It is an extremely versatile machine used to perform a variety of grinding operations like surface grinding, cylindrical grinding, or complex shapes. We have several grinding machines in our workshop facility with distinctive features.

# **Power Cutter**

Power cutters that are used to cut hard materials like concrete, stone etc. They use mechanical, electrical or hydraulic mechanism to drive the wheel that is used in cutting operation. We have several grinding machines in our workshop facility with distinctive features.



Shearing machines are multipurpose devices used in the cutting of alloys and other sheet metals. It uses a scissor-like action to cut metal into sheets or strips. The machine is hydraulically operated and efficient in shearing of metal.

Features:

Bed Size: 2745 mm Max. Thickness: 10 mm

### **Benefits of Metal Shearing | Cutting Sheet Metal**

- Provides ability to make staight line cuts on flat sheet stock
- Cleaner Cut
- Straighter edge than traditional torch cutting.
- Since shearing cuts without forming chips or burning or melting the meterail, the process works well
  with most softer metals.
- Perhaps the biggest advantage of shearing is that it produces minimal or no kerf, with virtually no loss of meterall which equates to minimized waste.
- Shearing can be used with diameter part and is especially cost-effective for high-output operations producing thousands of pieces per hour.
- Can cut relatively small lengths of meterial at a time because the shearing blades are able to be mounted at an angle. This reduces the overall shearing force needed for each project.



Hydraulic press is also a type of press machine. It uses the hydraulic system to apply force that is used to drive the press. It is used for heavy duty applications where larger force is required as compared to mechanical press. Mainly used for forming with help of dies. We have diverse types of hydraulic presses with different capacities.

# **Features:**

Nominal Force: 2000 ton Nominal Force: 500 ton

Bed Size: 3048 mm Bed Size: 3048 mm

Height: 3048 mm Height: 2438 mm

# **Benefits of Hydraulic Press**

- Smooth Pressing
- Feel the Pressure
- Pressure Control
- Lifting and Pressing Ability
- Adapdability



Rolling machine is used to roll a metal sheet or strip. A metal stock is passed through one or more pairs of rolls moving in the same direction that roll it into a curved sheet. We have diverse types of rolling machines with different capacities.

# **Features:**

Table Size: 1500 mm (W) Table Size: 2500 mm (W)

Rolling Capacity: 20 mm Rolling Capacity: 50 mm

Table Size: 1500 mm (W)

Rolling Capacity: 14 mm



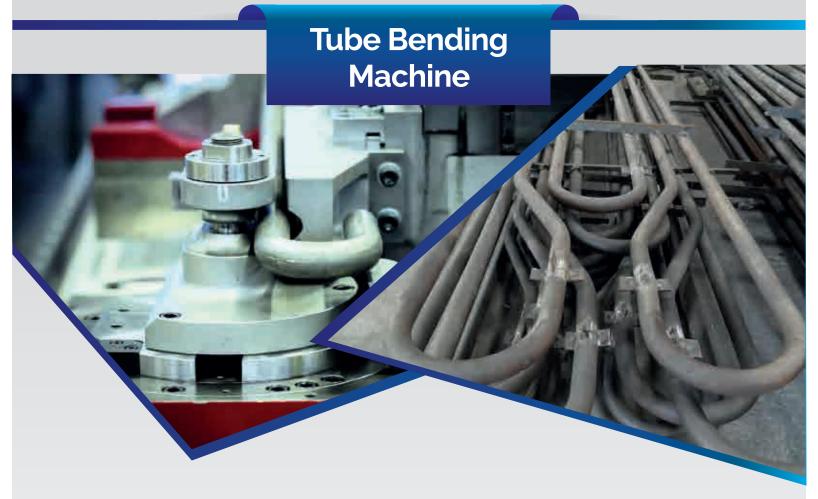
A bending machine is a forming machine tool. Its purpose is to assemble a bend on a workpiece. A bend is manufactured by using a bending tool during a linear or rotating move. In this machine, the bottom rolls are driven by electric motor & gear box. The upper roll is having manual up & down adjustment to achieve desired bending radius. This is a very simple and robust design machine suitable for light to medium jobs.

# **Features:**

Bed Size: 2000 mm

Max. Bending Capacity: 10 mm

- Induction Hardened forged Steel Rolls
- Hydraulic Drop End
- Double Speed Working System
- Electronic Balacing System for parallel movement of the rols
- Standard Brake System
- Conical Bending Device
- Large Working strocke Allower to get best bending result
   Featured Compact Structure for the easy Operation and Maintenance



Tube bending machines are employed to produce bends in tubes. Bends of different radii can be made using this machine. Tubes are structural, hollow conduits that are used as flow lines for fluids and gases. It has its wide application in boiler, pressure vessels, HVAC, and automotive industry.

# **Features:**

Max. Bending Capacity: 76.8 mm dia. at 5mm thickness

Eleminate welds, joints, and fixtures

Lower production costs

Eliminate risk of leaks

Cleaner and smoother finish

Minimize flow restrictions



The welding manipulator consists of boom elevation unit, boom retraction unit, motorized cross slider, column, boom, base, platform for loading operator, worktable and control part. The welding is performed with fine finish to ensure the high precision. It has flux recovery unit to ensure reusability of flux after the welding process. Column top is the boom elevation unit, consist of AC brake motor, worm reducer and chain sprocket couple etc. This machine has gravity balance unit which makes boom elevation stable and reliable and with ratchet anti-dropping unit. There are 08 sets of control rollers on the saddle along vertical and horizontal movement. It is adjustable eccentric structure and rectangle rail in triple -sides, which can ensure smooth and no shivering during boom retraction and elevation.

# **Features:**

| Welding type:                        | Automatic SAW (Submerged arc welding) |
|--------------------------------------|---------------------------------------|
| Effective stroke of boom retraction: | 6000 mm                               |
| Effective stroke of boom elevation:  | 5000 mm                               |
| Retraction transmission type:        | Chain and Sprocket Couple             |
| Retraction feeding speed:            | 120 - 1200 mm/min                     |
| Elevation Speed:                     | 1000 mm/min                           |

# **QA/QC Procedures and Records**

The quality is ensured by maintaining quality procedures for every job and keeping a record of all jobs performed, ensuring traceability of quality at each step. Following documents are maintained for quality assurance.

- Quality Control Manual
- Quality Inspection Plan
- Material Verification Records
- Welding Procedure Specification(WPS)
- Welder Performance Qualification(WPQ)
- Calibration Records
- NDE Records

# **Quality Control Manual:**

- Quality Control Manual defines the detailed procedure for the Welding.
- Quality Control Manual covers the Control and Implementation of Design, Material Verification, Examination and Inspection.
- Welding, NDE, Heat Treatment and MDR at FIELD.
   Quality Control Manual assigns the responsibilities to all the personnel involved in the Erection.



Board Inspectio

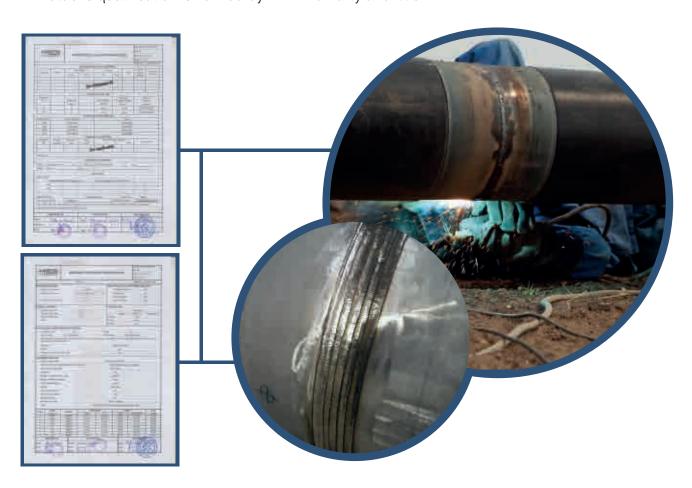


#### **Quality Inspection Plan (QIP)**

- QIP is scheduled by Manager QA/QC showing all the activities to be performed.
- QIP is Reviewed and Approved by AI/Third Party and Client.
- QIP provides the flexibility to HOLD/WITNESS the activity for AI/Third Party and Client.
- QIP is strictly obeyed and observed as per company's strategy.

#### **Welding Strength**

- Qualified welders under ASME Section IX and AWS D 1.1
- Qualified welding procedure specifications under ASME Section IX and AWS D 1.1
- TWI CSWIP 3.1/3.2 welding inspectors
- ASNT SNT-TC-1 A qualified Level II and Level III NOT inspectors
- Well trained QC inspectors
- WELDING PROCEDURE SPECIFICATION (WPS)
- Procedure Qualification Record (PQR) will be performed as per ASME Section IX, ASME Section VIII
   Div.1 and any additional Client Requirements.
- Welding procedure specifications (WPS) will be prepared on the base of Procedure Qualification
- Record (PQR) to cover all welding processes and strictly observed by all the welders.
- WPS will be reviewed and accepted by AI/Third Party and Client.
- WELDER PERFORMANCE QUALIFICATION (WPQ)
- All the welders are qualified as per ASME Section IX and Approved WPS requirements.
- Welder's qualification is verified by AI/Third Party and Client.



# **Testing Services**

FABCON offers a complete range of mechanical testing services. Additionally, we provide timely preparation of test specimens or any special fixturing. Besides, FABCON regularly conducted tensile, hardness, impact, load, pressure and fatigue tests that help in designing customized products. Tests are performed using tools, machines, fixtures, and processes that evaluate the performance of products by simulating real life conditions.

#### **NDE Facilities**

FABCON offers a comprehensive range of non-destructive testing, engineering inspection and third-party inspection. FABCON is headed by experienced and knowledgeable personnel with the commitment to provide its customers with a Non-Destructive Testing service second to none.

Our Non-Destruction Testing Services includes:

- Radiography X-Ray and Gamma Ray, Iridium 192 and Cobalt 60
- Ultra-sonics
- Magnetic Particle Inspection (MPI)
- Dye Penetrant Inspection (DPI)
- Eddy Current Testing
- Visual Testing

#### **NDE Facilities**

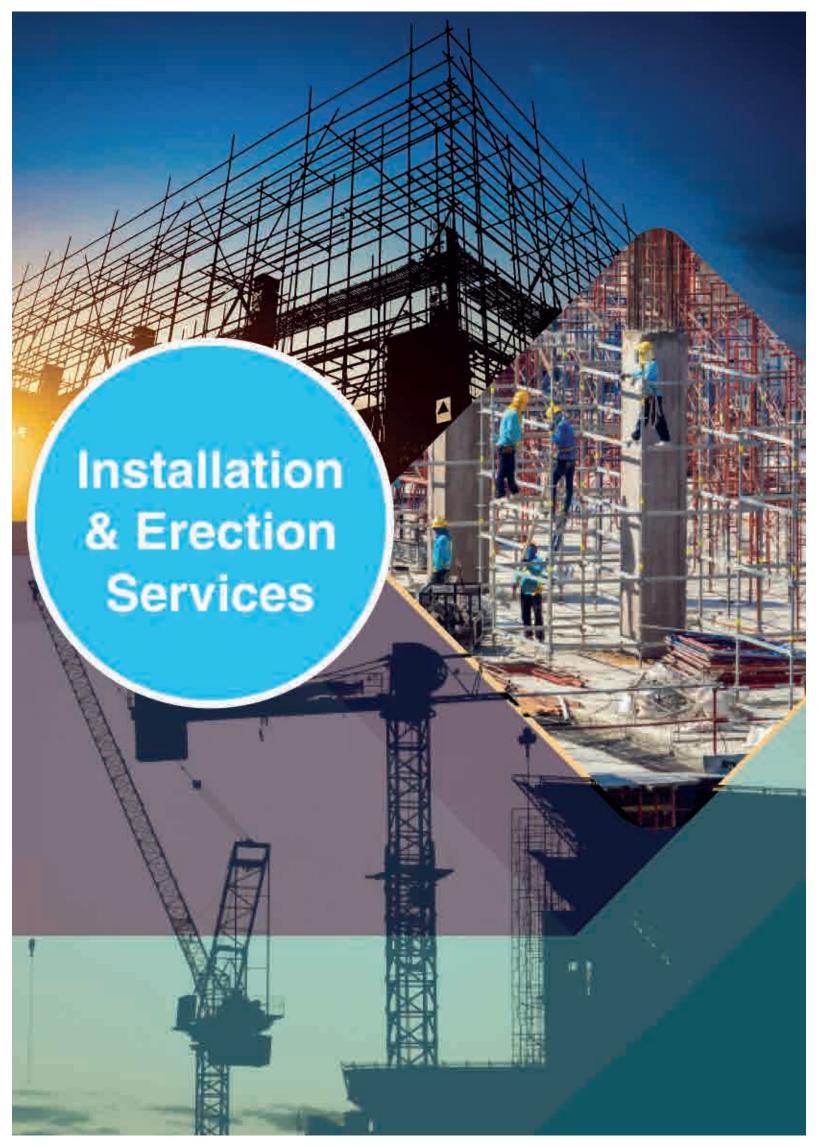
FABCON don't approach heat treating as an afterthought to the manufacturing process, instead we approach it as an integrated component of the product defined as per codes and standards. To ensure that code is completely followed, FABCON analyzes the work and offer heat treatment of the product where required. Our experienced and knowledgeable staff can identify potential problems offering time and money saving solutions before and after the fabrication process. FABCON offers localized heat treatment as well as complete heat treatment in a furnace.

#### **Hydrotesting**

FABCON can provide in-house shop based hydrostatic and pneumatic testing of piping, equipment and components for a wide range of industries including industrial, biotechnology, chemical, food, beverage and other industrial plants. FABCON has the capability to perform hydrostatic tests up to 120barg in a safe and efficient manner. FABCON can perform hydrostatic and pneumatic pressure tests to meet the requirements of ASME, ASTM and client or project specific standards. We use tested and certified equipment, instruments, charts, digital recorders and provide comprehensive documentation.

#### **Surface Finishing and Painting**

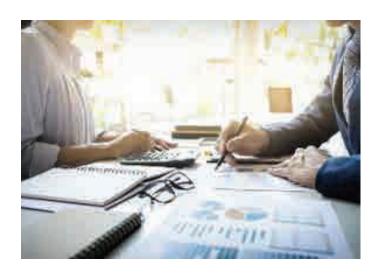
Our staff has decades of expertise in this sector and meeting OSHA safety and industry regulations is non-negotiable. The people at FABCON are experts in industrial painting and sandblasting. Our painters are competent in the use of abrasive blasting equipment, airless and conventional spray painting, paint testing equipment and atmosphere testing equipment. They are trained in the use of all this equipment for both on site and workshop projects. Our team of highly skilled painters maintain daily logs to monitor ambient conditions and complete specification sheets with accuracy on a daily basis.



# **INSTALLATION AND ERECTION SERVICES**

FABCON relies team of project managers, planners, engineers and site supervisors who have worked in high-profile projects across PAKISTAN in different industries, such as chemical plants, fertilizer plants, sugar plants, paper plants and cement plants. We are always willing to provide solutions to our business partners not only in substantial projects but also in small scale projects, often comprising minor activities for short periods which might not be worth the effort for others but not for us. From unloading till commissioning of plant, FABCON offers complete range of installation and erection services.

- Installation of equipment and machinery
- Levelling, alignment and anchoring
- Erection and rigging
- Fabrication and Welding
- Electrical and instrumentation installations
- Surface preparation and paint work
- Insulation and cladding
- Commissioning



# **Project Planning and Scheduling**

We do not simply prepare the work sheets; we bring innovative ideas, fresh thinking and solutions with a focus on identifying opportunities to maintain schedules and reporting expertise, including:

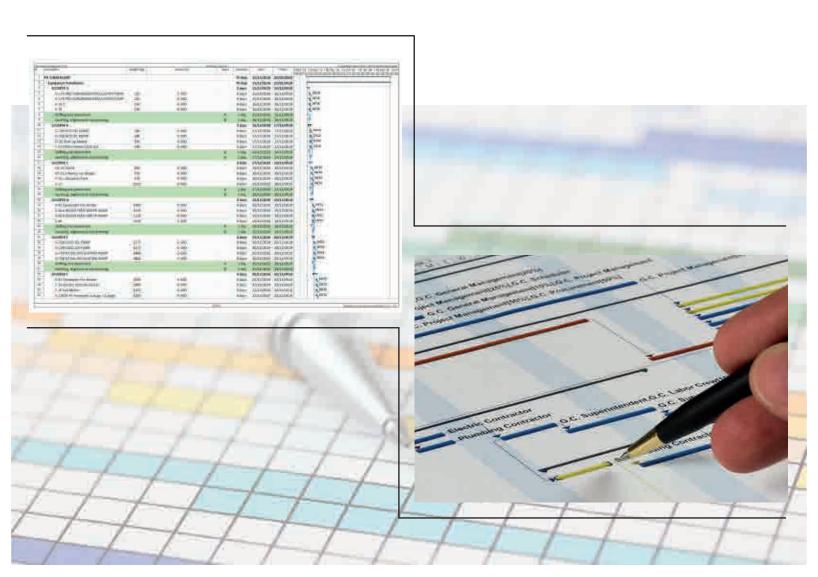
- Identifying the critical path
- Resource Loading
- Importing/ Exporting Data
- Cost/ Schedule Integration
- Reduce time and Manage Risks

FABCON have a specialized trained team of engineers and project managers in construction and CPM (Critical Path Method) scheduling who are proficient with planning tools like Primavera, Microsoft Project and Excel worksheets.



# PROJECT REPORTING AND CONTROL

- FABCON project planning engineers evaluate and compare the actual measured results against those planned.
- Whenever there is a variance, corrective action is required to keep the project on schedule and to budget.
- The inputs are the project plan and progress reports that contain data collected from the project team.
- Where progress deviates significantly, and this usually means outside of a predetermined tolerance limit, it is important to identify the underlying causes and take corrective action.
- Involves tracking, reviewing and regulating project progress.
- Includes status reporting, progress measurement and forecasting.
- Reports on scope, schedule, cost, resources, quality and risks.
- Controls project and project document changes.
- Includes control of scope, schedule, costs and risks.
- Formalizes acceptance of deliverables.
- Records quality control results.
- Implements risk treatment plans and actions.



# **HUMAN RESOURCE DEVELOPMENT**

FABCON's professional team of engineers and managers develop an onsite project organogram which not only helps in human resource management but also identify the potential areas needed for development of staff according to the department. Our professional staff represents all of our core principles and have been a single most key factor in making FABCON the industry leader it is today. With our highly skilled personnel to supervise, coordinate, weld or to complete many other specialized tasks we can efficiently and seamlessly complete even the most demanding projects. Loyalty and commitment are values we promote amongst all our employees, from apprentices and trainees to senior management. We support our local community by providing career opportunities for local people. Our Professional staff mainly consists of;



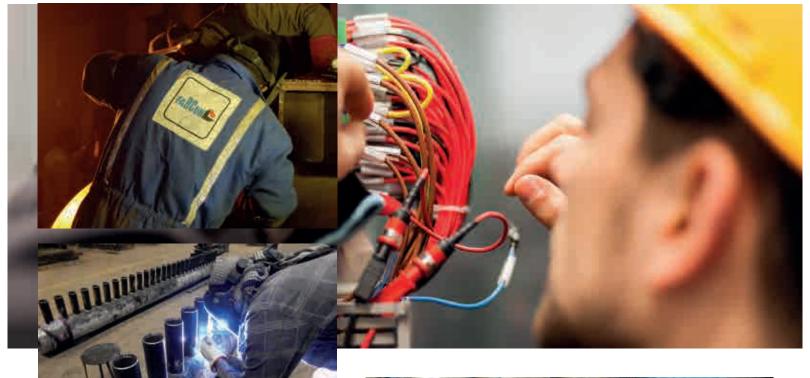
### **SKILLED MANPOWER**

With increasing complexity in today's industry and specific demands changing from project to project, it is of the utmost importance to work with specialized professionals. Hiring FABCON's manpower services ensures that each task of a project is executed by the adequately qualified and certified workforce. Our skilled manpower is fully qualified and experienced with the interpretation of drawings, on site fabrication, installation, erection, welding, rigging, repairs and maintenance of any type of equipment, machinery and structural steel. They are competent in the use of all equipment necessary for onsite works. Our site skilled staff include following key positions to perform these tasks.

- Qualified Site supervisors
- Proficient Fabricators
- Expert Fitters
- Knowledgeable Multi-process Welders
- Practiced Riggers
- Experienced Millwrights

- Competent Electricians
- Instrument Technicians
- Certified HTV Drivers
- Blasters, Painters and Insulators

We are committed to continuous improvement processes and providing our staff with the skills and experiences they need to further develop and enhance their own individual portfolios.







# **Un-skilled Manpower and Trainees**

FABCON do not consider any member of the team as an unskilled person. Even a helper is not unskilled person because without its help the welder or a fitter cannot maintain highest level of accuracy in their task. Our un-skilled manpower and trainees continue to add value to the service provided by our company to our valued clients. They are trained by our skilled trades in all aspects of their relative trades including work skills and ethics. The continuous training and improvement in skills enhance their portfolio and develop a key resource for future executions.



# SITE MACHINERY AND TOOLS

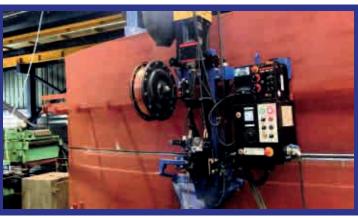
FABCON machinery division has developed a complete understanding of the stringent industrial requirements and involve latest machinery and tools that are best of the breed, known for their robust design, quality and reliability. Essential tools and fast-moving spare parts are sufficiently stocked in our inventory to meet the day to day requirements. The list of key site machinery and tools is as follows; AGW Machine is used for circumferential & longitudinal welding of tank shell plates from 6MM to 60MM.

#### Features:

- Flux Recovery System
- Cross Seam Weld Head Adjusters
- Lincoln DC600 / DC1000 Power Source Lincoln Contact Nozzle Assembly
- Lincoln Wire Reel Assembly

- Vertical & Horizontal Adjusters
- Lincoln Weld Heads





• Lincoln Control Box

# **Tractor Machine**

The Tractor is a self-propelled mechanized wire feeder, designed for the submerged arc process with track system capabilities. Designed to be used with a variety of Lincoln DC constant voltage and constant current power sources. The rugged, lightweight unit permits quick movement to the next joint. Its compact size fits through small openings and confined spaces. Butt and fillet welds can be made on heavy plate or steel as light as 12 gauge (2.5mm).

#### **Features:**

- Tractor feeds '3/32" to 3/16" (2.4 to 4.8 mm) solid wires, from 100 400 inches per minute (2.5 -10.2 m/min) wire feed speed.
- Calibrated tractor drive adjusts travel speeds from 6 to 70 inches per minute (0.12 to 1.8 m/min).
- Exceptional tracking control and self-steering in most applications leave the operator free for quality control, joint cleaning and flux handling.
- Weld butts, horizontal fillet and lap joints to the left or right side of the tractor frame for convenience.





# **Mobile Cranes**

FABCON can arrange variety of mobile cranes from 5 Tons to 400 tons lifting capacity, with heavy duty capabilities. These cranes are periodically inspected by the third party for proper fitness on job.

# **Features:**

• Mobile cranes with long telescopic booms can reach great working heights quickly and easily. Flexibility is the highest priority for the equipment – the right crane for every job can be configured quickly using functional lattice extensions, folding jibs, fixed and luffing lattice jibs. With all our technological advances, we always try to ensure that the latest technologies can also be supplied.



 Crawler cranes with lattice booms move very heavy loads safely and economically. The telescopic crawler cranes are flexible in use and require very short set-up times. The telescopic boom whose concept has been adopted from all-terrain cranes.



enables a wide range of radii to be achieved quickly and easily compared to conventional crawler cranes. And what's more, the boom can even be extended and retracted with a load on the hook.

# Air Compressor

| Discription  | UOM  | QTY. |
|--|------|------|
| Air Compressor Sizes: 250 CFM - 655 CFM            | Nos. | 14   |
| Air Compressor Electric for minor work             | Nos. | 6    |
| Welding Plant                                      |      |      |
| Electric Welding Plant 350 Amp - 3 Phase           | Nos. | 54   |
| Electric Welding Plant 600 Amp - 800 Amp - 3 Phase | Nos. | 29   |
| Electric Welding Plant 450 Amp - 500 Amp - 3 Phase | Nos. | 187  |
| Rotary Diesel Welding Plant - 3 Phase              | Nos. | 14   |
| Semi-Automatic Welding Machine - 3 Phase           | Nos. | 3    |
| Torch  |      |      |
| Argon Torch (Cutter Set)                           | Set  | 20   |
| Gas Cutting Torch                                  | Set  | 9    |

| Drill Machine                            |      |    |
|--|------|----|
| Drill Machine Electrical                 | Nos. | 3  |
| Drill Machine Magnetic                   | Nos. | 8  |
| Drill Machine Pedestal                   | Nos. | 9  |
| Drill Machine Hammering                  | Nos. | 6  |
| Winch Machine                            |      |    |
| Winch Machine 30 Ton (Electric)          | Nos. | 1  |
| Winch Machine 22 Ton (Electric)          | Nos. | 2  |
| Winch Machine 5 Ton (Electric)           | Nos. | 4  |
| Winch Machine 1.2 Ton (Electric)         | Nos. | 17 |
| Hydrotesting Pun                         | np   |    |
| Electric Hydrotesting Pump various sizes | Nos. | 6  |
| Hydrotesting Pump (Diesel)               | Nos. | 2  |
| Hydrotesting Assembly                    | Nos. | 20 |
| Mechanical Jac                           | k    |    |
| Mechanical Jack 32 Tons                  | Nos. | 1  |
| Mechanical Jack 20 Tons                  | Nos. | 2  |
| Mechanical Jack 10 Tons                  | Nos. | 1  |
| Pneumatic Jack Hamn                      | ner  |    |
| Jack Hammer (Pneumatic)                  | Nos. | 6  |
| Hammering Jack Chisel (Pneumatic)        | Nos. | 15 |

| Chain Block                          |      |    |
|--------------------------------------|------|----|
| Chain Block 20 Ton                   | Nos. | 9  |
| Chain Block 10 Ton                   | Nos. | 8  |
| Chain Block 5 Ton                    | Nos. | 29 |
| Chain Block 3 Ton                    | Nos. | 14 |
| Chain Block 2 Ton                    | Nos. | 15 |
| Chain Block 1 Ton                    | Nos. | 10 |
| Chain Block 1.5 Ton                  | Nos. | 2  |
| Pipe Cutter                          |      |    |
| Cold Pipe Cutter Pneumatic Size: 16" | Nos. | 1  |
| Cold Pipe Cutter Pneumatic Size: 10" | Nos. | 1  |
| Pipe Cutting Machi                   | ne   |    |
| Pipe Cutting Machine Electrical 18"  | Nos. | 1  |
| Pipe Cutting Machine Electrical 14"  | Nos. | 1  |
| Pipe Cutting Machine Electrical 12"  | Nos. | 2  |
| Pipe Cutting Machine Electrical 8"   | Nos. | 1  |
| Pipe Cutting Machine Electrical 4"   | Nos. | 7  |
| Sand Blasting Hoope                  | r    |    |

Nos..

9

Sand Blasting Hooper with Accessories

| Fork Lifter                           |      |     |
|---------------------------------------|------|-----|
| Fork Lifter 5 Ton                     | Nos. | 4   |
| Fork Lifter 1.5 Ton                   | Nos. | 1   |
| Gas Cylinder                          |      |     |
| LPG Gas Cylinder 40 Kg                | Nos. | 25  |
| LPG Gas Cylinder 10 Kg                | Nos. | 40  |
| Oxygen / Argon Cylinder               | Nos. | 70  |
| Fire Extinguisher 1 - 40 Kg (SAFETY)  | Nos. | 119 |
| CO2 Fire Cylinder for (SAFETY)        | Nos. | 6   |
| Wrench                                |      |     |
| Torque Wrench 3/8"                    | Nos. | 1   |
| Torque Wrench 1"                      | Nos. | 2   |
| Torque Wrench 1½"                     | Nos. | 1   |
| Torque Wrench ½"                      | Nos. | 1   |
| Torque Wrench 3/4"                    | Nos. | 1   |
| Pneumatic Impact Wrench various sizes | Lot  | Lot |
| Bowser & Tank                         |      |     |
| Diesel Storage Tank 12000 Ltr.        | Nos. | 6   |
| Water Bowser                          | Nos. | 8   |
|                                       |      |     |

Nos.

1

Diesel Storage Tank 30,000 Ltr.

| Scaffolding Pipe                               |      |         |
|--|------|---------|
| Scaffolding Pipe various sizes with Joint etc. | Rft. | 400,000 |
| Container                                      |      |         |
| Office Container fully furnished 20'           | Nos. | 25      |
| Hand Hoist                                     |      |         |
| Hand Hoist various sizes                       | Rft. | 20      |
| Power Generato                                 | r    |         |
| Power Generator 250 KVA                        | Nos. | 1       |
| Power Generator 150 KVA                        | Nos. | 2       |
| Power Generator 100 KVA                        | Nos. | 2       |
| Power Generator 70 KVA                         | Nos. | 2       |
| Power Generator 60 KVA                         | Nos. | 3       |
| Power Generator 30 KVA                         | Nos. | 1       |
| Power Generator 7.5 KVA                        | Nos. | 1       |
| Power Generator 4 KVA                          | Nos. | 1       |
| Power Generator 3 KVA                          | Nos. | 12      |
| Power Generator 2.5 KVA                        | Nos. | 2       |
| Power Generator from 2.2 KVA to 1 KVA          | Nos. | 20      |
| Grinder  |      |         |
| Electric Grinder 4" Dewalt                     | Nos. | 44      |
| Electric Grinder 5" Dewalt                     | Nos. | 67      |

| Electric Grinder 9" (Dewalt)            | Nos. | 55 |
|---|------|----|
| Electric Pencil Grinder 1/4"            | Nos. | 9  |
| Electric Grinder 7" Dewalt              | Nos. | 2  |
| Electric Grinder 4" Hilti               | Nos. | 2  |
| Electric Grinder 5" B/D                 | Nos. | 1  |
| Electric Grinder 9" B/D                 | Nos. | 5  |
| Electric Grinder 9" Hitachi             | Nos. | 3  |
| Electric Grinder 5" Hilti               | Nos. | 1  |
| Electric Grinder 9" Hilti               | Nos. | 1  |
| Pneumatic Grinder various sizes 5" - 9" | Nos. | 16 |

# Distribution Panel

| Main Electric Panel | Nos. | 48  |
|---------------------|------|-----|
| Distribution Board  | Lot  | Lot |

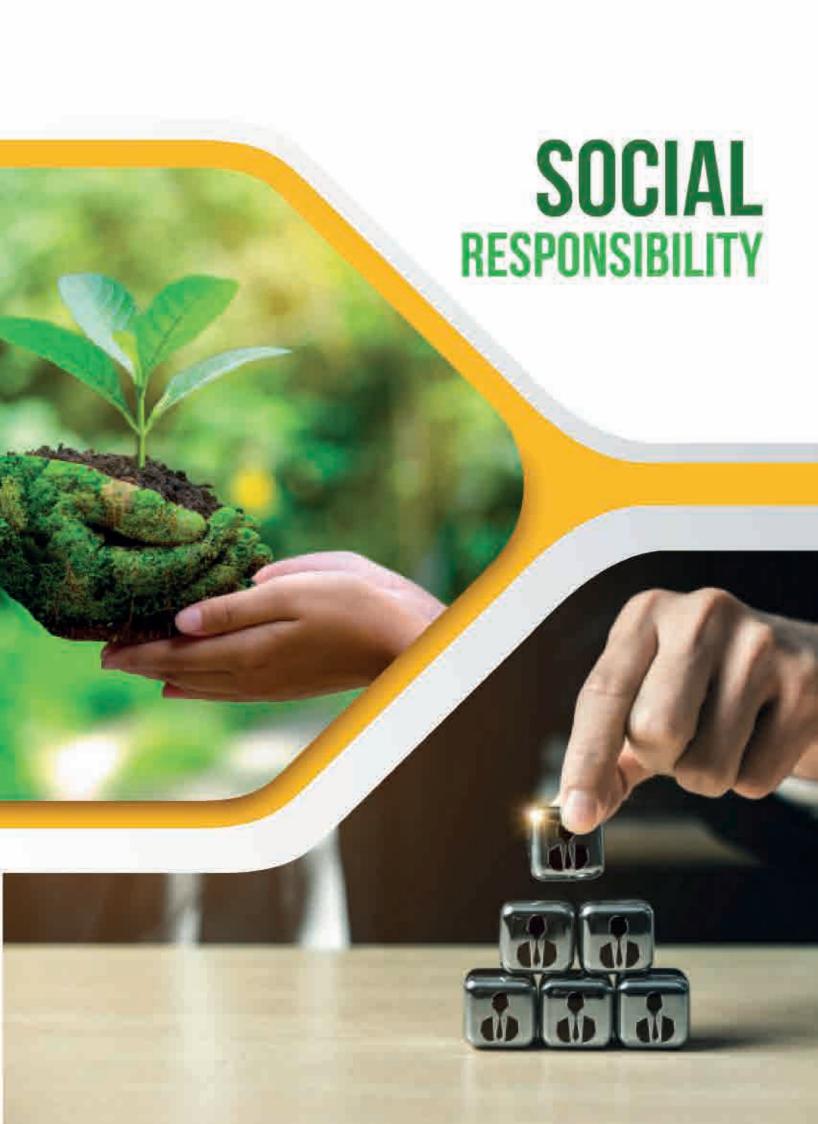
# List of Erection Tools

| Bus bar bender (Hydraulic) | 03 | Nos. |
|----------------------------|----|------|
| Pipe Bender (Hydraulic)    | 01 | Nos. |
| Circular Pipe Cutter       | 06 | Nos. |
| Spot Welding Machine       | 01 | Nos. |
| Power Hacksaw              | 01 | Nos. |
| Cable Jacks                | 08 | Nos. |

| Cable Rollers                             | 200 | Nos. |
|---|-----|------|
| Hydraulic Crimping Pliers                 | 12  | Nos. |
| Mechanical Crimping Pliers                | 02  | Nos. |
| Mechanical Cable Cutter                   | 06  | Nos. |
| Electrician Tool Boxes                    | 30  | Nos. |
| Fitter Tool Boxes                         | 30  | Nos. |
| Switchgear Tool Boxes                     | 06  | Nos. |
| Sleeves Punch Pliers                      | 12  | Nos. |
| Motorized Cable Pulling Winches           | 02  | Nos. |
| Hot Air Gun                               | 02  | Nos. |
| TANK VERTICALITY / PLUMBNESS & SETTLEMENT |     |      |
| Theodolite                                | No. | 1    |
| Dumpy Level                               | No. | 1    |
| TANK VERTICALITY / PLUMBNESS & SETTLEMENT |     |      |
| Fire Extinguisher                         | Lot | Lot  |
| First Aid Boxes                           | Lot | Lot  |
| LLC - Meter                               | Set | 1    |
| Safety Harness (Half / Full)              | Lot | Lot  |
| Safety Signs (Various Types)              | Lot | Lot  |
| Fire Blanket                              | Lot | Lot  |

| Safety Siren  | Lot | Lot |
|---|-----|-----|
| Barrication Tape  | Lot | Lot |
| Spectacles  | Lot | Lot |
| Ear Plug  | Lot | Lot |
| Ear Muff  | Lot | Lot |
| Dust Mask   | Lot | Lot |
| Filter Mask   | Lot | Lot |
| Organic Mask  | Lot | Lot |
| Face Shield   | Lot | Lot |
| Welding Shield  | Lot | Lot |
| Pvc Suit / Pvc Suit with Hood                               | Lot | Lot |
| Rain Suit   | Lot | Lot |
| Sand Blasting Hood  | Lot | Lot |
| Safety Helmets  | Lot | Lot |
| Life Jackets  | Lot | Lot |
| Hand Gloves (Cotton / Leather / PVC / Antistatic / Welding) | Lot | Lot |
| Eyes Safety Goggles / Splash Goggles                        | Lot | Lot |
| Jem Suit for Close Area                                     | Lot | Lot |
| Safety Shoes Antistatic                                     | Lot | Lot |
| Gum Boot  | Lot | Lot |
| Survey Meter  | Lot | Lot |

| Survey Meter.             | Nos. | 1 |
|---------------------------|------|---|
| Pocket Radiation Monitor. | Nos. | 1 |
| Film badges. / Tld        | Nos. | 1 |
| Dosimeter.                | Nos. | 1 |
| Colimater                 | Nos. | 1 |
| Dosimeter Charger         | Nos. | 1 |
| Safety Belts & Helmets'.  | Nos. | 1 |
| Emergency Lights & Signs  | Nos. | 1 |





FABCON is committed to creating added human and social value by incorporating corporate social responsibility (CSR) into all activities. Our social responsibility builds on our Quality, Safety, Security and Environment strategy that concerns the entire company and as well as our administrative services have been contributing for many years now. Our CSR strategy is therefore fully integrated within our overall company strategy and is built around four main areas:

Our values and conduct

Our associates

The environment

Our economic partners.

FABCON's vision and approach to CSR as a global company also reflects this partnership philosophy. It reflects an investment of company resources, time and talent in the service of issues, organizations and communities that matter to our members and clients.

FABCON seeks to boost local economies through our purchasing and hiring initiatives and through ongoing relationships with key stakeholders. These activities promote the sustainability of local communities and FABCON's continued success.

Fabcon's goal is to consider the sustainability, health, safety and environment of the communities where we operate. We strive to advance economy and social growth by applying a proven business model that encourages communities in our operating locations to develop and thrive. This commitment is supported through FABCON's local purchasing and hiring initiatives, proactive stakeholder engagement, collaborative partnerships with local organizations and investments in social programs.

We work closely with a number of local suppliers to ensure sustained quality of service and provide additional training opportunities to some suppliers. Maximizing our use of vendors based in the countries where we operate leads to increased job creation and economic opportunities for local residents.

FABCON also invests significantly in local initiatives that generate economic opportunity and advance sustainable development. We actively engage with key stakeholders to understand community interests and develop solutions with mutually beneficial outcomes. This process helps FABCON address local community needs by identifying social investment opportunities in focus areas such as health, education, culture and economic development.

- Where skills meet opportunity
- Unleashing Human Potential
- Research and Resources
- Community Partners and grants
- Education and Healthcare
- Community Building and Environment
- We take action on:
- Human rights and labour practices: under no circumstances will FABCON ever use forced labour or child labour. We condemn human rights violations and child labour in the production chain and we endorse the Universal Declaration of Human Rights (UDHR). It is part of our code of conduct and infringement of this by our suppliers and subcontractors is not tolerated.
- Health and safety: health and safety are of paramount importance. FABCON optimizes safety procedures
  within its production processes and focuses on training and educating employees in health and safety
  issues.
- Training and education: by mean of various training/education and development programme, employees
  are given the opportunity to develop and grow professionally.

Strengthening the communities where we live and work through our company's charitable contributions and employee volunteerism is a fundamental part of our culture, and it remains strong and active thanks to all of our employees. Our combined efforts with our employees are making a positive impact on the people being served and our communities.

And last but not the least we do what we say and say what we do, we have established trust and earned the respect of our employees, customers, partners, shareholders, and communities.



**CERTIFICATE OF INCORPORATION** 

PEC CERTIFICATE

**GST CERTIFICATE** 

NTN CERTIFICATE

Registrations

LAHORE CHAMBER CERTIFICATE

**ISO & OHSAS CERTIFICATES** 

**BOILER & PRESSURE VESSELS** 

LPG AND TANK CERTICATE

C&W

**HUD & PHE** 

# **INCORPORATION CERTIFICATE**

| 3                         |                      |                      | 1                 |
|---------------------------|----------------------|----------------------|-------------------|
|                           | GOVERNMENT (         | DE PAKISTAN          |                   |
|                           | # (SE)               |                      |                   |
|                           | (I)                  |                      |                   |
|                           |                      |                      |                   |
|                           | ERTIFICATE OF IN     |                      |                   |
| (Under section 3          | 2 of the Companies ( | Ordinance, 1984 (XL) | /II of 1984)      |
|                           |                      | WE E                 |                   |
| W S CS                    | tration No12743/2    |                      | WAS THE BUILD     |
|                           | thatFABCON DI        | ESIGN & ENGINE       | ERING             |
| (PRIVATE)                 | LIMITED.             | ZZ                   | XX                |
|                           |                      |                      |                   |
| is this day incorporated  | under the Companie   | Ordinance, 1984 (X   | LVII of 1984) and |
| that the company is limit | ed by Shar           | es.                  |                   |
|                           | hand at Lahe         | siriar -             | - 8               |
| Citizen annober more      | Description Registry | ALC:                 |                   |
| Given under my            | 10 <sup>th</sup>     |                      | June              |
| this                      |                      | day of               | June              |
| two thousand and          | 10 <sup>th</sup>     | day of               | June              |
| two thousand and          | 10 <sup>th</sup>     | day of               | June              |
| two thousand and          | 10 <sup>th</sup>     | day of               | June              |
| two thousand and          | 10 <sup>th</sup>     | day ofe.             | 17827-63          |
| two thousand and          | 10 <sup>th</sup>     | day ofe.             |                   |
| two thousand and          | Three                | day ofe.             | HMAD )            |
| two thousand and          | Three                | day ofe.             | HMAD )            |
| two thousand and          | Three                | day ofe.             | HMAD )            |
| two thousand and          | Three                | day ofe.             | HMAD )            |

## **PEC CERTIFICATE**



Som QR code to view details.



Serial No. 486378 PEC-11

### PAKISTAN ENGINEERING COUNCIL

Licence No: 2957 Category: C2 Validity: 30 June, 2021

#### LICENCE OF PAKISTANI CONSTRUCTOR/OPERATOR

(Under the bye-laws of Pakistan Engineering Council 1987)

This is to certify that M/s FABCON DESING & ENGINEERING (PVT) LTD (Licencee), with its registered office at H.# 8 BLOCK-M, JOHAR TOWN LAHORE have been licenced under Construction and Operation of Engineering Works Bye-laws 1987. until the validity date to construct/operate engineering works, the construction/capital cost of which does not exceed Rs. 1000 (ONE THOUSAND) million provided the licencee fulfils all the qualification requirements prescribed by Client or Employer for a particular engineering work; and subject to the licencee continuing to fulfill all the requirements of the bye-laws.

Field of Specialization BC01 - CE01 - CE02 (Pedestrian Bridge only) - CE04 (Irrigation Only) - CE08 - CE09 - CE10 - ME01 - ME02 - ME05 - ME06 - (ELEVEN ONLY) (Specialization Code Nos. for detail see overleaf)

> Date of Issue: Oct 26, 2020 (Islamabad)



Registrar Pakistan Engineering Council, Islamabad.

Note:
If a firm does not get renewal of its licease within a year after expiry of its licease, the firm may be renewed after payment of outstanding fee if entire defaulting period plus surcharge at the rate of 5% of defaulting fee amount, or as prescribed from time to time.

The employer must ensure employment of engineers whose names are mentioned on backside of the licence. The Consulting Engineer (the Engineer Incharge in case the consultant is not appointed) shall monitor the number of engineers employed by the Constructor/Operator and inform the Council accordingly.

Owner(s) of the firm shall be held responsible, if any information, document or paper submitted by him/them is found incorrect or forged.

## **GST CERTIFICATE**

#### GOVERNMENT OF PARISTAN COLLECTORATE OF SALES TAX LAHORE

#### CERTIFICATE OF REGISTRATION Under Sales Tax Act, 1990)

(QI) NAME

M/S TAROUM DESIGN & ENGINEERING (EVT) LTD

(DE) ADDRESS SUIT WIT, ATH FLOOR ABOUT COMPLEX SA/E GULBERG-II LABORE

9

COLLECTORATE

you have been registered as a

Manufacturer

Distributer

Wholesaler



X Ship Breaker

\* Services

#### This means that you must:

- Charge Sales Tax on all taxable supplies made during the course of taxable activity.
- (11) File a return in designated bank relating to a month on or before the 15th of the following month.

  (tii) File a Wil-Return even if no taxable activity taxes place during the current tax period.

  (Iv) Abide by provisions of Sales Tax Actil990, and rules made there
- under.
- Your Sales Tan Registration Number 18 : 03-04-8402-001-82

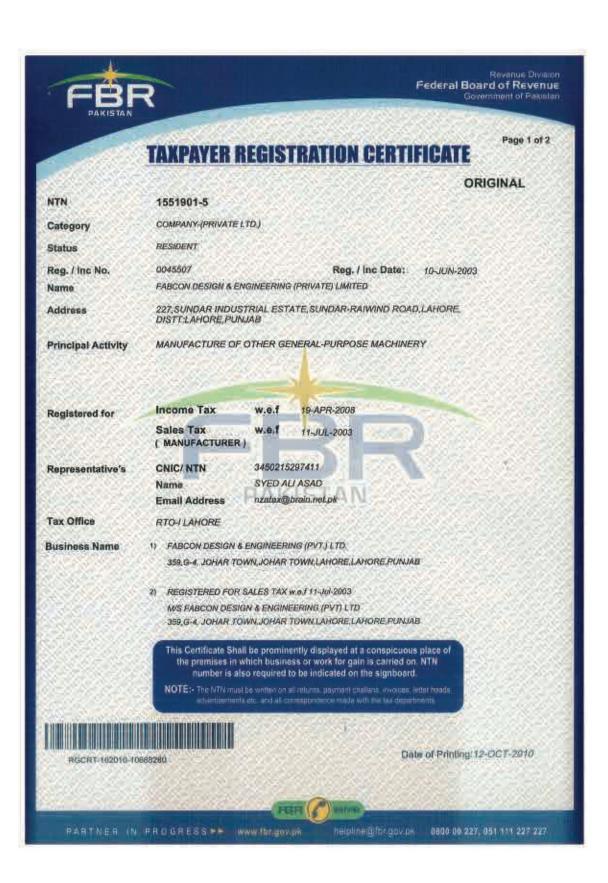
Date of Registration : 11-701-2003 105

( The eleventh of - July 1003 )

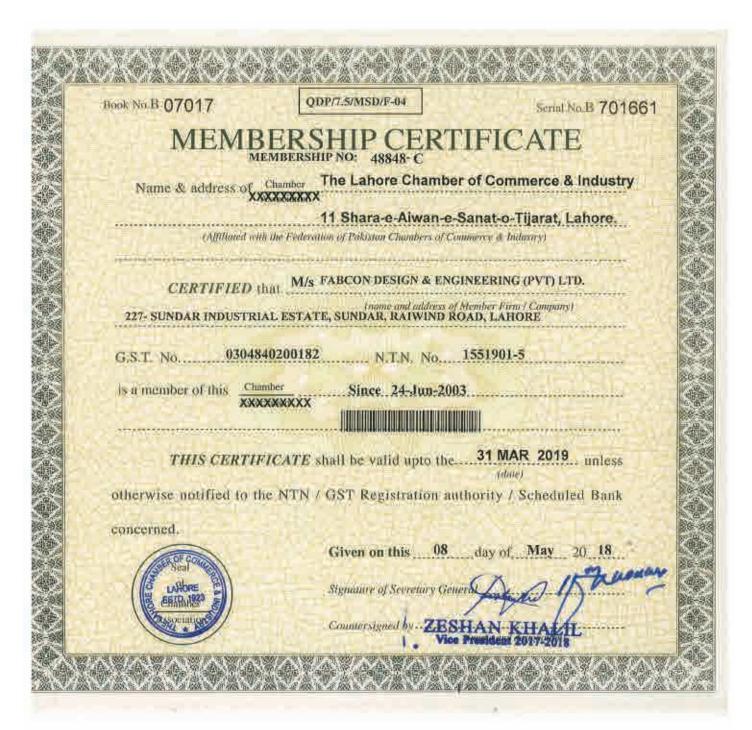
This number must be shown in tax return and all the invoices is dued by you and succeed in all your correspondence with the cales Tax Department. (06)

> ASSISTANT COLLECTOR (SALES TAX) (ADDISTRATION & INFORMATION DIVISION)

## **NTN CERTIFICATE**



# LAHORE CHAMBER CERTIFICATE



# **ISO & OHSAS CERTIFICATE**







# **BOILER & PRESSURE VESSELS CERTIFICATE**



#### CERTIFICATE OF AUTHORIZATION

This confident sombles has named company as substitutedly, use the External symbol of the Annulana Science of Memory and the Society of Medium and Engineers (ASME) for this explication with belief a succentione with the applicable rules of the SOME Bodies and Pressure Vessal Confidence of the Society and Pressure Vessal Confidence of the Society and the Societies of Annual Confidence of the Society of Societies of Annual Confidence of the Societies of the Society of Societies of the Annual Confidence of the Society of Societies of the Society of Societies of the Society of Societies of the Soci

COMPANY

FABICON Design and Engineering (Pvt.) List. 221 Scientific Inclusional Exists Lattone, Parijals 54000. Publisher

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COMPANY

FABCON Design and Engineering (PVL) Ltd. 227 Sünder Industrial Estam Lations, Parijah 54000. Pakistan

BODE

Manufacture and assembly of power boliers at the above feeding and field alter controlled by the electric location

CERTIFICATE NUMBER: 38 268

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BOILER & PRESSURE VERSEL IMPRESTORS

Certificate of Authorization



This is on earning may:

FADCON DESIGN AND ENGINEERING (PVE.) LTD. 227 SUNDAR INDUSTRAL ESTATE LAHORE PUNLIAR \$4000

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BOILER & PRESSURE VESSEL INSPECTORS

Certificate of Authorization



PARSCON DESIGN WAT ENGINEERING (PVT.) LTD. 227 SUNDER INCUSTRIAL ESTATY LAHORS, PUNJAB. 54000 PAKISTAN

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The American Society of Mechanical Engineers

### OGRA LPG TANK BOWZER CERTIFICATE



OIL & GAS REGULATORY AUTHORITY

TCS/FAX No. OGRA-LPG-17(228)/12 April 4, 2013

The Chief Executive, M/s Fabcon Design & Engineering 227 Sundar Industrial Estate, Sundar-Raiwind Road, Lahore

Subject

AUTHORIZED MANUFACTURER OF LPG STORAGE TANKS / LPG BULLETS / LPG BOWZERS

Dear Sir,

Reference Authority's earlier letter of even number dated December 15, 2010 on the above subject vide which you were pre-qualified as authorized manufacturer of LPG storage tanks / LPG bullets / LPG bowzers.

- You are informed that the Authority is pleased to renew your registration as the authorized manufacturer of LPG storage tanks / LPG bullets / LPG bowzers from January 01, 2013 to December 31, 2013 subject to the following conditions:
  - i) The Authority has the right to cancel your registration at any time when it has been established inrough an inspection conducted by the inspector appointed by the Authority that the manufacturing process or method or any substandard material is used in manufacturing.
  - ii) You shall keep an updated record of all manufacturing/manufactured items along with details of clients for the purpose of audit if required by the Authority or its representative.
- 3. The annual renewal/registration fee is Rs. 300,000/- which is required to be submitted by your company in favour of OGRA before 15th December each year failing which your company would be de-listed from the authorized manufacturers list and your company will have to follow the whole process again for enlistment.

Yours Sincerely,

(Ghulam-e-Muhammad Shaheen) Dy, Executive Director (LPG) For & on behalf of

Oil & Gas Regulatory Authority

# **HUD & PHE REGISTRATION**



No.SO(UD)8-23/2012. GOVERNMENT OF THE PUNIAB HOUSING, URBAN DEVELOPMENT B PUBLIC HEALTH ENGINEERING DEPARTMENT

Dated Lahore, the 6th March: 2020.

M/S. FABCON DESIGN & ENGINEERING (PVT) LTD, Government Contractor, House No.B. Block-M, Johan Yuwn,

Subject

34

RENEWAL OF FIRM AS "A" CLASS CONTRACTOR (C-3 / RS.500.00 M) FOR THE YEARS 2018-19 & 2019-20 WITH HUD & PHE DEPARTMENT.

Your firm has been approved for renewal in sategory "A" Dass Contractor for the Financial Years 2018-19 & 2019-20 upto Rs.500.00 Million.

- You are authorized to tender the works in the department under time administrative control of Secretary, HUD &PHE Department within the provision of Private Department's littler No.SD()NR)FD-7-5(4)-74, nated \$1.61.1982, subject to
  - In the event you did not carried our any work / participated in tendering for any work during the year 2019-20 in any Department, the Department may not consider your name for runewal for the next year unless you give cogent reasons für not doing the same.
  - II. Should any department be dis-satisfied with your quality of work, conduct and technical efficiency, the department shall be at liberty to reloave your same from the approved list of debarring you from all future tendering throughout the Punjali in any department without assigning any reasons thereof.
  - Approxion for relieval for the year 2020-21 complete in all respect will be submitted to this Department well before 31,05,2020 or as notified
  - The Pakistan Engineering Council bearing Serial No.462669 PEC Linense No.4466 citagory (C-3) valid into 30.06.2020.
  - The firm deposited nerewal fee vide Recept vide No.18834 dated 06.03,2020 with the Admin. Officer D/o Chief Engineer (South), PHED,
  - vi. In case, if it is observed at any stage that you have made manufactured / tempered PEC license, your firm will be black listed and Pakistan Engineering Council will be requested to cancel your license.

- You will ensure depluyment of your technical staff (professional engineers) on projects
- will. Your field of specialization will be as under-

"(ME-06) Specialized Fabrication and Treatment medical Equipment, Misc. Mechanical Equipment Chiller for Power Generation"

SECTION OFFICER (UD)

6/3/2-1-

NO. & DATE EVEN

A copy is forwarded for information and necessary action to:-

- L. This Director Generals, LOA, MDA, RDA, FDA, GDA, BDA, PMDA, SDA
- All Director Generals, PMAs in Puntate
- The Director General, PHATA, Labore.
- The Managing Directors, (WASAs), thr, Multan, Rwp, F/shad & Gwl.
- 5 The Chief Engineers, PHED (North / South), Labore
- 6: The Chief Engineer, TEPA (LDA), Labore
- 1 The Chairman, Improvement Trust, Murree
- 8 The Deputy Director, MISSME Cell, HUD SPHE Department

SECTION OFFICER (UD)

## **C&W REGISTRATION**

REGISTERED

No SOB-II (C&W)2-18/2010 GOVERNMENT OF THE PUNJAB COMMUNICATION & WORKS DEPARTMENT Dated Lahore, the October 2012

M/s Fabcon Design & Engineering (Pvt.) Limited, 227-Sunder Industrial Estate,

Sunder Raiwind Road, Lahore. (Registration No. BII/2-18/2010)

Subject

ENLISTMENT / RENEWAL OF CONTRACTOR(S) / CONSTRUCTOR(S) FOR THE YEAR

Consequent upon approval by the Enlistment Committee, renewal of M/a Fabcon Design & Engineering (Pvt.) Limited is hereby granted for the fiscal year 2012-13 in Category C-4 Building (CE10), (ME05) (Workshop, Mill, Quarry System) and ME06 (Specialized Fabrication & Treatment, Medical Equipment, Kitchen & Laundry Equipment, Heat Recovery System, Pollution Control System, Miscellaneous Mechanical Equipment, Chiller for Power Generation & Specialized Plant) (upto Rs fifty (50) million).

The renewal is subject to following conditions:

The renewal is for the year 2012-13 and is valid upto June 30, 2013 only

10 Firm has to deposit Rs 75,000/- (Rupees seventy five thousand only) as below

| Fee                | CE10<br>(Building) | ME05<br>(Workshop,<br>Mill, Quarry<br>System) | ME06 (Specialized Fabrication & Treatment, Medical Equipment, Kitchen & Laundry Equipment, Heat Recovery System, Pollution Control System, Miscellaneous Machanical Equipment, Chiller for Power Generation & Specialized Plant) | Total  |
|--------------------|--------------------|---|--|--------|
| Ronowat tee        | 25,000             | 25,000  | 25,000   | 75,000 |
| Penalty for 2 Otrs |                    | 9   | 90   |        |
| Total:             | 25,000             | 25,000  | 25,000   | 75,000 |

with any Executive Engineer of C&W Department within 30 days from the date of Issuarice of this letter. Failure to deposit the amount within prescribed period will result in termination of renewal.

Should the Department be dissalisted with performance, conduct, quality of work and technical iii) officiency of the firm, the enlistment committee may remove your name from approved list of contractors or even blacklist the firm without assigning any reason, deharring it's participation in all luture tendering in any Government Department,

Further, the firm can apply for renewal of enlistment for the next fiscal year 2013-14 latest by June 30, 2013 alongwith requisite documents.

You are requested to provide bank challan/certificate issued by Excise & Taxation Department regarding payment of professional tax for the year 2012-13 at the time of depositing of entirement/renewal fee.

10 1/22 MUHAMMAD SIDDIDUE Section Officer (B-II)

No. & Date Even.

A copy is forwarded for information and necessary action to

ENVERNMENT OF THE PUNJAB W DEPARTMENT LAHORS

PS to Secretary, C&W Department. PAs to AST-II, & DS(B), C&W Department.

Chief Engineer, Punjab Highways Department (North Zone), Lahore. Chief Engineer, Punjab Highways Department (South Zone), Lahore. Chief Engineer, Punjab Buildings Department (North Zone), Lahore.

Chief Engineer, Punjab Buildings Department (South Zone), Lahore.

Chief Engineer, Punjab District Support & Monitoring Department, Lahore with the request to circulate to the subordinate offices at once for information and record

All Chief Engineers are requested to direct their lower formations to ensure the deposit of professional tax of the firms/contractors for the year 2012-13.

(MUHAMMAD SIDDIQUE) Section Officer (B-II)



# FEATURED PROJECTS AND PRODUCTS PORTFOLIO



FABCON has been involved in a number of high-profile projects throughout Pakistan. Below are details of few of our executed projects.

# **DESIGN, MANUFACTURING, SUPPLY, ERECTION AND**

#### **COMMISSIONING OF POWER PLANTS AND POWER BOILERS**



**Private Sector** 



Power Plant and Power Boilers are used in every industry such as Chemical, petrochemical, sugar mill, textile industry, paper mill for process heating and power generation. We are specialized in process, mechanical and structural design of power plants and power boilers as per codes and standards. The applications are from small level factory to complex level industry. As

partner of the industry, each of our power plant and power boilers reflects`z the professional knowledge and reliability of the power plants, power boilers

### **RANGE OF PRODUCTS**

FABCON has been manufacturing, designing, engineering and servicing gas, oil, coal, solid waste, wood, biomass and hybrid fuel-fired power plants and power boilers for our large number of satisfied customers. In addition to a complete line of power plants and power boilers, FABCON also manufactures a complete line of boiler parts and boiler room peripherals and provides unparalleled turnkey after-market products and services to deliver complete installation and operation to its customers. FABCON provides all range of Power Plant and Power Boiler accessories which include but not limited to:

- Power Steam Turbines
- Power Auxiliary Equipment
- Power Boilers
- Steam Drum/Mud Drum
- Membrane Wall
- Evaporator
- Superheater
- Economizer
- Air heater

- FB Combustion System
- Oil/Gas Burners
- Fuel Feeders
- Dust Collection System
- Steel Stack
- Air/Flue Gas Duct
- Supporting Steel Structure
- Deaerator
- Steam Distribution Headers

### **DESIGN, MANUFACTURING, SUPPLY, ERECTION AND**

#### **COMMISSIONING OF POWER PLANTS AND POWER BOILERS**

- Evaporator
- Superheater
- Economizer
- Air heater
- Draft Fans
- Moving/Dumping/Step Grate
- Soot Blowers
- Feed Water Pumps
- Safety, Control Valves
- Electric Motors with VSD

- Air/Flue Gas Duct
- Supporting Steel Structure
- Deaerator
- Steam Distribution Headers
- Blown down tank
- Rotary valves
- Motor Control Centre
- Instrumentation
- PLC/DCS System

### **CODES AND STANDARDS**

All boiler and accessories are designed in house using self-designed excel sheet calculations and internationally certified software based on following codes and standards:

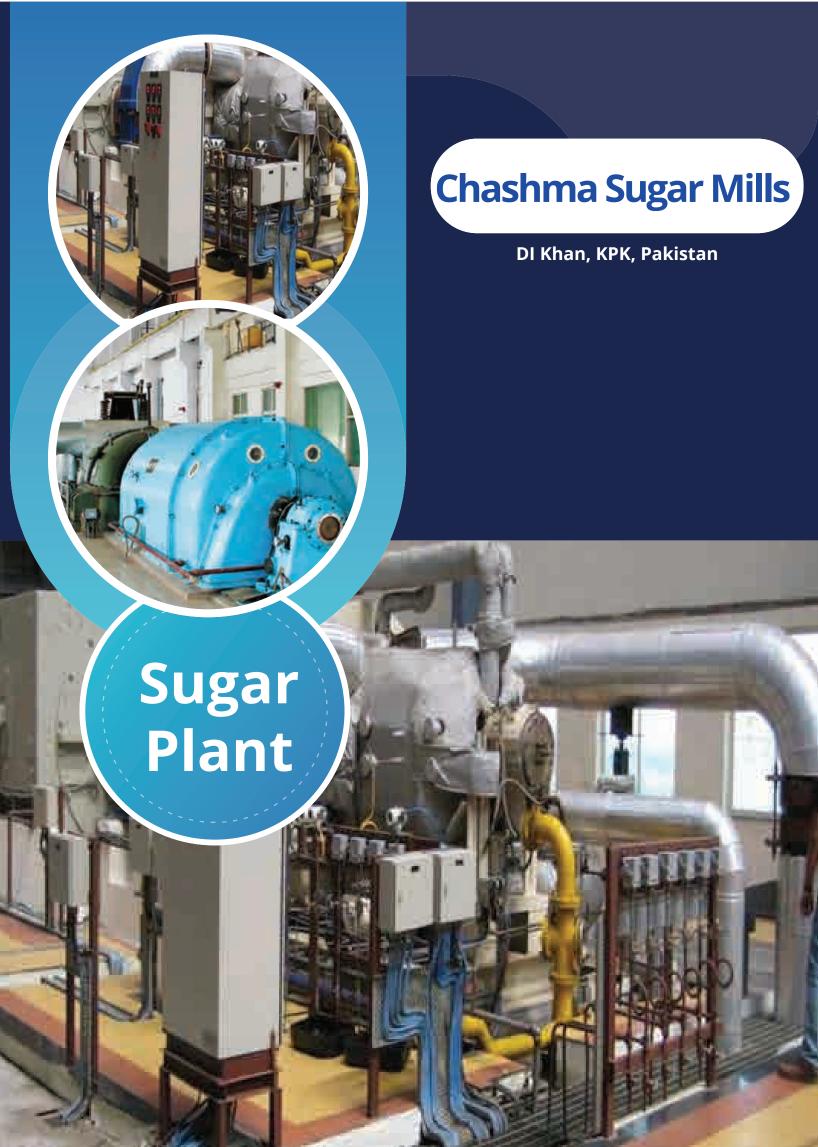
- ASME BPV
- NACE
- AISC
- ASCE 7-16
- ASTM
- AWS

- ACI
- API 610
- ASD SPECIFICATIONS.
- API 520
- EN:13445

# **CUSTOMER AREAS**

- Oil & gas refineries
- Chemical Plant
- Petrochemical
- Sugar Mill
- Textile Mill

- Paper Mill
- Food Processing Plant
- Cement Industry
- Fertilizer Plant



#### 12 MW POWER PLANT FOR CHASHMA SUGAR MILS



**Sugar Plant** 



DI Khan, KPK, Pakistan

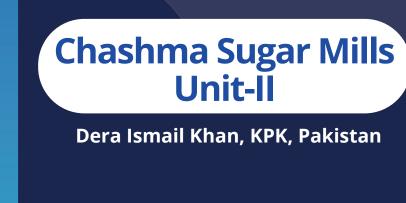


Chashma Sugar Mills



Steam generation at 25barg pressure and 350°C super heat temperature with double drums power boilers and 02 Nos. back pressure medium pressure power turbines with 06MW capacity each and electric generator with 1500rpm and output at 11kVA.

- Unloading of imported power turbine, electric generator including auxiliaries like cooling system, lubrication system, LV switch gear, MV switch gears and Control Panels.
- Inspection of floor levels of foundation for turbine and generator.
- Placement/installation of turbine and generator on the foundation.
- Alignment of turbine and generator using shimming and non-shrink grouting.
- Installation and interconnection of powerhouse auxiliaries including cooling system, lubrication system, LV switch gear, MV switch gears and Control Panels.
- Turbine electrical loop and control loop tests
- Commissioning of power turbine, generator and its auxiliaries on no-load.
- Commissioning of power plant including power boiler, steam turbine, generator and its auxiliaries on full load.





OF 2.5 MW POWER PLANT WITH 30TPH, 25BARG, 350°C DOUBLE DRUM, DUMP GRATE, BAGASSE FIRED POWER BOILER ISLAND & 2.5MW STEAM TURBINE FOR CHASHMA SUGAR MILLS UNIT-II







**Sugar Plant** 

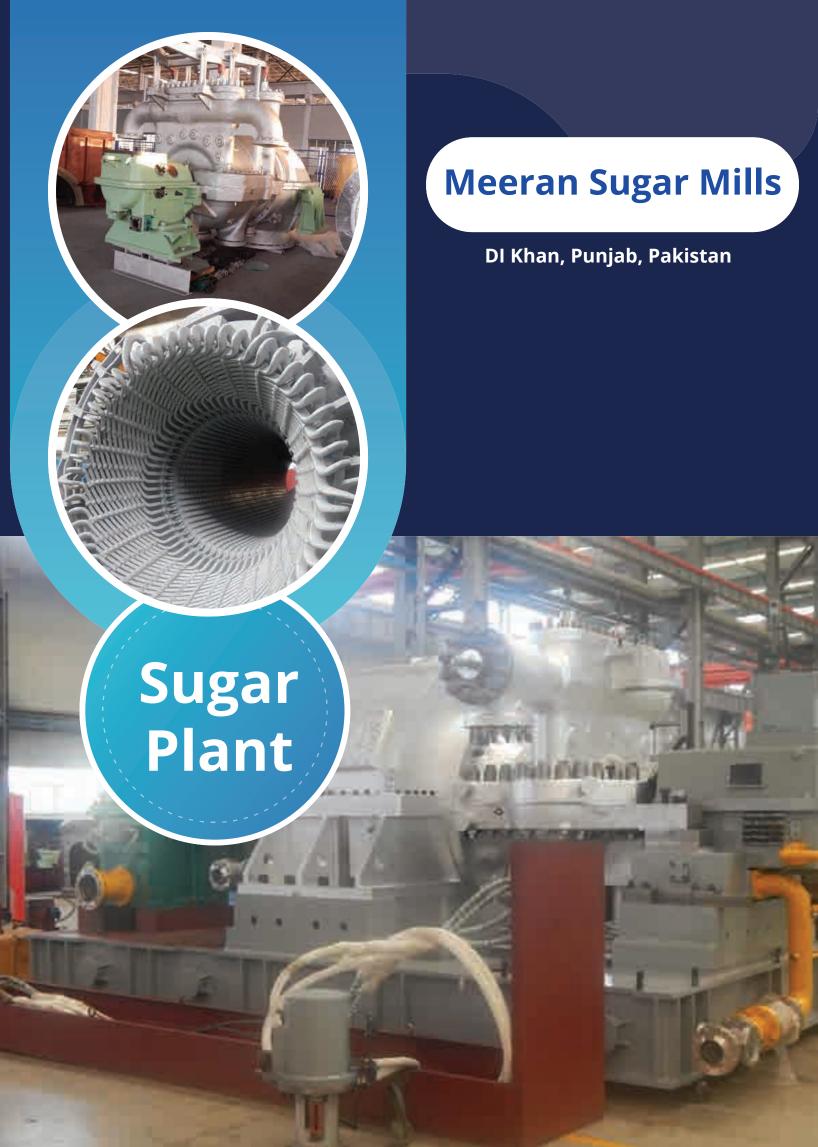
Dera Ismail Khan, KPK, Pakistan

Chashma Sugar Mills Unit-II



2.5MW Steam Turbine with Power Boiler of Steam generation at 30tph, 25barg pressure and 350°C super heat temperature with double drums, dump grate, natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, super heater, air heater, draft fans, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, combustion system, excess air, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, soot blowers, electric and geared motors, variable speed drives, motor control panels, field instruments, distributed control system (DCS), cables schedule etc.
- Design and analysis of civil foundations and supporting steel structure for boiler.
- Project management and site construction management for execution of civil works, installation of boiler pressure parts, non-pressure parts, auxiliaries and erection of steel structure including scheduling, general layouts daily progress and milestone tracking and project reviews.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including steam drum, water drum, evaporator, down-commers, risers, economizer, air heater and super heater.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient combustion and flue gas temperature low as 140°C.
- Complete boiler is controlled with minimum operators through distributed control system (DCS).



#### 12 MW POWER PLANT FOR MEERAN SUGAR MILS



**Sugar Plant** 



DI Khan, Punjab, Pakistan



Meeran Sugar Mills



Steam generation at 25barg pressure and 350°C super heat temperature with double drums power boilers and 02 Nos. back pressure medium pressure power turbines with 06MW capacity each and electric generator with 1500rpm and output at 11kVA.

- Unloading of imported power turbine, electric generator including auxiliaries like cooling system, lubrication system, LV switch gear, MV switch gears and Control Panels.
- Inspection of floor levels of foundation for turbine and generator.
- Placement/installation of turbine and generator on the foundation.
- Alignment of turbine and generator using shimming and non-shrink grouting.
- Installation and interconnection of powerhouse auxiliaries including cooling system, lubrication system,
   LV switch gear, MV switch gears and Control Panels.
- Turbine electrical loop and control loop tests
- Commissioning of power turbine, generator and its auxiliaries on no-load.
- Commissioning of power plant including power boiler, steam turbine, generator and its auxiliaries on full load.





Sugar Plant

Rehman Hajra Sugar Mills Muzaffargarh, Punjab, Pakistan

#### 12 MW POWER PLANT FOR REHMAN HAJRA SUGAR MILS



**Sugar Plant** 



Muzaffargarh, Punjab, Pakistan

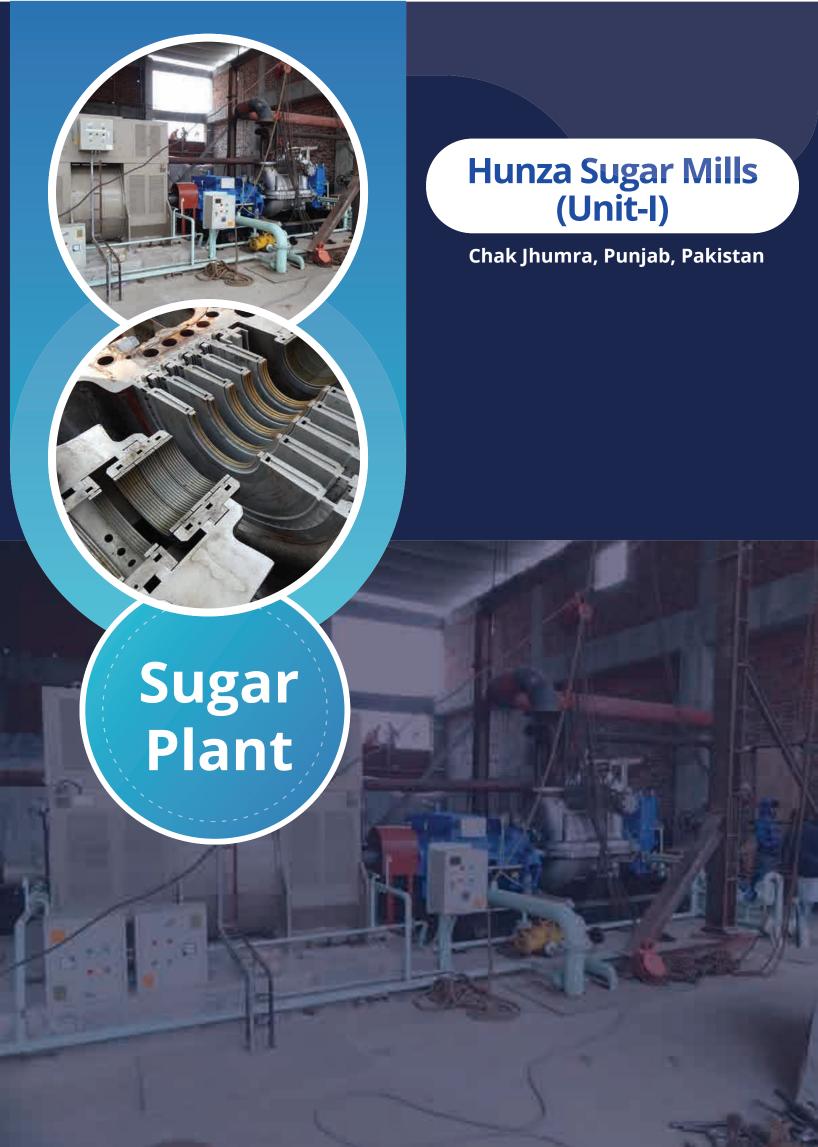


Rehman Hajra Sugar Mills



Steam generation at 25barg pressure and 350°C super heat temperature with double drums power boilers and 02 Nos. back pressure medium pressure power turbines with 06MW capacity each and electric generator with 1500rpm and output at 11kVA.

- Unloading of imported power turbine, electric generator including auxiliaries like cooling system, lubrication system, LV switch gear, MV switch gears and Control Panels.
- Inspection of floor levels of foundation for turbine and generator.
- Placement/installation of turbine and generator on the foundation.
- Alignment of turbine and generator using shimming and non-shrink grouting.
- Installation and interconnection of powerhouse auxiliaries including cooling system, lubrication system, LV switch gear, MV switch gears and Control Panels.
- Turbine electrical loop and control loop tests
- Commissioning of power turbine, generator and its auxiliaries on no-load.
- Commissioning of power plant including power boiler, steam turbine, generator and its auxiliaries on full load.



#### INSTALLATION AND COMMISSIONING OF

3.0 MW POWER PLANT WITH 30TPH, 45BARG, 450°C DOUBLE DRUM, DUMP GRATE, BAGASSE FIRED BOILER ISLAND FOR HUNZA SUGAR MILLS UNIT-I







**Sugar Plant** 

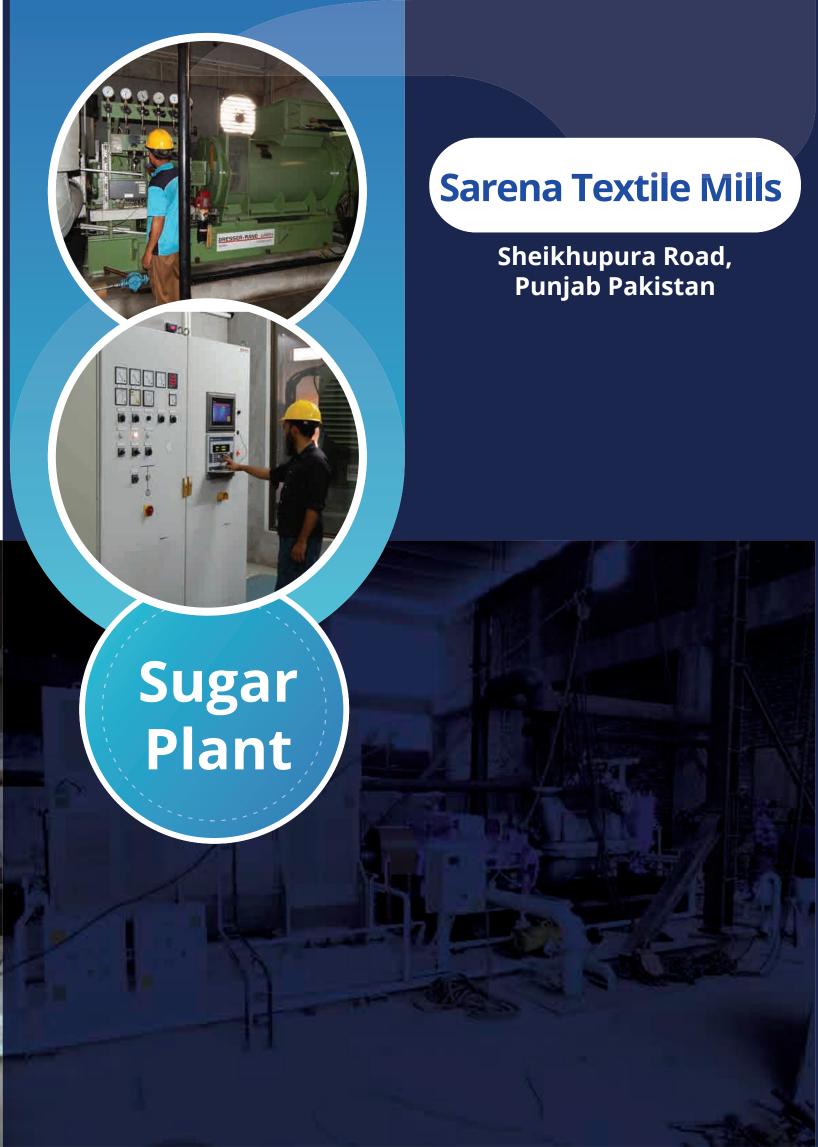
Chak Jhumra, Punjab, Pakistan

Hunza Sugar Mills Unit-I



2.5MW Steam Turbine with Power Boiler of Steam generation at 30tph, 25barg pressure and 350°C super heat temperature with double drums, dump grate, natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, super heater, air heater, draft fans, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, combustion system, excess air, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, soot blowers, electric and geared motors, variable speed drives, motor control panels, field instruments, distributed control system (DCS), cables schedule etc.
- Design and analysis of civil foundations and supporting steel structure for boiler.
- Project management and site construction management for execution of civil works, installation of boiler pressure parts, non-pressure parts, auxiliaries and erection of steel structure including scheduling, general layouts daily progress and milestone tracking and project reviews.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including steam drum, water drum, evaporator, down-commers, risers, economizer, air heater and super heater.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient combustion and flue gas temperature low as 140°C.
- Complete boiler is controlled with minimum operators through distributed control system (DCS).



#### INSTALLATION AND COMMISSIONING OF

3.0 MW POWER PLANT WITH 30TPH, 35BARG, 350°C DOUBLE DRUM, CHAIN GRATE, BAGASSE AND COAL FIRED BOILER ISLAND FOR SARENA TEXTILE MILLS







**Textile Plant** 

Sheikhupura Road, Punjab, Pakistan

Sarena Textile Mills



3.0MW Steam Turbine with Power Boiler of Steam generation at 30tph, 35barg pressure and 350°C super heat temperature with double drums, chain grate, natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, super heater, air heater, draft fans, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, combustion system, excess air, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, soot blowers, electric and geared motors, variable speed drives, motor control panels, field instruments, distributed control system (DCS), cables schedule etc.
- Design and analysis of civil foundations and supporting steel structure for boiler.
- Project management and site construction management for execution of civil works, installation of boiler pressure parts, non-pressure parts, auxiliaries and erection of steel structure including scheduling, general layouts daily progress and milestone tracking and project reviews.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including steam drum, water drum, evaporator, down-commers, risers, economizer, air heater and super heater.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient combustion and flue gas temperature low as 140°C.
- Complete boiler is controlled with minimum operators through distributed control system (DCS).

#### **WASTE HEAT RECOVERY POWER PLANTS**



#### **Private Sector**



Flue gases from high temperature process area in industries such as Chemical, petrochemical, sugar mill, textile industry, paper mill for process heating and power generation contains a lot of energy and this energy can be used to get electricity by installing a waste heat recovery unit. We are specialized in design, manufacturing, and installation of waste heat recovery plant from scratch to end. As a partner of the industry, each of our waste heat recovery plant not only reflect the professional knowledge and reliability of the plant but also our effort and role towards the green environment.

## RANGE OF PRODUCTS

Fabcon's waste heat recovery plant solutions are not just a way to cut costs and lower emissions, they allow you to recover more energy than you ever thought possible contributing to a more successful, profitable plant.

Our waste heat exchange technology can cut your costs by:

- Helping you achieve fuel savings for captive power/steam generator through feedwater preheating
- Reducing your specific energy consumption for producing steel, and reducing maintenance costs for the quench tower
- · Increasing captive power plant efficiency with the most advanced flue gas energy recovery technology

And lower emissions standards by:

- Lowering emissions of SOx, NOX, and CO2 through reduced fuel consumption
- Increasing your captive power plant's energy efficiency
- Reducing your energy consumption per ton of steel produced
- Minimizing your plant's environmental load

All using heat recovery solutions which seamlessly integrates with your existing installation. Our waste heat recovery technology has been proven in other industries to recover up to 30% in previously lost energy.

# **CODES AND STANDARDS**

Waste heat recovery plant is designed by the experienced and educated from top rank university team by using state of the art in house self-designed excel sheet calculations and internationally certified software based on following codes and standards:

# **WASTE HEAT RECOVERY POWER PLANTS**

- ASME BPV
- NACE
- AISC
- ASCE 7-16
- ASTM
- AWS

- ACI
- API 610
- ASD SPECIFICATIONS.
- API 520
- EN:1344

# **CUSTOMER AREAS**

- Oil & gas refineries
- Chemical Plant
- Petrochemical
- Sugar Mill
- Textile Mill

- Food Industry
- Fertilizer Plant
- Paper Mill
- Cement Industry
- Gas power plants



# **Textile Sector**



#### 1.9 TPH HEAT RECOVERY STEAM GENERATOR (HRSG) FOR SARENA TEXTILE



**Textile Sector** 



Sheikhupura Road Lahore, Pakistan



Sarena Textile



Steam generation at 1.9 tph, 10barg pressure saturated steam from heat recovery steam generator (HRSG) by using a heat source of high energy flue gases from genset with natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, maximum heat utilization system, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, electric and geared motors.
- Design and analysis of supporting steel structure for Boiler and De-aerator.
- General layouts, detailed manufacturing drawings for boiler pressure parts and non-pressure parts,
   P&ID diagrams.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including tube sheet and tube arrangements, heat exchanger, economizer, and Deaerator.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Project management and site construction management for installation of HRSG and auxiliaries including scheduling, daily progress and milestone tracking and project reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient heat transfer from flue gas temperature low as 140°C.
- Commissioning of Boiler at site under the experience team of Engineers and Supervisors.

# **Cement Sector**



#### **INSTALLATION AND ERRECTION OF COMPLETE SETUP OF**

#### 7.5MW WASTE HEAT RECOVERY POWER PLANTS FOR CHERAT CEMENT.



**Cement Industry** 



Peshawar, Pakistan



**Cherat Cement** 



Complete Installation of 7.5MW capacity waste heat recovery power plants which includes three boilers, approximately 250-ton weight piping, 500-ton weight turbine and steel structure, gensets, pumps and compete ducting system.

- Project planning and Scheduling for the on-time installation of the Complete project.
- Rigging study of the equipment and select best suited cranes, trailers, outriggers, soil requirement and safety parameters for movement, loading, unloading and erection of heavy equipment.
- Hiring and training of qualified staff for the site management.
- Generate rigging drawings and layouts for Equipment and Structure.
- Installations of three boilers, boiler auxiliaries, piping, ducting system, turbines, pumps, gensets as per P & ID diagrams under the supervision of experienced and qualified staff.
- Installation of steel structure including structural parts of boilers system, Prefab sheds and Overhead cranes.
- Manage the resource and machinery for installation effectively and efficiently.
- Leveling and Alignment of equipment including motor shafts, turbines, generators, and structures.
- Steel grouting work for the foundations of static and rotary equipment.
- Installation of Electrical and Instrumentation works as per client's requirement and satisfaction.

#### **BOILER AND ITS ACCESSORIES**



#### **Private Sector**



Boilers are used in every industry such as Chemical, petrochemical, sugar mill, textile industry, paper mill for process heating and power generation. We are specialized in process, mechanical and structural design of boilers as per codes and standards. The applications are from small level factory to complex level industry. As a partner of the industry, each of our boilers and each boiler accessories reflect the professional knowledge and reliability of the boiler and accessories in decades.

## RANGE OF PRODUCTS

FABCON has been manufacturing, designing, engineering and servicing gas, oil, coal, solid waste, wood, biomass and hybrid fuel-fired steam and hot water boilers for our large number of satisfied customers. In addition to a complete line of steam and hot water boilers, FABCON also manufactures a complete line of boiler parts and boiler room peripherals and provides unparalleled turnkey after-market products and services to deliver complete installation and operation to its customers. FABCON provide all range of Boiler and accessories which includes but not limited to;

- Steam Drum/Mud Drum
- Membrane Wall
- Evaporator
- Superheater
- Economizer
- Air heater
- Draft Fans
- Moving/Dumping/Step Grate
- FB Combustion System
- Oil/Gas Burners
- Fuel Feeders
- Dust Collection System
- Steel Stack

- Air/Flue Gas Duct
- Supporting Steel Structure
- Deaerator
- Steam Distribution Headers
- Blown down tank
- Rotary valves
- Soot Blowers
- Feed Water Pumps
- Safety, Control Valves
- Electric Motors with VSD
- Motor Control Centre
- Instrumentation
- PLC/DCS System

# **CODES AND STANDARDS**

All boiler and accessories are designed in house using self-designed excel sheet calculations and in

#### **BOILER AND ITS ACCESSORIES**

ternationally certified software based on following codes and standards:

ASME BPV

• ASCE 7-16

ACI

API 520

NACE

ASTM

API 610

EN:13445

AISC

AWS

ASD SPECIFICATIONS.

# **CUSTOMER AREAS**

• Oil & gas refineries

Chemical Plant

Petrochemical

Sugar Mill

Textile Mill

Paper Mill

Food Processing Plant

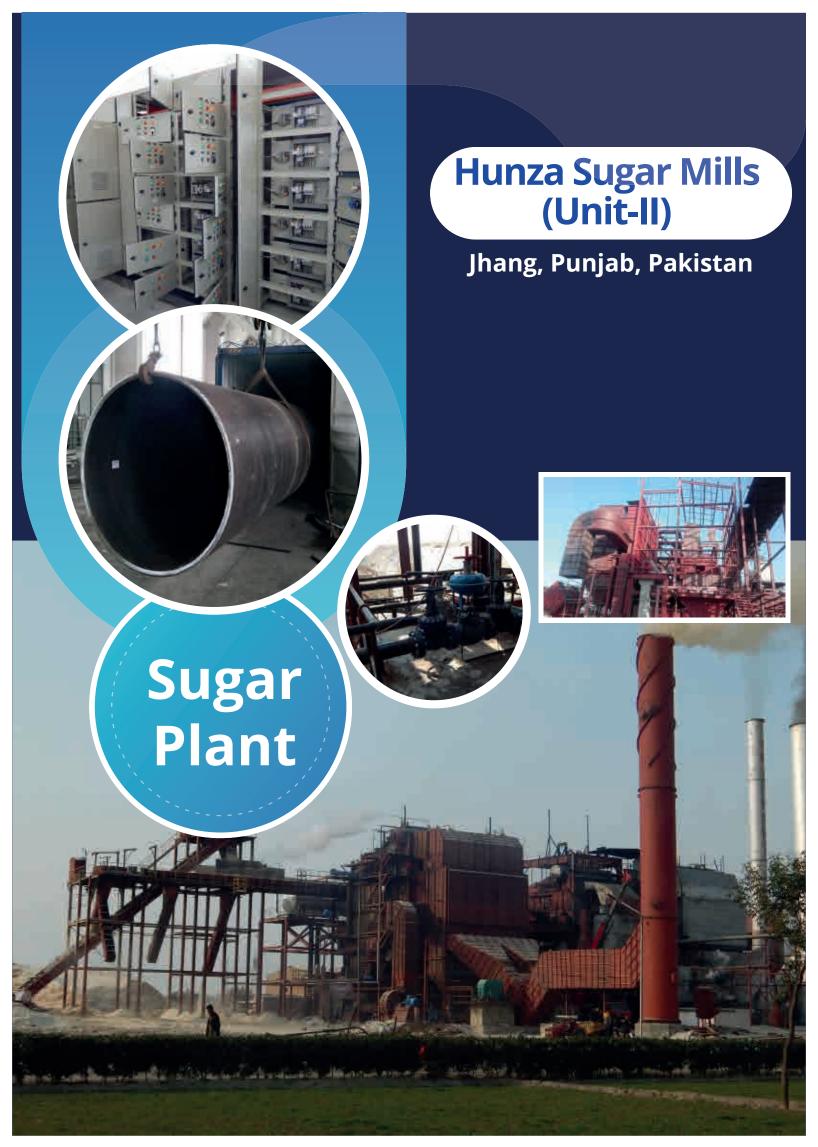
Cement Industry

Fertilizer Plant

# **FOREIGN PARTNERS**

FABCON has established collaborations worldwide through its extensive research and true business norms. We have wide variety of foreign component vendors from Europe i.e. Germany, Italy, UK, Netherlands, Czech Republic, Turkey and from Asia i.e. China, Taiwan, Korea and Vietnam and from USA. Each vendor has unique speciality and produce quality and reliable products.

- Greenfield Research Incorporated, Canada
- Planum Doo, Croatia
- Alera International, Germany
- Sepco, China
- ISGEC, India
- Avant Garde, India
- Krissy Consultancy services, India
- Qingdao Jieneng Group, China
- Jinan Boiler Group Co. Ltd, China
- Wuxi Huaguag Boiler Co. Ltd, China
- Zhengzhou Boiler Co. Ltd, China
- Shandong Huayuan Boiler Co. Ltd, China
- Wuxi Zozen Boilers Co. Ltd, China



#### **INSTALLATION AND COMMISSIONING OF**

# 100TPH, 25BARG, 350°C DOUBLE DRUM, DUMP GRATE, BAGASSE FIRED POWER BOILER ISLAND FOR HUNZA SUGAR MILLS UNIT-II







**Sugar Plant** 

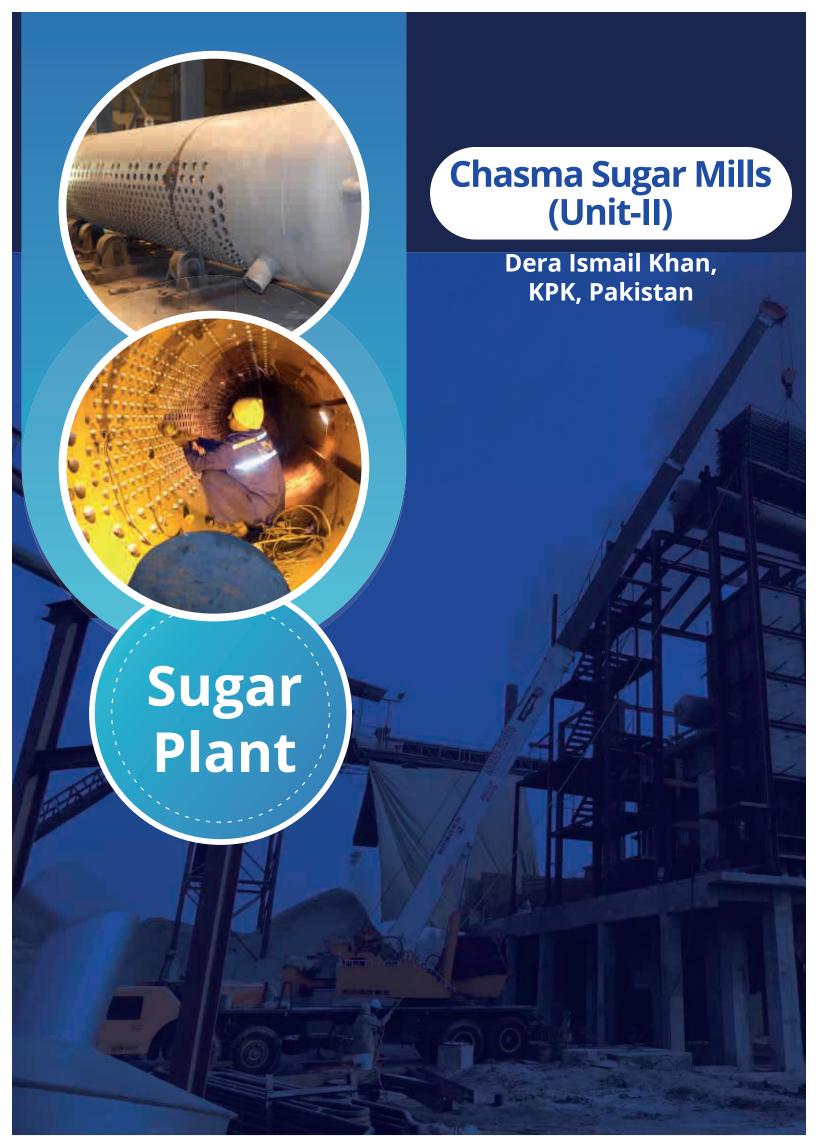
Jhang, Punjab, Pakistan

Hunza Sugar Mills Unit-II (Siraj Sugar Mills)



Steam generation at 100tph, 25barg pressure and 350°C super heat temperature with double drums, dump grate, natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, super heater, air heater, draft fans, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, combustion system, excess air, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, soot blowers, electric and geared motors, variable speed drives, motor control panels, field instruments, distributed control system (DCS), cables schedule etc.
- Design and analysis of civil foundations and supporting steel structure for boiler.
- Project management and site construction management for execution of civil works, installation of boiler pressure parts, non-pressure parts, auxiliaries and erection of steel structure including scheduling, general layouts daily progress and milestone tracking and project reviews.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including steam drum, water drum, evaporator, down-commers, risers, economizer, air heater and super heater.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient combustion and flue gas temperature as low as 140°C.
- Complete boiler is controlled with minimum operators through distributed control system (DCS).



30TPH, 25BARG, 350°C DOUBLE DRUM, DUMP GRATE, BAGASSE FIRED BOILER ISLAND FOR CHASHMA SUGAR MILLS UNIT-II







**Sugar Plant** 

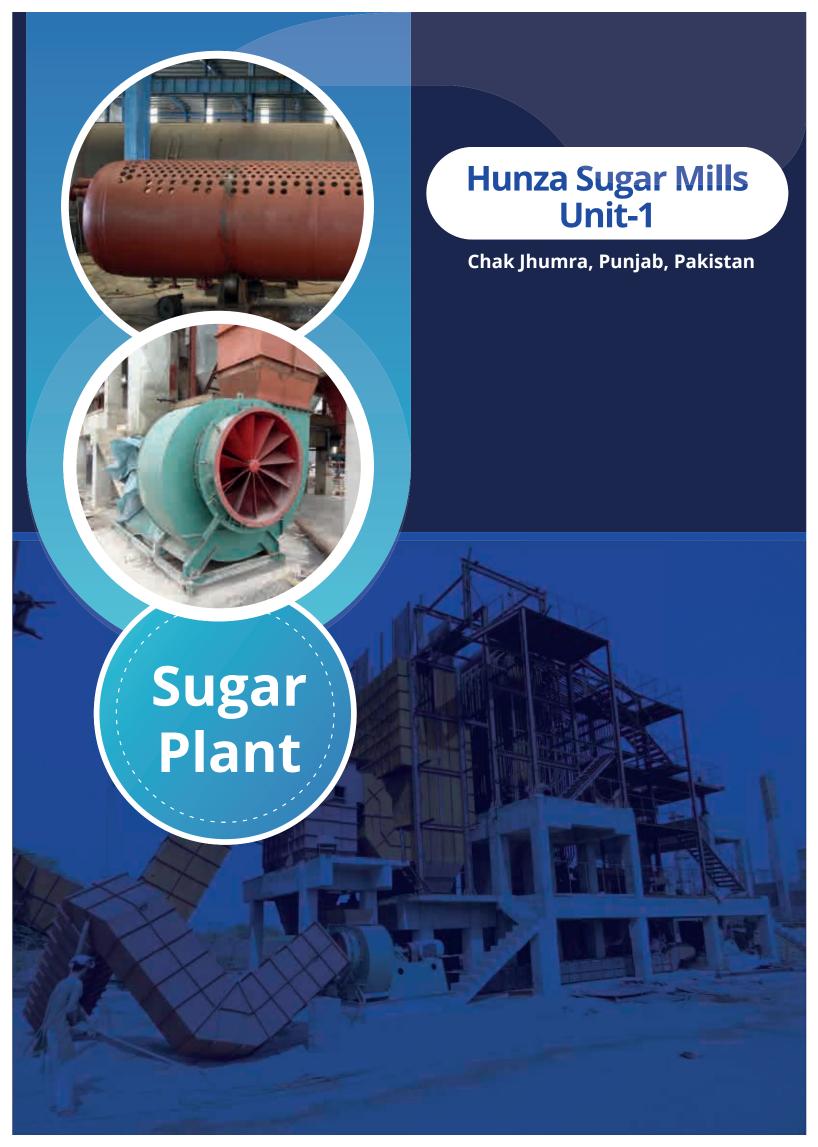
Dera Ismail Khan, KPK, Pakistan

Chashma Sugar Mills Unit-II



Steam generation at 100tph, 25barg pressure and 350°C super heat temperature with double drums, dump grate, natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, super heater, air heater, draft fans, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, combustion system, excess air, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, soot blowers, electric and geared motors, variable speed drives, motor control panels, field instruments, distributed control system (DCS), cables schedule etc.
- Design and analysis of civil foundations and supporting steel structure for boiler.
- Project management and site construction management for execution of civil works, installation of boiler pressure parts, non-pressure parts, auxiliaries and erection of steel structure including scheduling, general layouts daily progress and milestone tracking and project reviews.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including steam drum, water drum, evaporator, down-commers, risers, economizer, air heater and super heater.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient combustion and flue gas temperature as low as 140°C.
- Complete boiler is controlled with minimum operators through distributed control system (DCS).



30TPH, 45BARG, 450°C DOUBLE DRUM, DUMP GRATE, BAGASSE FIRED BOILER ISLAND FOR HUNZA SUGAR MILLS UNIT-I







**Sugar Plant** 

Chak Jhumra, Punjab, Pakistan

Hunza Sugar Mills Unit-I



Steam generation at 30tph, 45barg pressure and 450°C super heat temperature with double drums, dump grate, natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, super heater, air heater, draft fans, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, combustion system, excess air, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, soot blowers, electric and geared motors, variable speed drives, motor control panels, field instruments, distributed control system (DCS), cables schedule etc.
- Design and analysis of civil foundations and supporting steel structure for boiler.
- Project management and site construction management for execution of civil works, installation of boiler pressure parts, non-pressure parts, auxiliaries and erection of steel structure including scheduling, general layouts daily progress and milestone tracking and project reviews.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including steam drum, water drum, evaporator, down-commers, risers, economizer, air heater and super heater.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient combustion and flue gas temperature as low as 140°C.
- Complete boiler is controlled with minimum operators through distributed control system (DCS).

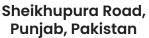
# Sarena Textile Mills



30TPH, 35BARG, 350°C DOUBLE DRUM, CHAIN GRATE, BAGASSE AND COAL FIRED BOILER ISLAND FOR SARENA TEXTILE MILLS









Sarena Textile Mills

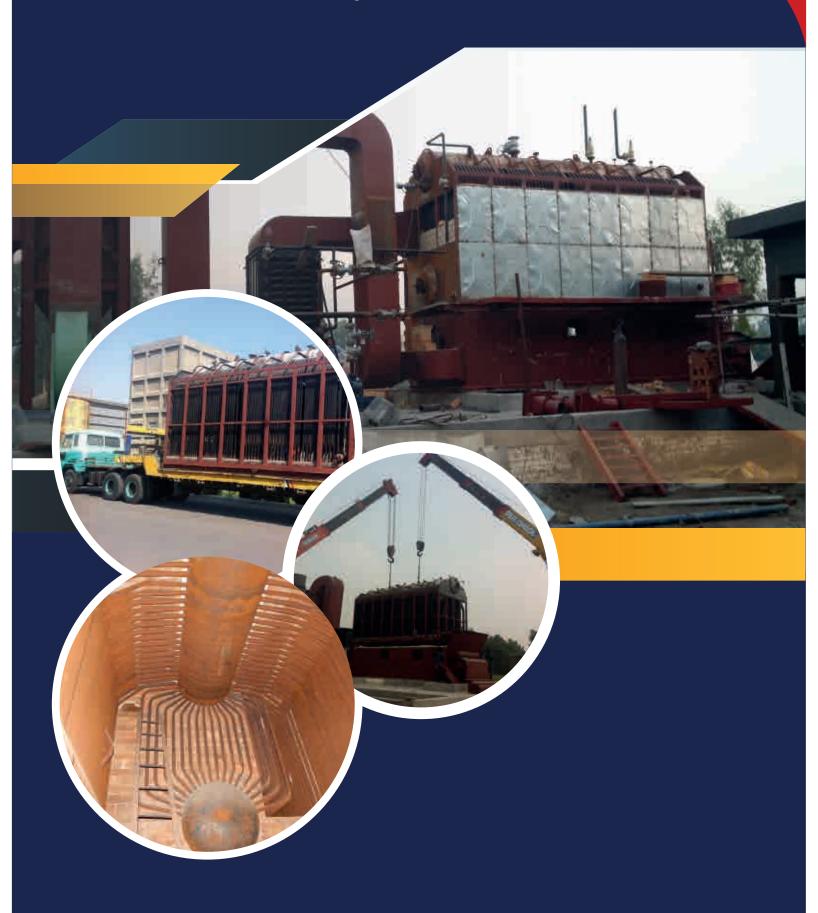


Steam generation at 30tph, 35barg pressure and 350°C super heat temperature with double drums, chain grate, natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, super heater, air heater, draft fans, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, combustion system, excess air, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, soot blowers, electric and geared motors, variable speed drives, motor control panels, field instruments, distributed control system (DCS), cables schedule etc.
- Design and analysis of civil foundations and supporting steel structure for boiler.
- Project management and site construction management for execution of civil works, installation of boiler pressure parts, non-pressure parts, auxiliaries and erection of steel structure including scheduling, general layouts daily progress and milestone tracking and project reviews.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including steam drum, water drum, evaporator, down-commers, risers, economizer, air heater and super heater.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient combustion and flue gas temperature as low as 140°C.
- Complete boiler is controlled with minimum operators through distributed control system (DCS).

# **Food Plant**

MANGA RAIWIND ROAD, PUNJAB, PAKISTAN



PACKAGE TYPE 10TPH, 10BARG, SATURATED STEAM, DOUBLE DRUM, CHAIN GRATE,
COAL FIRED BOILER ISLAND FOR MILLAC FOODS







**Food Plant** 

Manga Raiwind Road, Punjab, Pakistan

Millac Foods



Steam generation at 10tph, 10barg pressure saturated steam with package type, double drums, chain grate, natural circulation, balanced draft system and including boiler auxiliaries like de-aerator, feed water pumps, economizer, air heater, draft fans, blow down system and steam distribution system.

- Process design of boiler and auxiliaries including water circulation system, combustion system, excess air, air draft, flue gas draft and de-aeration system.
- Sizing and purchase specifications of auxiliaries including feed water pumps, control valves, safety valves, mechanical valves, soot blowers, electric and geared motors, variable speed drives, motor control panels, field instruments, distributed control system (DCS), cables schedule etc.
- Design and analysis of civil foundations and supporting steel structure for boiler.
- Project management and site construction management for execution of civil works, installation of boiler pressure parts, non-pressure parts, auxiliaries and erection of steel structure including scheduling, general layouts daily progress and milestone tracking and project reviews.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of boiler pressure parts including steam drum, water drum, evaporator, down-commers, risers, economizer, air heater and super heater.
- Procurement and supply chain management of local and foreign boiler auxiliaries and purchasable.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Hydrotest of boiler at design pressure and commissioning at rated capacity of steam production on anticipated pressure and temperature with efficient combustion and flue gas temperature as low as 140°C.
- Complete boiler is controlled with minimum operators through distributed control system (DCS).

#### **STEEL PLANTS**



**Private Sector** 



Steel plays an important role in the development of the country as it used in almost every sector from petroleum to chemical industry, from railway to wapda, from textile to paper mill, from sugar mill to cement plant, from luxury apartments to commercial buildings. FABCON is providing its services in the complete design procurement, installation and commissioning installation of steel plant

#### RANGE OF PRODUCTS

FABCON has grown with the help of well-educated hard-working employees. Since its foundation in 1998 FABCON has developed into an expert in the field of Steel plant and steel manufacturing technology.

We are industry leaders in the design, procurement, installation, and commissioning of steel manufacturing machines such as Induction furnace, CCM, Re-rolling mills, EOT cranes for material handlings and specially designed pre-engineeried shed.

By combining innovative ideas, technical excellence, and traditional engineering skills, we have earned a reputation for quality, safety and reliability that has seen our products installed in some of the world's most advanced steel manufacturing facilities. Our groundbreaking high production rate machinery help increase the production of steel products improve servicing times and reach new levels of safety and efficiency.

FABCON provides all range of services for Steel Plants from scratch to final product. Some of the major machinery installed in the steel plants are as follows:

# INDUCTION FURNACE

- Medium frequency furnace equipment for iron, steel, and non-ferrous metals.
- Induction Melting offers the modern foundry a cleanl, efficient, cost-effective melting facility with all the advantages of state-of-the-art technology and environmental protection.
- The equipment is of proven technical design, with high performance, versatile to install, and user friendly to operate.
- Melting Solutions Limited furnace installations are designed to meet applicable statutory regulations and safety requirements including electromagnetic compatibility (EMC) and noise requirements.
- The defined melt rate is with the standard length of our bus bars and water-cooled cables.
   Melt rate may vary ±3%

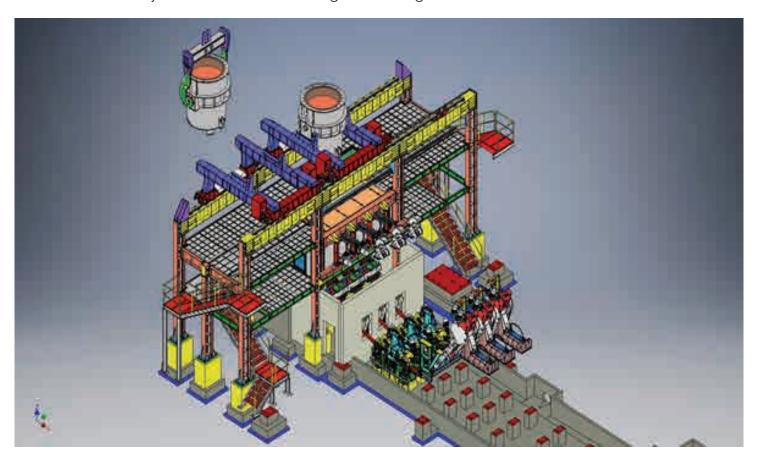
#### **STEEL PLANTS**

- High Power Consumption Efficiency
- Low Capital investment
- High Power Densities
- Reduced Operational Costs

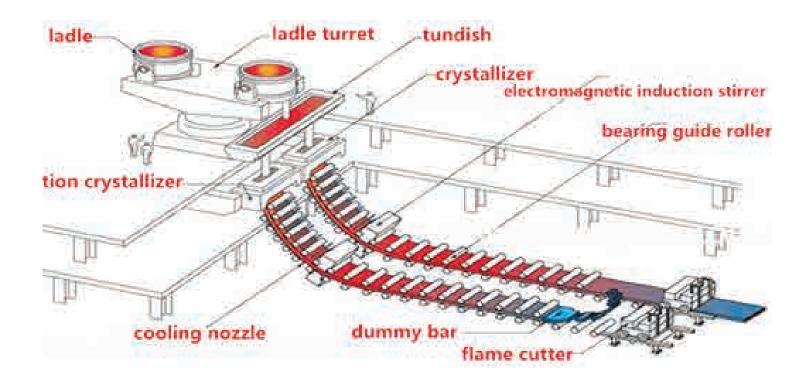


# **CONTINUOUS CASTING MACHINE (CCM)**

- Continuous casting is a special casting process to convert liquid form of metals to solidified form in different shapes and sizes in a continuous process.
- It consists of several complex commercial processes and routes to obtain the result.
- The molten metal is poured from the top of the turret and it solidifies against mound walls, then it is taken out for the further process to get different grades of semi-finished metal.
- Several other alloys are also mixed with it to get different grades of steel.



#### **STEEL PLANTS**



- Rigid/ Flexible dummy bar type for user option
- Advanced, mature, reliable, and optimized technique quality assurance measures
- Accuracy positioning of key equipment's, free-adjustment design
- Perfect water inner cooling structure design of the high-temperature area
- High and low leg/whole hanging and two cylinders synchronously lifting tundish car
- High precision copper (stainless steel) water jacket mold
- Various structure of four bars/half-leaf spring/whole leaf spring/sinusoid/non-sin oscillating device
- Various structure of full water-cooling continuous withdrawal and straightening machine
- Full water-cooling auxiliary withdrawal and straightening machine
- Rigid dummy bar friction drive or pneumatic tilting storage
- Free-adjustment coordinates-positioning type water-cooling guiding section
- Dynamic-adjustment automatic secondary cooling water distribution system
- Various torch cutting models for selection
- Free-adjustment water-cooling roller table
- Variety of hot charge system scheme

## REHEATING FURNACE

Reheating furnaces are used in hot rolling mills to heat the steel stock (Billets, blooms, or slabs) to the rolling temperatures of around 1200 C° which is suitable for plastic deformation of steel and hence for rolling in the mill. The heating process in a reheating furnace is a continuous process where the steel stock is charged at the furnace entrance, heated in the furnace, and discharged at the furnace exit. Heat is transferred to the steel stock during its traverse through the furnace mainly utilizing convection and radiation from the burner gases and the furnace walls.

# DESIGN, SUPPLY, INSTALLATION, AND COMMISSIONING OF STEEL PLANTS

# **RE-ROLLING MILL**

Steel Re-Rolling Mill is one of the types of steel rolling mills used in the rolling mill industry that are used to roll different kinds of metal objects to give them desired shape, thickness, density, and curves. These are mainly used to roll, or process products made from steel, copper, iron, aluminium, etc. and convert them into bars, beams, angles, channels, rods, plates, sheets in the desired shape, size, and thickness. Steel Re-Rolling Mills are broadly employed in rolling mill plants, cement industry, material handling industry, steel plants, mining industry, fertilizer industry, power plants, sponge iron industry, and allied sectors. Steel re-rolling mills are designed by highly skilled engineers using top-grade metal and the latest technology. These re-rolling mills are equipped with automatic control and all safety standard features.

- Also comes with an automatic control system.
- Equipped with all safety standards.
- These are easy to operate and handle.
- Are made from top-grade corrosion-free metal.
- Are highly durable while providing very high output.



#### **STEEL PLANTS**

# **AUXILIARY EQUIPMENT**

- EOT Crane
- Weigh Bridges
- Ladles
- Vibratory Feeders
- Environmental Protection Plant

- RO Plant
- Air Compressors
- Cooling Towers
- Cooling Pumps
- Chemical & Mechanical Labs

# **PEB SHEDS**

Steel Plant shed is especially designed for maximum production rate and following codes and standards are followed for the shed designing, in-house fabrication and installation of Steel Plant shed.

- ASHRAE
- ACI 318
- NACE
- MR0175
- OSHA
- ASCE 7-16
- ASTM

- SSPC-PS
- UBC/IBC
- Pakistan Building Code
- AW/S
- AISI
- ASD SPECIFICATIONS
- MBMA

# **FOREIGN AND LOCAL COMPONENTS**

Steel Plant basically consists of two portions. One portion consists of foreign components including Induction Furnaces, CCM and Re-rolling mill, sensors, motors, End carriages, winch, control panels. The other portion is based on local components such as defined below.

# FOREIGN COMPONENTS

- Induction Furnace.
- Continuous Casting Machine
- Re-rolling Machine
- Furnace cooling system
- Re-heating furnaces
- Compressors

# **LOCAL COMPONENTS**

- Pre-engineered sheds
- Overhead cranes
- Environment Protection Plant
- RO Plant
- Coling Towers
- Pumping Station

#### PRESSURE VESSELS, HEAT EXCHANGERS, COLUMNS AND DRUMS



#### **Private Sector**



Pressure vessels and heat exchangers are used in every industry for process requirements and storage of material at pressure. We are specialized in process, mechanical and structural design of pressure vessels and heat exchangers as per codes and standards. The applications are from small level factory to complex level industry. As a partner of the industry, each of our pressure vessels and each heat exchanger reflects the professional knowledge and reliability of the vessels and exchangers we have gained over the decades.

## RANGE OF PRODUCTS

A leading manufacturer of Pressure Vessels, Three Phase Separators, Process Skids, Heat Exchangers, Distillation Columns, Deaerators and other high-quality products, FABCON serves custom equipment providers and manufacturers.

Capabilities include a full range of engineering, design, project management, quality control, and fabrication services for ASME, PED, PD, EN and DIN certified vessels, filtration systems and skid-mounted process systems. FABCON does not limit its custom fabrication capabilities to pressure vessels and process tanks. Whether the need is a custom vessel, air receivers, or any variation of process skids, FABCON has the solution to fit that need. General range of vessels and exchangers offered are:

- Nitrogen cylinder
- Evaporator
- Air Receiver
- 3-Phase separators
- Salt Melter
- Knock out drum
- Economizer
- LPG Storage tank
- LPG bullet
- Autoclave Vessel

- Vacuum Vessel
- Chlorine Liquefier
- Inlet Gas Cooler
- Gas trim cooler Exchanger
- Fan fin type heat exchanger
- Plate type heat exchanger
- Kettle type re-boiler exchanger

# **CODES AND STANDARDS**

All pressure vessels and heat exchangers are designed in house using self-designed excel sheet calculations and internationally certified software based on following codes and standards:

## PRESSURE VESSELS, HEAT EXCHANGERS, COLUMNS AND DRUMS

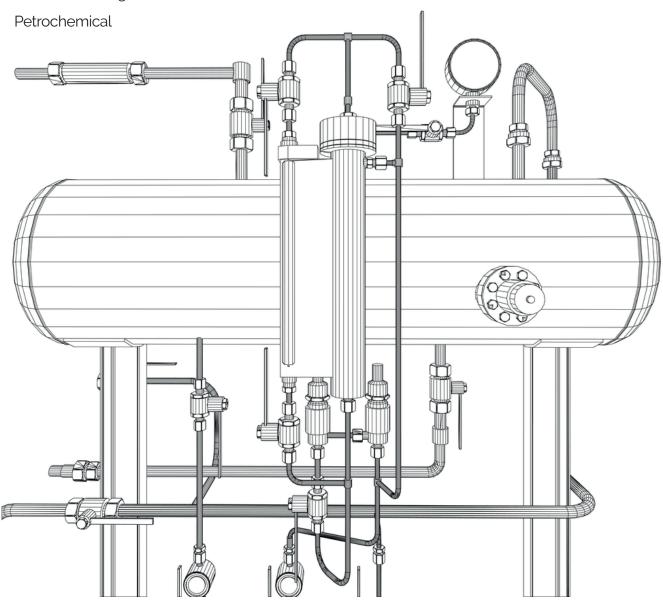
- ASME BPV
- NACE
- ASCE 7-16
- ASTM
- DIN
- UBC/IBC
- AWS

- MR0175
- AISC
- API
- TEMA
- ASD SPECIFICATIONS.
- PD-5500
- EN:13445

# **CUSTOMER AREAS**

- Oil & gas refineries
- Chemical Plants
- Fertilizer Plant
- Food Processing Plant

- Paper Mill
- Food Processing Plant
- Cement Industry
- Fertilizer Plant



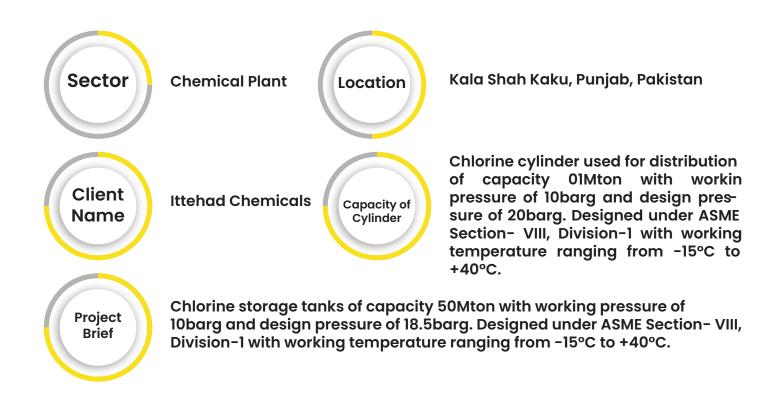
# **Chemical Plant**

Kala Shah Kaku, Punjab, Pakistan



# **DESIGN, MANUFACTURING AND SUPPLY OF**

# 50MTON CHLORINE STORAGE TANK AND 01MTON CHLORINE CYLINDERS FOR ITTEHAD CHEMICALS



- Design and drawings of chlorine cylinders and storage tanks including design of nozzles, manholes,
   valve protector and fusible plugs.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of chlorine storage tanks and chlorine cylinders.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Heat treatment of storage tanks and cylinders to relieve stresses.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Hydrotest of storage tank at 25barg and cylinders at 40barg witnessed by third-party inspection and client.

# **Defence Sector**

Kala Shah Kaku, Punjab, Pakistan



## **DESIGN, MANUFACTURING AND SUPPLY OF**

#### **AUTOCLAVE VESSELS AND NITROGEN GAS FOR DEFENCE SECTOR**



#### **Defence Sector**



2 x Autoclave vessels of diameter 2.5m, length 14m and diameter 1.5m, length 3m, including jacket and coils for heating with working pressure of 08barg and design pressure of 10.5barg. Designed under ASME Section- VIII, Division-1 with working temperature up to +200°C.



Nitrogen gas holder of diameter 1.4m and length 04m with shell thickness 49mm and dish head thickness 56mm, capable of holding gas under working pressure of 80barg and designed at 90barg pressure. Designed under ASME Section- VIII, Division-1 with working temperature up to +50°C.

- Design and manufacturing drawings of autoclave vessels and nitrogen gas holder including design of nozzles, manholes, automatic opening and closing door mechanism, jacket and coils.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of autoclave vessels and nitrogen gas holder.
- In house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- The autoclave vessels were specially designed to be handled horizontally with effortless operation of
  closing and opening of autoclave doors. The doors were equipped with a motorized system, which
  enables operation through a single individual, thus eliminating the use of overhead crane to operate the
  autoclave lid, as practiced in the past.
- Hydrotest of autoclaves at 14barg and nitrogen gas holder at 120barg witnessed by third-party inspection and client.

# **Chemical Sector**



















# **INSTALLATION AND ERECTION**

# OF PHTHALIC ANHYDRIDE CHEMICAL PLANT (PA-CHEM) FOR INTERNATIONAL PETROCHEMICALS.







M-3 Industrial City Faisalabad, Pakistan







1,000 tons of total weight of equipment and structure was installed in Faisalabad in three months only with the maximum weight of single reactor of 105 ton. Special rigging study was performed for movement and erection of equipment was carried out by the professional staff under the rules of OSHA.

- Project planning and Scheduling for the on-time installation of the Complete project.
- Rigging study of the equipment and best suited cranes were selected, trailers, outriggers, soil requirement and safety parameters for movement, loading, unloading and erection of heavy
- equipment.
- Generate rigging drawings and layouts for Equipment and Structure.
   Strict training and supervision of site staff for the safety rules and regulations defined by OSHA during
- equipment movement and installation.
- Manage the resource and machinery for installation effectively and efficiently.
   Installation of heavy weight reactors of weight 105 ton by using all terrain crane with capacity of 250 ton
- having weight of each outrigger of 110 ton.
   Installation of different heavy weight condensers of maximum weight 30 ton at the height of 6m from
- ground level by using crane of capacity 250 ton.
   Installation of different types of low-pressure vessels at maximum height of 24m from ground level by
- using crane of capacity 120 ton with lifting radius of 15 m.
- Installation of boiler at height of 16m with the lifting radius of 16.5m with a crane of capacity of 100 ton
- Levelling and Alignment of equipment including pressure vessels, motor shafts, turbines, generators, and structures.
- Steel grouting work for the foundations of static and rotary equipment.
   Efficient welding works for piping works under the supervision of API certified quality assurance staff.

# DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF SUGAR PLANT EQUIPMENT



#### **Private Sector**



Sugar Mills are the backbone of the country's growth and play an important role in the GDP of the country. We are specialized in designing, supply, erection, and commissioning of the sugar equipment having higher efficiency and higher production rate. As a partner of the sugar industry, each of our equipment reflect the professional knowledge and reliability since decades.

## RANGE OF PRODUCTS

Capitalizing on our extensive industry experience of more than 2 decades, we, FABCON are successfully meeting the requirements of our clients by manufacturing and exporting a wide assortment of Sugar Plants. Crushing of sugarcane to extract sugarcane juice, in order to make sugar and other similar products takes place in such plants. These are designed and fabricated under the stringent supervision of deft engineers from certified quality base materials and state-of-the-art technologies.

To meet the varied requirements of our clients, we offer these Sugar Plants in varied technical specifications and at highly moderate costs along with premium grade packaging. Before dispatch, the entire product range is checked for quality on varied parameters in order to ensure hassle free performance at the clients' end. Apart from advanced products, we can also provide our esteemed clients reliable designing, erection, and commissioning services of such plants.

FABCON offers complete sugar plant starting from green house till commissioning with wide range of equipment manufactured in house locally and other equipment from renowned foreign partners.

# **PROCESS HOUSE COMPONENTS**

- Juice heater
- Liquor heater
- Falling film evaporator
- Robert type Evaporator
- Batch pan
- Continuous pan (Horizontal/Vertical)
- Spray condenser
- Bagacillo cyclone separator
- Mud Mixer

- Rotary Lime slaker
- Vacuum filter
- Talo clarifier
- U-shape crystallizer
- Massecuite Re-heater
- Vertical crystallizer
- Pug Mill
- Continuous centrifugal
- Batch centrifugal

## **SUGAR PLANT EQUIPMENT**

- Sugar Conveyor
- Sugar Melter/ Remelter
- Sugar Dryer
- Sugar Elevator
- Sugar Graders
- Sugar Bins

- Rubber Belt conveyor
- Wooden bag conveyor
- Wooden Bag Conveyor
- Cascade condenser
- Sugar dust catching system

## MILL HOUSE COMPONENTS

- Weigh Bridge
- Tilting table
- Feed table
- Cane carrier
- Cane Crushing Mill
- Planetary Gear

- Rubber belt conveyor
- Donnelly chutes
- Cane yard control console
- Cush conveyor
- Bagasse carrier

# **POWERHOUSE COMPONENTS**

- Boilers (LP, MP & HP) and its accessories
- Power House with LT, MV, HV Panels
- EOT Crane

# **ELECTRICAL AND AUTOMATION**

- Electrical Motor MV, LV, HV
- Motor Control Centres
- Variable Speed Drives
  - Instrumentation including flow meters, temperature sensors, pressure sensors, level sensors
     and other monitoring devices
  - DCS for complete plant operation



# Alman Seyyam Sugar Mills

Dera Ismail Khan, KPK, Pakistan



#### **Featured Projects and Products Portfolio**

**FABCON** has been involved in number of high-profile projects throughout Pakistan. Below are details of few of our executed projects.

# **Engineering, Procurement and Construction Management (EPCM)**

of Alman Seyyam Sugar Mills and Co-generation Power Plant



**Sugar Plant** 



Dera Ismail Khan, KPK, Pakistan



Alman Seyyam Sugar Mills



10,000 tons cane crushing capacity per day with largest mill house having 55' x 106' and 50' x 100' cane crushing mills and process house based on falling film evaporators with target steam consumption of 35% only.



Co-generation bagasse fired power plant of 34.5MW generation with 2 x 94tph, 85barg, 550°C, single drum, membrane wall, dumping grate, bagasse fired high pressure boilers and turbines to supply power to the sugar plant during seasons as well as supplying power to the national grid.

### Features and Scope

- Bankable feasibility study and technical feasibility study of the project.
- Initial surveys of project including soil investigation, topography, cane availability survey, water testing and selection etc.

- Plant layouts, design of civil foundations for equipment and civil infrastructure including roads, buildings and boundary wall.
- 3D Piping layout isometrics and piping design including complete design of plant in 3D.
- Detail manufacturing drawings of mill house, process house and power plant equipment.
- Electrical, instruments and automation design for sugar plant and power plant.
- Supply chain management and supervision of equipment and machinery from foreign and local
  vendors including planetary gears, batch centrifugal, high voltage electric motors and inverters, power
  steam turbine, cane crushing mills, shredder, continuous centrifugal machines, pumps, cooling tower,
  bagging house, high/medium/low voltage electrical panels, field instruments, control valves,
  distributed control system (DCS) etc.
- In-house manufacturing of mill house, process house and power plant equipment including weigh bridges, platforms, carriers, overhead cranes, juice heaters, pans, evaporators, falling film evaporators, crystallizers, pug mills, condensers, storage tanks, high pressure bagasse fired boilers and its auxiliaries etc.
- Inspection and testing of in-house and out-sourced manufactured equipment and machinery by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Project management, cash flow management and site construction management for execution of civil
  works, installation of equipment and erection of steel structure including scheduling, daily progress and
  milestone tracking, cash flow charts and project reviews.



# Sugar Plant

JDW HEATERS



#### **JUICE HEATER OF AREA 520M2 FOR JDW SUGAR MILL**



**Sugar Plant** 



1 Nos x Juice Heater of heating surface area 520 m<sup>2</sup> of shell inner diameter 2200mm, tube outer diameter of 41.3mm and tube length 4510mm long with 16 number of passes.

- Process design of the key dimensions of the juice heater to obtain the required heating surface area and capacity.
- Design and manufacturing drawings of juice heater including shell design, jacket design, head design and design of nozzles, manholes and supports.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of Juice Heater.
- Manufacturing of juice heater including drilling and machining of tube plate, fabrication of calandria and jacket, fabrication of cover plate and duplex valve.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Hydrotest of juice heater witnessed by third-party inspection and client.
- Installation of juice heater at site including installation and expansion of stainless-steel tubes.
- Installation of mounted valves, accessories, gauges and associated pipeline to connect with the main process system.

#### **DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF**

#### **PEB BUILDING**



#### Private/ Government/ Defence Sector



PEB building is nowadays a need of every sector whether it is government or private as it built in lesser time as compared to civil works and advantageous over civil structure in terms of seismic resistance. We are specialized in designing, supply, erection and installation of the pre-engineering buildings, sheds, and warehouses. As a partner of numerous clients, each of our structures reflect the professional knowledge and reliability which has been known for decades.

#### **RANGE OF PRODUCTS**

FABCON Structures have earned a reputation for quality, affordable steel-framed pre-engineered buildings throughout Pakistan. We have the design, fabrication, and installation experience you can count on for your next building project.

FABCON can provide facilities for commercial, industrial, and municipal applications. We produce buildings that are tough, precise, and functional while offering design flexibility and economy.

Fabcon over the years has contributed immensely to the enhancement of quality of life through various new products and services. PEB are steel structures built over a structural concept of primary members, secondary members, roof & wall sheeting connected to each other & various other building components. The building can be provided with skylight, wall lights, turbo vents, ridge ventilators, roof monitors, doors & windows trusses, mezzanine floors, fascias, canopies, crane system, insulators etc., based on customers' requirements. These buildings are custom designed to be lighter in weight & high in strength. It is also economical in cost, factory-controlled quality, durability, longevity, flexibility in expansion, environment friendly, faster installation etc.

General collection of PEB Buildings that FABCON has already completed in various sectors of the country are

#### PROCESS HOUSE COMPONENTS

- Tapered Column Clear Span
- Multi Gable
- Arched multi span
- Multi span
- Crane Building
- Mono slope

- Mezzanine
- Roof System
- Curved Rafter
- 3-row modular span

#### **DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF**

#### **PEB BUILDING**

#### **CODES AND STANDARDS**

All the PEB buildings whether open or closed are designed in house using self-designed excel sheet calculations and internationally renowned software based on following codes and standards:

- ACI 318
- NACE
- MR0175
- AISC
- ASCE 7-16
- ASTM
- SSPC-PS

- UBC/IBC
- Pakistan Building Code
- AWS
- AISI
- ASD SPECIFICATIONS
- MBMA

#### **HEALTH AND SAFETY POLICY**



## **Government Sector**

**Orange Line Train Depot** 



PRE-FABRICATED BUILDINGS OF COVERED AREA 56,500 m<sup>2</sup> FOR ORANGE LINE TRAIN DEPOT LOCATED AT DERAN GUJRAN, LAHORE

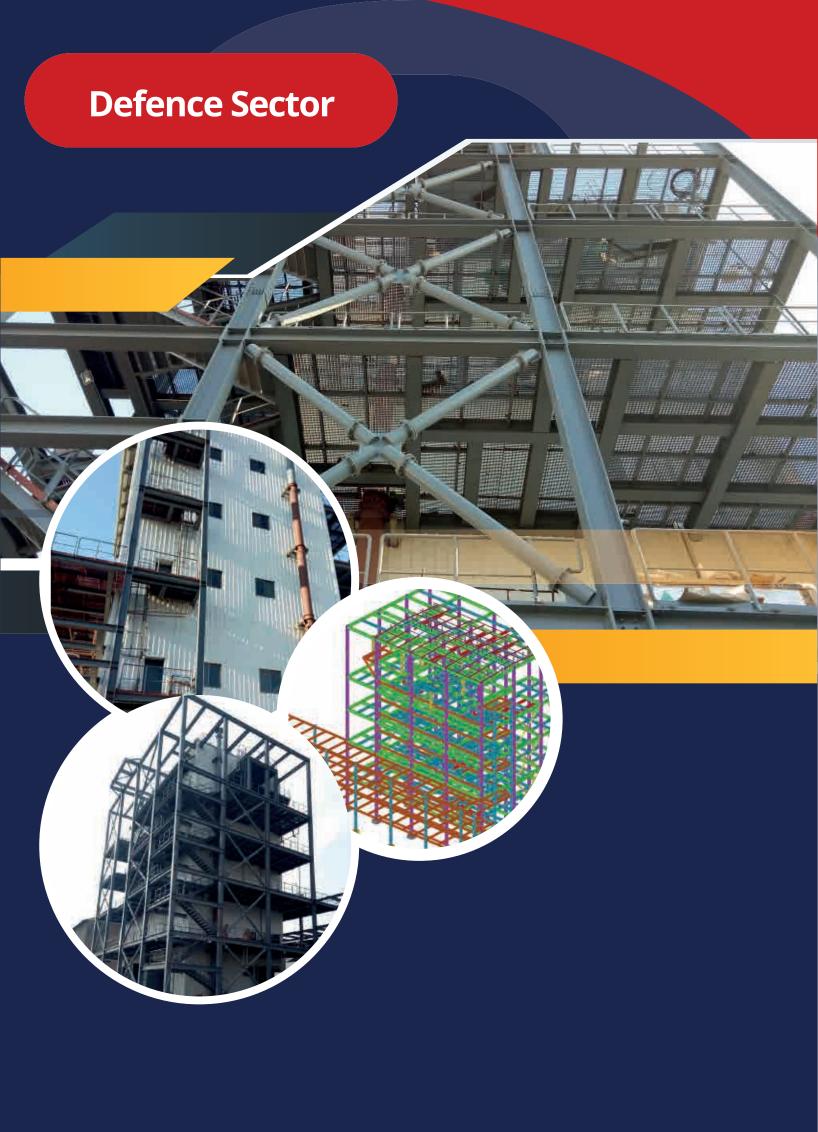


#### **Government Sector**



07 Nos x Pre-fabricated buildings with crane loaded structure of total covered area 56,500 m<sup>2</sup> of multiple dimensions used for maintenance and storage of orange line train system. Designed under AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan with wind speed of 160km/hr. and seismic zone 2A with importance factor of 1.15.

- Design and manufacturing drawings of anchor bolts, base plates, columns, rafters, bracings, connection plates, flashes, trims, eave gutters, skylights, purlins, roof/wall sheeting panels with insulation, doors, windows and gantry beams for cranes as per standards AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan.
- Vetting of design analysis, manufacturing drawings and installation drawings from NESPAK.
- Procurement and supply chain management of imported raw material required for in-house manufacturing.
- Manufacturing and fabrication of built-up primary members, secondary members and accessories of pre-engineering building as per approved drawings from NESPAK.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing and ultrasonic testing to ensure weld quality.
- Transportation and installation at site including anchor bolts, columns, rafters, bracings, purlins, roof and wall sheeting, roof and wall insulation, roof and wall bottom liners, gantry beams for cranes and other accessories.
- Surface finish and protective painting including sand blasting as per SA2.5 profile, primer coating of corrosion resistant zinc phosphate and epoxy based polyurethane paint as best industrial practices.



OF FIVE (05) STORY PRE-FABRICATED BUILDING OF COVERED AREA 525 m<sup>2</sup>
FOR PAKISTAN ORDINANCE FACTORY (POF) WAH CANTT.



**Defense Sector** 



01 Nos x five (05) story Pre-fabricated building of total covered area 525 mof length 20.9m, width 24.9m and total height of 29.8m.Designed under AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan with wind speed of 160km/hr. and seismic zone 2A with importance factor of 1.15.

- Design and manufacturing drawings of civil foundations, floors, anchor bolts, base plates, columns, rafters, beams, bracings, connection plates, flashes, trims, eave gutters, skylights, purlins, roof/wall sheeting panels with insulation, doors, windows and gantry beams for cranes as per standards AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan.
- Procurement and supply chain management of imported raw material from Turkey.
- Manufacturing and fabrication of built-up primary members, secondary members and accessories of pre-engineering building as per approved drawings from Client.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Construction of civil foundations, floors on each level consisting of 10" reinforced concrete on decking sheet of 0.5mm.
- Performing non-destructive examinations including dye penetrating testing and ultrasonic testing to ensure weld quality.
- Transportation and installation at site including anchor bolts, columns, rafters, bracings, purlins, roof and wall sheeting, roof and wall insulation, roof and wall bottom liners, gantry beams for cranes and other accessories.
- Surface finish and protective painting including sand blasting as per SA2.5 profile, primer coating of corrosion resistant zinc phosphate and epoxy based polyurethane paint as best industrial practices.
- Importing and laying of chemical resistant tiles imported from Germany with Oxydur-VEU-Cement and Oxydur VE-LR LF Vinyl ester resin.

PRE-FABRICATED SHED OF COVERED AREA 20,000 m<sup>2</sup> FOR MULTAN CATTLE MARKET.



**Government Sector** 



44 Nos x Pre-fabricated shed of total covered area 20,000 m of length 30.48m, width 14.26m and height 3.4m. Designed under AISC and ASCE with designed wind speed of 150km/hr. and seismic zone 2A with importance factor of 1.15.

- Soil survey and topographic analysis of site for design of civil foundations.
- Design and construction of civil foundations and anchoring of bolt as per AISC standard and good engineering practice.
- Design and manufacturing drawings of anchor bolts, base plates, columns, rafters, bracings, connection plates, purlins and sheeting as per standard AISC and loading conditions defined by ASCE 7-16.
- Procurement and supply chain management of imported raw material required for in-house manufacturing.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Safe transportation of all steel sections and required tools and machinery for installation at site.
- Erection and installation of steel structure on site as per OSHA standards to ensure safety precautions during installation.

## **Food Sector**

Haidri Beverages (Pvt) LTD.



PRE-FABRICATED SHED OF COVERED AREA 1,252 m<sup>2</sup> FOR HAIDRI BEVERAGES PVT LTD, ISLAMABAD.



**Private Sector** 



Soil survey and topographic analysis of site for design of civil foundations. Design and construction of civil foundations and anchoring of bolt as per AISC standard and good engineering practice. Design and manufacturing drawings of anchor bolts, base plates, columns, rafters, bracings, connection plates, purlins and sheeting as per standard AISC and loading conditions defined by ASCE 7-16.

- Soil survey and topographic analysis of site for design of civil foundations.
- Design and construction of civil foundations and anchoring of bolt as per AISC standard and good engineering practice.
- Design and manufacturing drawings of anchor bolts, base plates, columns, rafters, bracings, connection plates, purlins and sheeting as per standard AISC and loading conditions defined by ASCE 7-16.
- Procurement and supply chain management of imported raw material required for in-house manufacturing.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Safe transportation of all steel sections and required tools and machinery for installation at site.
- Erection and installation of steel structure on site as per OSHA standards to ensure safety precautions during installation.

# **Pre Fabricated Buildings**



PRE-FABRICATED SHED M-04 ABDUL HAKEEM OF COVERED AREA 1,252 m<sup>2</sup> FOR ZKB



**Government Sector** 



1 Nos x Pre-fabricated shed of total covered area 1,252 m of length 47.75m, width 26.21m and height 6.8m. Designed under AISC and ASCE with designed wind speed of 150km/hr. and seismic zone 2A with importance factor of 1.15.

- Soil survey and topographic analysis of site for design of civil foundations.
- Design and construction of civil foundations and anchoring of bolt as per AISC standard and good engineering practice.
- Design and manufacturing drawings of anchor bolts, base plates, columns, rafters, bracings, connection plates, purlins and sheeting as per standard AISC and loading conditions defined by ASCE 7-16.
- Procurement and supply chain management of imported raw material required for in-house manufacturing.
- In house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Safe transportation of all steel sections and required tools and machinery for installation at site.
- Erection and installation of steel structure on site as per OSHA standards to ensure safety precautions during installation.

# **Chemical Sector** 11111

PRE-FABRICATED SHED FOR COAL, LIME AND TURBINE HALL WALL OF TOTAL COVERED AREA 7,000 m<sup>2</sup> FOR SITARA CHEMICALS.



**Chemical Industry** 



02 Nos x Pre-fabricated shed for coal, Lime and turbine hall wall of structure steel of total covered area 7,000 m<sup>2</sup> of maximum length 73m, width 48m and height 15m. Designed under AISC and ASCE with designed wind speed of 150km/hr. and seismic zone 2A with importance factor of 1.15.

- Soil survey and topographic analysis of site for design of civil foundations.
- Design and construction of civil foundations and anchoring of bolt as per AISC standard and good engineering practice.
- Design and manufacturing drawings of anchor bolts, base plates, columns, rafters, bracings, connection plates, purlins and sheeting as per standard AISC and loading conditions defined by ASCE 7-16.
- Procurement and supply chain management of imported raw material required for in-house manufacturing.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Safe transportation of all steel sections and required tools and machinery for installation at site.
- Erection and installation of steel structure on site as per OSHA standards to ensure safety precautions during installation.

#### **DESIGN, MANUFACTURING, SUPPLY, ERECTION, AND INSTALLATION OF**

#### **ROAD SAFETY INFRASTRUCTURE**



#### Private/ Government/ Defence Sector



Steel structure is the key element of road infrastructure whether it is government or private as it is built in lesser time as compared to civil works and advantageous over civil structure in terms of seismic resistance. We are specialized in designing, supply, erection and installation of the bridges and road safety infrastructure having higher strength. As a partner of numerous clients, each of our structures reflect the professional knowledge and reliability which we have been known for decades.

#### **RANGE OF PRODUCTS**

Fabcon has a long track-record of designing, building, and operating the most complex structures of bridges, metro-stations, marine and building works in a sustainable manner across all over Pakistan. FABCON is consistently further developing itself on the Pakistani infrastructure market and offers its clients a wide range of competencies in the regions.

With structures characteristic of a medium-sized company and as an international construction group with more than 20 years of experience, we construct, transport and install road safety infrastructure. In this way we are able to ensure together with our clients that traffic flows better and more sustainably on modern roads and railways within and between conurbations and that the government's infrastructure expansion targets are actually turned into real structures within the framework of the energy transition.

General collection of infrastructures that FABCON has already completed in various sectors of the country are:

#### **PROCESS HOUSE COMPONENTS**

- Pedestrian Bridges
- Monuments
- Cattle Farms
- Bus stations
- Road safety Railings
- Metro-stations

- Transmission Towers
- Roadside Signboards
- Parabolic/ Elliptical shape roofs
- Railway station roof and Coverings
- Stadium roof and structure
- Spherical Domes

#### **DESIGN, MANUFACTURING, SUPPLY, ERECTION, AND INSTALLATION OF**

#### **ROAD SAFETY INFRASTRUCTURE**

- Highway roadside safety decks
- Protection Fences
- Gantry Bridges
- Flat Roof Canopies

- Swimming pool/ Greenhouse roofs
- Heavy Duty Aircraft Hangers

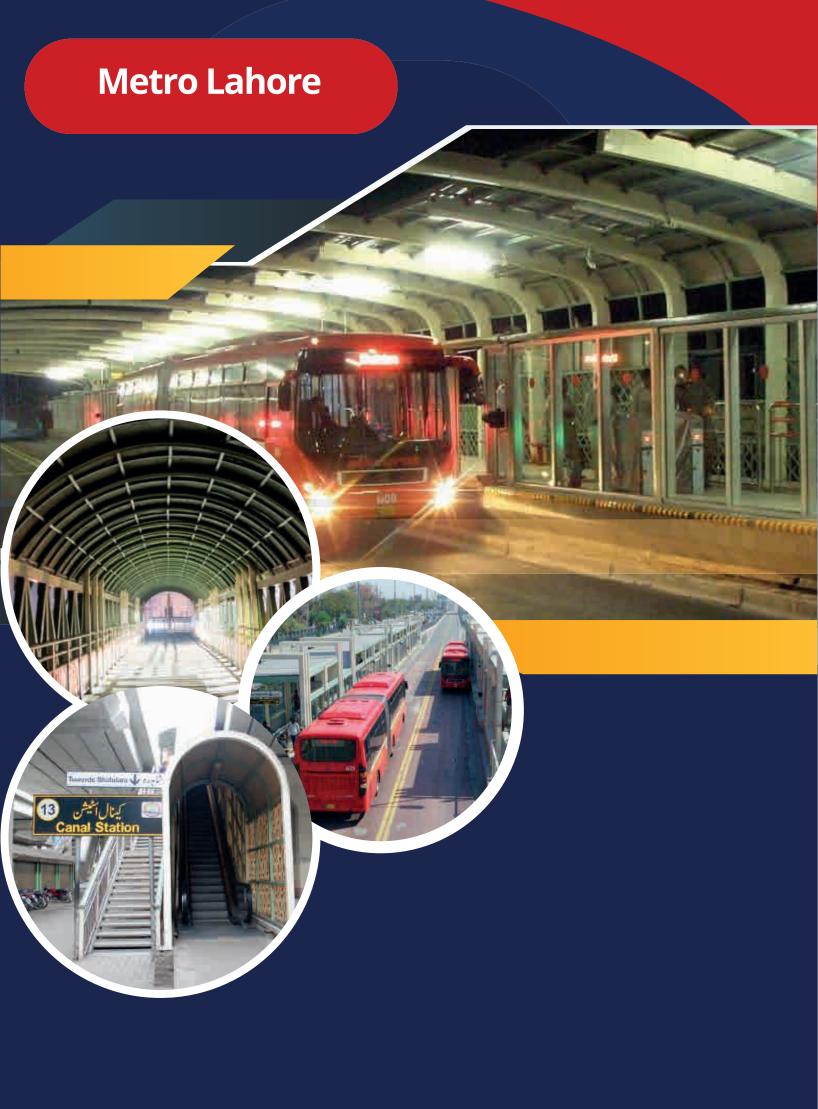
#### **CODES AND STANDARDS**

All the structures are designed in-house using self-designed excel sheet calculations and internationally renowned software based on following codes and standards:

- ACI 318
- NACE
- MR0175
- AISC
- ASTM
- ASCE 7-16
- SSPC-PS

- UBC/IBC
- Pakistan Building Code
- AWS
- AISI
- ASD SPECIFICATIONS
- MBMA





BUS STATIONS AND PEDESTRIAN BRIDGES FOR LAHORE METRO BUS RAPID TRANSIT SYSTEM, LAHORE

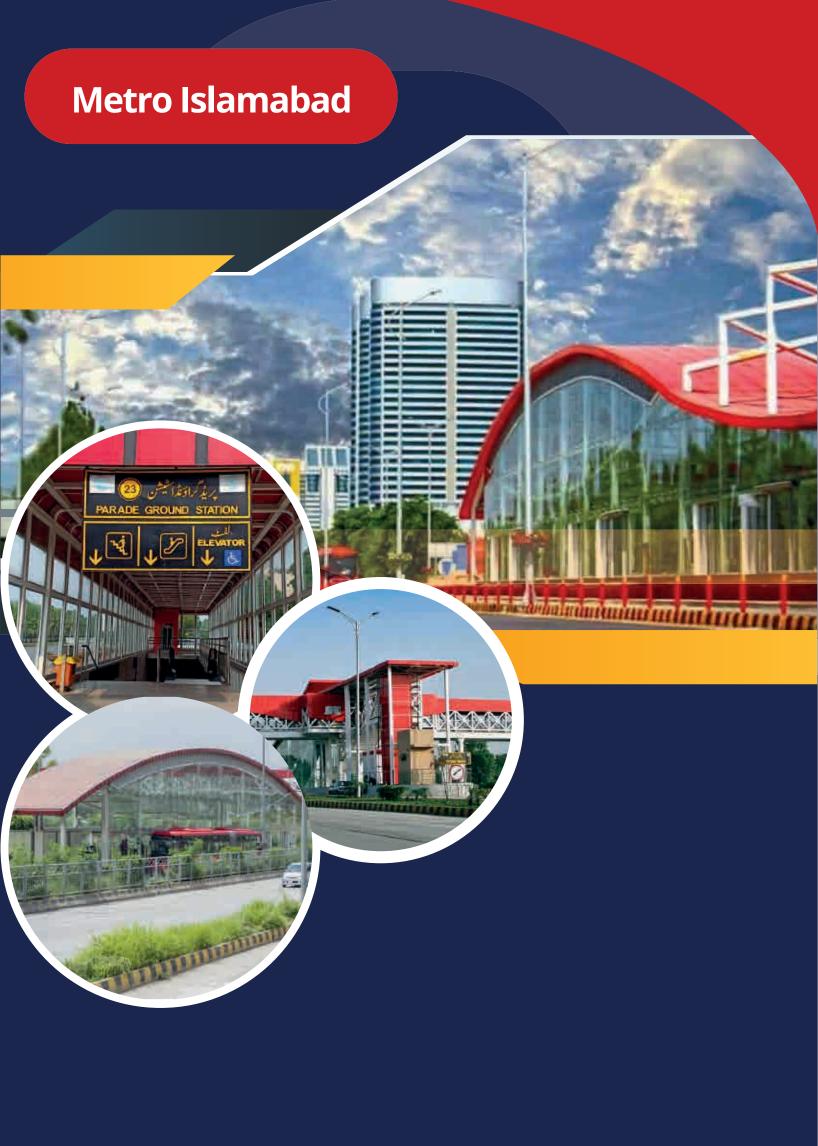


**Government Sector** 



Construction of bus stations of 137m & height 11.46m along with pedestrian bridge 105m length & 8.5m height. Designed under AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan with wind speed of 150km/hr.and seismic zone of 2A with importance factor 1.15.

- Design, structural analysis and manufacturing drawings for bus station and pedestrian bridges primary and secondary members including stairs, canopy and roof design.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of structure members used in the manufacturing of bus station and pedestrian bridge.
- Fabrication of columns, main bridge deck, bracings, roof canopy and stairs for pedestrian bridge and bus station.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Transportation and installation of pedestrian bridge and bus station at site including bolt up of primary and secondary members, installation of stairs and welding of roof canopy as per drawings and standard rigging study used worldwide for structure installation.
- Surface finish and protective painting including sand blasting as per SA2.5 profile, primer coating of corrosion resistant zinc phosphate and epoxy based polyurethane paint as best industrial practices.



## BUS STATIONS AND PEDESTRIAN BRIDGES FOR ISLAMABAD METRO BUS RAPID TRANSIT SYSTEM, ISLAMABAD



#### **Government Sector**



Construction of bus stations of 137m & height 11.46m along with pedestrian bridge 105m length & 8.5m height. Designed under AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan with wind speed of 150km/hr.and seismic zone of 2A with importance factor 1.15.

- Design, structural analysis and manufacturing drawings for bus station and pedestrian bridges primary and secondary members including stairs, canopy and roof design.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of structure members used in the manufacturing of bus station and pedestrian bridge.
- Fabrication of columns, main bridge deck, bracings, roof canopy and stairs for pedestrian bridge and bus station.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Transportation and installation of pedestrian bridge and bus station at site including bolt up of primary and secondary members, installation of stairs and welding of roof canopy as per drawings and standard rigging study used worldwide for structure installation.
- Surface finish and protective painting including sand blasting as per SA2.5 profile, primer coating of corrosion resistant zinc phosphate and epoxy based polyurethane paint as best industrial practices.



## BUS STATIONS AND PEDESTRIAN BRIDGES FOR MULTAN METRO BUS RAPID TRANSIT SYSTEM, MULTAN

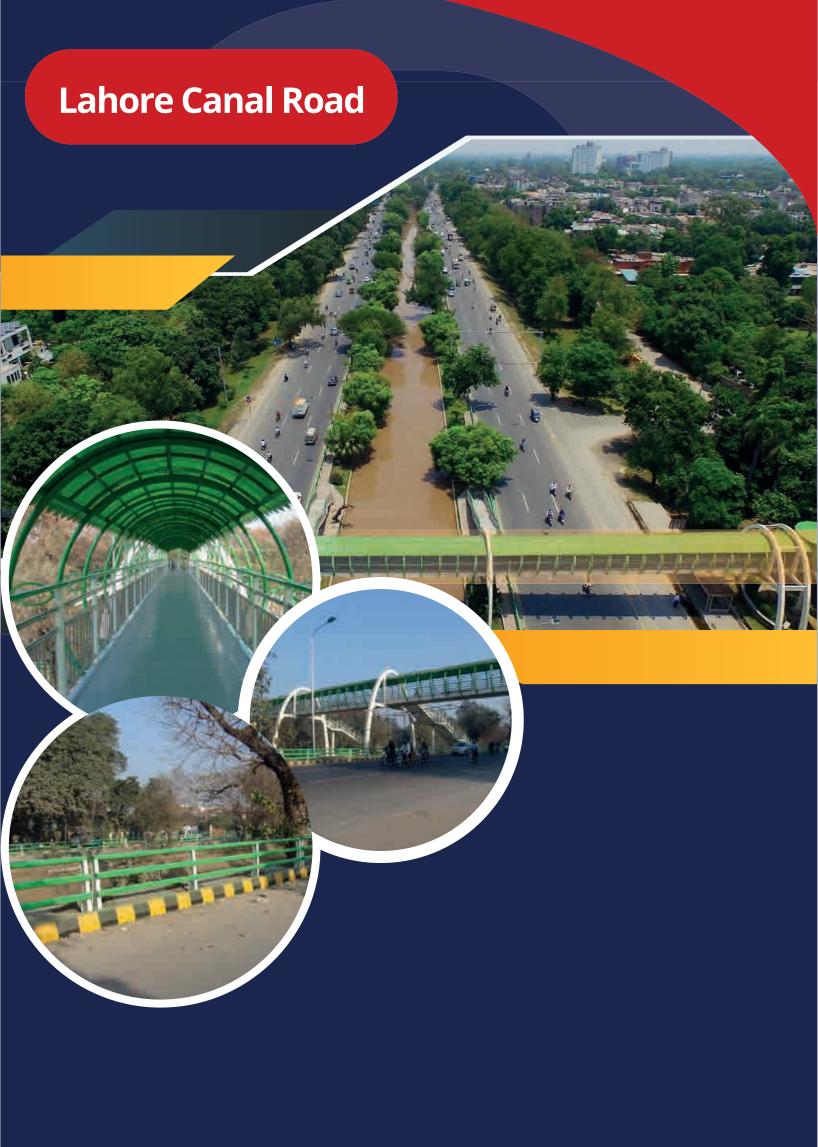


#### **Government Sector**



Construction of bus stations of 137m & height 11.46m along with pedestrian bridge 105m length & 8.5m height. Designed under AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan with wind speed of 150km/hr.and seismic zone of 2A with importance factor 1.15.

- Design and manufacturing drawings of anchor bolts, base plates, columns, rafters, bracings, connection plates, flashes, trims, eave gutters, skylights, purlins, roof/wall sheeting panels with insulation, doors, windows and gantry beams for cranes as per standards AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan.
- Vetting of design analysis, manufacturing drawings and installation drawings from NESPAK.
- Procurement and supply chain management of imported raw material required for in-house manufacturing.
- Manufacturing and fabrication of built-up primary members, secondary members and accessories of pre-engineering building as per approved drawings from NESPAK.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing and ultrasonic testing to ensure weld quality.
- Transportation and installation at site including anchor bolts, columns, rafters, bracings, purlins, roof and wall sheeting, roof and wall insulation, roof and wall bottom liners, gantry beams for cranes and other accessories.
- Surface finish and protective painting including sand blasting as per SA2.5 profile, primer coating of corrosion resistant zinc phosphate and epoxy based polyurethane paint as best industrial practices.



#### **DESIGN, MANUFACTURING AND INSTALLATION OF**

SAFETY RAILING AND PEDESTRIAN BRIDGES ALONG LAHORE CANAL ROAD (LAHORE).



#### **Government Sector**

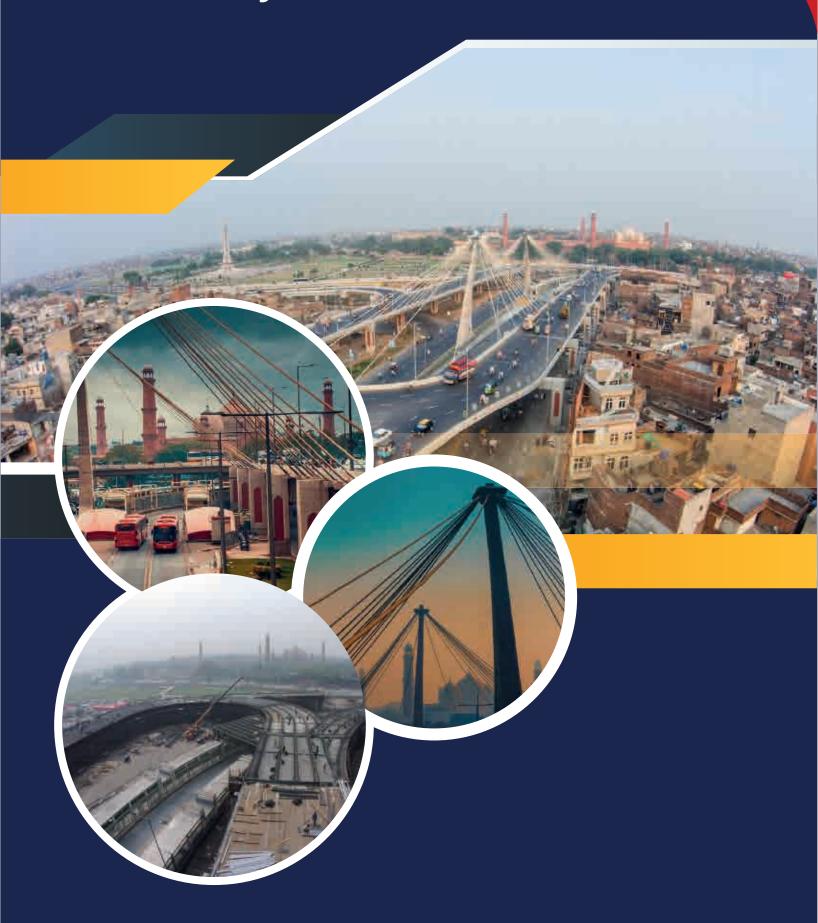


Construction of safety railing on both sides of Lahore canal road of length 17.2km along with pedestrian bridges of maximum length 63.45m and height 9.48m. Designed under AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan with wind speed of 150km/hr. and seismic zone of 2A with importance factor 1.15.

- Design, structural analysis and manufacturing drawings for safety railings and pedestrian bridges primary and secondary members including stairs, canopy and roof design.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of structure members used in the manufacturing of road safety railings and pedestrian bridge.
- Fabrication of columns, main bridge deck, bracings, roof canopy and stairs for pedestrian bridge and fabrication of road safety railings.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Transportation and installation of pedestrian bridge and road safety railings at site including bolt up of primary and secondary members, installation of stairs and welding of roof canopy as per drawings and standard rigging study used worldwide for structure installation.
- Surface finish and protective painting including sand blasting as per SA2.5 profile, primer coating of corrosion resistant zinc phosphate and epoxy based polyurethane paint as best industrial practices.

# **Government Sector**

# **Azadi Chowk Flyer-Over**



STEEL SHUTTERING AND CONSTRUCTION OF MAST MONUMENT FOR AZADI CHOWK FLYOVER, LAHORE.



**Government Sector** 



Construction of steel shuttering of size and Mask MONUMENT SPECIFICATIONS for Azadi Chowk Flyover Lahore. Designed under AISC, UBC, AWS, AISI, ASCE and Building Code Pakistan with wind speed of 150km/hr. and seismic zone of 2A with importance factor 1.15.

- Design, structural analysis and manufacturing drawings for light weight steel shuttering by maintaining profile of reinforced concrete bridge.
- Wire rope assembly are designed with forged material turn buckles for better tension result in wire according to weather conditions and loads applied.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of members used in the manufacturing of Steel Shuttering.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Transportation and installation of steel shuttering at site including bolt up of primary and secondary members as per drawings and standard rigging study used worldwide for structure installation.
- Design and construction of mast monument of height 11' and wire rope assembly dia specs and connection of mast monument to the bridge with wire ropes assembly
- Surface finish and protective painting including sand blasting as per SA2.5 profile, primer coating of corrosion resistant zinc phosphate and epoxy based polyurethane paint as best industrial practices.

#### **DESIGN, SUPPLY, ERECTION AND COMMISSIONING OF**

#### **API STORAGE TANK**



#### Private/ Government Sector



Storage tank is one of the essential components of the chemical, petrochemical, oil and gas, cement, sugar, fertilizer, food and paper industry. We are specialized in designing, supply, erection and commissioning of the tank for the storage of bulk quantity as per codes and standards. As a partner of the numerous clients, each of our storage tank reflect the professionalism in terms of knowledge, technology and reliability since decades.

#### RANGE OF PRODUCTS

We provide our customers with field erected tanks built in strict accordance with the American Petroleum Institute's (API) standards. As an API member, we are up to date on the latest news, policies, and design requirements. FABCON provides custom design, fabrication and erection of tanks that meet API standards and customer specific requirements in a wide range of shop manufactured and field erected Above Ground Storage Tanks ranging in size from 1,000 to 500,000 barrels. Since its founding, FABCON has constructed many large-scale projects all over Pakistan. With an unmatched reputation for integrity, quality products, and superior customer service, FABCON is the leading supplier of storage solutions in the Pakistan.

Fabcon has expertise in the designing and construction of following types of storage tanks including civil foundations of slab type and concrete ring wall foundations.

#### **PROCESS HOUSE COMPONENTS**

- Cone roof field tank
- Dome roof field tank
- Cone roof shop fabricated tank
- Shop fabricated bolted tank
- Low pressure storage tank
- Medium Pressure tank
- Geodesic roof tank
- Aluminum roof tank
- Internal floating roof tank

- Rectangular storage tank
- Double shell storage tank
- Refrigerated tank
- External Floating roof tank
- Open roof tank

#### **DESIGN, SUPPLY, ERECTION AND COMMISSIONING OF**

#### **API STORAGE TANK**

#### **CODES AND STANDARDS**

All the infrastructure is designed in house using self-designed excel sheet calculations and internationally renowned software based on following codes and standards:

- API 650
- API 653
- Shell Dep
- API 620
- API 12-F
- UL-142
- API 625
- API 12-F

- OSHA
- BS-2654
- EEMUA Codes
- ASTM
- ASCE- 07
- AISC
- AWS
- API 12-D
- API 12-P

#### **TANK ACCESSORIES**

- Firefighting system
- Floating roof tank seals
- Hybrid type floating roofs
- Earthing equipment
- Rleeder vents

- Drainage system
- Level indicators
- Anti-rotation devices
- Inspection hatches
- FRP coating/lining





## Oil & Gas Sector



API 650 CRUDE OIL /WASH TANK OF CAPACITY 2021 BBLS FOR PAKISTAN OILFIELDS LIMITED.



Oil and Gas Sector



01 Nos x API storage tank of capacity 2021 bbls of diameter 6.705m and height 9.244m with shell insulation of 50mm thickness, capable of holding crude oil/wash tank at atmospheric pressure. Designed under API 650 with working temperature up to +125°F.

- Design and manufacturing drawings of API storage tank including topography, soil survey for design of ring type civil foundation and dyke wall.
- Construction of ring type civil foundation of diameter 07m and dyke wall of perimeter 25m.
- Procurement and supply chain management of imported raw material for site manufacturing of storage tank.
- Construction of tank on ring wall foundation at site including fit-up and welding of bottom plates, shell plates and roof plates/rafters including nozzles and manhole.
- Third-party inspection during procurement and construction by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing, vacuum box test and radiographic testing of weld joints to ensure weld quality.
- Hydrotest of storage tank at atmospheric pressure witnessed by third-party inspection and client.
   Design, manufacturing and erection of foam fire system including foam tank of stainless steel, foam chamber and associated pipeline.
- Performing surface preparation by sandblasting the tank internally and externally up to 2.5 cleanliness
  profile. Sandblasting followed by internal zinc phosphate primer and epoxy finish paint achieving 350
  microns dry film thickness. External paint with one coat of anti-corrosion alkyd-based primer and finish
  enamel paint achieving 85 microns dry film thickness.
- Installation of glass wool insulation with G.I cladding to protect the internal heating of the tank.

#### **DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF**

#### **LPG BOWSERS AND LPG STORAGE TANKS**



#### Private/ Government Sector



Liquified Petroleum Gas (LPG) is major source of energy and required extensive care for storage and transportation. Tanks and bowsers are the main equipment that used extensively for storage and transportation of LPG, respectively. We are specialized in designing, supply, installation, and commissioning of the tanks and bowsers. As a partner of the different LPG distribution companies, each of our equipment reflects the professionalism in terms of knowledge, technology and reliability of product which we have been known for decades.

#### RANGE OF PRODUCTS

FABCON is a leading energy service contractor providing timely and cost-effective solutions for the transfer, storage and distribution of Liquefied Petroleum Gas and Natural Gas Liquids (LPG & NGL). Our LPG and NGL professionals work closely with each client from design through to the installation and start-up of each project to ensure a comprehensive solution that fits their requirements and budget. Additionally, FABCON is a leading supplier of new and used ASME processing and storage tanks and equipment, with one of the largest new and used LPG and NGL tank inventories in the country.

Our experience in carbon steels enable us to manufacture pressure vessels of virtually any type to ASME Section VIII, Division I specifications. With our ASME "U" Certification, we have the ability to engineer, procure materials, fabricate and test pressure vessels for almost any purpose.

Our commitment to operations that are in strict conformance with ASME standards ensures your storage vessels are manufactured to the highest levels of quality, safety, and reliability. Our storage vessels are tailored to meet your exact needs and specifications. Bullets, tanks up to 100Mton capacity are readily designed, manufactured, delivered, and installed with short lead times.

Custom Fabricated LPG storage tank features include:

#### PROCESS HOUSE COMPONENTS

- Design and Fabrication as per client's specifications and design standards.
- Vessel capacity up to 100 Mton
- Custom Nozzle configurations
- Optional Post weld heat treatment & stress relieving

#### **DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF**

#### **AND LPG STORAGE TANKS**

- Short lead time
- Heavy hauling and installation
- Skid mounted options
- Third party inspections
- Certified material
- According to OGRA and Explosive Norms
- Destructive and non-destructive testing.

All type of storage tanks, bowsers and its accessories are designed in house using self-designed excel sheet calculations and internationally renowned software based on following codes and standards.

#### **CODES AND STANDARDS**

- API
- **CODAP**
- OSHA
- BS 5500
- EN-10028
- ASCE -07

- OGRA
- **ASTM**
- EN-13445
- PED
- UBC/IBC
- NACE



# **LPG SECTOR**



## **DESIGN, MANUFACTURING AND SUPPLY OF**

#### 155MTON LPG STORAGE TANK FOR CRESS LPG



**LPG Sector** 



03 Nos x LPG storage tank of capacity 155Mton of diameter 3.75m and length 27.3m with shell thickness 25mm and dish head thickness 14mm, capable of holding LPG under working pressure of 15.5barg and designed at 17.2barg pressure. Designed under ASME Section- VIII, Division-1 with working temperature up to +80°C.

### FEATURES AND SCOPE

- Design and manufacturing drawings of LPG tank including design of nozzles, manholes and saddles.
- Procurement and supply chain management of imported raw material required for in-house manufacturing of LPG tank.
- In-house and third-party inspection during procurement and manufacturing by tracking and maintaining quality documents like quality control procedures, quality inspection plans, material traceability reports, welding procedure specifications and product quality reviews.
- Performing non-destructive examinations including dye penetrating testing, ultrasonic testing and radiographic testing of weld joints to ensure weld quality.
- Hydrotest of LPG tank at 22.4barg witnessed by third-party inspection and client.





## ELECTRIC OVERHEAD TRAVELLING (EOT) CRANES WITH STANDARD AND EXPLOSION PROOF ENCLOSURES



#### Private/Government/Defence Sector



EOT cranes are used in every industry and sector for lifting purpose. We are specialized in design of over head travelling cranes in standard and explosion proof/fire proof enclosures. The applications are from simple factory solutions to multiple plant crane systems to complex automatic system. As a partner of the industry, each of our cranes and each crane part reflect the professional knowledge and reliability of the cranes in decades.

## **RANGE OF PRODUCTS**

FABCON is capable of designing and supplying several types of cranes including cranes for hazardous environments depending upon the requirement of the end user. The cranes can be synchronized and non-synchronized based on the user's requirement. We design and supply the following types of cranes:

- Explosion Proof Cranes
- Spark Proof Cranes
- Standard EOT Cranes
- Double Girder, Top Running
- Single Girder, Top Running

- Single Girder, Under Running
- Manually Operated Cranes
- Monorails
- Gantry Cranes
- Jib Cranes

## **CODES AND STANDARDS**

All cranes are designed in-house using self-designed excel sheet calculations based on following codes and standards:

- DIN 15020-1:1983
- DIN 15020-2:1983
- DIN 15018-1:1983
- DIN 15018-2:1983
- BS 2573-1:1983
- CMAA SPECIFICATION NO.70:2010

- CMAA SPECIFICATION NO.74:2010
- AISC LRFD SPECIFICATIONS;1999
- AISC ASD SPECIFICATIONS.
- FEM 1.001
- FEM 1.004

## ELECTRIC OVERHEAD TRAVELLING (EOT) CRANES WITH STANDARD AND EXPLOSION PROOF ENCLOSURES

## **HAZARDOUS ENVIRONMENT CRANES**

All crane components are selected to ensure the high level of safety required for the hazardous atmospheres in chemical and petrochemical plants, oil refineries, gas power plants, wastewater treatment plants, paint shops and other industrial sites.

Quality is especially important in hazardous environments, where safety and efficiency are key. Multiple certifications prove the quality of these products:

IECEx for the world

ATEX for Europe

• CSA US for the United States

TRCU for Russia

## **CUSTOMER AREAS**

- Oil & gas refineries
- Chemical
- Solar energy equipment factories
- Woodworking
- Waste water treatment

#### Paint spray

- Gas power plants
- Printing
- Alcohol distilleries

## FOREIGN AND LOCAL COMPONENTS

Crane basically consists of two portions. One portion consists of foreign components including crane kit, end carriages and electrical system for long travel and short travel. The other portion is based on structural assemblies which are manufactured in house. To understand the concept better, the components can be divided as follows:

#### **FOREIGN COMPONENTS**

- Electric hoist / Trolley
- End carriages with wheels
- Travelling machinery
- Bridge panel
- Trolley power supply
- Crane power supply

#### LOCAL COMPONENTS

- Main girder (double/single)
- Platform and railings
- Runway rail for cross travel
- Gantry girder
- Runway rail for long travel
- Push button station/Pendant

## **FOREIGN PARTNERS**

FABCON has established collaborations worldwide through its extensive research and true business norms. We have wide variety of foreign component vendors from Europe i.e. Germany, Italy, UK, Netherlands, Czech Republic, Turkey and from Asia i.e. China, Taiwan, Korea and Vietnam. Each vendor has unique speciality and produce quality and reliable products.

## ELECTRIC OVERHEAD TRAVELLING (EOT) CRANES WITH STANDARD AND EXPLOSION PROOF ENCLOSURES

## **FOREIGN COMPONENTS**

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# ELECTRIC OVERHEAD TRAVELLING (EOT) CRANES WITH STANDARD AND EXPLOSION PROOF ENCLOSURES

## **COMPLETED PROJECTS**

| Structure                   | Environment     | Duty Group      | SWL       | Span | HOL  | LT   | Client                                | Year         |
|-----------------------------|-----------------|-----------------|-----------|------|------|------|---------------------------------------|--------------|
| Double Girder               | Standard        | FEM M5 (2m)     | 5         | 19.4 | 9    | 37   | SUPARCO                               | 2007         |
| Double Girder               | Standard        | FEM M5 (2m)     | 5         | 19.4 | 9    | 43.2 | SUPARCO                               | 2007         |
| Double Girder               | Standard        | FEM M5 (2m)     | 5         | 7    | 9    | 15.2 | SUPARCO                               | 2007         |
| Double Girder               | Standard        | FEM M6 (3m)     | 10        | 20   | 16   | 50   | SUPARCO                               | 2007         |
| Double Girder               | Standard        | FEM M5 (2m)     | 10        | 17   | 15   | 17   | Kundian<br>Chemicals                  | 2007         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 40        | 23   | 9.5  | 40   | Pindi Trading                         | 2007         |
|                             |                 | \ /             | 35        |      |      |      |                                       |              |
| Double Girder Double Girder | Explosive Proof | FEM M5 (2m)     |           | 21   | 8.5  | 63   | Pindi Trading Pindi Trading           | 2007<br>2007 |
|                             | Explosive Proof | FEM M5 (2m)     | 25        | 25   | 10.5 | 28   |                                       |              |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 25        | 9    | 8.5  | 24   | KRL                                   | 2008         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 30        | 9    | 8.5  | 30   | KRL                                   | 2008         |
| Double Girder               | Explosive Proof | FEM M6 (3m)     | 20        | 23.5 | 10   | 60   | KRL                                   | 2008         |
| Single Girder               | Standard        | FEM M6 (3m)     | 5         | 3.8  | 5    | 10   | Project Management Organizaiton (PMO) | 2009         |
| Single Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 8    | 10   | 8    | PMO                                   | 2009         |
| Single Rail                 | Standard        |                 | 5         | 15   | 7.85 |      | SUPARCO                               | 2010         |
| 8                           |                 |                 | -         |      | ,    |      | Pakistan Space &                      |              |
| Single Girder               | Standard        | FEM M5 (2m)     | 5         | 18.8 | 8    | 65   | Upper<br>Atmosphere<br>Research       | 2010         |
| Single Girder               | Standard        | FEM M6 (3m)     | 2         | 15.2 | 10.2 | 60.5 | KNFC (STP)                            | 2010         |
| Single Girder               | Standard        | FEM M6 (3m)     | 2         | 15.2 | 10.2 | 32.5 | KNFC (STP)                            | 2010         |
| Single Girder               | Standard        | FEM M6 (3m)     | 2         | 15.2 | 6    | 32.5 | KNFC (STP)                            | 2010         |
| Single Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 15.5 | 6.5  | 49   | New Auto Engg                         | 2011         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 15.5 | 6.5  | 49   | New Auto Engg                         | 2011         |
| Single Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 15.5 | 6.5  | 49   | PMO                                   | 2011         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 15.5 | 6.5  | 49   | PMO                                   | 2011         |
| Single Girder               | Explosive Proof | FEM M4<br>(1Am) | 10        | 13.7 | 4.9  | 18   | New Auto Engg                         | 2011         |
| Double Girder               | Explosive Proof | FEM M4<br>(1Am) | 10        | 13.7 | 4.9  | 18   | New Auto Engg                         | 2011         |
| Single Girder               | Explosive Proof | FEM M4 (1m)     | 10        | 13.7 | 4.9  | 18   | PMO                                   | 2011         |
| Double Girder               | Explosive Proof | FEM M4 (1m)     | 10        | 13.7 | 4.9  | 18   | PMO                                   | 2011         |
| Double Girder               | Standard        | FEM M5 (2m)     | 3         | 16.5 | 8    | 48   | New Auto Engg                         | 2011         |
| Single Girder               | Standard        | FEM M5 (2m)     | 3         | 16.5 | 8    | 48   | New Auto Engg                         | 2011         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 20   | 4    | 30   | New Auto Engg                         | 2011         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 15   | 4    | 20   | New Auto Engg                         | 2011         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 15   | 4    | 20   | PMO                                   | 2011         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 20   | 4    | 30   | PMO                                   | 2011         |
| Double Girder               | Explosive Proof | FEM M4          | 10        | 15   | 7    | 20   | New Auto Engg                         | 2011         |
| Daulda Citata               | E1i D - C       | (1Am)           | 10        | 1.5  | 7    | 20   | DMO                                   | 2011         |
| Double Girder               | Explosive Proof | FEM M4 (1m)     | 10        | 15   | 7    | 20   | PMO                                   | 2011         |
| Single Girder               | Explosive Proof | FEM M5          | 10        | 10.5 | 7.8  | 56.5 | NDC                                   | 2013         |
| Single Girder               | Explosive Proof | FEM M5          | 10        | 10.8 | 7.6  | 56.6 | NDC                                   | 2013         |
| Single Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 8    | 5    | 8    | Procurement Div.                      | 2014         |
| Single Girder               | Explosive Proof | FEM M5 (2m)     | 5         | 19   | 5    | 19   | Procurement Div.                      | 2014         |
| Double Girder               | Standard        | FEM M5 (2m)     | 25        | 21   | 12.5 | 42   | Gulf Sugar Mills                      | 25 ton       |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 3.2       | 18   | 6.5  | 100  | MES                                   | 2014         |
| Double Girder               | Explosive Proof | FEM M5 (2m)     | 6         | 18   | 6.5  | 100  | MES                                   | 2014         |
| Monorail                    | Standard        | FEM M5 (2m)     | 2/3/5/7.5 | 10   | 6.5  | 20   | Technical<br>Assossiates              | 2015         |
| Single Girder               | Standard        | FEM M5 (2m)     | 15        | 21   | 12.5 | 42   | Alman Seyyam<br>Sugar Mills           | 2018         |
| Double Girder               | Standard        | FEM M5 (2m)     | 10        | 16.7 | 9.2  | 61   | Pyramid Steel<br>Strucutre            | 2019         |
| Single Girder               | Standard        | FEM M5 (2m)     | 5         | 21   | 9    | 26   | Pyramid Steel<br>Strucutre            | 2019         |



## **DESIGN, SUPPLY, INSTALLATION, AND COMMISSIONING OF**

#### **TUNNELING FORMWORK, HVAC DAMPERS AND VENTILATION FANS.**



#### Private Sector/Defence Sector/Government Sector



Tunnel Form Construction Technique was invented over 50 years ago. The use of tunnel-form produces high quality monolithic structures. It eliminates the use of any subsequent wet trades (Plastering etc.). It is basically an operation to cast walls and slabs in one operation in a daily cycle. This technique is highly systematic, earthquake proven and provides an ideal solution to the critical problem of sound transmission. It gives a sound reduction of 50 decibels.

## **RANGE OF PRODUCTS**

FABCON has designed, manufactured and installed the key equipment for modern tunneling industry. Led by industry veterans FABCON ranks among the most experienced and best equipped tunneling equipment manufacturers in Pakistan.

Our team of engineers and technicians, with years of experience in the tunneling industry, guarantee our customers a product of high quality and technology. Besides, our company is supported by specialized factories in the field with good organizational skills and also with decades of experience in equipment assembly for tunnels that with their professionalism provides an added value to the final product required by the customer.

FABCON provides all range of Tunnel formwork and its accessories which includes but not limited to:

- Tunnel Formwork
- Tunnel Shuttering
- Concrete Filling Pumps in Tunnels
- Butterfly type Dampers
- Ventilation Fans
- Tunnel Shielding

## **CODES AND STANDARDS**

All tunnel equipment is designed in house using self-designed excel sheet calculations and internationally certified software based on following codes and standards:

- ASHRAE
- ACI 318
- NACE
- MR0175
- OSHA
- ASCE 7-16
- ASTM

- SSPC-PS
- UBC/IBC
- Pakistan Building Code
- AWS
- AISI
- ASD SPECIFICATIONS
- MBMA

# Railway Sector (Govt.)



## **DESIGN, SUPPLY, INSTALLATION, AND COMMISSIONING OF**

#### **DIFFERENT PRODUCTS FOR PAKISTAN RAILWAYS**



#### **Government Sector**



Pakistan Railways forms the lifeline of the country by catering to its needs for large scale movement of freight as well as passenger traffic. It not only contributes to its economic growth but also promotes national integration. FABCON is providing its services to railway in the field of lifting and moving heavy locomotive equipment, expensive doors for railway storage components, workshop machinery and R&D services for the betterment of Railway.

### RANGE OF PRODUCTS

We are industry leaders in the design, manufacture, and delivery of handling equipment for rail depots and workshops.

By combining innovative ideas, technical excellence, and traditional engineering skills, we have earned a reputation for quality, safety and reliability that has seen our products installed in some of the world's most advanced maintenance facilities. Our groundbreaking heavy lifting products help rail maintenance providers improve servicing times and reach new levels of safety and efficiency.

FABCON provides all range of Railway Products which include but not limited to:

#### **TURN TABLES**

FABCON has been building turntables for freight railroads and transit systems for decades and is the leading turntable designer and manufacturer in Pakistan. Our proprietary designs and manufacturing methods for turntables, acquired over the last six decades, ensure that our turntable customers will get the highest quality and highest value turntables available on the market today.

Type of turntables we have already manufactured are:

- Locomotive Turntables
- Railcar Turntables
- Turntable Tops.

## **TRAVERSER**

Traversers are a perfect example of large-scale installations that are built to order and FABCON is making a name for itself in this field, having created the vehicle mover in Pakistan for the Railway workshop of Rawalpindi.

## **DESIGN, SUPPLY, INSTALLATION, AND COMMISSIONING OF**

#### **DIFFERENT PRODUCTS FOR PAKISTAN RAILWAYS**

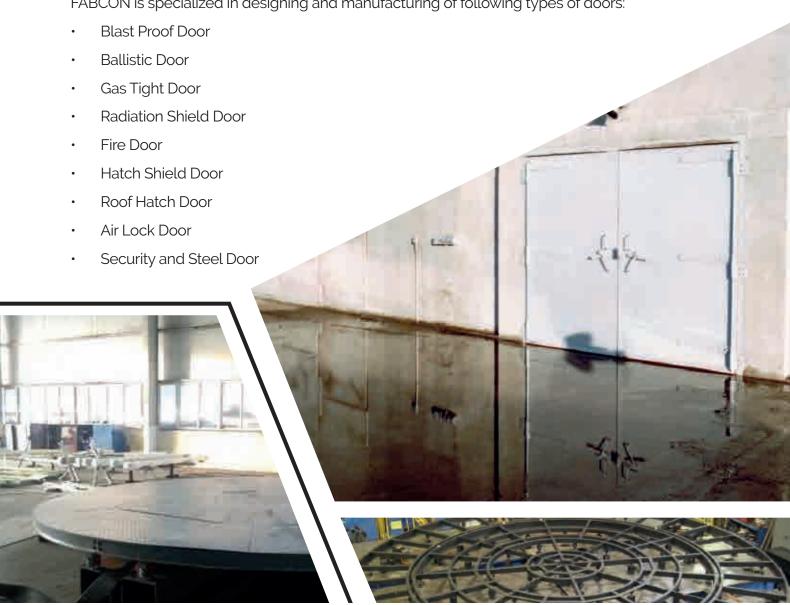
The rail traverser is the most advanced ever produced by the firm and took almost 12 months to design and build. Weighing 90t and measuring 25m in length, it is equipped to handle future locomotives that are expected to be larger than today's trains.

No job is too large or small for FABCON and the firm guides traverser clients from concept to manufacture and installation, producing a completely bespoke product that meets individual workshop and vehicle requirements.

## **BLAST PROOF DOORS**

Our specialized product provides disaster prevention against risk of fire and used in storage area. It aids to manage effective control over fire related explosions.

The purpose of the product is to provide security and safety to human life and property. FABCON is specialized in designing and manufacturing of following types of doors:



#### **DIFFERENT SECTORS IN PAKISTAN**



#### **Private and Defense Sector**



Civil infrastructure is a major source of country development in terms of Revenue, job creations for skilled people and Engage of different private and governments sectors collectively which also enhances the good relations between different sectors of the country. FABCON is providing its services in the field of civil works which mainly includes construction of roads, bridges, multi-story buildings, children schools, Offices mess, Storage Depot. Etc.

### RANGE OF PRODUCTS

We exist to make great things possible.

We constantly strive to grow and to use our talent and knowledge to change the world for the better.

FABCON provides heavy- and light-civil infrastructure services for government and commercial clients across the country. Our experienced professionals leverage the latest equipment and technology to deliver comprehensive, single-source solutions for the most complex projects.

Since 1998, we have helped customers complete more than 500 projects that have created jobs, grown economies, improved the resiliency of the world's infrastructure, increased access to energy, resources, and vital services, and made the world a safer, cleaner place.

Differentiated by the quality of our people and our relentless drive to deliver the most successful outcomes, we align our capabilities to our customers' objectives to create a lasting positive impact.

Core to our values-ethics, safety, quality, people, culture, relationships, innovation and sustainability, and our covenants-integrity, respect, collaboration, trust, and delivery. They are what we believe, what customers can expect, and how we deliver.

FABCON is built upon time-tested values of excellence and integrity. This means working to the highest ethical standards and being measured by the enduring quality of our projects. Year after year we are among the safest companies in our industry.

## **MULTI-STORY BUILDINGS**

Our specialized product includes the complete construction of multi-story buildings. We have complete construction of many buildings so far with maximum of seven story building. Our Services of civil construction starts from:

#### **DIFFERENT SECTORS IN PAKISTAN**

## **BUILDING ARCHITECTURE**

FABCON has a specialized in-house team of world-class architects that creates 3D model of the building on the latest worldwide software as per client requirements and specifications for the better understanding of the final product.

### **LAYOUT**

Building layout is completed as per architectural drawings under the management of a team of architects.

## **FOUNDATIONS**

FABCON has a dedicated team of professional designers that build and generate the foundation drawings for the building and foundations are built as per drawings by using high strength steel and concrete mixing.





## **GREY STRUCTURE**

Grey structure is completed within the required times as per directions of the design team and under the supervision of experienced civil team. FABCON has all the equipment for construction of Grey structure such as different types of scaffolding, concrete mixing machines, concrete filling machines and concrete transfer lifts for roofs and foundation fillings.



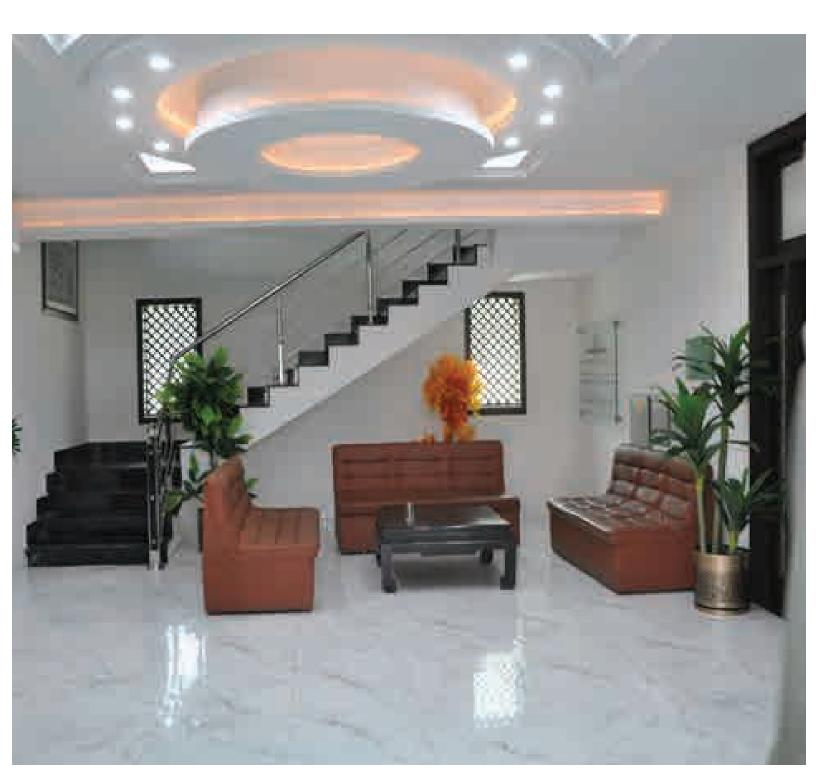
#### **DIFFERENT SECTORS IN PAKISTAN**

## **EXTERNAL FINISHING**

FABCON has provided different type of external finishes to its various clients such as Aluminum Sidings, Bricks, Natural Stones, Stone Veneer, Marble, Tile works, Energy Saving Paint, Exterior Paint, Stucco, Vinyl Sidings, Wood sidings.

## **INTERNAL FINISHING**

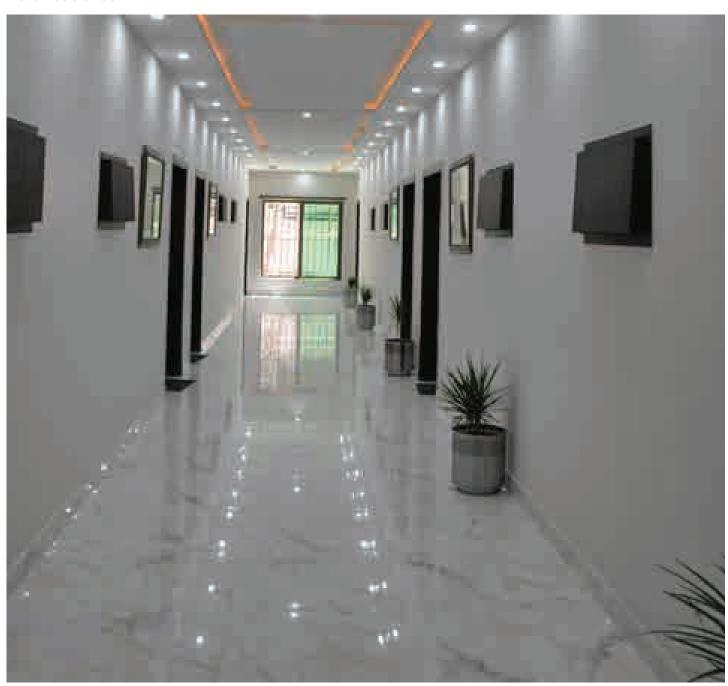
FABCON provides variety of internal finishing such as tile work, vinyl finishings, wooden floorings, imported marble, Chalk type pseudo ceiling, Water resistance paints and distempers, use of acoustic wedge panels for sound proofing and high eminence insulation material for energy conservation.



#### **DIFFERENT SECTORS IN PAKISTAN**

## **DOORS**

FABCON has built doors for internal rooms as per requirements such as timber doors for main rooms, lounges, halls and waterproof upvc doors for restrooms as they are widely used and highly efficient for water resistance.



## **WINDOWS**

High efficiency double glazed windows with aluminium frames are used which has a better efficiency for energy savings as air acts as an insulation between layer of glazing glass but also filters the UV radiations of sun.

#### **DIFFERENT SECTORS IN PAKISTAN**

## **GATE**

FABCON has installed several heavy weight in-house fabricated gate with designed supports by professional team of structure engineers.

## LIGHTING SYSTEM

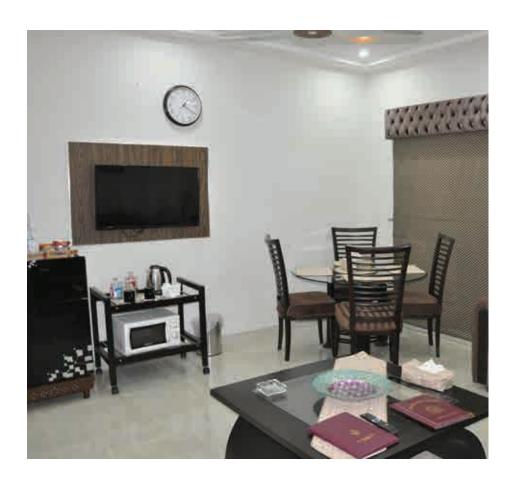
Quality is the only success policy for FABCON and FABCON always uses high quality wires for electrical systems and installs energy star qualified LED lights that not only provide required lumens but also contribute towards major saving in Energy and contributes its role towards green environment.

## **WOOD WORKS**

High quality wood is used for the construction of kitchen utensils box, Clothes cupboard, bookshelves, and TV lounge areas.

## **HVAC SYSTEM**

For multistory buildings FABCON has installed the environmentally friendly centralized heating ventilation and air conditioning system with central heating and cooling unit and distribute the heating and loads as per space requirements.



#### **DIFFERENT SECTORS IN PAKISTAN**

## **LIFT SYSTEM**

FABCON has installed imported lifts is its various multi-story buildings fully loaded with sensors that operate effectively.



## **CHILDREN SCHOOLS**

Expectations are high for schools and while that largely depends on the teachers, administrators, students, and families who make up a school community, the structure itself can also make a significant impact.

It takes experience, commitment, passion, and the teamwork we learned back when we were in the classroom to get everyone on the same page. At FABCON that is as much a part of our heritage as hammers and hard hats.

FABCON has built everything school related or education which includes classrooms, labs, athletic complex, swimming pools.

The floor and wall covering materials used throughout the building were selected not only for their sense of visual appeal but for their durability. Another key goal was to utilize as many sustainable or "green" materials as possible while still maintaining an acceptable budget.

## **DIFFERENT SECTORS IN PAKISTAN**





#### **DIFFERENT SECTORS IN PAKISTAN**

## **OFFICER'S MESS**

FABCON has designed and built officer's mess area for defence sector that not only are environmentally friendly but a peaceful place for mankind also. These areas are especially designed for acoustics and sound is controlled by using acoustic wedge panels and sound curtains that are highly efficient to resist the external sound.



## **DESIGN CODES AND STANDARDS**

All building and infrastructure are designed in house using self-designed excel sheet calculations and internationally certified software based on following codes and standards:

- ASHRAE
- ACI 318
- OSHA
- ASCE 7-16
- ASTM
- UBC/IBC
- Pakistan Building Code
- AISI

- ASD SPECIFICATIONS
- AASHTO LRFD
- ACI 347
- ACI 360
- PCI
- ACI 343
- BS 5628



**DESIGN & ENGINEERING** 

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