



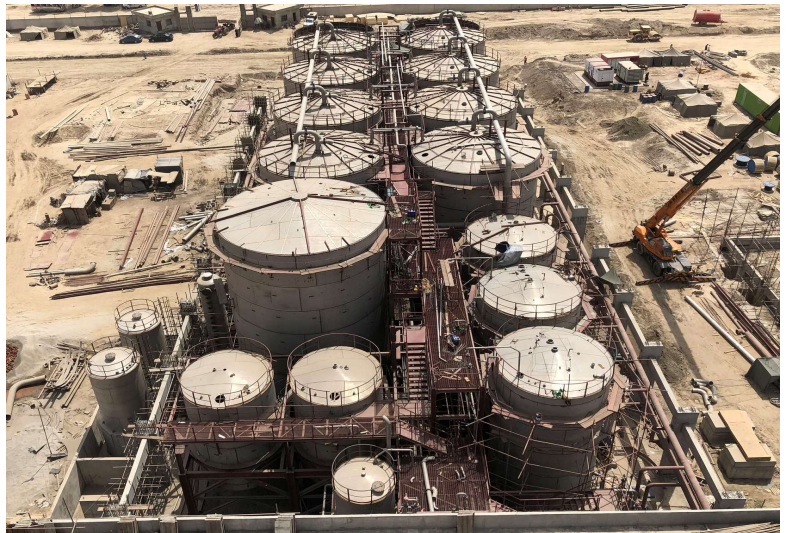
ABS Engineering Corporation (Pvt.) Limited





ABS Engineering Corporation (Pvt.) Ltd.

Company Profile



TRUSTED NAME IN MECHANICAL, FABRICATION AND ERECTION

Address: F-492, S.I.T.E., Karachi - 75700 – Pakistan.
Phone: (+92-21) 32579174 – 32579818 – 32593271 - 32593272
Mobile (PABX): 0300-2010993 Fax: (+92-21) 32567745
Email: asad.ahmed@absengineering.com

MAJOR JOBS COMPLETED:

| S.#. | Project Description | Duration | Completion | Customer / Location |
|------|---|-------------|------------|---|
| 1 | Complete Mechanical works consisting of Fabrication and Installation of 230,000 Liters/Day Ethanol Plant and Bio Gas Plant. | 2024 | ongoing | JDW Sugar Mill Limited. 17-Abid Majeed Road, Lahore Cantt, Lahore. |
| 2 | Fabrication of Shop Fabricated equipment for 65,000 liters/Day. Alcohol Plant. | 2023-2024 | On Time | Premier Sugar Mills Distillery Limited. Mardan (Khyber Pakhtoonkhawa) |
| 3 | Fabrication and installation of 200 TPD Fame Plant | 2023-2024 | On Time | HHK Oil Industries Ltd. Port Qasim, Karachi. |
| 4 | Complete Fabrication and Installation of 125,000 Ltrs/Day Capacity Distillery and Anhydrous Alcohol Plant and Bio Gas Plant. | 2021-2022 | On Time | RYK Mills Limited (Rahim Yar Khan) |
| 5 | Fabrication and Supply of Tube Bundle of 101-E-10 | 2019-2020 | On Time | National Refinery Limited 7-B, Korangi Industrial Zone, Karachi |
| 6 | Complete Manufacture Testing and Supply of F1- 3630 Backlog Metal Settling Vessel Design and Fabrication Complete Supply of AMA Filter Feed Vessel F1-750 | 2019-2020 | On Time | LOTTE Chemical Pakistan Limited Eastern Industrial Zone EZ/1, P-4 Port Qasim Rd, Karachi, 74200 |
| 7 | Complete Fabrication of Heat Ex. TT-307B (BJM Condenser) | 2020-2021 | On Time | Engro Polymer & Chemicals 16 th Floor, The Harbor Front Building, HC-3, Marine Drive, Block-4, Clifton, Karachi-75600. |
| 8 | Retubing of Heat Ex. TT-304 (HCL Column Re-boiler) | 2020-2021 | On Time | Engro Polymer & Chemicals 16 th Floor, The Harbor Front Building, HC-3, Marine Drive, Block-4, Clifton, Karachi-75600. |
| 9 | Refurbishment of Heat Ex. TT-302E (Quench Vapor Condenser) | 2020-2021 | On Time | Engro Polymer & Chemicals 16 th Floor, The Harbor Front Building, HC-3, Marine Drive, Block-4, Clifton, Karachi-75600. |
| 10 | Refurbishment of Heat Ex. TT-308C (Quench Vapor Condenser) | 2020-2021 | On Time | Engro Polymer & Chemicals 16 th Floor, The Harbor Front Building, HC-3, Marine Drive, Block-4, Clifton, Karachi-75600. |
| 11 | Construction of AETP Project | 2020-2021 | On Time | LOTTE Chemical Pakistan Limited Eastern Industrial Zone EZ/1, P-4 Port Qasim Rd |
| 12 | Dismantling and Re-construction of Carbon Steel Fermentation Tanks for Unicol Distillery Project. | 2020 - 2021 | On Time | Unicol Limited – 1st Floor, Modern Motors House, Beaumont Road, Karachi-75530 |
| 13 | Fabrication & Erection of Steel Storage Tanks and Plant Piping Network for Petrochemical Handling Facility PMC-2, Oil Installation Area Keamari. Karachi | 2019 - 2020 | On Time | Pakistan Molasses Company (Pvt.) Limited, 14 th Floor, Dolmen City, Executive Tower, Marine Drive, Block-4, Clifton, Karachi-75600. |
| 14 | Engineering, Procurement and Construction of 5000 MT New EDC Tank. | 2018 - 2019 | On Time | Engro Polymer & Chemicals, 16 th Floor, The Harbor Front Building, HC-3, Marine Drive, Block-4, Clifton, Karachi-75600. |

MAJOR JOBS COMPLETED:

| | | | | |
|----|---|-------------|---------|--|
| 15 | Dismantling and Erection of Fermenters (Services), Dismantling of Tanks, Piping, Structure and other items. | 2017 – 2018 | On Time | Unicol Limited – 1st Floor, Modern Motors House, Beaumont Road, Karachi-75530 |
| 16 | Line – III Area “C” for Fabrication/erection/Commissioning of Mechanical Equipment of new Cement Production at ACPL Factory, Hub Chowki, Lasbella, Baluchistan. | 2017 – 2018 | On Time | Attock Cement Pakistan Limited D-70, Block-4, Kehkashan -5 Clifton, Karachi -75600 |
| 17 | EPC for Chiller Project (DBN) | 2017 – 2017 | On Time | Engro Polymer & Chemicals, 16th Floor, The Harbor Front Building, HC-3, Marine Drive, Block-4, Clifton, Karachi-75600. |
| 18 | EPC of New Vacuum Column AS-404, Supply & Installation of AS-404 | 2017 | On Time | Engro Polymer & Chemicals, 16th Floor, The Harbor Front Building, HC-3, Marine Drive, Block-4, Clifton, Karachi-75600. |
| 19 | Fabrication & Erection Work of Internal Pipelines (Product and Fire) | 2016 - 2017 | On Time | Al Noor Terminal (Pvt.) Limited |
| 20 | Dismantling and Erection of Fermenters (Services), Dismantling of Tanks, Piping, Structure and other items. | 2016 - 2017 | On Time | Unicol Limited – 1st Floor, Modern Motors House, Beaumont Road, Karachi-75530 |
| 21 | Fabrication and Installation of plant machinery and equipment for new cement line | 2015-2016 | On Time | Cherat Cement Company (Ltd.) Modern Motors House, Beaumont Road, Karachi |
| 22 | Shop Fabricated Equipment (All items) for 125000 L/D Alcohol Plant and Anhydrous Alcohol Plant. | 2016 - 2017 | On Time | Madina Sugar Mills (Pvt.) Ltd., 2-C, KDA Scheme No. 1, Karsaz, Karachi. |
| 23 | Fabrication & Erection of Above Ground Petroleum Storage Tanks. | 2015 - 2016 | On Time | Al Noor Terminal (Pvt.) Limited |
| 24 | Fabrication and Erection Works of its New Plant in Accordance with Package 2 | 2015 - 2016 | On Time | Cherat Cement Company Limited, 3rd Floor, Modern Motors House, Beaumont Road, Karachi-75300 |
| 25 | Supply of material for Compressed Air and Hydraulic Oil Piping System. | 2015 - 2016 | On Time | Fauji Meat Limited, 1 st Floor, Bahria Complex – II, M.T. Khan Road, Karachi – Pakistan. |
| 26 | Erection of Compressed Air and Hydraulic Oil Piping System. | 2015 - 2016 | On Time | Fauji Meat Limited, 1 st Floor, Bahria Complex – II, M.T. Khan Road, Karachi – Pakistan. |
| 27 | Shop Fabrication and Installation of complete Ethanol Plant of 100,000 liter per day capacity fabricated with Stainless Tell SS316L and 304L material. Consisting of Distillation Columns shell and tube type Heat Exchangers, site storage tanks, steel structure and plant piping 40,000 dia inches. Approximately 1000 tons of Stainless Steel fabrication and installation works. | 2012 - 2014 | On Time | Unicol Limited - PHASE - II. 3rd Floor, Modern Motors House, Beaumont Road, Karachi-75530 |
| 28 | Shop Fabricated Equipment (All items) for 125000 L/D Alcohol Plant and Anhydrous Alcohol Plant. | 2014 - 2014 | On Time | Madina Sugar Mills (Pvt.) Ltd., 2-C, KDA Scheme No. 1, Karsaz, Karachi. |

MAJOR JOBS COMPLETED:

| | | | | |
|----|--|-------------|---------|--|
| 29 | Fabrication and Supply of New Heat Exchanger Tag Number TT 307 | 2013 - 2014 | On Time | Engro Polymer & Chemicals, 16th Floor, The Harbor Front Building, HC-3, Marine Drive, Block-4, Clifton, Karachi-75600. |
| 30 | Manufacturing of Shop Fabricated Equipment of Ethanol Plant for 125,000 L/D Capacity. | 2012 - 2013 | On Time | Chashma Sugar Mills Limited, Dera Ismail Khan, Pakistan. |
| 31 | Fabrication of Falling Film Evaporators 3000 M ² (Without Tube Expansion) and 3500 M ² (Complete Without Skirt, Vapor Chamber and Tubes Expansion) | 2011 - 2012 | On Time | Spray Engineering Devices (Pvt.) Limited, A-3, Moinabad II, Jinnah Avenue, Model Colony, Karachi |
| 32 | Fabrication and Supply of Calandria and Top Dish Head of Falling Film Evaporators 4000 M ² | 2011 - 2012 | On Time | Spray Engineering Devices (Pvt.) Limited, A-3, Moinabad II, Jinnah Avenue, Model Colony, Karachi |
| 33 | Fabrication of Falling Film Evaporators 3000 M ² and 3500 M ² | 2011 - 2012 | On Time | Spray Engineering Devices (Pvt.) Limited, A-3, Moinabad II, Jinnah Avenue, Model Colony, Karachi |
| 34 | Complete Fabrication and Installation of Oxy Chlor Reactor, MR-203 Total weight 95 tons. | 2011 - 2012 | On Time | Engro Polymer & Chemicals Limited, First Floor, Bahria Complex I, 24 M.T. Khan Road, Karachi-74000, Pakistan. |
| 35 | Vertical Crystalizer 175m ³ X dia 4.5m X 22 or 23 Coils, Masscult Re-Heater 300m ² and Vapor | 2011 - 2012 | On Time | Mehran Sugar Mills Limited, Adamjee House 8th Floor, I.I. Chundrigar Road, Karachi-74000. |
| 36 | Supply and Fabrication of Carbonation Tank 3200 / Retention Tank 3200 | 2011 - 2012 | On Time | Mirpurkhas Sugar Mills Limited, Modern Motors House, Beaumont road, Karachi-75530 |
| 37 | Supply and Fabrication of Juice Heaters (350M ²) Heating Surface. | 2011 - 2012 | On Time | Mirpurkhas Sugar Mills Limited, Modern Motors House, Beaumont road, Karachi-75530 |
| 38 | Supply and Fabrication of Evaporator with Heating Surface 3000M ² | 2011 - 2012 | On Time | Mirpurkhas Sugar Mills Limited, Modern Motors House, Beaumont road, Karachi-75530 |
| 39 | Supply and Fabrication of Batch Vacuum Pan 60 Ton (FCB Design) without tubes & circulator. | 2011 - 2012 | On Time | Mirpurkhas Sugar Mills Limited, Modern Motors House, Beaumont road, Karachi-75530 |
| 40 | Supply and Fabrication of Rotary Truck Dumper 08 Meters Diameter. | 2011 - 2011 | On Time | Mirpurkhas Sugar Mills Limited, Modern Motors House, Beaumont road, Karachi-75530 |
| 41 | Supply and Fabrication of Cane Mud Vacuum Filter Ø 10' X 20' with approx. 600 Ft ² filtering | 2011 - 2011 | On Time | Mirpurkhas Sugar Mills Limited, Modern Motors House, Beaumont road, Karachi-75530 |
| 42 | Juice Clarifier Design 500 M ³ , Evaporator HS 4000 M ² and A- | 2010 - 2011 | On Time | Mehran Sugar Mills Limited, Adamjee House 8th Floor, I.I. Chundrigar Road. Karachi-74000. |



MAJOR JOBS COMPLETED:

| | | | | |
|----|---|-------------|---------|---|
| 43 | Erection and Installation of Vessels, Steel Structure at DRI Furnace. Fabrication of Pipe Racks at DRI plant. Fabrication of Ducts, Misc. Equipment and Misc. small structure and surface preparation & painting works. Installation and Painting of Pipe Racks, Plant piping and Sand blasting and Primer of piping at DRI plant. Total Tonnage 6,500 tons and 120,000 dia. inches | 2008 - 2011 | On Time | Tuwairqi Steel Mills Limited, Finance and Trade Centre, 1st Floor, Block- D, Shahrah-e-Faisal, Karachi-74400, Pakistan. |
| 44 | Line – II Area “C” for Fabrication/erection/Commissioning of Mechanical Equipment of new Cement Production at ACPL Factory, Hub Chowki, Lasbella, Baluchistan. | 2005 – 2006 | On Time | Attock Cement Pakistan Limited D-70, Block-4, Kehkashan -5 Clifton, Karachi -75600 |



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INTRODUCTION

ABS Engineering Corporation (Pvt.) Limited (ABS) was established in the year 1983.

ABS is a general Engineering, Fabrication and Erection Company, dealing in manufacturing of plants, machinery and equipment for **Ethanol, Cement, Sugar, Oil & Gas, Fertilizer, Petrochemicals, Power plants, Food & Confectionery and other processes, manufacturing and Allied industries.**

ABS in association with world renowned Technology providers and Engineering companies provides complete Turnkey plants on “Engineering, Procurement and Construction (EPC)” basis.

Beside turnkey projects, in-house manufacturing facilities supported by trained and experienced personnel and voluminous technical know-how enables ABS to design, fabricate, erect and commission a wide range of coded equipment for **Oil & Gas, Fertilizer and Petrochemical industries**, such as; **Pressure vessels, Shell & Tube Type Heat exchangers, Air Cooler Heat Exchangers, Tube Bundles, Distillation / Rectification / Dehydration Columns, Knock-out Drums, Steam Drums, Condensers, Re-boilers, Reactors, Oil Storage Tanks, etc.**

For other chemical process and manufacturing industries the manufacturing range covers the equipment manufacturing such as; **Evaporators, Vacuum Pans, Heat Exchangers, Mixtures, Filters, Separators, Crushers, Shredders, Mixers, Sludge Pumps, Conveyors, Elevators, Air Separators, Pre-Heaters, Condensers, Clarifiers, Centrifugal Separator Machines, Storage Tanks, Plant Piping, Steel Structures/Staging, Ducting, Casings, etc.**

ABS operates through two well equipped workshops situated within a 100 M distance with each other and has a combined area of **7,100M²**.

On the basis of nature of work ABS has four divisions:

- **Coded Equipment Division**
- **Process Equipment Division**
- **Rotary Machines Division**
- **Steel Structure and Pre-Engineered building Division**
- **Field Services (Site Fabrication, Erection, Plant & Cross Country Piping and Construction) Division**

The combined facilities of both manufacturing units have capability to achieve production up-to 10,000 Tons/year (depending on the nature of work), by deploying approximately 1,400,000 to 1,500,000 hours/300 days (based on double shift working). Similarly approximately 20,000 Tons / year or more (depending on the nature of work), fabrication and erection could be done at site, by deploying approximately 2,200,000 to 2,600,000 hours/300 days (based on double shift working).

ABS is ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 certified and is under way to achieve the ASME U-Stamp certification in near future.

Through a gradual development, endorsed by client's satisfaction, ABS is now capable to undertake not only the partial projects but process Designing, Engineering, Manufacturing, Installation and Commissioning of a complete plant on Turn-key basis.



QUALITY POLICY

ABS Engineering Corporation (Pvt.) Limited is committed to manufacture the best quality products, by fulfilling the requirements, not only limited to the codes, specification standards and good engineering practices but to the entire satisfaction of our clients.

We shall endeavor our best efforts for improving the effectiveness of Quality Management System.

Director

ABS Engineering Corporation (Pvt.) Ltd.
Rev. 01

Dated: January 1, 2002



SAFETY POLICY

It is the Policy of ABS Engineering Corporation (Pvt.) Ltd. to provide, maintain and improve safe and healthy conditions at each of its workstations and construction sites. We want to serve our clients, industry and society in such a manner as to prevent personal injury, prevent loss and damage and maintain the natural environment.

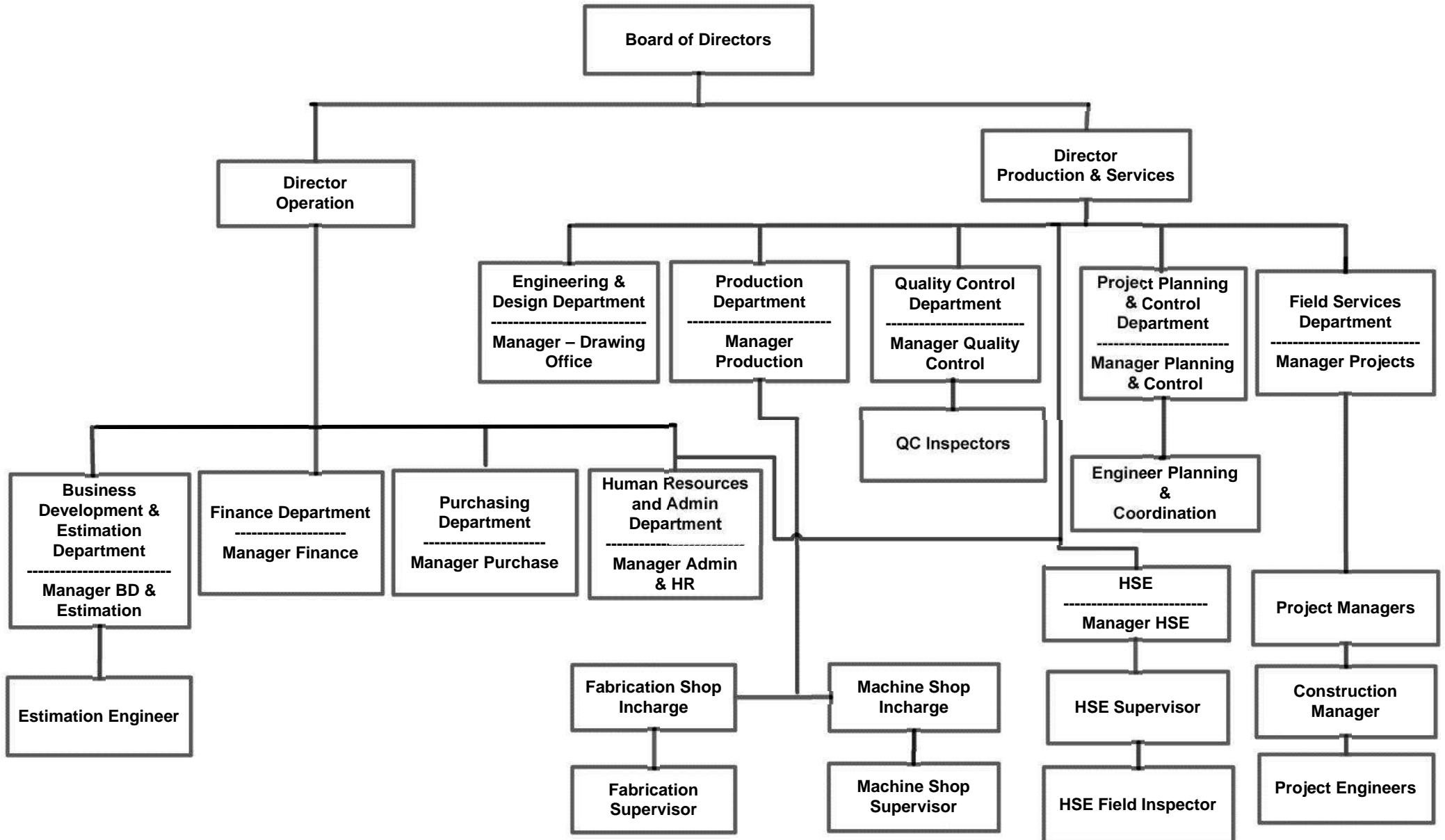
The safety policy and safe work procedures are prepared to provide basic rules to our employees, which are essential for safe working conditions.

Farhan Ahmed - Director
A.B.S. Engineering Corporation (Pvt.) Ltd.



A.B.S. Engineering Corporation (Private) Limited

Organogram





KEY PERSONNEL

DIRECTORS

ENGR. FARHAN AHMED - Director

QUALIFICATIONS:

- B. E. – Mechanical (NED University of Engg. & Tech.)
- B.Sc. - Industrial Technology

EXPERIENCE:

- **32 years' experience for fabrication and erection of equipment and machinery for various plants.**
- Successful completion of various partial and turn-key projects.

RESPONSIBILITIES:

To look after the following activities

- Marketing and business development.
- Reviewing and approval of bids prepared by the estimation department.
- Discussion with Head of departments, in order to control the timely completion of jobs and projects.
- Financial approvals of Project's Procurements and Execution Budgets.
- Approvals for the procurement of raw materials.
- Periodic meetings with all internal departments to review and ensure of works progress, quality and safety issues.



KEY PERSONNEL

DIRECTORS

ENGR. ASAD AHMED – Director Operations

QUALIFICATIONS:

- B.E. – Mechanical. (Canada)

EXPERIENCE:

- **21 Years' experience for expediting the in-house fabrication and on-site construction activities.**

RESPONSIBILITIES:

To look after the following activities:-

- International Sourcing of Material and products.
- Business Development and Scoping for Collaboration with World Renowned Technology Providers.
- Organizational Growth.
- Reviewing bids for approvals prepared by the estimation department.
- Approvals for local and foreign purchases.
- Preparation of fabrication and erection methodologies.



KEY PERSONNEL

MANAGERS

ENGR. M. JALIL KHAN – Manager Projects

QUALIFICATIONS:

- B.E. (Mechanical)

EXPERIENCE:

- 31 years' experience of Project Management.

RESPONSIBILITIES:

To look after the following activities:

- Top Management of on-going projects.
- Allocation of jobs to Project Engineer.
- Projects Budgets Preparation and allocation.
- Hiring of Human and other resources.
- Periodic Internal Technical Audits of technical departments.
- To monitor the implementation of QC system and procedures, as per ISO 9001:2008.



KEY PERSONNEL

MANAGERS

ASIF RAZA – Projects Coordinator

QUALIFICATIONS:

- Master of Science

EXPERIENCE:

- 24 years' experience of Project Management.

RESPONSIBILITIES:

To look after the following activities:

- Coordination between Client and ABS Execution Team
- Correspondence with client for approvals regarding drawings and designing matters.
- Conducting meeting with Clients regarding progress.
- Coordination between designer and Fabrication Team.
- Keeping records of client's queries and replies.
- Communication with Client regarding procedures as per "Inspection and Test Plants"



KEY PERSONNEL

ENGINEERS

ENGR. SYED ZAREEF ALAM – Project Engineer

QUALIFICATION:

- B.E – Mechanical

EXPERIENCE:

- 05 Years' experience.

RESPONSIBILITY:

To look after the following activities:

- Evaluation of Project deliverables.
- Interpretation of Engineering Drawings and Technical Specifications as provided by the Client.
- Cost Estimation of project.
- Preparation of Bill of Material and Co-ordinate with Client for the issuance of required material for the execution of project.
- Monitoring of progress of all activities and deliverables such as material, construction drawings etc.



KEY PERSONNEL

ENGINEERS

SYED WALI HAIDER – In-charge Engineer (Fabrication Shop)

QUALIFICATIONS:

- D.A.E. (Mechanical)

EXPERIENCE:

- 35 years' experience in the field of fabrication & erection of rotary machines and process equipment such as: Pressure vessels, Heat exchangers, Reactors, Columns, Evaporators, Vacuum pans, Pressure filters, Vacuum filters, Dryers, Centrifugal machines, Crushers, Graders, Conveyors, Storage tanks, Pipe line and various steel structures.

RESPONSIBILITIES:

To look after the following activities:

- To manage the execution of fabrication activities in fabrication shops.
- To develop and implement fabrication & erection techniques.
- To allocate fabrication jobs to the supervisors of both workshops.
- Preparation of fabrication and erection methodologies.
- To review the shop drawings and cutting plans, issued by drawing office and issue for execution.



KEY PERSONNEL

ENGINEERS

MOHAMMAD KHAN AZHAR – In-charge Engineer (Machine Shop)

QUALIFICATIONS:

COURSES & TRAINING

- D.A.E. (Mechanical)
- Certificate course from G.C.T., Karachi.
- Training course from Pak-Swiss Training Centre for:
 - All kinds of gear cutting and Hobbing.
 - Heat treatment procedures for Hardening, Tempering, Annealing, Normalizing and Carburizing.

EXPERIENCE:

- 36 years' experience in the field of heavy and precise machining, development of machining techniques, Tigs & Fixtures, Gear cutting, machines assembly, installation and commissioning of Rotary machines.

RESPONSIBILITIES:

To look after the following activities in Machine shop:

- To organize machining activities in machine shop.
- Time study for machining activities.
- Development of machining techniques and attachments.
- Final assembly of machines and equipment.
- Commissioning and start up of machinery at client's location.
- Dynamic balancing of rotary parts such as; Turbine rotors, Generator rotors, Motors, Rotors etc.
- Repair and maintenance of in-house machines.
- Development of Dies designs for press works.
- To carryout the repair, maintenance and refurbishment of machinery projects.



KEY PERSONNEL

ENGINEERS

MUHAMMAD TUFAIL – Construction In charge (on-site Projects)

QUALIFICATION:

- B. Tech (Mechanical)

EXPERIENCE:

- 29 Years' experience in the fabrication and erection of Steel structures, storage tanks, Vessels, Columns, Heat exchanger, Conveyor and Plant Pipe.

RESPONSIBILITY:

- To manage execution of on-site fabrication and erection activities.
- Material control, Implementation of new techniques to improve quality.
- Coordination with Q.C. department for stage inspections.
- Fabrication planning and scheduling, in accordance with schedule of on-site projects.



KEY PERSONNEL

ENGINEERS

MOHAMMD TEHSIN – Manager Procurement

QUALIFICATIONS:

- D.A.E. (Mechanical)

EXPERIENCE:

- 33 years experience for the erection of Equipment, Machinery, Tank Farms and Complete plants.
- 19 years experience for the local procurement of raw materials, equipment, plant and machinery.

RESPONSIBILITIES:

To manage the following activities of site projects:

- Searching, prequalification and registering of local and foreign suppliers and vendors.
- Purchasing and issuance of purchasing inquiry.
- Expediting for quotations.
- Technical evaluation in accordance with requisition, of quotations.
- Preparation of comparative statements.
- Negotiations with local and foreign suppliers.
- Issuance of Purchase orders or establishment of L/Cs.
- Expediting for the timely supply of ordered materials.
- Coordination between suppliers and QC department or Third party inspection agencies, for the pre-delivery inspection of ordered materials.



KEY PERSONNEL

INSPECTORS – QC DEPARTMENT

HASAN ALI – Quality Control Inspector

QUALIFICATION:

- D.A.E. (MECH.)

EXPERIENCE:

- 34 years' experience in Fabrication & Inspection of Steel structure, Stainless steel Pressure vessel, Heat exchanger, Columns, Air cooler Heat Exchangers, Condensers and Steel Structure for Oil & Gas and Steel Mills.

RESPONSIBILITY:

- To carryout the inspection of fabrication activities.
- To maintain records and documentations according to ITPs.
- To compile documents for M.D.R.



KEY PERSONNEL

INSPECTORS – QC DEPARTMENT

MUHAMMAD ASIF IQBAL – In-charge QA/QC

QUALIFICATION:

B. Tech (Mechanical Engineer)

EXPERIENCE:

10 Years' experience in Development and Implementation of QC Plans for different equipment like Heat Exchanger, Pressure Vessel, Steel Storage Tanks, Process Piping, Kiln Shells, Steel Structure, Surface Condenser, Reactor, Column for Ethanol Plants, Chemical Plants and Cement Plants.

RESPONSIBILITY:

Quality Control during stages of fabrication & erection as per standards, specifications, agreement and QC plans.

Coordinating and Implementing NDT Activities including UT, RT, MPT, DEPT.

Controlling Quality on Shops Manufacturing and Site Erection on Projects.

Extensive knowledge of welder's qualification, welding procedure qualification, procedure development, welding supervision, PWHT Control.

Surface preparation (Sand blasting/cleaning) and protection (Painting & Coating).

Carry out tests such as Hydrostatic Test, Air leak test and Vacuum box test.

Preparation of manufacturing data reports (MDR'S).



KEY PERSONNEL

INSPECTORS – QC DEPARTMENT

MUNAF ALI QURESHI – Quality Control Inspector

QUALIFICATION:

D.A.E. (MECH.)

EXPERIENCE:

07 years' experience in Fabrication & Inspection of Steel structure, Stainless steel Pressure vessel, Heat exchanger, Columns, Air cooler Heat Exchangers, Condensers and Steel Structure for Oil & Gas and Steel Mills.

RESPONSIBILITY:

To carryout the inspection of fabrication activities.

To maintain records and documentations according to ITPs.

To compile documents for M.D.R.



KEY PERSONNEL

HEALTH & SAFETY

MUHAMMAD WAQAS – HSE OFFICER

| | |
|-------------------------------|--|
| QUALIFICATIONS: | Hazara University Mansehra Certified HSE Officer |
| PROFESSIONAL CERTIFICATES: | NEBOSH (IGC-I, IGC-II & IGC-III) Certified. IOSH certified HABC L2 Fire Safety Certified. Safety Assistant Course Form DTI Lahore. |
| EXPERIENCE: | <p>08 years of HSE/Administrative experience in both shutdowns & Projects in Oil & Gas, Fertilizer and Petrochemical Industries.</p> <p>Currently working at RYK Distillery Sadiqabad by ABS Engineering Corporation (PVT.) Ltd from November – 2021 as an Admin Officer.</p> <p>Worked as an Admin Officer at LOTTE Chemical Pakistan Limited by ABS Engineering Corporation (PVT.) Ltd From October – 2020 to November – 2021. (Civil & Mechanical Works)</p> <p>HSE Incharge at Pakistan Molasses Company (PMC-II Project) Karachi Kemari By ABS Engineering Corporation (PVT.) Limited Karachi from February 2019 August 2020. (Civil & Mechanical Work)</p> <p>Worked as a HSE supervisor at Engro Polymer and Chemical Limited Karachi By Descon Engineering Limited from August 2014 to February 2019. (Maintenance & Shutdown Works)</p> |
| RESPONSIBILITIES: | <p>To look after the following activities:</p> <p>Prepare Monthly HSE Statistics/ monitoring and measuring of KPI's of all site contractors and present to top management</p> <p>Monitoring of Site by means of audits and inspections to ensure HSE compliance</p> <p>Well responsible for rectifying of all HSE related issues.</p> |



KEY PERSONNEL

SUPERVISOR

ABDUL REHMAN – Sr. Mechanical Supervisor

QUALIFICATION:

- D.A.E. (Mechanical)

EXPERIENCE:

- 34 Years' experience in the field of fabrication & erection of rotary machines and process equipment such as: Pressure vessels, Heat exchangers, Reactors, Columns, Evaporators, Vacuum pans, Pressure filters, Vacuum filters, Graders, Conveyors, Storage tanks, Pipe line and various steel structures.

RESPONSIBILITY:

To look after the following activities:

- To manage execution of fabrication / erection activities.
- To ensure proper materials handling and records.
- To supervise execution teams to work using appropriate method.
- To ensure the execution according to approved drawings.
- To get approval of work done from QC department.

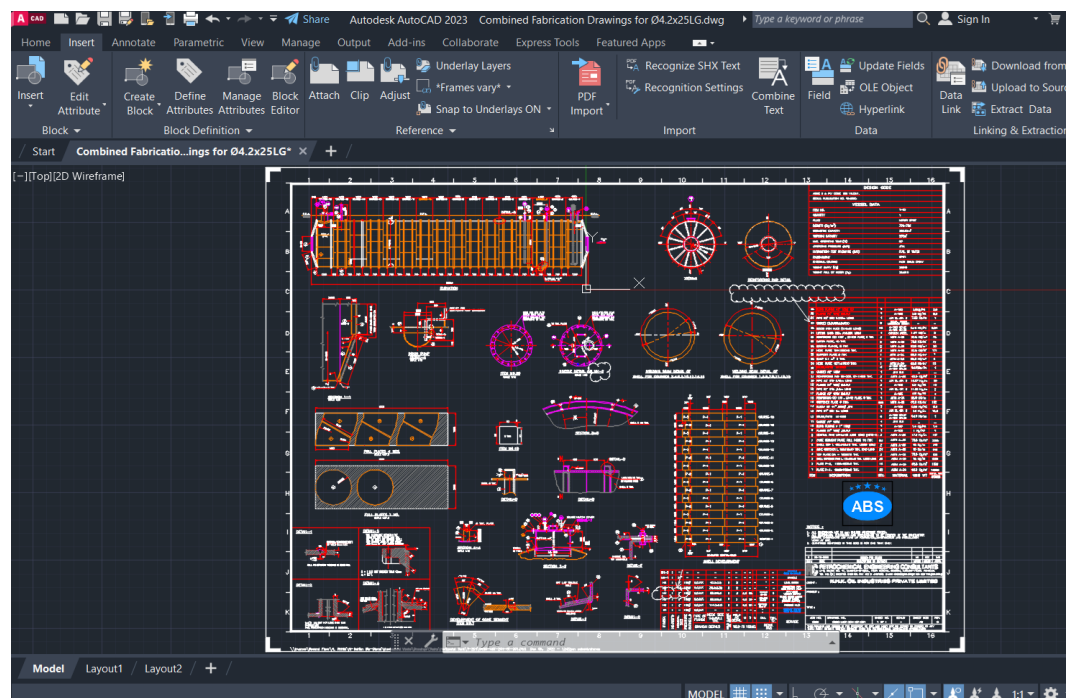
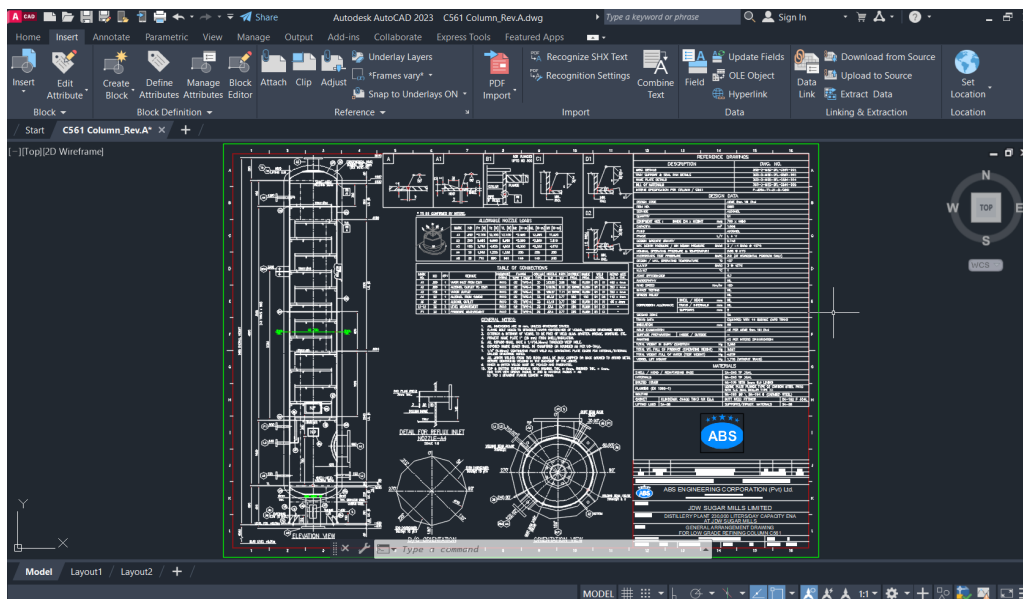


CAPABILITIES

ENGINEERING

DESIGNING AND DRAWINGS DEVELOPMENT (DRAWING OFFICE):

In order to provide strong back up to our fabrication facilities, in-house arrangement is available for code calculations, designing and drafting of Engineering and shop drawings. These facilities are further strengthened by the support of our associated mechanical, electrical and instrumentation designers and consultants.



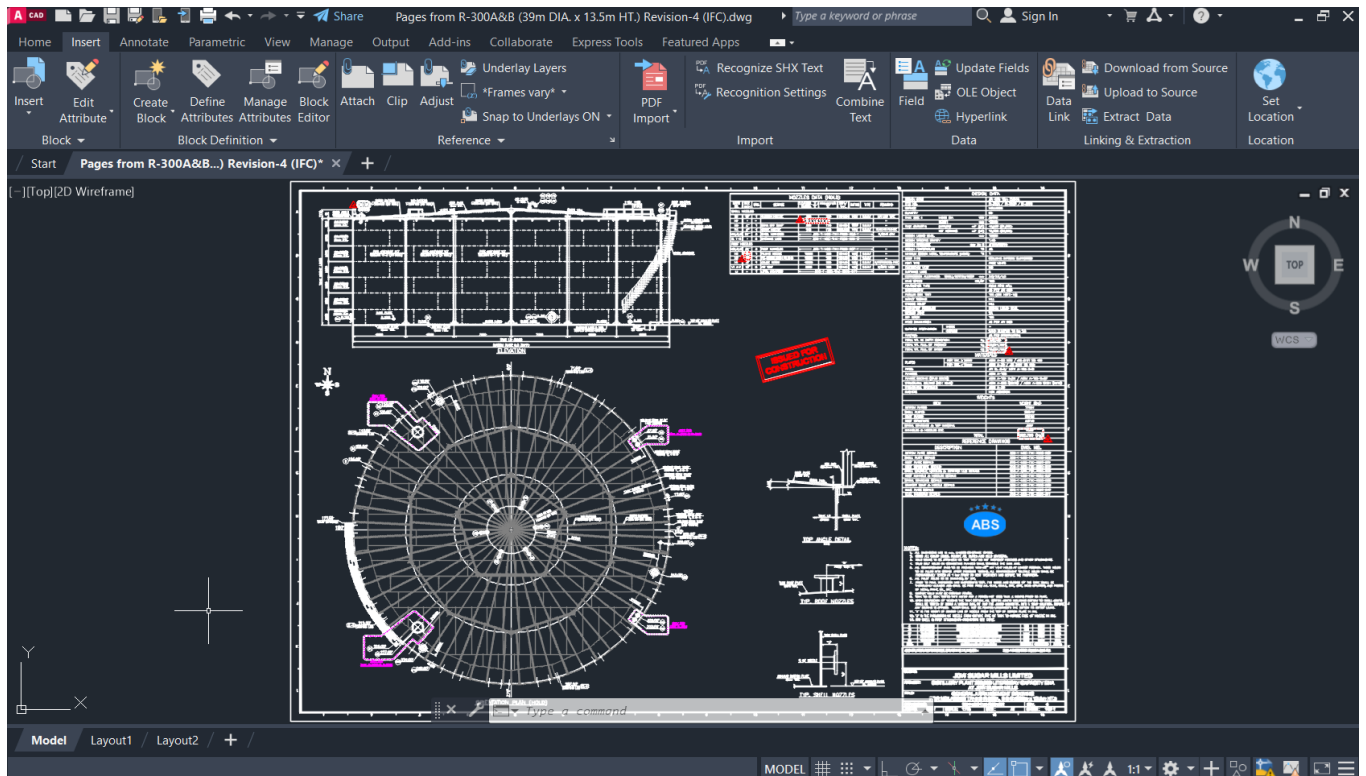
Furthermore ABS has many close associations with internationally renowned Licensers, Designer, Technology providers, etc., for development and offering complete plants on turn key basis.



CAPABILITIES

ENGINEERING

Our drawing office is headed by qualified and experienced engineers and supported by computer-aided designing and drafting facilities. Detailed designing is carried out in accordance with data sheets provided by the clients.



All shop drawing, and cutting plans are prepared on AutoCAD. For that purpose ABS has permanent in-house availability of 20,000 drafting hours per year and further could be arranged, if and when required basis.

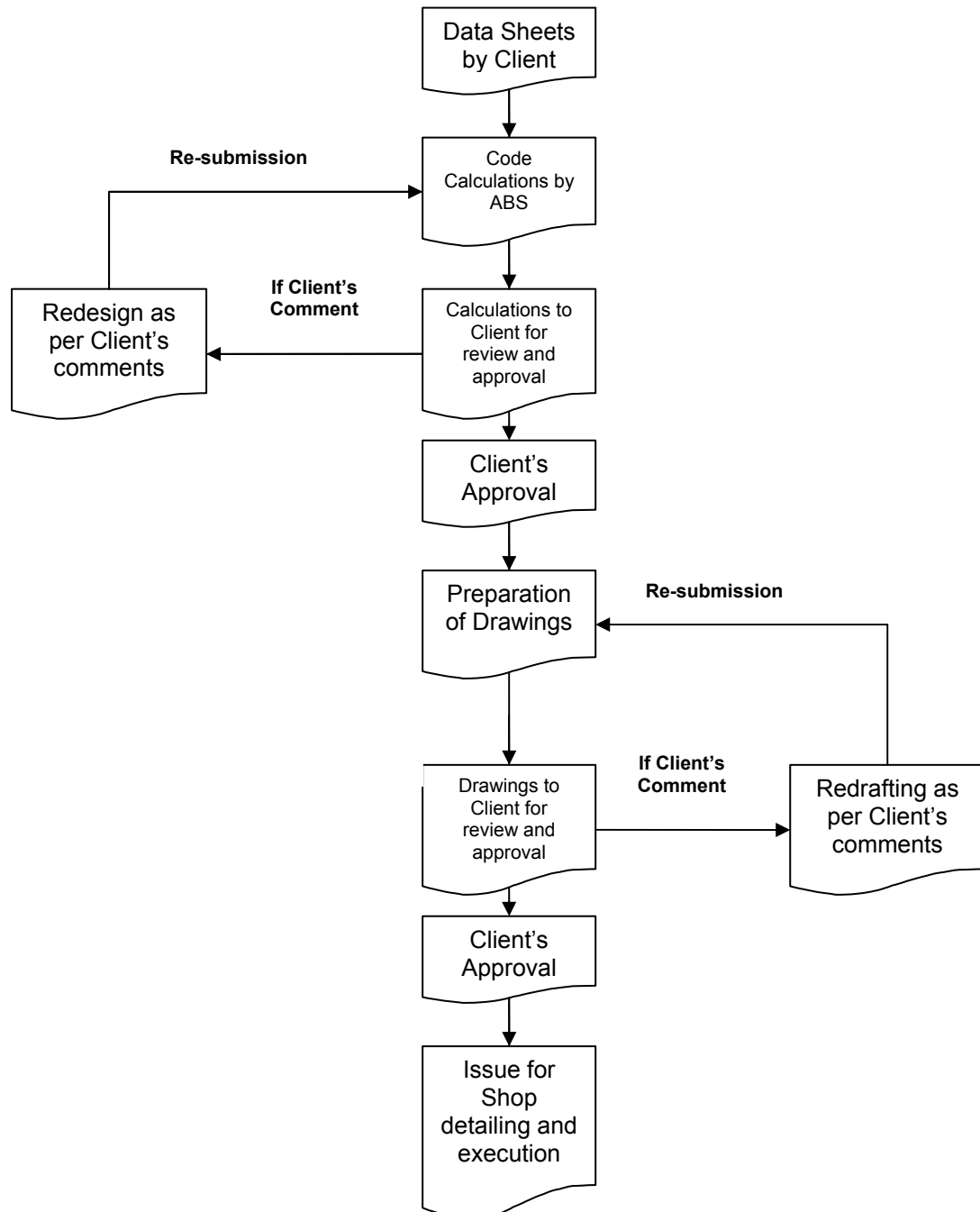
Upon receipt of order, all design calculations; client's specification, drawings, etc. are reviewed by drawing office, for compliance and adequacy in accordance with applicable codes and standards. We have developed our computerized calculation programs for the code calculations and detailed designing.



CAPABILITIES

ENGINEERING

FUNCTIONAL FLOW OF DESIGNING AND DRAFTING





CAPABILITIES

ENGINEERING

DESIGN CODES IN EXPERIENCE:

- | | |
|--|--|
| - Pressure Vessels | ASME Sec. VIII Div. 1 & 2, BS 5500, AD Merkblatt and CODAP. |
| - Heat Exchangers | TEMA – R/C/B, ASME Sec. VIII Div. 1 & CODAP. |
| - Chemical Plant & Petroleum Refinery Piping | ASME / ANSI B 31.3 |
| - Liquid Transmission / Distribution Piping | ASME / ANSI B 31.4 BS 8010 & API 1104. |
| - Storage Tanks | API 650 and CODAP |
| - Air Heaters | API 661 |
| - Structural Steel Designing | AISC, BS 5950, BS 4360, BS 729 & AWS D 1.1 |
| - For Material Selection | - ASME Sec. II Parts A,B,C & D - JIS (Ferrous & Non Ferrous Metal) - DIN (Material Specifications) - API Specification 5L |
| - Welding | ASME Sec IX AWS D 1.1 |
| - Surface Preparation | SSPC Swedish Standard “SIS 05-5900” |
| - Cathodic Protection | NACE |
| - NDT Procedures | ASME Sec. V |



CAPABILITIES

PROCUREMENT

To efficiently fulfill project-specific procurement needs, ABS leverages a modern, integrated procurement management system driven by our dedicated Procurement & Supply Chain Department. We prioritize sourcing from pre-approved, high-quality vendors through a rigorous supplier qualification process aligned with ISO 9001:2015 standards.

Our procurement operations maintain dynamic engagement with global manufacturers, stockists, and specialized material suppliers, ensuring responsive sourcing for both bulk and small-scale material requirements. This agile and data-informed approach enables us to stay ahead of market trends, ensure supply chain resilience, and deliver consistent value to our projects.

In addition to fulfilling project-specific requirements, our procurement team offers value-added sourcing services to clients, assisting in the identification and procurement of hard-to-find or specialized materials—ensuring alignment with project timelines and precision in material specifications to enhance overall project synergy.



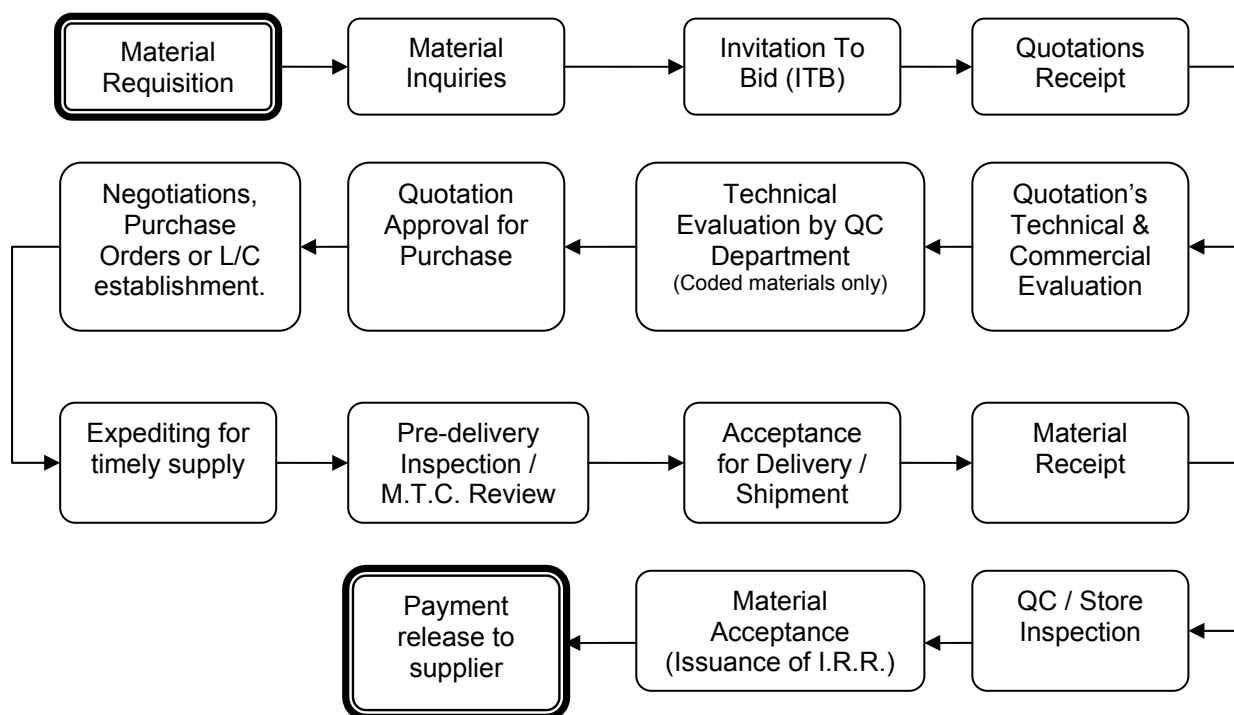
CAPABILITIES

PROCUREMENT

For the import special materials, especially for coded equipment such as; **Pressure Vessels, Heat Exchangers**, etc; ABS has close contacts with internationally renowned suppliers of Pressure Parts such as; **Killed / Quenched / Tempered plates, Forgings, Tube Sheets, Flanges, Metallic Gaskets and fasteners**. These suppliers entertain even very small quantities and ship the required materials on priority basis.

Similarly for steel structures, in addition to our expertise in direct imports from fresh rolling by international steel mills, ABS has established reliable sourcing channels through stockists across China, Korea, Europe, and the Middle East to ensure prompt availability and timely delivery of structural steel materials.

FUNCTIONAL FLOW FOR PROCUREMENT



CAPABILITIES

CONSTRUCTION

CONSTRUCTION AND MANUFACTURING CAPABILITIES

Construction and manufacturing capabilities are divided into following divisions:

1. SHOP FABRICATION

- 1.1) Coded Equipment Division
- 1.2) Process Equipment Division
- 1.3) Rotary Machines Division
- 1.4) Steel Structures Division



CAPABILITIES

CONSTRUCTION

2. FIELD SERVICES

- 2.1) On-site Fabrication
- 2.2) Erection, Leveling and Alignment
- 2.3) Heavy lifting and handling





CAPABILITIES

SHOP FABRICATION CAPABILITIES

1. SHOP FABRICATION

ABS has two well equipped workshops for high quality fabrication for all manufacturing divisions of the company.

On the basis of nature of fabrication standards and codes requirements, Shop fabrication activities are classified into following divisions:

1.1 CODED EQUIPMENT DIVISION

This division specializes for the manufacture of coded equipment especially for Oil & Gas, Fertilizer, Petrochemical industries.

The main products of this Division are:

Pressure Vessels, Knock out drums, Steam drums, Steam saturation drums, Boiler feed water tanks, De-aerator tanks, Heat exchangers, Reactors, Columns, Furnaces, Pressure piping, Air coolers, Shop fabricated piping / Spools, Shop fabricated steel structures etc.

Workshop No. 1 is completely dedicated and equipped for the fabrication of coded equipment.

In order to fulfill the technical requirements of relevant codes the company emphasizes on quality control in accordance with relevant codes and standards.

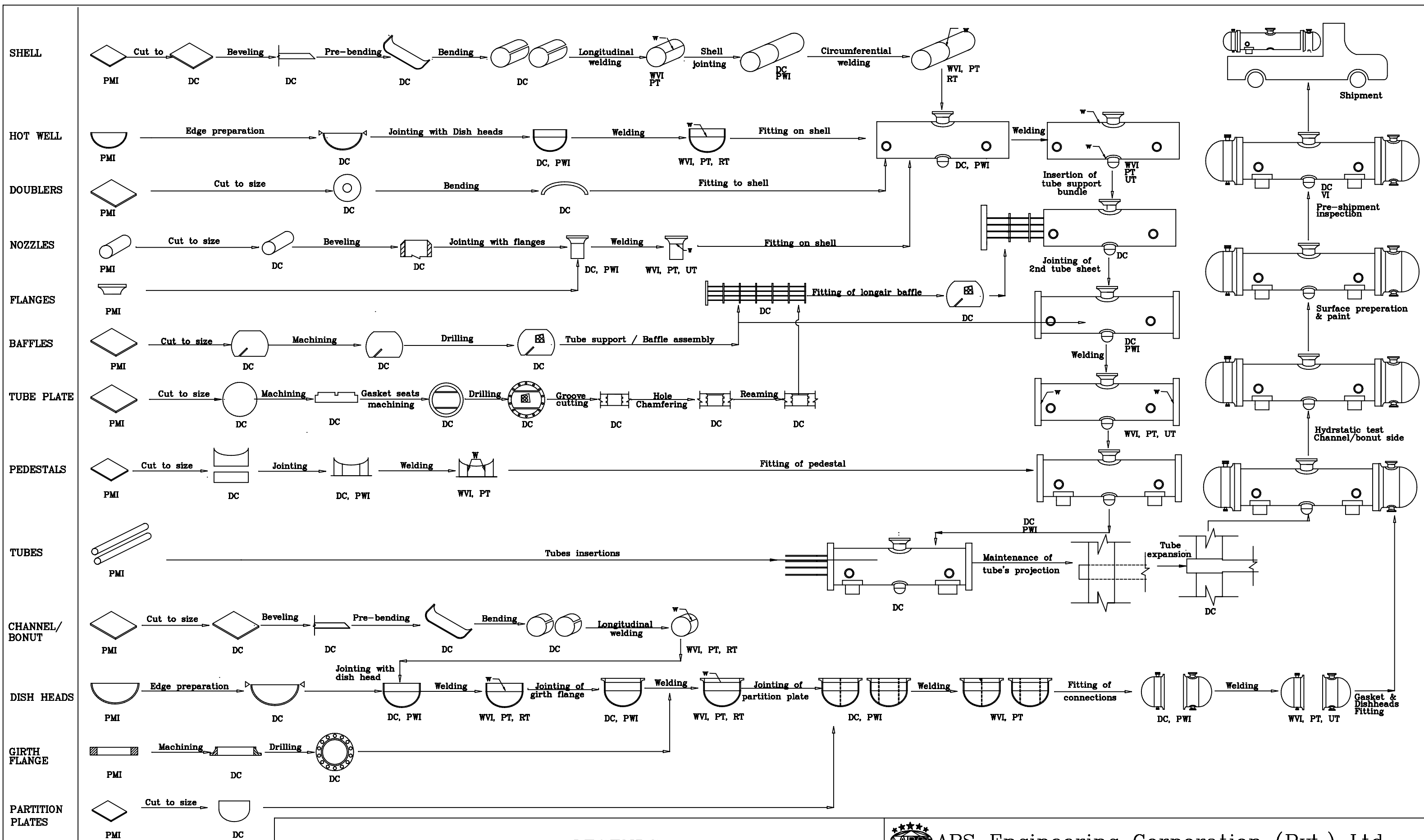
For the manufacturing and Quality Control of the coded equipment, following codes are adapted and followed.

ASME Sec. VIII-Div 1, 2 & BS 5500 for Pressure Vessels, Heat Exchangers, Columns & Reactors, TEMA for Heat exchangers, API 661 for Air coolers & Heaters, API 650 for Storage tanks, ANSI B 31.4, 31.4 & BS for Piping, ASME Sec. II for Material selection, ASME Sec. IX for welding qualifications and ASME V for NDT.

The quality of the equipment is assured during the manufacturing with help of stage inspection. Following "Schematic Flow Diagrams" shows the sequences of fabrication and stage inspection of Pressure Vessel, Heat Exchanger, Storage Tanks, and Plant piping spools are referred as under:

- | | |
|---|-----------------------------|
| – Fabrication & Inspection Sequence of Pressure Vessel | Diagram No. ABS-PV-FIS-001 |
| – Fabrication & Inspection Sequence of Heat Exchanger | Diagram No. ABS-HEX-FIS-001 |
| – Fabrication, Erection & Inspection Sequence Of Storage Tank | Diagram No. 003/ABS/Prop. |
| – Fabrication & Inspection Sequence of Plant Piping Spools | Diagram No. ABS-PSV-FIS-001 |

Above diagrams elaborate the procedures and their sequences adapted for the fabrication and stage inspections.



LEGENDS

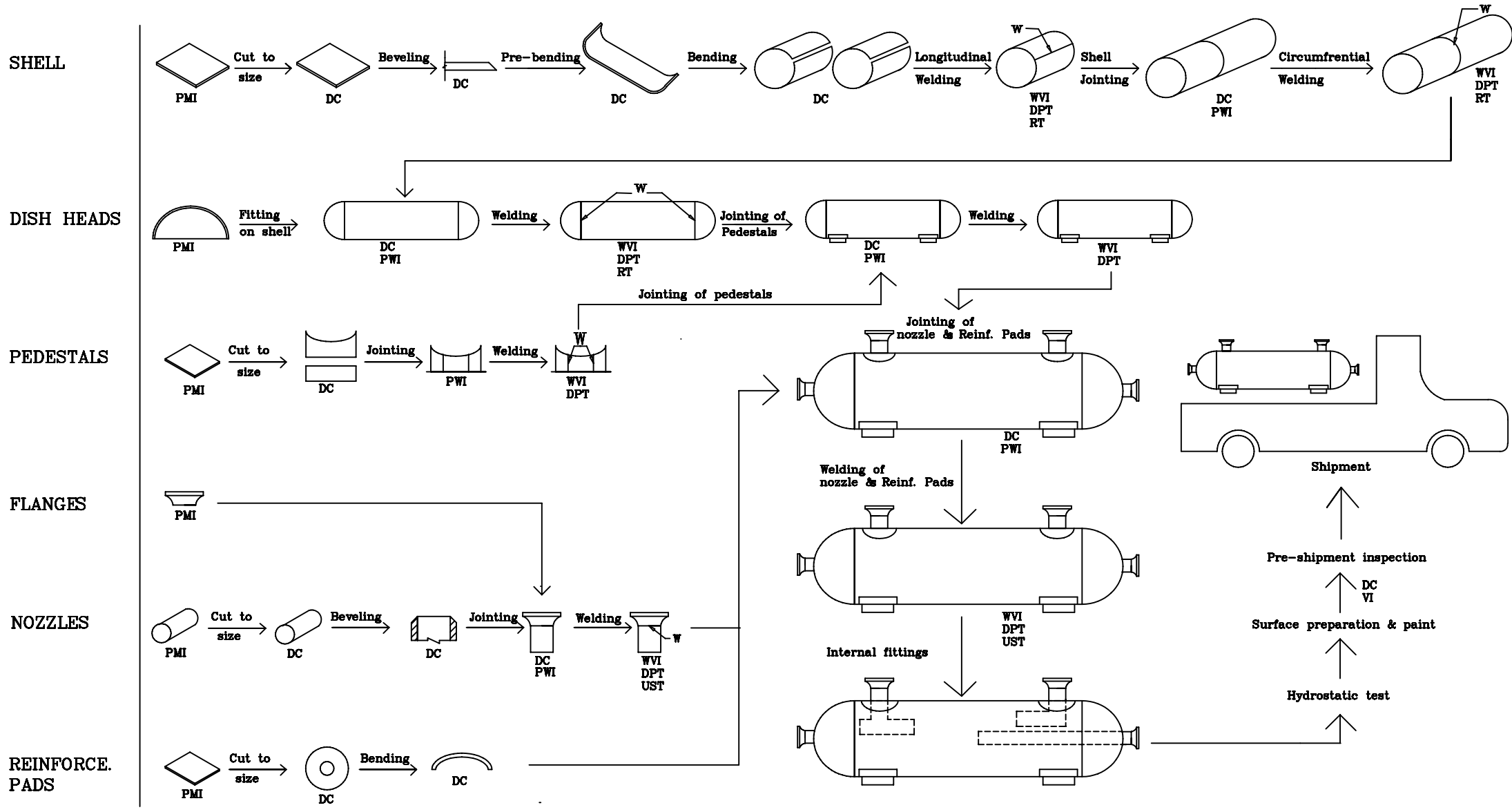
| | | | |
|-----|------------------------------------|----|------------------------|
| DC | : DIMENSION CHECK | PT | : DIE PENETRATION TEST |
| PMI | : POSITIVE MATERIAL IDENTIFICATION | RT | : RADIOGRAPHIC TEST |
| PWI | : PRE-WELDING INSPECTION | UT | : ULTRASONIC TEST |
| WVI | : WELDING VISUAL INSPECTION | VI | : VISUAL INSPECTION |



ABS Engineering Corporation (Pvt.) Ltd.

TITLE: FABRICATION & INSPECTION SEQUENCE OF HEAT EXCHANGER

DRAWING NO.: ABS-HEX-FIS-001



- LEGENDS**
- DC : DIMENSION CHECK
 - PMI : POSITIVE MATERIAL IDENTIFICATION
 - PWI : PRE-WELDING INSPECTION
 - WVI : WELDING VISUAL INSPECTION
 - DPT : DIE PENETRATION TEST
 - RT : RADIOGRAPHIC TEST
 - UST : ULTRASONIC TEST
 - VI : VISUAL INSPECTION

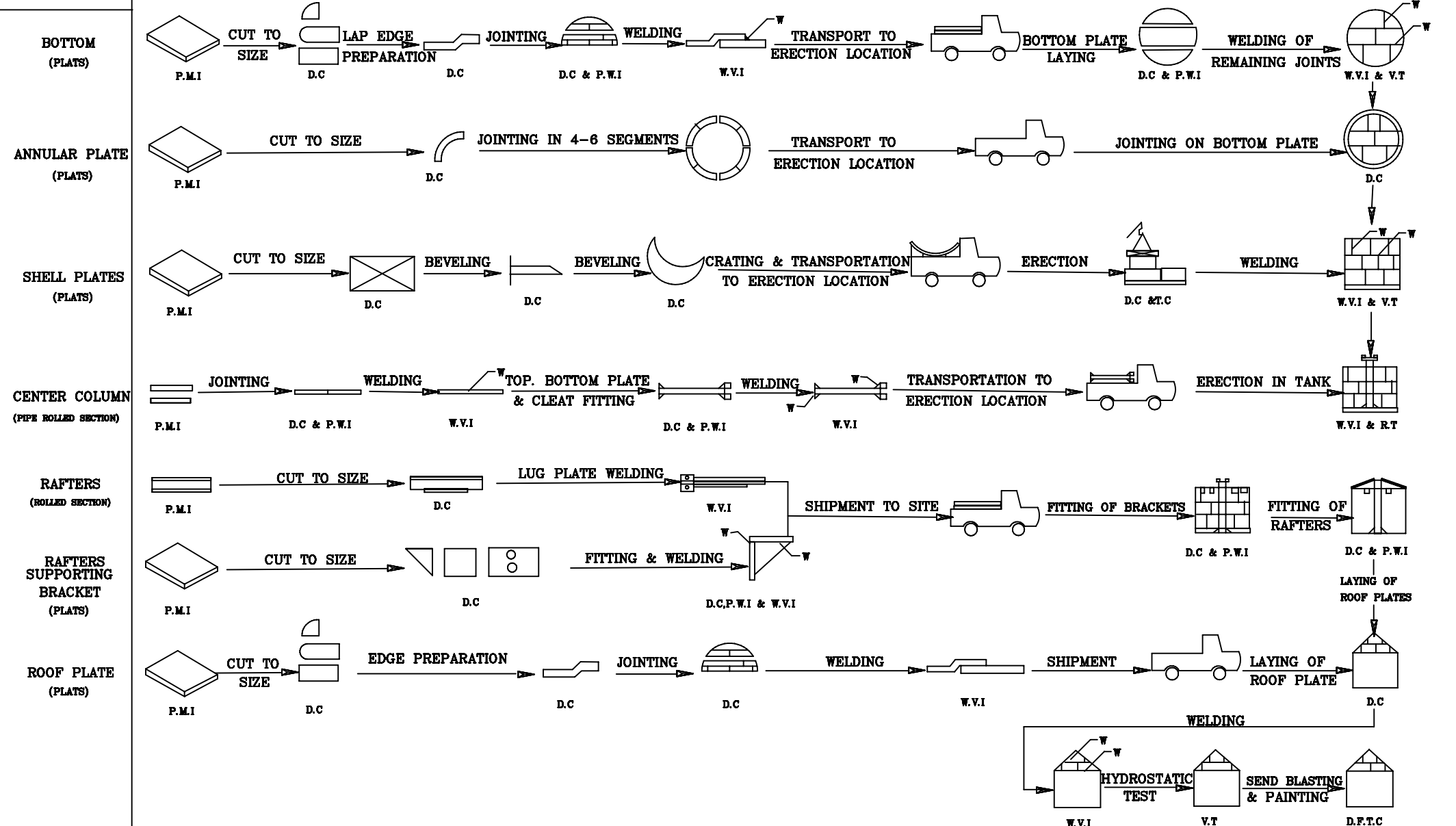
ABS Engineering Corporation (Pvt.) Ltd.

TITLE: FABRICATION & INSPECTION SEQUENCE OF PRESSURE VESSEL

DRAWING NO.: ABS-PV-FIS-001

FABRICATION & INSPECTION SEQUENCE OF STORAGE TANK

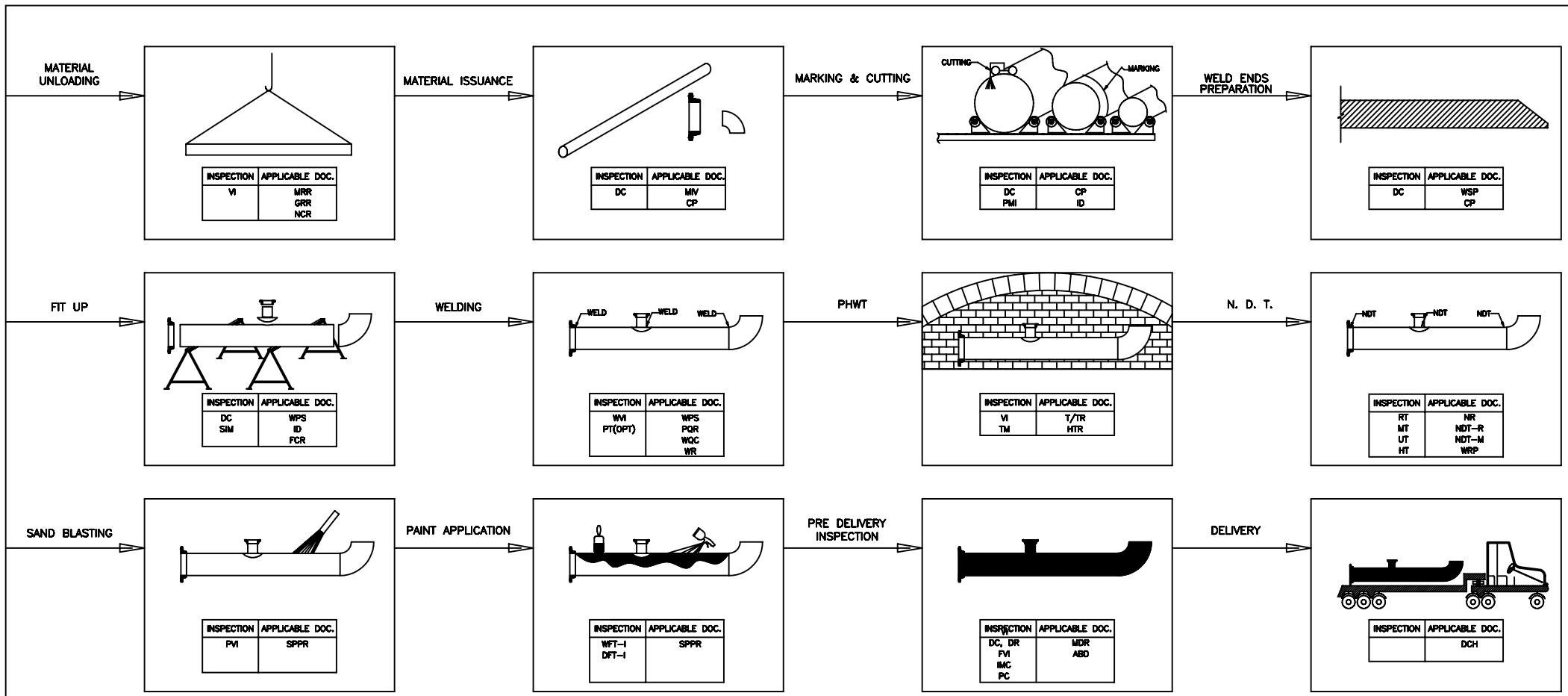
**PART
(BASIC MATERIAL)**



LEGENDS

| | |
|--|---------------------------|
| DC : DIMENSION CHECK | PT : DIE PENETRATION TEST |
| PMI : POSITIVE MATERIAL IDENTIFICATION | RT : RADIOGRAPHIC TEST |
| PWI : PRE-WELDING INSPECTION | UT : ULTRASONIC TEST |
| WVI : WELDING VISUAL INSPECTION | VI : VISUAL INSPECTION |

| | |
|--------------|---|
| TITLE | FABRICATION & INSPECTION SEQUENCE OF STORAGE TANK |
| MANUFACTURER | ABS Engineering Corporation (Pvt.) Ltd. |
| DRAWING NO. | 003/ABS/Prop. |



INSPECTION

- VI = VISUAL INSPECTION
- DC = DIMENSION CHECK
- PMI = POSITION MATERIAL IDENTIFICATION
- SIM = SPOOL IDENTIFICATION MARKING
- PT = DYE PENETRANT TEST
- WVI = WELDING VISUAL INSPECTION
- TM = TEMPERATURE MONITORING
- PVI = PROFILE VISUAL INSPECTION
- WFT-I = WET FILM THICKNESS INSPECTION
- DFT-I = DRY FILM THICKNESS INSPECTION
- DR = DOCUMENT REVIEW
- FI = FINAL VISUAL INSPECTION (PUNCH LIST)
- IMC = IDENTIFICATION MARKS CHECKING
- PC = PACKING CHECKING

APPLICABLE DOCUMENTATION

- MRR = MATERIAL RECEIPT REGISTER
- GRR = GOODS RECEIPT REPORT
- NCR = NON CONFORMITY REPORT
- MIV = MATERIAL ISSUE VOUCHER
- CP = CUTTING PLANS
- WPS = WELDING PROCEDURE SPECIFICATION
- ID = ISOMETRIC DRAWINGS
- FCR = FIT UP CHECK REPORT
- PQR = PROCEDURE QUALIFICATION RECORD
- WQC = WELDERS QUALIFICATION CERTIFICATE
- WR = WELDING RECORD
- T/TR = TIME V/S TEMPERATURE RECORDS
- HTR = HEAT TREATMENT REPORT
- NR = NDT REQUISITION
- NDT-R = NDT REPORTS
- NDT-M = NDT MAP
- WRP = WELDING REPAIR PROCEDURE
- SPPR = SURFACE PREPARATION & PAINT REPORT
- MDR = MANUFACTURER DATA REPORTS
- ABD = AS BUILT DRAWING

A.B.S. Engineering Corporation (Pvt.) Ltd.



CAPABILITIES

CAPABILITIES OVERVIEW

GENERAL CAPABILITIES

MANUFACTURING RANGE

The manufacturing range of different divisions is as under:

A) SHOP FABRICATION:

1) **CODED EQUIPMENT DIVISION:**
PRESSURE VESSEL, HEAT EXCHANGERS, COLUMNS, REACTORS, ETC.

2) **PROCESS EQUIPMENT DIVISION:**
EVAPORATORS, VACUUM PANS, VACUUM FILTERS, PRESSURE FILTERS, CENTRIFUGAL SEPARATION, MACHINES, CLARIFIERS, CONDENSERS ETC.

3) **ROTARY MACHINES DIVISION:**
ROTARY FILTERS, CRUSHERS, SHREDDERS, CRUSHING MILLS, PUMPS, ROTARY FEEDERS & COMPRESSORS.

4) **STEEL STRUCTURE DIVISION:**
SHOP AND SITE FABRICATION, PAINTING AND ERECTION OF STEEL STRUCTURES.

B) FIELD SERVICES:
STORAGE TANK FARM, STEEL STRUCTURE, PLANT PIPING, CROSS COUNTRY PIPING, EQUIPMENT, MACHINES AND PLANTS INSTALLATION AS A PARTIAL PROJECT AND COMPLETE PLANTS ON TURN KEY BASIS.

MAXIMUM MANPOWER EMPLOYED

300 Persons per month per shift

QUALITY CONTROL SYSTEM

A) QUALITY CONTROL MANAGEMENT SYSTEM IS AVAILABLE.
B) ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 CERTIFIED
B) IN PROCESS: **ASME U STAMP**

WORKING SPACE

| Location | Working Spce Width x Length x Height | Overhead Cranes Capacities |
|---|---|-------------------------------|
| Workshop No. 1 (Area = 5500 M²) | | |
| BAY NO. 1 | 62' x 256' x 30' | 10 & 15 Tons |
| BAY NO. 2 | 62' x 256' x 30' | 15 Tons & 15 Tons |
| OPEN YARD | 62' x 150' x open | 15 Tons |
| Workshop No. 2 (Area = 2050 M²) | | |
| BAY NO. 1 | 44' X 176' X 30' | 25 Tons |
| BAY NO. 2 | 44' X 176' X 30' | 25 Tons |
| OPEN YARD | 40' X 103' X open | |



CAPABILITIES

CAPABILITIES OVERVIEW

FABRICATION AND MACHINING CAPABILITIES

PRODUCTION CAPACITIES

| EQUIPMENT | PRODUCTION CAPACITY (KG./ MAN / HR.) | PRODUCTION TONS/YEAR |
|------------------|---|-------------------------|
| PRESSURE VESSELS | 4 TO 8 | 1920 TO 3840 |
| HEAT EXCHANGERS | 3 TO 5 | 1440 TO 2400 |
| ROTARY MACHINES | 2 TO 4 | 690 TO 1920 |
| STORAGE TANKS | 5 TO 8 | 5000 TO 6000 |
| STEEL STRUCTURE | 5 TO 10 | 5500 TO 11000 |

METALS IN EXPERIENCE

- . CARBON STEEL
- . HIGH TENSILE STEEL
- . STAINLESS STEEL
- . ALLOY STEEL
- . CHROMIUM STEEL
- . CLADDED STEEL

PLATE ROLLING (BENDING)

. 40 mm Thick X 3000 mm wide X Ø 2000 mm (shell diameter)

FORMING

- . **DISH HEAD FORMING** = 20 mm Thick X Ø 4000 mm (Strokes Process)
- . **CONES FORMING** = 20 mm Thick X Ø 4000 mm (Strokes Process)

PLATE SHEARING

- . **CARBON STEEL** = 25 mm X 4000 mm wide
- . **STAINLESS STEEL** = 12 mm X 4000 mm wide

FLAME CUTTING

. **CARBON STEEL** = 200 mm Thick Plate

PLASMA CUTTING

. **STAINLESS STEEL** = 25 mm Thick Plate

WELDING TECHNIQUES

- . SMAW
- . TIG
- . SUBMERGED ARC WELDING

FABRICATION EXPERIENCE OF THICKEST PLATE

- . **JOB DESCRIPTION** = FABRICATION OF "MILL HEAD STOCKS"
- . **MAXIMUM THICKNESS OF PLATE WELDED** = 75 mm
- . **MATERIAL GRADE** = BS 1501-151 - GR. 26A
- . **WELDING TECHNIQUE** = SMAW with PWHT
- . **TOTAL TONS** = 200 TONS (fabricated as one job)



CAPABILITIES

CAPABILITIES OVERVIEW

FABRICATION AND MACHINING CAPABILITIES

HEAT TREATMENT ARRANGEMENT (PWHT)

. ELECTRICAL RESISTANCE HEATING ARRANGEMENT
. VENDOR'S FURNACE = 14' wide x 26' long x 14' height

EXAMINATIONS AND TESTS ARRANGEMENTS

NON DESTRUCTIVE TESTING ARRANGEMENT
. RT, MT & UT (arrangement from inspection authorities)
. Dimensional check, Hydrostatic, Pneumatic test, PT & Welding Visual Inspection (in-house arrangement)
DESTRUCTIVE TESTING ARRANGEMENT
. ISO 9000 Certified Testing Laboratory of M/s. Karachi Shipyard & Engineering Works

MAXIMUM MACHINING RANGES

LEVELED BASE PLATE FOR SHOP TRIAL ASSEMBLY

. 3000 mm X 3000 mm
. 4000 mm X 3000 mm

MAXIMUM TURNING ON VERTICAL LATHE

. Ø 4200 mm X 2200 mm height

MAXIMUM TURNING ON HORIZONTAL LATHE

. Ø 1500 mm X 9000 mm

MAXIMUM FACING AND BORING ON HORIZONTAL BORING MACHINE

. 1500 mm Deep X 3600 mm High X 13700 mm Travel

MAXIMUM DRILLING ON RADIAL DRILL MACHINE

. Ø 100 mm X 2400 mm Swing radius.
(10 Nos. Radial Drill Machines are available)

DYNAMIC BALANCING CAPACITIES

IN-HOUSE DYNAMIC BALANCING

. Ø 2400 mm X 3000 mm Long X 1 Ton.



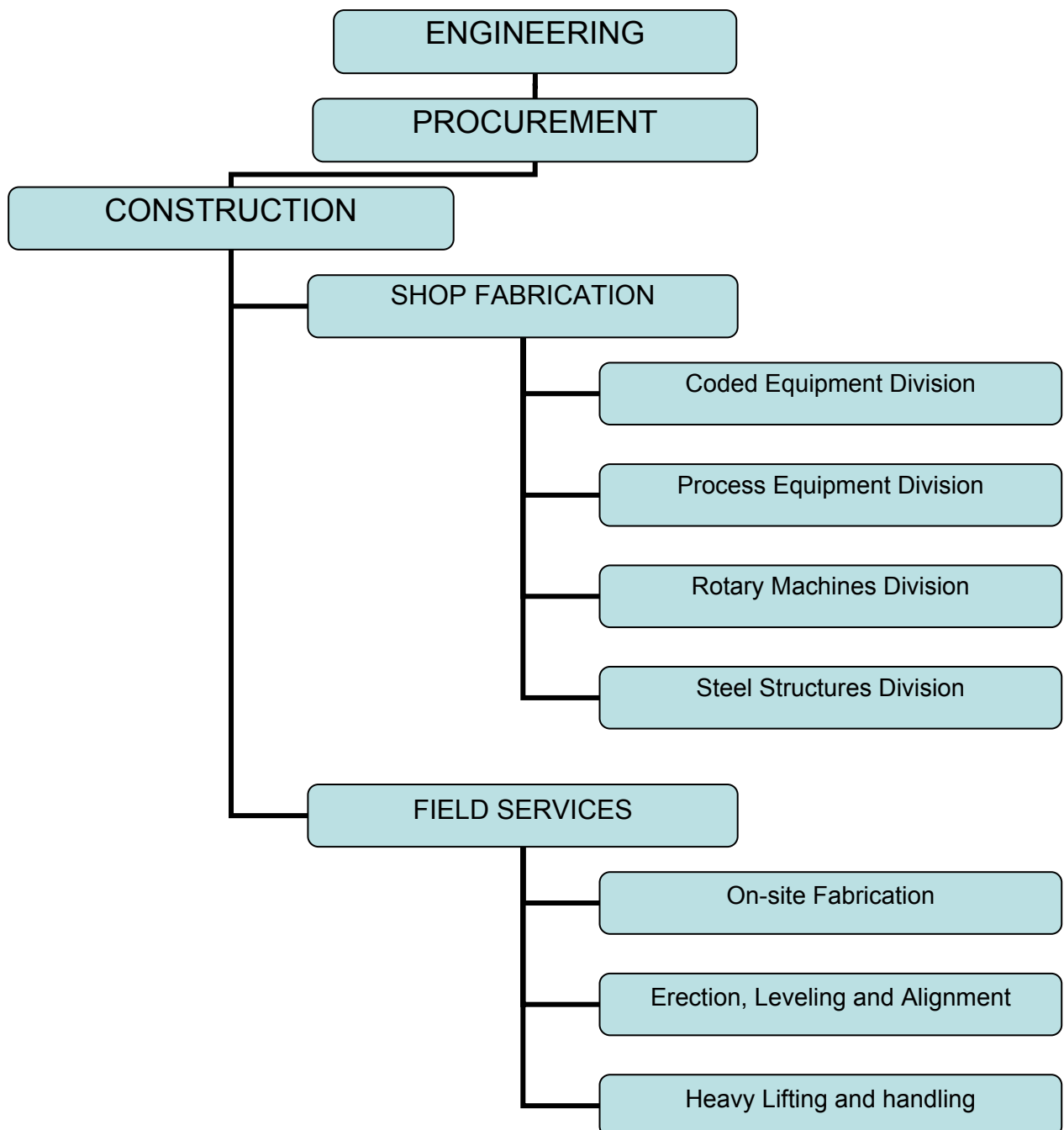
CAPABILITIES

SCOPE OF SERVICES

ABS operates on the concept that technological development and skill adds to contribution margin, therefore, it is possible to undertake a high quality job with-in the budget.

ABS in association with world renowned Technology providers and Engineering companies and with the backup of it's two well equipped workshops and field services divisions take the contracts on EPC basis.

SCOPE OF SERVICES





CAPABILITIES

SHOP FABRICATION CAPABILITIES

1.2 PROCESS EQUIPMENT DIVISION:

This division specializes in fabrication of equipment for chemical process and other manufacturing industries. Equipments are manufactured for various unit operations and unit processes such as; Heat Exchanging, Evaporation, Reaction, Boiling, Cooling, Crystallization, Separation, Filtration, Condensation and Drying, etc for the process and manufacturing industries, other than Oil & Gas, Fertilizers and Petrochemical Industries.

The main products of this Division are:

Evaporators, Vapour Cells, Falling Film Evaporators, Vacuum Pans, Vacuum Filters, Pressure Filters, Crystallizers, Heat Exchangers, Gas Scrubbers, Multi Trays Clarifiers, Multi Jet Condensers, Cascade Condensers, Rain & Shower Type Condensers, Fluidized Bed Dryers, Counter Flow Dryers, Rotary Dryers, Shop Fabricated Low Pressure Piping Spools, etc.

This Division could serve the following Industries:

1. Ethanol Plant
2. Urea Formaldehyde Plants
3. Cement Industries
4. Sugar Industries
5. Glass Industries
6. Bio Gas Plants
7. Water treatment Plants
8. Soap & Detergents Plant
9. Food, Drugs and Cosmetics Industries
10. Chipboard and Medium Density Fiber Board Plants
11. Environmental and Effluent Treatment Plant
12. Other process and manufacturing industries



CAPABILITIES

SHOP FABRICATION CAPABILITIES

1.4 STEEL STRUCTURES DIVISION:

This division specializes in both shop and field fabrication and erection of steel structure works such as:

Steel Structure for platforms, buildings, self supporting and lattice type masts & Towers, Gantries, Steel piles casing for following industries:

1. Ethanol Plants
2. Oil & Gas fields
3. Oil Refineries
4. Fertilizer Industries
5. Cement Plants
6. Sugar Mills
7. Flood light Masts
8. Lattice type towers
9. Jetties & Terminals
10. Industrial Sheds
11. Multistoried Residential and Commercial Buildings, constructed with Steel Structure.

Specialized team and tools & tackles are available for the shop detailing of fabrication drawings, fabrication, surface preparation & painting, shop fit-up trial assembly and erection of steel structures.

Beside capabilities for the fabrication of usual Rolled Sections, this division is also capable for fabrication of large sized sections by plate fabrication of built-up Sections. For that purpose we have expertise to control the Thermal Distortion of Plate fabricated built-up sections.

We have experience for the fabrication of large size sections by built-up plate fabrication for a Pre-heater Tower of a Cement Plant and Complete Supporting Structure of a Sugar Mill.

Special arrangement of base plates and workspace are available under the over head crane area, for the trial shop fit-up assembly of Steel Structure.

Blasting booth equipped with dust collector is available for sand blasting and covered enclosure is available for the paint application by Airless Spray, for the shop painting of steel structures.

DOCUMENTS:

Following documents are available for the fabrication and quality control of steel structure:

1. Fabrication Methodology
2. Inspection and Test Procedures
3. Inspection and Test Plan

SHOP DETAILING:

ABS has arrangement with associates companies for shop detailing of steel structure drawings on most comprehensive software "Xsteel".



CAPABILITIES

FIELD SERVICES CAPABILITIES

2 FIELD SERVICES DIVISION (SITE FABRICATION & ERECTION AND CONSTRUCTION)

Besides well equipped workshops and sizeable fixed installations ABS has a skilled team capable to handle site fabrication and mechanical erection works.

Site works includes on-site fabrication and erection of storage tanks of various sizes, piping, steel structures, Insulation, surface preparation & painting, heavy rigging and lifting, installation, alignment and commissioning of complete plants and machinery, delivered in one piece or in knock-down condition.

In-charge of this site team is always an experienced Project Manager capable for Project Planning & Control, scheduling, budgeting and execution in accordance with applicable standard for field services, erection and construction.

Our team of Engineers and experienced work force is equipped with proper tools, plants and mobile equipment, which are mentioned as below:

- Mobile cranes Heavy handling equipment.
- Mobile Power generators.
- Mobile welding plants and accessories.
- On-site Post welds heat treatment (PWHT) arrangement.
- On-site Gas cutting machines including Plasma cutters and Semi Automatic Cutters.
- Skid mounted machines, such as lathes, boring machines, drilling machine, plates bending rollers, etc.
- Rigging tools and equipment.
- Portable hand tools (Electric / Pneumatic) such as drilling machines, grinding machines, cutting machines, chipping machines etc.
- Skid mounted offices and mobile accommodations.
- Surface preparation (blasting) and coating equipment.
- Erection, testing and commissioning Jigs & Fixtures.
- Communication devices such as Satellite Phones, mobile phones, webcams and computers.

Major projects by FIELD SERVICES DIVISION:

Beside various small on-site projects, ABS has successfully completed following on-site projects:

- | | |
|--|-------------|
| a. Installation of Pakistan's only DRI (Steel Plant) | 01 Project |
| b. Fabrication and Installation of a Cement Line | 03 Project |
| c. Tank farms and onsite tank fabrication | 15 Projects |
| d. Complete Installation of Ethanol Plants | 11 Projects |
| e. Construction of Tanks, Piping and Structure for Oil Storage Terminals | 08 Projects |
| f. Steel Piles welding and Jetty Structure for a Jetty and Oil Terminal | 01 Project |
| g. Expansion and B.M.R. Projects for Sugar Mills | 04 Projects |
| h. Cross-country Pipeline | 02 Projects |
| i. Complete installation and modernization of Glass furnace | 01 Project |



MANUFACTURING FACILITIES

WORKSHOPS

Manufacturing facilities are mainly comprises of following:

1. **WORKSHOPS**
2. **SKILLED MANPOWER**
3. **MACHINES, TOOLS AND PLANTS**
 - a. Special Machines and Equipment
 - b. General Types of Machines (see List of Machines)
 - c. Mobile Cranes

WORKSHOPS

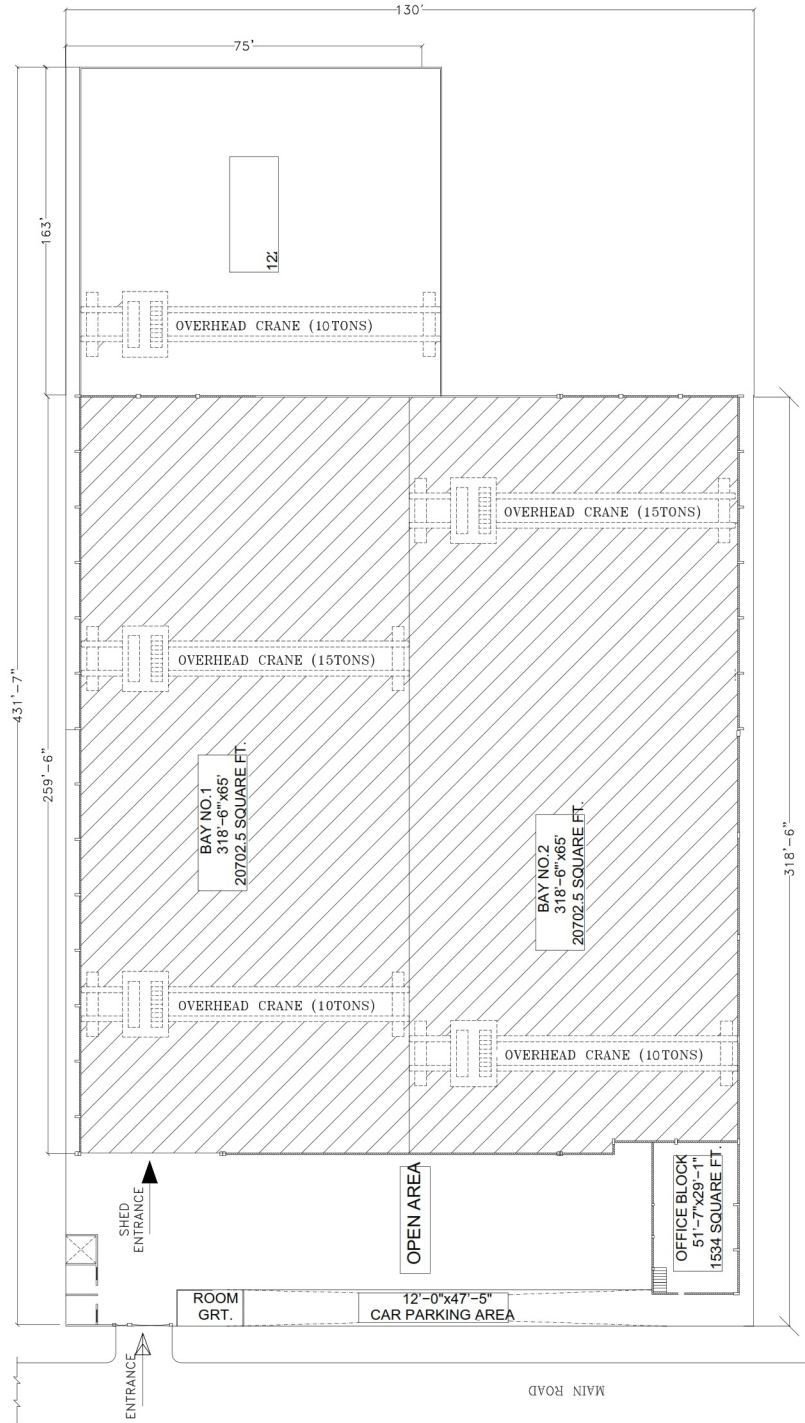
ABS has two well equipped workshops, general information about these work shops are as below:

| Location | Overhead Cranes Capacity | Divisions | Nature Of Fabrication |
|---|--|--|---|
| <u>Workshop No. 1</u> Location: F-492, S.I.T.E. Karachi. Total Area = 5,500 M² Covered Area = 3,000 M² | 15 Tons = 4 Nos. 10 Tons = 1 Nos. | <u>CODED EQUIPMENT DIVISION</u> Coded equipment for Petrochemical Fertilizer Oil & Gas Industries and Chemical Process Industries. | Pressure vessels, Heat exchangers, Reactors, Boiler Pressure parts, Columns & Reactors, Air heaters / Coolers, Knock-out drums, Steam drums Steam saturation drums, Boiler feed water tanks, De-aerator tanks, Steel structure and General fabrication. |
| <u>Workshop No. 2</u> Location: F-604, S.I.T.E. Karachi. Total Area = 2,050 M² Covered Area = 1,500 M² | 25 Tons = 2 Nos. | <u>PROCESS EQUIPMENT DIVISION</u> Equipment for chemical process industries and general fabrication division. | Evaporators, Reactors, Elevators, Vacuum pans, Heat exchangers, Heaters, Coolers, Vacuum filters, Pressure filters, Boiler non pressure parts, Steel structure, Crystallizers, Centrifugal machines, Dryers, Rotary dryers steel structure and General fabrication. |



MANUFACTURING FACILITIES

WORKSHOPS



LAYOUT PLAN OF WORKSHOP NO. 1



MANUFACTURING FACILITIES

WORKSHOPS



LAYOUT PLAN OF WORKSHOP NO. 2



MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT

SPECIAL MACHINES AND EQUIPMENT

ABS, along with experienced team of qualified engineers and trained manpower, has a wide range of heavy and precise machinery and equipment.

In addition to the conventional sized Lathes, Shapers, Planers, Radial drill machines ABS has a few “**SPECIAL LARGE SIZE MACHINES**” available to undertake the heavy and large size machining jobs.

General features and capabilities of these special machines are as below:

1) VERTICAL LATHE (à 4,200 mm X 2,200 mm)

For the turning, facing and boring a work piece having the following dimensions:

Diameter = \varnothing 4,200 mm
Height = 2,200 mm

SPECIAL USE OF THIS MACHINE:

- Machine of large diameter fly wheels, gear rings, impellers, Girth Flanges, Blind covers and casings.
- This machine is also used for the beveling of Dish heads.
- Location (orientation) marking of Nozzles and connections on Dish heads of Pressure vessels, Heat exchangers and Columns.
- Larger diameter Girth flanges and tube sheets are also machined on this machine.

2) HORIZONTAL LATHE (à 1,500 mm X 9,000 mm)

This machine is suitable for the turning and facing of a job having sizes:

Diameter = \varnothing 1,500 mm
Length = 9,000 mm

3) HORIZONTAL BORING MACHINE (14,000 mm X 4,000 mm X 1,500 mm)

This machine is used for the boring and facing of Head stocks, Housings, Casings, Key ways made in shafts up to 14000 mm length and other boring and facing jobs. The dimensions of jobs that could be handled on this machine are:

Travel = 14,000 mm
Height = 4,000 mm
Boring length (Horizontally deep) = 1,500 mm

4) RADIAL DRILL MACHINES

A set of 12 Nos. Radial Drill Machine is available.

Swing radius range = 1,200 mm to 1,800 mm
Drilling range (hole size) = 6 mm to 100 mm



MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT

- Beside other drilling jobs, these machines are used for the drilling in tube sheets of Heat exchangers, Vacuum pans & Evaporators with special arrangements for the specific jobs, tube sheets up to 6000 mm can be drilled with these machines.
- 12 Nos. Drill machines enable us to carryout the drilling in 12 Nos. Tube sheets, at a time.

5) BENDING ROLLERS

CAPACITIES:

- Roller No. 1 = 3,000 mm long X 40 mm thick plate (4 Rolls with initial pinch)
- Roller No. 2 = 2,400 mm long X 25 mm thick plate (3 Rolls)
- Roller No. 3 = 3,000 mm long X 10 mm thick plate (3 Rolls)
- Beside above rollers, ABS has arrangement with vendor's workshops for the rolling of 65 mm thick plates.

6) PLATE SHEARING AND BEVELING MACHINE (25 mm X 4000 mm)

- This hydraulically operated machine is used for shearing the plates up to 25 mm thickness x 4000 mm length.
- The additional feature of this machine is to cut the weld bevels of plate up to 30°, in just one stroke. It results in a straight and uniform bevel throughout the prepared Butt weld joint and saves a lot of time which would otherwise be consumed in Oxy-Acetylene gas cutting.

7) WELDING

Following welding equipment are also available.

- Submerged Arc welding machines.
- TIG welding machines.
- SMAW welding rectifiers and generators.
- Welding positioners.
- Spot welding machines.

8) HEAT TREATMENT FACILITIES

For pre and post weld heat treatment, stress relieving and normalizing, following arrangements are available:

- Electric resistance heating arrangement for Pre and PWHT of weld joints (in-house facility).
- Heat Treatment Furnace = 14' wide X 26' long X 14' height (Vendor's facility)



MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT

LIST OF MACHINES (FOR FABRICATION & ERECTION)

| S. NO. | EQUIPMENT | MAKE | CAPACITY | QTY. |
|--|--|---------------------------------|--|------|
| TUBE BENDING MACHINE | | | | |
| We can bend tubes from ____mm Ø to ____mm Ø without flattening using various tube bending dies developed by ABS. | | | | |
| BENDING ROLLER MACHINES | | | | |
| 1 | BENDING ROLLER MACHINE | RUSHWORTH ENGLAND | TH. 40 MM X 3000 LONG X DIA. 1000 MM - 6000 MM | 1 |
| 2 | BENDING ROLLER MACHINE | RUSHWORTH ENGLAND | TH. 25 MM X 2400 LONG X DIA. 1000 MM - 6000 MM | 1 |
| 3 | BENDING ROLLER MACHINE | BRONX ENGLAND | TH. 12 MM X 3000 LONG X DIA. 1000 MM - 6000 MM | 1 |
| 4 | SECTION (ANGLES, CHANNELS, FLATS & TUBES ROLLING MACHINE | A.B.S. PAKISTAN | SECTION SIZES UPTO 6" | 1 |
| PLATE SHEARING PRESSES | | | | |
| 1 | SHEARING MACHINE WITH BEVEL CUTTING | CORPETLOUVET ENGLAND | TH. 25 MM X 6000 MM LONG | 1 |
| 2 | SHEARING MACHINE | JOSHUA BIGWOOD & SONS ENGLAND | TH. 12 MM X 3000 MM LONG | 1 |
| 3 | UNIVERSAL SHEARING, PUNCHING AND NOTCHING MACHINE | ENGLAND | | 1 |
| BENDING AND FORMING PRESSES | | | | |
| 1 | POWER PRESS (PLATE BENDING) | (V.B.C.M.C. NO. 240-10) ENGLAND | TH. 12 MM X 4000 X ADJUSTABLE CLEARANCE | 1 |
| 2 | HYDRAULIC PRESS MACHINE | A.B.S. PAKISTAN | WORKING DIA. 4000 X 40 MM TH. | 1 |
| 3 | MECHANICAL PRESS FOR DIE & CUTTING | ENGLAND | 20 TONS | 1 |
| WELDING & FLAME CUTTING MACHINES | | | | |
| 1 | WELDING RECTIFIERS & TRANSFORMER | VARIOUS MAKES | 450 TO 1000 AMPS | 150 |
| 2 | SUBMERGE WELDING MACHINE (MOBILE TRACTOR TYPE) | ESAB | 750 AMPS | 2 |
| 3 | TIG WELDING PLANTS | OTC JAPAN | 450 AMPS | 20 |
| 4 | POWER GRINDERS | VARIOUS MAKES | | 250 |
| 5 | PROFILE FLAME CUTTING MACHINE | VARIOUS MAKES | | 15 |



MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT

LIST OF MACHINES (FOR FABRICATION & ERECTION)

| S. NO. | EQUIPMENT | MAKE | CAPACITY | QTY. |
|---|--|-------------------------------|----------|---------|
| SAND BLASTING & PAINTING EQUIPMENT | | | | |
| 1 | AIR COMPRESSOR FOR SAND BLASTING | BROOM WADE ENGLAND | 200 PSI | 1 |
| 2 | AIR COMPRESSOR FOR SAND BLASTING | BROOM WADE ENGLAND | 150 PSI | 3 |
| 3 | AIR COMPRESSOR FOR SAND BLASTING | BROOM WADE ENGLAND | 150 PSI | 1 |
| 4 | AIR COMPRESSOR FOR PAINTING | ENGLAND | 150 PSI | 3 |
| 5 | BLASTING UNIT (SAND POT, NOZZLES, PIPES, ETC.) | VARIOUS MAKES | | 5 SETS |
| 6 | AIRLESS SPRAY MACHINES | VARIOUS MAKES | | 2 SETS |
| 7 | AIR SPRAY GUNS | VARIOUS MAKES | | 10 SETS |
| POWER GENERATING SETS | | | | |
| 1 | POWER GENERATOR | DETROIT U.S.A. | 150 KW | 1 |
| 2 | POWER GENERATOR | GENERAL MOTOR U.S.A. | 125 KW | 1 |
| 3 | POWER GENERATOR | GENERAL MOTOR U.S.A. | 125 KW | 1 |
| 4 | POWER GENERATOR | I. GARDNER & SONS PATRICROFT, | 75 KW | 1 |
| LIFTING AND HANDLING EQUIPMENT | | | | |
| 1 | FORK LIFT TRUCK | TOYOTA, JAPAN | 3000 KGS | 1 |
| 2 | OVER HEAD TRAVELING CRANE | ABS ENGINEERING CORP | 15 TONS | 4 |
| 3 | OVER HEAD TRAVELING CRANE | ABS ENGINEERING CORP | 10 TONS | 2 |
| 4 | OVER HEAD TRAVELING CRANE | ENGLAND | 10 TONS | 1 |
| 5 | CHAIN BLOCKS | ENGLAND | 10 TONS | LOT |
| 6 | CHAIN BLOCKS | ENGLAND | 05 TONS | LOT |
| 7 | CHAIN BLOCKS | ENGLAND | 01 TON | LOT |



MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT

LIST OF MACHINES (FOR MACHINING & MAINTENANCE JOBS)

| S.NO. | EQUIPMENT | MAKE | CAPACITY | QTY. |
|----------------------------------|---|---------------------------------------|---------------------------------------|------|
| DYNAMIC BALANCING MACHINE | | | | |
| 1 | COMPUTERIZED DYNAMIC BALANCING MACHINE | CARL SCHENCK, GERMANY | SWING 2400 MM X 3000 MM LONG X 1 TON. | 1 |
| 2 | PORTABLE COMPUTERIZED BALANCING MACHINE | CARL SCHENCK, GERMANY | UNIVERSAL SIZES AND TONNAGE | 1 |
| VERTICAL LATHES | | | | |
| 1 | VERTICAL LATHES | BROADHEATH MANCHESTER, ENGLAND. | SWING 5000 MM X 2200 MM HEIGHT. | 1 |
| 2 | VERTICAL LATHES | BULLARD, U.S.A. | SWING 1420 MM X 760 MM HEIGHT. | 1 |
| 3 | VERTICAL LATHES | WEBSTER & BENNETT ENGLAND | SWING 1345 MM X 500 MM HEIGHT. | 1 |
| CENTER LATHES | | | | |
| 1 | CENTER LATHE | NOBLE & LUND ENGLAND | SWING 1500 MM X 9200 MM LONG. | 1 |
| 2 | CENTER LATHE | JOHN LAND ENGLAND | SWING 160 MM X 4580 MM LONG. | 1 |
| 3 | CENTER LATHE | MEUSER GERMANY | SWING 330 MM X 2750 MM LONG. | 1 |
| 4 | CENTER LATHE | JOHN LANG ENGLAND | SWING 230 MM X 1525 MM LONG. | 1 |
| 5 | CENTER LATHE | BECO PAKISTAN | SWING 200 MM X 2130 MM LONG. | 1 |
| 6 | CENTER LATHE | CHINA | SWING 127 MM X 500 MM LONG. | 1 |
| 7 | CENTER LATHE | CROWTHORN ENGLAND | SWING 330 MM X 2400 MM LONG. | 1 |
| 8 | CENTER LATHE | SWIFT HALIFAX ENGLAND | SWING 305 MM X 3000 MM LONG. | 1 |
| 9 | CENTER LATHE | SWIFT HALIFAX ENGLAND | SWING 610 MM X 4000 MM LONG. | 1 |
| 10 | CENTER LATHE | A.B.S. PAKISTAN | SWING 840 MM X 3300 MM LONG. | 1 |
| 11 | CENTER LATHE | CHAMPION PAKISTAN | SWING 380 MM X 1830 MM LONG. | 1 |
| 12 | CENTER LATHE | JOHN LANG ENGLAND | SWING 205 MM X 1850 MM LONG. | 1 |
| 13 | CENTER LATHE MICRO | CHAMPION PAKISTAN | SWING 25 MM X 250 MM LONG. | 1 |
| 14 | CENTER LATHE | OLD FIELD & SCHEFIELD HALIFAX ENGLAND | SWING 610 MM X 7300 MM LONG. | 1 |



MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT

LIST OF MACHINES (FOR MACHINING & MAINTENANCE JOBS)

| S.NO. | EQUIPMENT | MAKE | CAPACITY | QTY. |
|-----------------------------------|---|------------------------------------|---|------|
| 15 | CENTER LATHE | ESSBECO SWEDEN | SWING 200 MM X 1220 MM LONG. | 1 |
| HORIZONTAL BORING MACHINES | | | | |
| 1 | HORIZONTAL BORING MACHINE | UNION GERA VEB. GERMANY | 14 M TRAVEL X 4 M HEIGHT X 1.5 M DEEP | 1 |
| 2 | HORIZONTAL BORING MACHINE | KEARNS ENGLAND | X = 1370, Y = 815, Z = 760 MM | 1 |
| PLANNERS | | | | |
| 1 | DOUBLE COLUMN 4 TOOL HOLDER SETUP PLANNER | SWIFT SUMMER SKILL HALIFAX ENGLAND | MOVEMENT X = 1830 MM, Y = 1 915 MM, Z = 915 MM. | 1 |
| 2 | DOUBLE COLUMN 4 TOOL HOLDER SETUP PLANNER | SWIFT SUMMER SKILL HALIFAX ENGLAND | MOVEMENT X = 3050 MM, Y = 1 1220 MM, Z = 1220 MM. | 1 |
| 3 | DOUBLE COLUMN 4 TOOL HOLDER SETUP PLANNER | NOBLE & LUND ENGLAND | MOVEMENT X = 4270 MM, Y = 1 1525 MM, Z = 1525 MM. | 1 |
| SHAPER MACHINES | | | | |
| 1 | SHAPER MACHINE | CHURCHILL REDMAN ENGLAND | MOVEMENT, X = 609 MM, Y = 609 MM, Z = 305 MM. | 1 |
| 2 | SHAPER MACHINE | INVICTA ENGLAND | MOVEMENT X = 605 MM, Y = 605MM, Z = 330 MM. | 1 |
| MILLING MACHINES | | | | |
| 1 | MILLING MACHINE NO. 3 | USSR | MOVEMENT, X = 760 MM, Y = 431 MM, Z = 280 MM. | 1 |
| 2 | MILLING MACHINE | CINCINNATI ENGLAND | MOVEMENT X = 860 MM, Y = 455 MM, Z = 280 MM. | 1 |
| RADIAL DRILL MACHINES | | | | |
| 1 | RADIAL DRILL MACHINES | ASQUITH ENGLAND | DRILL 75 MM X SWING ARM 1800 MM. | 1 |
| 2 | RADIAL DRILL MACHINES | ASQUITH ENGLAND | DRILL 65 MM X SWING ARM 1200 MM. | 1 |
| 3 | RADIAL DRILL MACHINES | KITCHEN & WADE ENGLAND | DRILL 65 MM X SWING ARM 1200 MM. | 1 |
| 4 | RADIAL DRILL MACHINES | KITCHEN & WADE ENGLAND | DRILL 65 MM X SWING ARM 1200 MM. | 1 |



MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT

LIST OF MACHINES (FOR MACHINING & MAINTENANCE JOBS)

| S.NO. | EQUIPMENT | MAKE | CAPACITY | QTY. |
|--------------------------|---------------------------------|------------------------|----------------------------------|------|
| 5 | RADIAL DRILL MACHINES | KITCHEN & WADE ENGLAND | DRILL 65 MM X SWING ARM 1200 MM. | 1 |
| 6 | RADIAL DRILL MACHINES | ARCHDALE ENGLAND | SWING 75 MM X SWING ARM 1500 MM. | 1 |
| 7 | RADIAL DRILL MACHINES | ARCHDALE ENGLAND | SWING 65 MM X SWING ARM 1200 MM. | 1 |
| 8 | RADIAL DRILL MACHINES | ARCHDALE ENGLAND | SWING 65 MM X SWING ARM 1200 MM. | 1 |
| 9 | RADIAL DRILL MACHINES | ARCHDALE ENGLAND | SWING 65 MM X SWING ARM 1200 MM. | 1 |
| 10 | RADIAL DRILL MACHINES | ARCHDALE ENGLAND | SWING 65 MM X SWING ARM 1200 MM. | 1 |
| 11 | RADIAL DRILL MACHINES | ARCHDALE ENGLAND | SWING 65 MM X SWING ARM 1200 MM. | 1 |
| 12 | MAGNETIC DRILL MACHINE | VARIOUS MAKES | 20 MM HOLES. | 6 |
| 13 | DRILL MACHINE MICRO | ENGLAND | DRILL 5 MM. | 1 |
| 14 | PEDESTAL DRILL MACHINE | CHATAN PAKISTAN | DRILL 12 MM. | 1 |
| 15 | PEDESTAL DRILL MACHINE | USSR | DRILL 30 MM. | 1 |
| 16 | HAND DRILL MACHINE | VARIOUS MAKES | DRILL 8 MM TO 30 MM. | 15 |
| PEDESTAL GRINDERS | | | | |
| 1 | CYLINDRICAL GRINDING MACHINE | JS ENGLAND | SWING 200 MM X 450 MM LONG. | 1 |
| 2 | CENTER LESS GRINDING MACHINE | BSA ENGLAND | | 1 |
| 3 | DRILL GRINDING MACHINE | MAY ENGLAND | DRILL 12 MM TO 50 MM. | 1 |
| 4 | PEDESTAL TOOLS GRINDING MACHINE | ENGLAND | WHEEL SIZE 305 MM | 1 |
| POWER SAW | | | | |
| 1 | POWER HACKSAW | GOLDEN PAKISTAN | SHAFT CUTTING UP TO 400 MM. | 1 |
| 2 | HYDRAULIC POWER HACKSAW | WICK STEEL ENGLAND | SHAFT CUTTING 300 MM. | 1 |
| 3 | HYDRAULIC POWER HACKSAW | SWIFT ENGLAND | SHAFT CUTTING UP TO 200 MM. | 1 |
| 4 | ROTARY INDEXING TABLE | ENGLAND | WORKING 500 MM | 1 |

MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT



List Of Cranes Owned By ABS

| S.NO. | MAKE | MODEL | BOOM TYPE | BOOM LENGTH with Flying Jib | CAPACITY | QTY. | |
|-------|-----------|-------|----------------------|-----------------------------|----------|------|--|
| 1 | Tadano RT | 1992 | Telescopic Hydraulic | 176' | 45 Ton | 1 |  |

MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT



List Of Cranes Owned By ABS

| S.NO. | MAKE | MODEL | BOOM TYPE | BOOM LENGTH with Flying Jib | CAPACITY | QTY. | |
|-------|-----------|-------|----------------------|--------------------------------|----------|------|--|
| 2 | Tadano RT | 2000 | Telescopic Hydraulic | 161' | 35 Ton | 1 | |

MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT




List Of Cranes Owned By ABS

| S.NO. | MAKE | MODEL | BOOM TYPE | BOOM LENGTH with Flying Jib | CAPACITY | QTY. | |
|-------|-----------|-------|----------------------|-----------------------------|----------|------|--|
| 3 | Tadano RT | 1992 | Telescopic Hydraulic | 142' | 25 Ton | 1 | |

MANUFACTURING FACILITIES

MACHINES AND EQUIPMENT

To be selected and procured accordingly to project requirement

| S.NO. | Type | BOOM LENGTH with Flying Jib | CAPACITY | QTY. | |
|-------|----------------|--------------------------------|-----------|------|--|
| 4 | Hammer Head | 60m | 16~20 Ton | 1 |  |



PROJECT PLANNING & CONTROL

PROJECT CONTROL & SCHEDULING SYSTEM

ABS utilizes a highly efficient, digital Project Planning & Control System, managed by our Planning Department. We employ industry-standard software tools such as Microsoft Project and Primavera P6 to ensure precise scheduling, resource allocation, and project tracking.

The screenshot displays the Primavera P6 Professional 23 software interface. The main window shows a project schedule Gantt chart with a tree view on the left. The tree view is expanded to show the following hierarchy:

- Project Schedule (Level 3) - 330 days, 04-Apr-24 to 27-Feb-25
- Alcohol Plant Shop Fabricated Equipments - 180 days, 04-Apr-24 to 30-Sep-24
 - Shop Fabrication - 180 days, 04-Apr-24 to 30-Sep-24
 - Columns & vessels, condensers & Reboilers, Footbridges, ladders and platforms and grating - 180 days, 04-Apr-24 to 30-Sep-24 (Predecessors: 5, 6, 7, 8)
- Field Erection - 330 days, 04-Apr-24 to 27-Feb-25
 - Columns & vessels, condensers & Reboilers, Footbridges, ladders and platforms and grating - 60 days, 01-Oct-24 to 29-Nov-24 (Predecessors: A1000, 45)
 - Columns Trays Fitting - 60 days, 01-Oct-24 to 29-Nov-24 (Predecessors: A1000)
 - Plate heat Exchangers - 20 days, 01-Oct-24 to 20-Oct-24 (Predecessors: A1000)
 - Pumps Installation - 20 days, 01-Oct-24 to 20-Oct-24 (Predecessors: A1000)
- Bio Gas Shop Fabricated Equipments - 165 days, 04-Apr-24 to 15-Sep-24
 - Shop Fabrication - 120 days, 04-Apr-24 to 01-Aug-24
 - Field Erection - 45 days, 02-Aug-24 to 15-Sep-24
 - Degassing Tanks - 30 days, 02-Aug-24 to 31-Aug-24 (Predecessors: 12)
 - Lamellar Separator (with SS Internals) - 45 days, 02-Aug-24 to 15-Sep-24 (Predecessors: 11)
 - Miscellaneous Equipments - 30 days, 02-Aug-24 to 31-Aug-24 (Predecessors: 13)
- Supporting Structure & Pipe Racks - 151 days, 04-Apr-24 to 01-Sep-24
 - Distillation Section - 151 days, 04-Apr-24 to 01-Sep-24
 - Shop Fabrication - 60 days, 04-Apr-24 to 02-Jun-24 (Predecessors: 21)
 - Erection of Distillation Structure - 120 days, 05-May-24* to 01-Sep-24 (Predecessors: 20)
 - Fermentation Section - 151 days, 04-Apr-24 to 01-Sep-24
 - Shop Fabrication - 60 days, 04-Apr-24 to 02-Jun-24 (Predecessors: 24)
 - Erection of Fermentation Structure - 120 days, 05-May-24* to 01-Sep-24 (Predecessors: 23, 48)
 - OBL Pipe Racks - 151 days, 04-Apr-24 to 01-Sep-24
 - Shop Fabrication - 60 days, 04-Apr-24 to 02-Jun-24 (Predecessors: 27)
 - Erection of OBL Pipe Racks - 120 days, 05-May-24* to 01-Sep-24 (Predecessors: 26)
- Fermentation Tanks - 150 days, 04-Apr-24 to 31-Aug-24
 - Shop Fabrication Works - 120 days, 04-Apr-24 to 01-Aug-24 (Predecessors: 30)
 - Field Erection Work - 120 days, 04-Apr-24 to 31-Aug-24 (Predecessors: 29, 48)
- SS Tanks (R-303,R-304,R-305, R411,R412 & R-413) - 90 days, 04-Apr-24 to 02-Jul-24
 - Shop Fabrication Works - 60 days, 04-Apr-24 to 02-Jun-24
 - Field Erection Work - 90 days, 04-Apr-24 to 02-Jul-24

Upon receipt of an order, Planning Department reviews thoroughly the allocated time, specific designing & testing requirements, availability or procurement of material and other inputs and resources required for the completion of project.

Fabrication and inspection plans are prepared by assessing the technical requirements, man-hours required, material procurement and special tools or machinery requirements. The plans are then linked up with the availability of calculated man-hours, fixed resources and other variable.

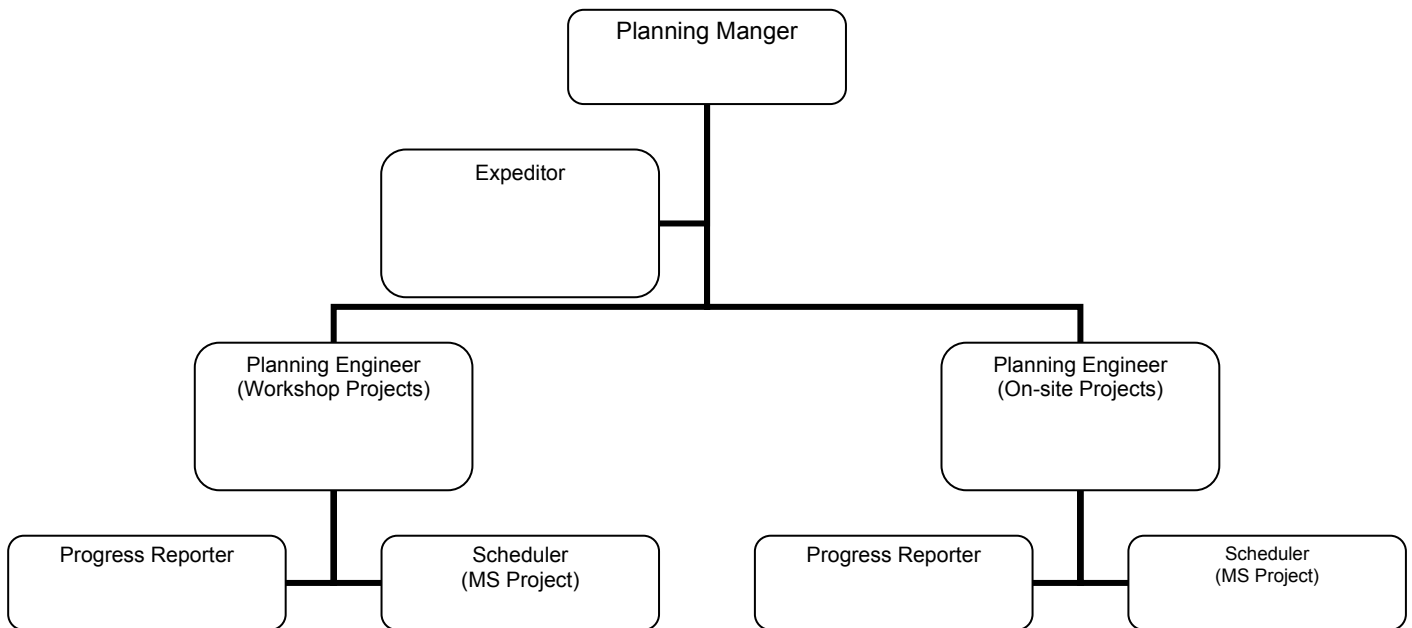
Planning Department, with the help of, Planning and Scheduling Tools, tracks the project from material procurement to the delivery stage. Periodic progress reports are the usual tool utilized for progress monitoring.

In case of progress slippage, other variables such as manpower, working time, tools & plants, etc. are reorganized or increased and Recovery Plans are prepared, implemented and monitored for the timely completion of the project.



PROJECT PLANNING & CONTROL

ORGANIZATION OF PLANNING DEPARTMENT



Planning department co-ordinates and expedites the following activities:

- **Co-ordination with Client and Workshop**
- **Engineering & Design**
- **Material take off, requisitions and procurement**
- **Status of material receiving & inspection**
- **Fabrication progress reporting**
- **Preparation and implementation of Progress Recovery Plans**
- **Timely inspection and tests**
- **Completion and handing over of jobs or projects**

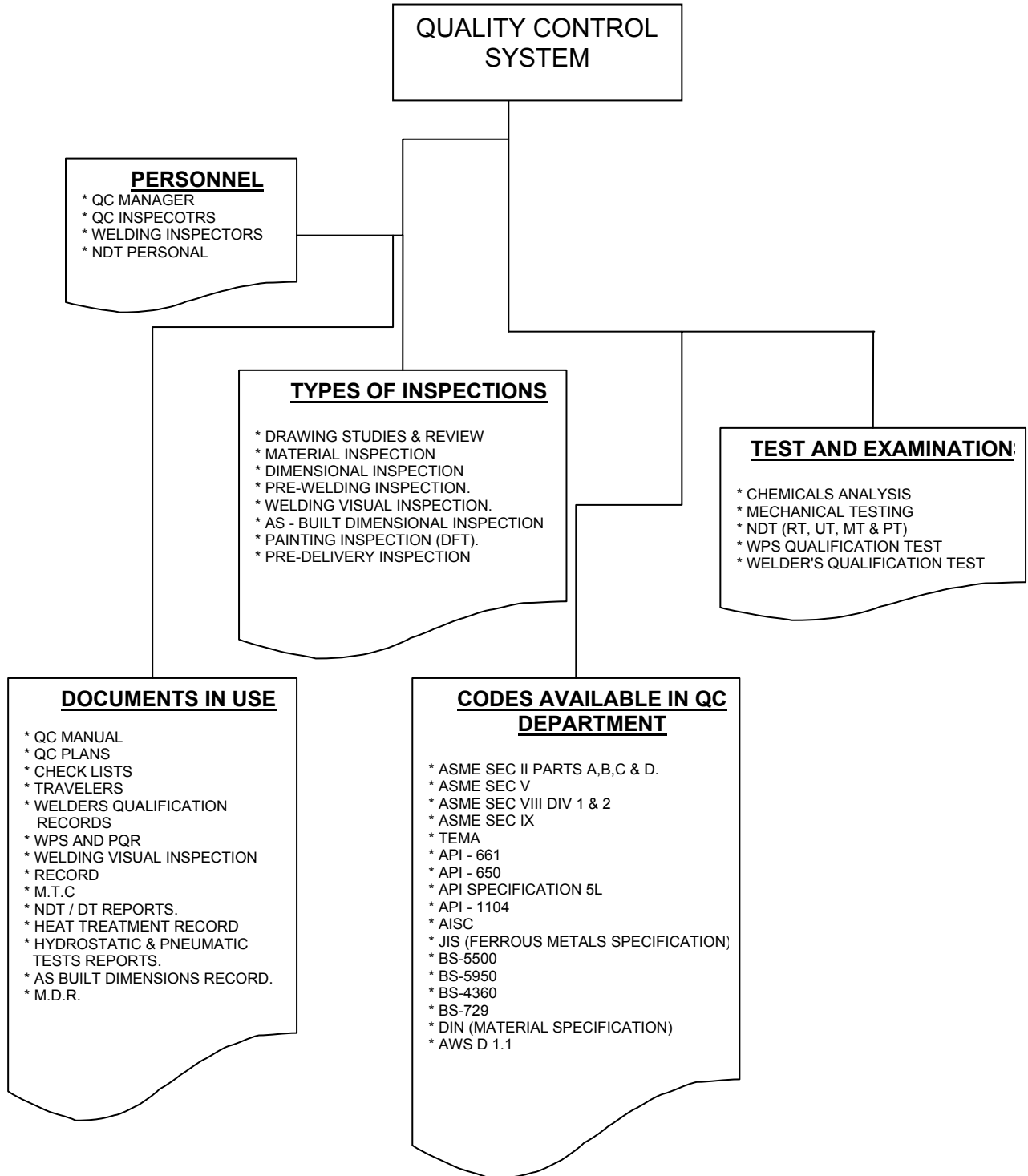
A schematic Flow Chart "**Functional Flow of Departments**" shows the functional flow of our in-house activities, controlled by the planning department.



QUALITY MANAGEMENT SYSTEM

QUALITY CONTROL SYSTEM

The Structure of ABS's Quality Management System is as below:





QUALITY MANAGEMENT SYSTEM

1. OBJECTIVES:

ABS is in the process for achieving the ASME U-STAMP & ISO 9001-2000 Certificates.

The manufacturing and QC departments operate on most effective systems developed for the fabrication, material control, stage inspections, document and data control. These systems comply with the quality control and documentation requirements of ISO 9001-2000 and ASME U – Stamp accreditation.

ABS, being the manufacturer of equipment for Oil & Gas, Petrochemical industries, other process and manufacturing industries, has developed a very efficient in-house Q.C. System. This department monitors the fabrication quality by adopting the set procedure and stage inspection during fabrication. This system supports the testing and inspection requirements of internationally recognized standards and codes, such as:

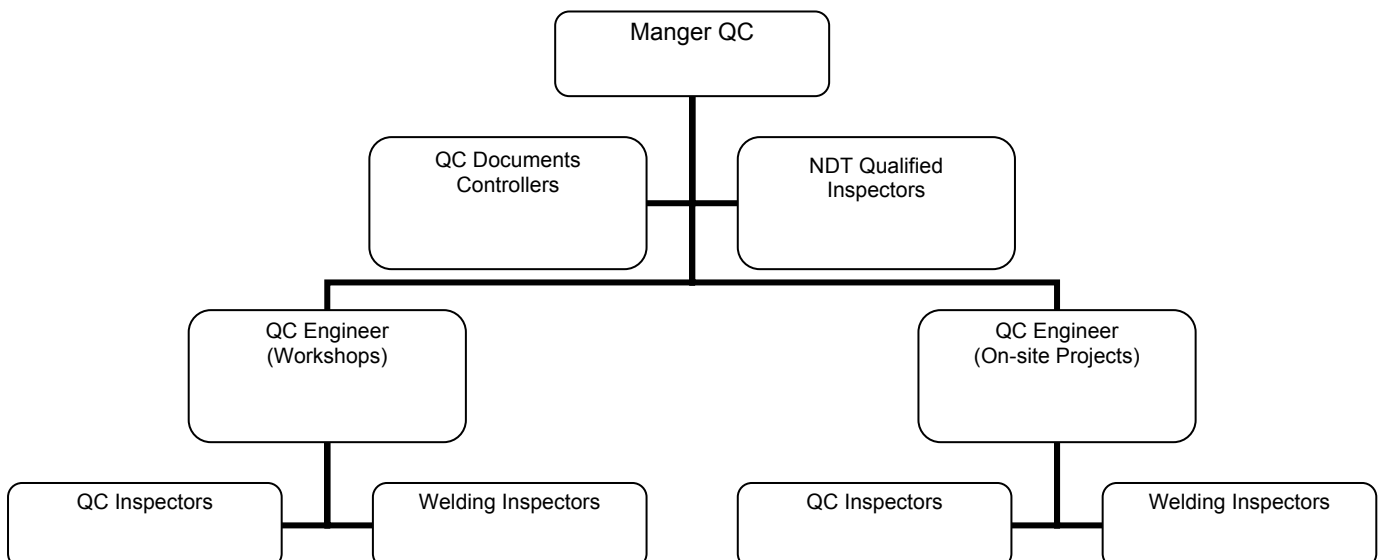
ASME Section VIII-Div. 1,2 & BS 5500 for Pressure Vessels, Heat Exchangers, Columns and Reactors, ASME Section II (A,B,C, D) for material and filler material selection, ASME Section V for NDT, ASME Section IX welders and welding procedures qualification, TEMA – RCB for Heat Exchangers, API 661 for Air Coolers / Heaters, API 650 for Storage Tanks and ANSI standards for Pipe lines.

2. Q.C. DEPARTMENT:

Q.C. department is headed by Q.C Manager who is assisted by Q.C. Inspectors, welding Inspectors and documentation and data controllers.

The in-house team of Inspectors carries out visual, dimensional and other stage inspections during fabrication, whereas NDT is subcontracted to a qualified NDT agency. The qualification documents and past similar experiences record of authorized level II or level III NDT personnel are reviewed by the Q.C Manager and after satisfaction the agency is appointed.

ORGANIZATION OF QC DEPARTMENT





QUALITY MANAGEMENT SYSTEM

2.1 FUNCTION OF QC DEPARTMENT:

- To make the Inspection & test plans, according to the technical requirement of specific job and ensure the implementation of these plans.
- To ensure the quality of material, workmanship and welding procedures in accordance with relevant codes and approved procedures.
- To check, verify and approve the manufacturing activities according to ITP.
- To carry out the NDT (such as RT, UT, PT, MT, dimensional checking, hydrostatic and pneumatic testing) and witness the “HOLD” points during manufacturing and maintain the record of ITP’s Travelers and check lists.
- To detect the non-conformities and propose the procedures for rectification.
- To ensure the rectification of non-conformities, according to the approved procedures.
- To keep the documentary records of Mill test Certificates, material reports, inspections, tests, non-conformities & their corrections and the M.D.Rs.

3.0 QUALITY CONTROL & PROCEDURAL DOCUMENTATION:

To provide guideline for manufacturing and quality control measures, to the technical staff of the company, various methodologies and procedures have been developed in a documented form.

These documents are prepared in accordance with the requirement of ISO 9001-2000, applicable codes, good engineering practice and previous experiences for the execution of various fabrication jobs and complete turn key projects.

Following documents are available as a guideline:

3.1 Methodologies & Procedures:-

- Steel Storage Tanks
- Shop Fabricated Plant Piping Spools
- Steel Structures
- Sand Blasting & Painting
- Cross-country Pipeline

3.2 QC Documentation:-

- QC manual for Pressure Vessel & Heat Exchangers
- Inspection & Test Plans for Storage Tanks
- Inspection & Test Plans for Pressure Vessels & Heat Exchangers
- Inspection & Test Plans for Steel Structures
- QC Plans for Plant Piping
- Inspection & Test Plans for Cross-country Piping

3.3 Operational Documents:-

- Production Planning and Control (Project Implementation)
- Material Control Manual (Inspection & Non- Conformities Control)
- Purchasing Procedure (Local and Foreign Material Procurement)
- Safety Manual (Safety & Environmental Protection)



QUALITY MANAGEMENT SYSTEM

3.4 Test Procedures:-

- Hydrostatic Testing
- Full water Leak Test
- Oil Penetrant Test
- Magnetic Particle Test
- Pneumatic Test
- Peaking & Banding Test
- Radiographic Examination
- Vacuum Test
- Galvanizing Adhesion Testing

Written procedures, check lists and travelers are available in above documents for checking, inspection & testing for various activities such as; drawings review, material inspections, fabrication stage inspections, surface preparation and coating, etc.

4 INSPECTION & TEST PLANS:

Upon receiving a Purchase Order, a work order is prepared and a copy is provided to Quality Control Department. Quality Control Department reviews the design, drawings, specifications and specific test and inspection requirements.

An "Inspection & Test plan" is prepared by the Quality Control Department which is based on the client's specific requirement, good engineering practices, applicable codes and specification.

Following tests and examinations are carried out during fabrication and field erection works:

- | | |
|--|--|
| - Dimensional inspection | - By in-house inspectors |
| - Welding visual inspection | - By in house welding inspector |
| - Dye Penetrant Tests (PT) | - By in house welding inspectors |
| - Radiography Testing (RT) | - Sub contracted to qualified agency |
| - Magnetic Particle Tests (MT) | - Sub contracted to qualified agency |
| - Ultrasonic Test (UT) | - Sub contracted to qualified agency |
| - Destructive Mechanical & Chemical analysis | - Sub contracted to approved testing Laboratory. |
| - Welding procedure qualification test | - Sub contracted to approved testing Laboratory. |

5.0 TESTING EQUIPMENT:

5.1 NDT Equipment (Available with approved NDT Agency)

- | | |
|---------------------------------------|------------------------------------|
| - Radiographic Testing Machine | = Tech Ops 660, 20 & 100 Curies. |
| - Ultrasonic Flaw detector | = USK-75 / USL – 32, 0.5 to 10 MHz |
| - Magnetic Particle testing Equipment | = Probe type Yoke, 1000 Amps. |

5.2 Destructive Testing Equipment & Machines (Available with our approved Agency)

- Universal Testing Machine
- Charpy Impact Tester
- Hardness Tester
- Spectrometer
- Pressure gauges testing / calibration bench
- Measuring Tapes calibration Jig.



QUALITY MANAGEMENT SYSTEM

5.3 Welding Inspection Instruments and Gauges

- Fillet weld measuring gauges
- Hi-Low measuring gauges
- Bevel measuring gauges
- DC / AC Ampere meter (Clamp Type Tester)
- Digital Thermometers (for PWHT temperature checking)

5.4 Pressure / Leak Testing Equipment

- Pump for pressure testing (upto 20,000 PSI)
- Pressure gauges (upto 16,000 PSI)
- Compressor for Pneumatic tests (upto 150 PSI)
- Pressure / holding and relief valves.



WORK IN HAND

| S. No. | Particulars | Date of Start | Name of Client |
|--------|---|---------------|------------------------|
| 1 | Fabrication and installation for Distillation & Rectification Unit Capacity: 230000 Liters/Day | May-2024 | JDW Sugar Mill Limited |



PAST PERFORMANCE

PAST PERFORMANCE AT A GLANCE

GENERAL STATISTICS

| S.No. | Description of Work | Quantity (Nos.) | Length/ Height (Meters) | Diameter (Inches) | Weight (Kg) |
|-------|---|-----------------|-------------------------|-------------------|-------------------|
| 1 | Erection Jobs | 440 | | | 5,231,686 |
| 2 | Steel Structure | | | | 10,271,800 |
| 3 | Plant Piping | | | 723,821 | |
| 4 | Cross Country Pipeline | | 12,000 | | |
| 5 | Field Storage Tanks | 331 | | | 23,475,412 |
| 6 | Heavy and High Lifting (Crane Capacity 250 Tons & 600 Tons) | | Upto 110 M | | 9,600,000 |
| 7 | Refurbishment of Shell & Tube Type Heat Exchangers | 37 | | | |
| 8 | Pumps And Motors Refurbishment | 84 | | | |
| 9 | Heat Exchangers | 201 | | | 3,066,328 |
| 10 | Pressure Vessels and Columns | 162 | | | 2,128,507 |
| 11 | Air Cooled Heat Exchangers | 18 | | | 103,391 |
| 12 | Fabricated Blowers and Fans (Dynamically Balanced) | 112 | | | |
| 13 | Tank (Shop Fabricated) | 220 | | | 373,743 |
| 14 | Plate Fabricated Structures, Columns and Masts | 144 | | | 1,018,960 |
| 15 | Carriers, Belt Conveyors and Screw Conveyors | 163 | | | 890,023 |
| 16 | Boiler Parts and Accessories | 47 | | | 412,000 |
| 17 | Process Equipment | 211 | | | 1,913,997 |
| 18 | Jetty Construction Experiences | 326 | | | 1,089,460 |
| 19 | Dryers | 5 | | | 238,000 |
| 20 | Rotary Machinery | 71 | | | 1,250,105 |
| | Total | 2,572 | 12,000 | 723,821 | 61,063,412 |



PAST PERFORMANCE

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

CODED EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M ² | PRESSURE BARS | DIMENSION (mm) | | | Tubes | | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL WT. KG | CLIENT |
|------|--|--------------------------------|---------------|---------------------|-----------|---------|---------|-----------|-------------|-------------|-----------|----------------|----------------|--------------------|--------------|--------------------------------|
| | | | | OD x LENGTH | THICKNESS | | OD (mm) | Thk. (mm) | Length (mm) | QTY. (Nos.) | | GRADE | | | | |
| | | | | SHELL | SHELL | T.SHEET | | | | | | SHELL | TUBE | | | |
| 1 | Complete Fabrication of Heat Ex. TT-307B (BJM Condenser) | | | 1428 x 5984 | 14 | 47 | 25.4 | 2.11 | 6000 | 1565 | 1 | SA 516 GR 70. | SA 179 | TEMA - C ASME VIII | 18,405 | Engro Polymer & Chemicals Ltd. |
| 2 | Retubing of Heat Ex. TT-304 (HCL Column Re-boiler) | | | 1063 x 3654 (TS/TS) | 12.7 | 75 | 25.4 | 2.74 | 3658 | 835 | 1 | SA 516 GR 70. | SA 179 | TEMA - R ASME VIII | | Engro Polymer & Chemicals Ltd. |
| 3 | Refurbishment of Heat Ex. TT-302E (Quench Vapor Condenser) | | | 895 x 9065 | 12.7 | 126 | 19.05 | 2.11 | 9144 | 736 | 1 | SA 516 GR 70. | SB-111-715 | TEMA - C ASME VIII | 13,970 | Engro Polymer & Chemicals Ltd. |
| 4 | Refurbishment of Heat Ex. TT-308C (Quench Vapor Condenser) | | | 1296 x 5610 (TS/TS) | 14 | | 19.05 | 1.6 | 6001 | 1365 | 1 | SA 285 GR.C | SB-111-715 | TEMA - B ASME VIII | 18,800 | Engro Polymer & Chemicals Ltd. |
| 5 | Replacement of Tube Sheets of Heat Ex. E1-502 (T.A. Drier Scrubber Cooler) | | | | | 54 | 19.05 | 1.6 | 6055 | 236 | 1 | | A789-S31803 | TEMA - R ASME VIII | | LOTTE Chemical Pakistan Ltd. |
| 6 | Retubing of Heat Ex. E1-621 | | | | | | 19.05 | 1.6 | 7000 | 108 | 1 | | SA 179 | TEMA - R ASME VIII | | LOTTE Chemical Pakistan Ltd. |
| 7 | Tube Bundle for Heat Ex. 101-E-10 | | | | | 60 | | | 4880 | 402 | 1 | | SA 213 Gr. T5 | TEMA - R ASME VIII | | National Refinery Ltd |
| 8 | Tube Bundle for Heat Ex. E530 | | | | | 57 | 19.05 | 2.11 | 11060 | 88 | 1 | | SA 179 | TEMA - R ASME VIII | | Pakistan Petroleum Ltd. |
| 9 | RE-Claimer U Tube Bundle Bank#10 | 400 | 45 | | | 70 | | | | | 1 | | SA 249 TP 304L | TEMA - R ASME VIII | | Pakistan Petroleum Ltd. |
| 10 | Tube Bundle for Heat Ex. 13-E-5 | | 19 | | | 140 | | | | | 1 | | SA 179 | TEMA - R ASME VIII | | National Refinery Ltd |
| 11 | Shell & Tube Type Pre Condenser | 830 | 9 | 1700 x 6000 (TS/TS) | 12 | 84 | | | | | 1 | SA 516 GR 60. | SA 179 | TEMA - R ASME VIII | 31,000 | National Refinery Ltd |
| 12 | Condenser Vertical | 940 | 3 | 2712 x 4800 | 6 | 35 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 16,600 | CSK Distilleries Ltd |
| 13 | Condenser Vertical | 220 | 3 | 1410 x 4800 | 5 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 4,450 | CSK Distilleries Ltd |
| 14 | Condenser Vertical | 100 | 6 | 1008 x 3750 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 2,350 | CSK Distilleries Ltd |
| 15 | Mash Preheater | 220 | 6 | 1158 x 6800 | 4 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 4,680 | CSK Distilleries Ltd |
| 16 | Condenser Horizontal | 780 | 4 | 2012 x 6800 | 6 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 15,700 | CSK Distilleries Ltd |
| 17 | Condenser Vertical | 100 | 6 | 1008 x 3900 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 2,360 | CSK Distilleries Ltd |
| 18 | Condenser Vertical | 500 | 3 | 2012 x 4800 | 6 | 35 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,200 | CSK Distilleries Ltd |
| 19 | Reboiler Vertical | 940 | 6 | 2712 x 4800 | 6 | 35 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 16,900 | CSK Distilleries Ltd |



PAST PERFORMANCE

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

CODED EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M ² | PRESSURE BARS | DIMENSION (mm) | | | Tubes | | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL WT. KG | CLIENT |
|------|----------------------|--------------------------------|---------------|----------------|-----------|-------|---------|-----------|-------------|-------------|-----------|----------------|----------------|-------------|--------------|----------------------|
| | | | | OD x LENGTH | THICKNESS | | OD (mm) | Thk. (mm) | Length (mm) | QTY. (Nos.) | | GRADE | | | | |
| | | | | | SHELL | SHELL | | | | | | T.SHEET | SHELL | | | |
| 20 | Condenser Vertical | 500 | 2 | 2012 x 4800 | 6 | 35 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,200 | CSK Distilleries Ltd |
| 21 | Condenser Vertical | 500 | 6 | 1610 x 6800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,925 | CSK Distilleries Ltd |
| 22 | Condenser Vertical | 80 | 6 | 910 x 3900 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,850 | CSK Distilleries Ltd |
| 23 | Reboiler Vertical | 100 | 6 | 1158 x 3350 | 4 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 2,800 | CSK Distilleries Ltd |
| 24 | Reboiler Vertical | 14 | 6 | 508 x 2900 | 3 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 600 | CSK Distilleries Ltd |
| 25 | Condenser Vertical | 940 | 3 | 2712 x 4800 | 6 | 35 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 16,600 | Dewan Diatilleries |
| 26 | Condenser Vertical | 220 | 3 | 1410 x 4800 | 5 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 4,450 | Dewan Diatilleries |
| 27 | Condenser Vertical | 100 | 6 | 1008 x 3750 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 2,350 | Dewan Diatilleries |
| 28 | Mash Preheater | 220 | 6 | 1158 x 6800 | 4 | 30 | | | | | 1 | SA 240 TP 316L | SA 269 TP 316L | CODAP | 4,680 | Dewan Diatilleries |
| 29 | Condenser Horizontal | 780 | 4 | 2012 x 6800 | 6 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 15,700 | Dewan Diatilleries |
| 30 | Condenser Vertical | 100 | 6 | 1008 x 3900 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 2,360 | Dewan Diatilleries |
| 31 | Condenser Vertical | 500 | 3 | 2012 x 4800 | 6 | 35 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,200 | Dewan Diatilleries |
| 32 | Reboiler Vertical | 940 | 6 | 2712 x 4800 | 6 | 35 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 16,900 | Dewan Diatilleries |
| 33 | Condenser Vertical | 500 | 2 | 2012 x 4800 | 6 | 35 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,200 | Dewan Diatilleries |
| 34 | Condenser Vertical | 500 | 6 | 1610 x 6800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,925 | Dewan Diatilleries |
| 35 | Condenser Vertical | 80 | 6 | 910 x 3900 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,850 | Dewan Diatilleries |
| 36 | Reboiler Vertical | 100 | 6 | 1158 x 3350 | 4 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 2,800 | Dewan Diatilleries |
| 37 | Reboiler Vertical | 14 | 6 | 508 x 2900 | 3 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 600 | Dewan Diatilleries |
| 38 | Condenser Vertical | 750 | 3 | 2462 x 4800 | 6 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 15,500 | Unicol (Pvt.) Ltd. |
| 39 | Condenser Vertical | 190 | 3 | 1310 x 4800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 4,000 | Unicol (Pvt.) Ltd. |
| 40 | Condenser Vertical | 80 | 4 | 908 x 3750 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,800 | Unicol (Pvt.) Ltd. |



PAST PERFORMANCE

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

CODED EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M ² | PRESSURE BARS | DIMENSION (mm) | | | Tubes | | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL WT. KG | CLIENT |
|------|----------------------|--------------------------------|---------------|----------------|-----------|-------|---------|-----------|-------------|-------------|-----------|----------------|----------------|-------------|--------------|--------------------|
| | | | | OD x LENGTH | THICKNESS | | OD (mm) | Thk. (mm) | Length (mm) | QTY. (Nos.) | | GRADE | | | | |
| | | | | | SHELL | SHELL | | | | | | T.SHEET | SHELL | | | |
| 41 | Mash Preheater | 180 | 4 | 1108 x 6800 | 4 | 25 | | | | | 1 | SA 240 TP 316L | SA 269 TP 316L | CODAP | 3,800 | Unicol (Pvt.) Ltd. |
| 42 | Condenser Horizontal | 620 | 4 | 1760 x 6800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 10,455 | Unicol (Pvt.) Ltd. |
| 43 | Condenser Vertical | 80 | 4 | 908 x 3900 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,800 | Unicol (Pvt.) Ltd. |
| 44 | Condenser Vertical | 400 | 3 | 1810 x 4800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 8,000 | Unicol (Pvt.) Ltd. |
| 45 | Reboiler Vertical | 750 | 6 | 2462 x 4800 | 6 | 32 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 15,500 | Unicol (Pvt.) Ltd. |
| 46 | Condenser Vertical | 400 | 2 | 1810 x 4800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 8,000 | Unicol (Pvt.) Ltd. |
| 47 | Condenser Vertical | 380 | 4 | 1460 x 6800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 6,000 | Unicol (Pvt.) Ltd. |
| 48 | Condenser Vertical | 60 | 4 | 758 x 3900 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,600 | Unicol (Pvt.) Ltd. |
| 49 | Reboiler Vertical | 80 | 6 | 1058 x 3306 | 4 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 2,700 | Unicol (Pvt.) Ltd. |
| 50 | Reboiler Vertical | 11 | 6 | 457 x 2900 | 3 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 500 | Unicol (Pvt.) Ltd. |
| 51 | Condenser Vertical | 750 | 3 | 2462 x 4800 | 6 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 15,500 | Matol (Pvt.) Ltd |
| 52 | Condenser Vertical | 190 | 3 | 1310 x 4800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 4,000 | Matol (Pvt.) Ltd |
| 53 | Condenser Vertical | 80 | 4 | 908 x 3750 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,800 | Matol (Pvt.) Ltd |
| 54 | Mash Preheater | 180 | 4 | 1108 x 6800 | 4 | 25 | | | | | 1 | SA 240 TP 316L | SA 269 TP 316L | CODAP | 3,800 | Matol (Pvt.) Ltd |
| 55 | Condenser Horizontal | 620 | 4 | 1760 x 6800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 10,455 | Matol (Pvt.) Ltd |
| 56 | Condenser Vertical | 80 | 4 | 908 x 3900 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,800 | Matol (Pvt.) Ltd |
| 57 | Condenser Vertical | 400 | 3 | 1810 x 4800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 8,000 | Matol (Pvt.) Ltd |
| 58 | Reboiler Vertical | 750 | 6 | 2462 x 4800 | 6 | 32 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 15,500 | Matol (Pvt.) Ltd |
| 59 | Condenser Vertical | 400 | 2 | 1810 x 4800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 8,000 | Matol (Pvt.) Ltd |
| 60 | Condenser Vertical | 380 | 4 | 1460 x 6800 | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 6,000 | Matol (Pvt.) Ltd |
| 61 | Condenser Vertical | 60 | 4 | 758 x 3900 | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,600 | Matol (Pvt.) Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M ² | PRESSURE BARS | DIMENSION (mm) | | | Tubes | | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL WT. KG | CLIENT |
|------|------------------------------|--------------------------------|---------------|---------------------|-----------|---------|---------|-----------|-------------|-------------|-----------|----------------|----------------|-------------|--------------|-----------------------|
| | | | | OD x LENGTH | THICKNESS | | OD (mm) | Thk. (mm) | Length (mm) | QTY. (Nos.) | | GRADE | | | | |
| | | | | | SHELL | T.SHEET | | | | | | SHELL | TUBE | | | |
| 62 | Reboiler Vertical | 80 | 6 | 1058 x 3306 | 4 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 2,700 | Matol (Pvt.) Ltd |
| 63 | Reboiler Vertical | 11 | 6 | 457 x 2900 | 3 | 30 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 500 | Matol (Pvt.) Ltd |
| 64 | Shell & Tube Type Condenser | 750 | 6 | 758 x 3600 (TS/TS) | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,350 | Habib Distilleries |
| 65 | Shell & Tube Type Re-Boiler | 150 | 3 | 1160 X 4650 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 3,000 | Habib Distilleries |
| 66 | Shell & Tube Type Condenser | 50 | 6 | 708 x 3600 (TS/TS) | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,200 | Habib Distilleries |
| 67 | Shell & Tube Type Re-Boiler | 7 | 6 | 908 x 3150 (TS/TS) | 4 | 32 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,450 | Habib Distilleries |
| 68 | Shell & Tube Type Pre-Heater | 150 | 6 | 1008 X 6800 (TS/TS) | 4 | 25 | | | | | 1 | SA 240 TP 316L | SA 269 TP 304L | CODAP | 3,450 | Habib Distilleries |
| 69 | Shell & Tube Type Condenser | 80 | 6 | 858 x 3750 (TS/TS) | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,650 | Habib Distilleries |
| 70 | Shell & Tube Type Re-Boiler | 600 | 6 | 2162 x 4650 (TS/TS) | 6 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,500 | Habib Distilleries |
| 71 | Shell & Tube Type Re-Boiler | 600 | 3 | 2162 x 4650 (TS/TS) | 6 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,500 | Habib Distilleries |
| 72 | Shell & Tube Type Re-Boiler | 320 | 3 | 1610 x 4650 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 5,400 | Habib Distilleries |
| 73 | Shell & Tube Type Re-Boiler | 320 | 2 | 1610 x 4650 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 5,400 | Habib Distilleries |
| 74 | Shell & Tube Type Condenser | 500 | 6 | 1610 x 6800 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,350 | Habib Distilleries |
| 75 | Shell & Tube Type Condenser | 420 | 6 | 1310 x 6800 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 6,000 | Habib Distilleries |
| 76 | Shell & Tube Type Re-Boiler | 9 | 6 | 406 x 2800 (TS/TS) | 3 | 32 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 390 | Habib Distilleries |
| 77 | Shell & Tube Type Condenser | 750 | 6 | 758 x 3600 (TS/TS) | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,350 | Al Abbas Distilleries |
| 78 | Shell & Tube Type Re-Boiler | 150 | 3 | 1160 X 4650 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 3,000 | Al Abbas Distilleries |



PAST PERFORMANCE

CODED EQUIPMENT

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M ² | PRESSURE BARS | DIMENSION (mm) | | | Tubes | | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL WT. KG | CLIENT |
|------|------------------------------|--------------------------------|---------------|---------------------|-----------|-------|---------|-----------|-------------|-------------|-----------|----------------|----------------|--------------------|--------------|-----------------------------|
| | | | | OD x LENGTH | THICKNESS | | OD (mm) | Thk. (mm) | Length (mm) | QTY. (Nos.) | | GRADE | | | | |
| | | | | | SHELL | SHELL | | | | | | T.SHEET | SHELL | | | |
| 79 | Shell & Tube Type Condenser | 50 | 6 | 708 x 3600 (TS/TS) | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,200 | Al Abbas Distilleries |
| 80 | Shell & Tube Type Re-Boiler | 7 | 6 | 908 x 3150 (TS/TS) | 4 | 32 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,450 | Al Abbas Distilleries |
| 81 | Shell & Tube Type Pre-Heater | 150 | 6 | 1008 X 6800 (TS/TS) | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 3,450 | Al Abbas Distilleries |
| 82 | Shell & Tube Type Condenser | 80 | 6 | 858 x 3750 (TS/TS) | 4 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 1,650 | Al Abbas Distilleries |
| 83 | Shell & Tube Type Re-Boiler | 600 | 6 | 2162 x 4650 (TS/TS) | 6 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,500 | Al Abbas Distilleries |
| 84 | Shell & Tube Type Re-Boiler | 600 | 3 | 2162 x 4650 (TS/TS) | 6 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,500 | Al Abbas Distilleries |
| 85 | Shell & Tube Type Re-Boiler | 320 | 3 | 1610 x 4650 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 5,400 | Al Abbas Distilleries |
| 86 | Shell & Tube Type Re-Boiler | 320 | 2 | 1610 x 4650 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 5,400 | Al Abbas Distilleries |
| 87 | Shell & Tube Type Condenser | 500 | 6 | 1610 x 6800 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 9,350 | Al Abbas Distilleries |
| 88 | Shell & Tube Type Condenser | 420 | 6 | 1310 x 6800 (TS/TS) | 5 | 25 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 6,000 | Al Abbas Distilleries |
| 89 | Shell & Tube Type Re-Boiler | 9 | 6 | 406 x 2800 (TS/TS) | 3 | 32 | | | | | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 390 | Al Abbas Distilleries |
| 90 | Shell & Tube Heat Exchanger | 180 | 4 | 1320 x 5000 (TS/TS) | 10 | 32 | | | | | 4 | SA 516 GR 60. | SA 269 TP 304L | TEMA - C ASME VIII | 36,952 | Mirpur Khas Sugar Mills Ltd |
| 91 | Dynamic Pre Condenser | 1200 | 8 | 2000 x 8000 (TS/TS) | 12 | 50 | | | | | 1 | SA 516 GR 60. | SA 269 TP 304L | TEMA - C ASME VIII | 25,000 | Habib Sugar Mills Ltd |
| 92 | Shell & Tube Heat Exchanger | 250 | 4 | 1679 x 4538 (TS/TS) | 10 | 30 | | | | | 1 | SA 516 GR 60. | SA 269 TP 304L | TEMA - C ASME VIII | 10,700 | Matiari Sugar Mills Ltd |
| 93 | Shell & Tube Heat Exchanger | 270 | 4 | 1580 x 4600 (TS/TS) | 12.5 | 30 | | | | | 6 | SA 516 GR 60. | SA 269 TP 304L | TEMA - C ASME VIII | 66,000 | Habib Sugar Mills Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M ² | PRESSURE BARS | DIMENSION (mm) | | | Tubes | | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL WT. KG | CLIENT |
|------|---|--------------------------------|---------------|---------------------|-----------|---------|---------|-----------|-------------|-------------|-----------|---------------|----------------|--------------------|--------------|---|
| | | | | OD x LENGTH | THICKNESS | | OD (mm) | Thk. (mm) | Length (mm) | QTY. (Nos.) | | GRADE | | | | |
| | | | | | SHELL | T.SHEET | | | | | | SHELL | TUBE | | | |
| 94 | Shell & Tube Heat Exchanger | 200 | 4 | 1450 x 4315 (TS/TS) | 12.5 | 30 | | | | | 3 | SA 516 GR 60. | SA 269 TP 304L | TEMA - C ASME VIII | 27,960 | Habib Sugar Mills Ltd |
| 95 | Shell & Tube Heat Exchanger | 300 | 4 | 1670 x 5180 (TS/TS) | 10 | 30 | | | | | 1 | SA 516 GR 60. | SA 269 TP 304L | TEMA - C ASME VIII | 12,240 | Dewan Sugar Mills Ltd |
| 96 | Shell & Tube Heat Exchanger | 150 | 6 | 1136 x 6580 (TS/TS) | 8 | 30 | | | | | 1 | SA 516 GR 60. | SA 269 TP 304L | TEMA - C ASME VIII | 8,550 | Thatta Sugar Mills Ltd |
| 97 | Shell & Tube Heat Exchanger | 150 | 6 | 1136 x 6580 (TS/TS) | 8 | 30 | | | | | 1 | SA 516 GR 60. | SA 269 TP 304L | TEMA - C ASME VIII | 8,550 | Dadu Sugar Mills Ltd |
| 98 | Shell & Tube Heat Exchanger | 200 | 6 | 1300 x 5000 (TS/TS) | 10 | 32 | | | | | 1 | SA 516 GR 60. | SA 269 TP 304 | TEMA - C ASME VIII | 10,200 | Mirpur Khas Sugar Mills Ltd |
| 99 | Shell & Tube Heat Exchanger | 300 | 6 | 1670 x 4660 (TS/TS) | 10 | 30 | | | | | 1 | SA 516 GR 60. | SA 269 TP 304 | TEMA - C ASME VIII | 11,950 | Al Abbas Distilleries |
| 100 | Contact Furnace (Shell & Tube Type) | | | 708 x 3500 (TS/TS) | 4 | 5 | | | | | 2 | SA 285 GR.C | SA 179 | TEMA - C ASME VIII | 2,483 | (Urea Formaldehyde Plant) Baluchistan Particle Board Ltd. |
| 101 | SHELL AND TUBE TYPE EVAPORATOR | | | | | | | | | | | | | | | |
| 102 | Shell and Tube Type Evaporator 3000 M2 | 3000 | | 5570 mm X 9800 mm | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Mirpurkhas Sugar Mills Limited |
| 103 | Shell and Tube Type Evaporator H.S | 4000 | | 7500mm x 16014mm | | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Mirpurkhas Sugar Mills Limited |
| 104 | Shell and Tube Type Juice Heaters | 350 | | 1650mm x 5050mm | 12 | 30 | | | | | 3 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Mirpurkhas Sugar Mills Limited |
| 105 | Shell and Tube Type Masscuite Re-Heater | 300 | | | | 10 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Mehran Sugar Mills Limited |
| 106 | Shell and Tube Type Vapor Line Juice Heater | 500 | | 2000mm x 7000mm | 12 | 32 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Mehran Sugar Mills Limited |
| 107 | Shell And Tube Type Evaporator | 990 | 3 | 3000 x 9270 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 37,000 | Faran Sugar Mills Ltd |
| 108 | Shell And Tube Type Evaporator | 1208 | 3 | 4080 x 7890 | 15 | 38 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 48,600 | Habib Sugar Mills Ltd |
| 109 | Shell And Tube Type Evaporator | 2000 | 3 | 4830 x 7930 | 16 | 36 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 70,000 | Habib Sugar Mills Ltd |
| 110 | Shell And Tube Type Evaporator | 2788 | 3 | 5526 x 9296 | 20 | 32 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 91,000 | Mirpurkhas Sugar Mills Limited |
| 111 | Shell And Tube Type Evaporator | 990 | 3 | 3725 x 9285 | 12.5 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 31,684 | Matiari Sugar Mills Ltd |
| 112 | Shell And Tube Type Evaporator | 1200 | 3 | 4000 x 9050 | 12.5 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 50,533 | Karachi Shipyard & Engg. Works Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M ² | PRESSURE BARS | DIMENSION (mm) | | | Tubes | | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL WT. KG | CLIENT |
|------|--|--------------------------------|---------------|----------------|-----------|-------|---------|-----------|-------------|-------------|-----------|-------------|---------------|--------------------|--------------|---|
| | | | | OD x LENGTH | THICKNESS | | OD (mm) | Thk. (mm) | Length (mm) | QTY. (Nos.) | | GRADE | | | | |
| | | | | | SHELL | SHELL | | | | | | T.SHEET | SHELL | | | |
| 113 | Shell And Tube Type Evaporator | 2000 | 3 | 4830 x 7930 | 16 | 36 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 70,000 | Habib Sugar Mills Ltd |
| 114 | Shell And Tube Type Evaporator | 2000 | 3 | 4732 x 14000 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 56,000 | Habib Sugar Mills Ltd |
| 115 | Vapor Cell Evaporator | 2083 | 3 | 5400 x 10050 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 65,000 | Noon Sugar Mills Ltd. |
| 116 | Vapor Cell Evaporator | 2083 | 3 | 5332 x 9635 | 16 | 30 | | | | | 2 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 115,000 | Dewan Sugar Mills Ltd. |
| 117 | Vapor Cell Evaporator | 800 | 3 | 2900 x 9490 | 12 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 28,400 | Habib Sugar Mills Ltd |
| 118 | SEMI KESTNER (FALLING FILM) EVAPORATORS | | | | | | | | | | | | | | | |
| 119 | Shell and Tube Type Falling Film Evaporators 4000 M2 | 4000 | | 3230 x 14480 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Spray Engineering Devices |
| 120 | Shell and Tube Type Falling Film Evaporators 3500 M2 | 3500 | | 3074 x 14480 | 16 | 30 | | | | | 4 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Spray Engineering Devices |
| 121 | Shell and Tube Type Falling Film Evaporators 3000 M2 | 3000 | | 2850 x 14480 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Spray Engineering Devices |
| 122 | Semi Kestner Evaporators | 2000 | 3 | 3404 x 11611 | 16 | 36 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 52,320 | Habib Sugar Mills Ltd |
| 123 | Semi Kestner Evaporators | 1200 | 3 | 3200 x 6614 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 40,263 | Habib Sugar Mills Ltd |
| 124 | Semi Kestner Evaporators | 2000 | 3 | 3372 x 9472 | 16 | 36 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 53,400 | Mehran Sugar Mills Ltd |
| 125 | SHELL AND TUBE TYPE VACUUM PANS | | | | | | | | | | | | | | | |
| 126 | A. Massequite Continous Pan Cap:102 M3 | 970 | 1.5 | | 18 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | | Mehran Sugar Mills Limited |
| 127 | Batch Vacuum Pan 60 Tons Cap | 285 | 1 | 4842 x 8691 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 38000 | Mirpurkhas Sugar Mills Limited |
| 128 | Vacuum Pan 80 Tons Cap | 385 | 2 | 5630 x 6783 | 16 | 32 | | | | | 3 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 157,200 | Habib Sugar Mills Ltd |
| 129 | Vacuum Pan 50 Tons Cap | 250 | 2 | 4736 x 6570 | 18 | 32 | | | | | 3 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 107,250 | Habib Sugar Mills Ltd |
| 130 | Vacuum Pan 80 Tons Cap | 300 | 2 | 5700 x 5720 | 20 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 42,700 | Sanghar Sugar Mills Ltd |
| 131 | Vacuum Pan 60 Tons Cap | 265 | 2 | 4582 x 7373 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 38,000 | Pakistan Industrial Development Corporation |
| 132 | Vacuum Pan 60 Tons Cap | 248 | 2 | 4842 x 8691 | 16 | | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 36,925 | JDW Sugar Mills Ltd |
| 133 | Vacuum Pan 70 Tons Cap | 291 | 2 | 4842 x 8831 | 16 | 30 | | | | | 1 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 40,500 | JDW Sugar Mills Ltd |
| 134 | Vacuum Pan 45 Tons Cap | 185 | 2 | 4452 x 5105 | 16 | 30 | | | | | 2 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 62,580 | Fauji Sugar Mills Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M ² | PRESSURE BARS | DIMENSION (mm) | | | Tubes | | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL WT. KG | CLIENT |
|------|------------------------|--------------------------------|---------------|----------------|-----------|-------|---------|-----------|-------------|-------------|-----------|-------------|---------------|--------------------|--------------|-----------------------|
| | | | | OD x LENGTH | THICKNESS | | OD (mm) | Thk. (mm) | Length (mm) | QTY. (Nos.) | | GRADE | | | | |
| | | | | | SHELL | SHELL | | | | | | T.SHEET | SHELL | | | |
| 135 | Vacuum Pan 80 Tons Cap | 370 | 3 | 5202 x 6040 | 16 | 30 | | | | | 6 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 253,800 | Faran Sugar Mills Ltd |
| 136 | Vacuum Pan 80 Tons Cap | 370 | 2 | 5630 x 6183 | 16 | 30 | | | | | 2 | SA 285 GR.C | SA 269 TP 304 | TEMA - C ASME VIII | 87,400 | Dewan Sugar Mills Ltd |

PAST PERFORMANCE

SHELL & TUBE TYPE HEAT EXCHANGERS & EQUIPMENT

CODED EQUIPMENT

| SR.# | DESCRIPTION | HEATING SURFACE M2 | PRESSURE BARS | DIMENSION (MM) | | | QTY. NOS. | MATERIAL | | DESIGN CODE | TOTAL | CLIENT |
|------|--------------------|--------------------|---------------|----------------|-----------|-------|-----------|----------|---------|-------------|--------|------------------------|
| | | | | OD X LENGTH | THICKNESS | | | GRADE | WT. | | | |
| | | | | | SHELL | SHELL | | | T.SHEET | SHELL | TUBE | |
| 137 | Condenser Vertical | 750 | 3 | 2462 x 4800 | 6 | 25 | 1 | SA 240 | SA 269 | CODAP | 15,500 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 138 | Condenser Vertical | 190 | 3 | 1310 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 4,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 139 | Condenser Vertical | 80 | 4 | 908 x 3750 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 140 | Mash Preheater | 180 | 4 | 1108 x 6800 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 3,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 316L | TP 316L | | | |
| 141 | Condenser | 620 | 4 | 1760 x 6800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 10,455 | Madina Sugar Mills Ltd |
| | Horizontal | | | | | | | TP 304L | TP 304L | | | |
| 142 | Condenser Vertical | 80 | 4 | 908 x 3900 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 143 | Condenser Vertical | 400 | 3 | 1810 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 8,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 144 | Reboiler Vertical | 750 | 6 | 2462 x 4800 | 6 | 32 | 1 | SA 240 | SA 269 | CODAP | 15,500 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 145 | Condenser Vertical | 400 | 2 | 1810 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 8,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 146 | Condenser Vertical | 380 | 4 | 1460 x 6800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 6,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 147 | Condenser Vertical | 60 | 4 | 758 x 3900 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,600 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 148 | | 80 | 6 | 1058 x 3306 | 4 | 30 | 1 | SA 240 | SA 269 | CODAP | 2,700 | Madina Sugar Mills Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

| | | | | | | | | | | | | |
|-----|----------------------|-----|---|-------------|---|----|---|---------|---------|-------|--------|------------------------|
| | Reboiler Vertical | | | | | | | TP 304L | TP 304L | | | |
| 149 | Reboiler Vertical | 11 | 6 | 457 x 2900 | 3 | 30 | 1 | SA 240 | SA 269 | CODAP | 500 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 150 | Condenser Vertical | 750 | 3 | 2462 x 4800 | 6 | 25 | 1 | SA 240 | SA 269 | CODAP | 15,500 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 151 | Condenser Vertical | 190 | 3 | 1310 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 4,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 152 | Condenser Vertical | 80 | 4 | 908 x 3750 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 153 | Mash Preheater | 180 | 4 | 1108 x 6800 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 3,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 316L | TP 316L | | | |
| 154 | Condenser Horizontal | 620 | 4 | 1760 x 6800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 10,455 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 155 | Condenser Vertical | 80 | 4 | 908 x 3900 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 156 | Condenser Vertical | 400 | 3 | 1810 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 8,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 157 | Reboiler Vertical | 750 | 6 | 2462 x 4800 | 6 | 32 | 1 | SA 240 | SA 269 | CODAP | 15,500 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 158 | Condenser Vertical | 400 | 2 | 1810 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 8,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 159 | Condenser Vertical | 380 | 4 | 1460 x 6800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 6,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 160 | Condenser Vertical | 60 | 4 | 758 x 3900 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,600 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 161 | | 80 | 6 | 1058 x 3306 | 4 | 30 | 1 | SA 240 | SA 269 | CODAP | 2,700 | Madina Sugar Mills Ltd |

PAST PERFORMANCE

CODED EQUIPMENT

| | | | | | | | | | | | | |
|-----|--------------------|-----|---|-------------|---|----|---|---------|---------|-------|--------|------------------------|
| | Reboiler Vertical | | | | | | | TP 304L | TP 304L | | | |
| 162 | Reboiler Vertical | 11 | 6 | 457 x 2900 | 3 | 30 | 1 | SA 240 | SA 269 | CODAP | 500 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 163 | Condenser Vertical | 750 | 3 | 2462 x 4800 | 6 | 25 | 1 | SA 240 | SA 269 | CODAP | 15,500 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 164 | Condenser Vertical | 190 | 3 | 1310 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 4,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 165 | Condenser Vertical | 80 | 4 | 908 x 3750 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 166 | Mash Preheater | 180 | 4 | 1108 x 6800 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 3,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 316L | TP 316L | | | |
| 167 | Condenser | 620 | 4 | 1760 x 6800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 10,455 | Madina Sugar Mills Ltd |
| | Horizontal | | | | | | | TP 304L | TP 304L | | | |
| 168 | Condenser Vertical | 80 | 4 | 908 x 3900 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,800 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 169 | Condenser Vertical | 400 | 3 | 1810 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 8,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 170 | Reboiler Vertical | 750 | 6 | 2462 x 4800 | 6 | 32 | 1 | SA 240 | SA 269 | CODAP | 15,500 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 171 | Condenser Vertical | 400 | 2 | 1810 x 4800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 8,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 172 | Condenser Vertical | 380 | 4 | 1460 x 6800 | 5 | 25 | 1 | SA 240 | SA 269 | CODAP | 6,000 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 173 | Condenser Vertical | 60 | 4 | 758 x 3900 | 4 | 25 | 1 | SA 240 | SA 269 | CODAP | 1,600 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |
| 174 | Reboiler Vertical | 80 | 6 | 1058 x 3306 | 4 | 30 | 1 | SA 240 | SA 269 | CODAP | 2,700 | Madina Sugar Mills Ltd |
| | | | | | | | | TP 304L | TP 304L | | | |



PAST PERFORMANCE

CODED EQUIPMENT

| | | | | | | | | | | | | |
|-----|----------------------|----|---|------------|---|----|------------|-------------------|-------------------|-------|------------------|------------------------|
| 175 | Reboiler Vertical | 11 | 6 | 457 x 2900 | 3 | 30 | 1 | SA 240 TP 304L | SA 269 TP 304L | CODAP | 500 | Madina Sugar Mills Ltd |
| | Total | | | | | | 201 | | | | 2,753,095 | |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|--|--------------------|-----------------|-----------------|-------|----------|--------------|----------------------|-----------------|---|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 1 | Oxy Chlore Reator | 53 | | 3048 x 14350 | 20 | 1 | SA 516 GR.70 | ASME Sec. VIII DIV.1 | 95,000 | Engro Polymer Chemical Limited |
| 2 | LPG Storage Vessels (Bullets) | 25.5 | | 5000 x 53280 | 31 | 1 | SA 516 GR.70 | A D MERKBLATT | 244,274 | Engro Paktank Terminal (Main Contractor - Descon) |
| 3 | LPG Storage Vessels (Bullets) | 25.5 | | 5000 x 53280 | 31 | 1 | SA 516 GR.70 | A D MERKBLATT | 244,274 | Engro Paktank Terminal (Main Contractor - Descon) |
| 4 | Slip Stream Filter Vessels | 10 | | 2483 x 2000 | 12 | 6 | SA 285 GR. C | ASME Sec. VIII DIV.1 | 24,000 | Engro Chemical Pak Ltd Formerly "Exxon |
| | Dehydration Column | 0 | 20 | 934 x 11000 | 10 | 1 | SA 516 GR.70 | ASME Sec. VIII DIV.1 | 6,500 | National Refinery Limited |
| 5 | Stripping, Degassing, Concentration Column | 3 | 44 | 2415 x 27000 | 6, 8 | 1 | CODAP | SA 240 TP 316 L | 20,300 | CSK Distilleries Ltd |
| 6 | Stripping, Degassing, Concentration Column | 3 | 44 | 2415 x 27000 | 6, 8 | 1 | CODAP | SA 240 TP 316 L | 20,300 | Dewan Distilleries |
| 6 | Stripping, Degassing, Concentration Column | 3 | 44 | 2415 x 27000 | 6, 8 | 1 | CODAP | SA 240 TP 316 L | 20,300 | Premier Distilleries |
| 7 | Rectification Column | 3 | 68 | 2162 x 31300 | 6, 8 | 1 | CODAP | SA 240 TP 304 L | 18,700 | CSK Distilleries Ltd |
| 8 | Rectification Column | 3 | 68 | 2162 x 31300 | 6, 8 | 1 | CODAP | SA 240 TP 304 L | 18,700 | Dewan Distilleries |
| 8 | Rectification Column | 3 | 68 | 2162 x 31300 | 6, 8 | 1 | CODAP | SA 240 TP 304 L | 18,700 | Premier Distilleries |
| 9 | Boiler Feed Water Tank | 3 | | 3000 x 8500 | 10 | 2 | DIN H-II | A D MERKBLATT | 18,000 | Karachi Shipyard & Engg. Works |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|---|--------------------|-----------------|-----------------|--------|----------|----------|-----------------|-----------------|-----------------------|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 10 | Rectification Column | 3 | 68 | 2012 x 31300 | 6,8 | 1 | CODAP | SA 240 TP 304 L | 18,000 | Unicol (Pvt.) Ltd |
| 11 | Rectification Column | 3 | 68 | 2012 x 31300 | 6,8 | 1 | CODAP | SA 240 TP 304 L | 18,000 | Matol (Pvt.) Ltd |
| 11 | Rectification Column | 3 | 68 | 2012 x 31300 | 6,8 | 1 | CODAP | SA 240 TP 304 L | 18,000 | Unicol Phase II |
| 12 | Distillation Column With Degazine Section | 3 | | 2116 x 24900 | 6,8,10 | 1 | CODAP | SA 240 TP 316 L | 16,271 | Al Abbas Distilleries |
| 13 | Distillation Column With Degazine Section | 3 | | 2116 x 24900 | 6,8,10 | 1 | CODAP | SA 240 TP 316 L | 16,271 | Habib Distilleries |
| 14 | Rectifying Column | 3 | | 1862 x 30300 | 6 | 1 | CODAP | SA 240 TP 316 L | 16,200 | Al Abbas Distilleries |
| 15 | Rectifying Column | 3 | | 1862 x 30300 | 6 | 1 | CODAP | SA 240 TP 316 L | 16,200 | Habib Distilleries |
| 16 | Hydro selection Column | 3 | 50 | 1710 x 23130 | 5, 6 | 1 | CODAP | SA 240 TP 304 L | 11,000 | CSK Distilleries Ltd |
| 17 | Hydro selection Column | 3 | 50 | 1710 x 23130 | 5, 6 | 1 | CODAP | SA 240 TP 304 L | 11,000 | Dewan Distilleries |
| 17 | Hydro selection Column | 3 | 50 | 1710 x 23130 | 5, 6 | 1 | CODAP | SA 240 TP 304 L | 11,000 | Premier Distilleries |
| 18 | Refining Column | 3 | 50 | 1710 x 23050 | 5,6 | 1 | CODAP | SA 240 TP 304 L | 10,980 | CSK Distilleries Ltd |
| 19 | Refining Column | 3 | 50 | 1710 x 23050 | 5,6 | 1 | CODAP | SA 240 TP 304 L | 10,980 | Dewan Distilleries |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|------------------------|--------------------|-----------------|-----------------|-------|----------|--------------|---------------------|-----------------|---|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 19 | Refining Column | 3 | 50 | 1710 x 23050 | 5,6 | 1 | CODAP | SA 240 TP 304 L | 10,980 | Premier Distilleries |
| 20 | Hydro selection Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304 L | 10,600 | Unicol (Pvt.) Ltd |
| 21 | Refining Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304 L | 10,600 | Unicol (Pvt.) Ltd |
| 22 | Hydro selection Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304 L | 10,600 | Matol (Pvt.) Ltd |
| 23 | Refining Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304 L | 10,600 | Matol (Pvt.) Ltd |
| 22 | Hydro selection Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304 L | 10,600 | Unicol Phase II |
| 23 | Refining Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304 L | 10,600 | Unicol Phase II |
| 24 | Refining Column | 3 | | 1462 x 22700 | 6 | 1 | CODAP | SA 240 TP 316 L | 10,150 | Al Abbas Distilleries |
| 25 | Refining Column | 3 | | 1462 x 22700 | 6 | 1 | CODAP | SA 240 TP 316 L | 10,150 | Habib Distilleries |
| 26 | Hydroselection Column | 3 | | 1412 x 22700 | 6 | 1 | CODAP | SA 240 TP 316 L | 9,850 | Al Abbas Distilleries |
| 27 | Hydroselection Column | 3 | | 1412 x 22700 | 6 | 1 | CODAP | SA 240 TP 316 L | 9,850 | Habib Distilleries |
| 28 | Steam Saturation Drum | 37.5 | | 2000 x 4000 | 25 | 1 | SA 516 GR.70 | ASME V111 & BS 5500 | 9,650 | Engro Chemical Pak Ltd Formerly "Exxon |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|-------------------------|--------------------|-----------------|-----------------|-------|----------|---------------|----------------------|-----------------|--|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 29 | Steam Drum | 12 | | 2400 x 4400 | 14 | 1 | SA 516 GR.60 | ASME V111 & BS 5500 | 9,000 | Engro Chemical Pak Ltd Formerly "Exxon" |
| 30 | Air Storage Vessels | 10 | | 1600 x 6800 | 15 | 1 | SA 516 GR. 60 | ASME Sec. VIII DIV.1 | 8,100 | Futehally Chemicals (Pvt.) Ltd |
| 31 | Low grade Concentration | 3 | 33 | 1008 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,530 | CSK Distilleries Ltd |
| 32 | Low grade Concentration | 3 | 33 | 1008 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,530 | Dewan Distilleries |
| 32 | Low grade Concentration | 3 | 33 | 1008 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,530 | Premier Distilleries |
| 33 | Low grade Concentration | 3 | 33 | 1008 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,475 | CSK Distilleries Ltd |
| 34 | Low grade Concentration | 3 | 33 | 1008 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,475 | Dewan Distilleries |
| 34 | Low grade Concentration | 3 | 33 | 1008 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,475 | Premier Distilleries |
| 35 | Low grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,300 | Unicol (Pvt.) Ltd |
| 36 | Low grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,300 | Matol (Pvt.) Ltd |
| 36 | Low grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,300 | Unicol Phase II |
| 37 | Low grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,250 | Unicol (Pvt.) Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|--------------------------------|--------------------|-----------------|-----------------|-------|----------|--------------|----------------------|-----------------|--|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 38 | Low grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,250 | Matol (Pvt.) Ltd |
| 38 | Low grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304 L | 4,250 | Unicol Phase II |
| 39 | Cation Exchange Vessel | 10 | | 2483 x 2000 | 12 | 1 | SA 285 GR. C | ASME Sec. VIII DIV.1 | 4,000 | Engro Chemical Pak Ltd Formerly " Exxon " |
| 40 | Carbonation Vessel | 3.5 | | 3000 x 4810 | 6 | 1 | SA 240 316 L | ASME Sec. VIII DIV.1 | 3,984 | Futehally Chemicals (Pvt.) Ltd |
| 41 | Air Receiver Vessels | 18 | | 1500 x 2400 | 12 | 2 | SA 285 GR. C | ASME Sec. VIII DIV.1 | 3,900 | Futehally Chemicals (Pvt.) Ltd |
| 42 | Anion Exchange Vessel | 10 | | 2483 x 1524 | 12 | 1 | SA 285 GR. C | ASME Sec. VIII DIV.1 | 3,700 | Engro Chemical Pak Ltd Formerly " Exxon " |
| 43 | Low Grade Concentration Column | 3 | | 858 x 12900 | 4 | 1 | CODAP | SA 240 TP 316 L | 3,370 | Al Abbas Distilleries |
| 44 | Low Grade Concentration Column | 3 | | 858 x 12900 | 4 | 1 | CODAP | SA 240 TP 316 L | 3,370 | Al Abbas Distilleries |
| 45 | Low Grade Concentration Column | 3 | | 858 x 12900 | 4 | 1 | CODAP | SA 240 TP 316 L | 3,370 | Habib Distilleries |
| 46 | Low Grade Concentration Column | 3 | | 858 x 12900 | 4 | 1 | CODAP | SA 240 TP 316 L | 3,370 | Habib Distilleries |
| 47 | Steam Distributor | 42 | | 1800 x 3490 | 20 | 1 | SA 516 GR 70 | ASME Sec. VIII DIV.1 | 2,500 | Karachi Shipyard & Engg. Works |
| 48 | Condensate Receiver | 6 | | 1500 x 2500 | 11 | 1 | SA 285 GR. C | ASME Sec. VIII DIV.1 | 2,500 | Karachi Shipyard & Engg. Works |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|--|--------------------|-----------------|-----------------|-------|----------|------------------|-----------------|-----------------|--------------------------------|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 49 | Fusel Oil Decanter | 3 | | 1810 x 6500 | 5 | 1 | SA 240 TP 304 L | CODAP | 2,300 | Al Abbas Distilleries |
| 50 | Luther Column | 3 | 22 | 1008 x 9150 | 4 | 1 | CODAP | SA 240 TP 304 L | 2,100 | CSK Distilleries Ltd |
| 51 | Luther Column | 3 | 22 | 1008 x 9150 | 4 | 1 | CODAP | SA 240 TP 304 L | 2,100 | Dewan Distilleries |
| 51 | Luther Column | 3 | 22 | 1008 x 9150 | 4 | 1 | CODAP | SA 240 TP 304 L | 2,100 | Premier Distilleries |
| 52 | Luther Column | 3 | 22 | 958 x 9150 | 4 | 1 | CODAP | SA 240 TP 304 L | 2,000 | Unicol (Pvt.) Ltd |
| 53 | Luther Column | 3 | 22 | 958 x 9150 | 4 | 1 | CODAP | SA 240 TP 304 L | 2,000 | Matol (Pvt.) Ltd |
| 53 | Luther Column | 3 | 22 | 958 x 9150 | 4 | 1 | CODAP | SA 240 TP 304 L | 2,000 | Unicol Phase II |
| 54 | Stripping, Degassing, Concentration Column | 3 | 44 | 2312 x 27000 | 6,8 | 1 | CODAP | SA 240 TP 316 L | 1,880 | Unicol (Pvt.) Ltd |
| 55 | Stripping, Degassing, Concentration Column | 3 | 44 | 2312 x 27000 | 6,8 | 1 | CODAP | SA 240 TP 316 L | 1,880 | Matol (Pvt.) Ltd |
| 55 | Stripping, Degassing, Concentration Column | 3 | 44 | 2312 x 27000 | 6,8 | 1 | CODAP | SA 240 TP 316 L | 1,880 | Unicol Phase II |
| 56 | Lutter Column | 3 | | 858 x 9150 | 4 | 1 | CODAP | SA 240 TP 316 L | 1,840 | Al Abbas Distilleries |
| 57 | Lutter Column | 3 | | 858 x 9150 | 4 | 1 | CODAP | SA 240 TP 316 L | 1,840 | Habib Distilleries |
| 58 | High Pressure Surge Vessel | 190 | | 300 x 2500 | 18 | 3 | BS 1501 - 15126A | BS 5500 | 1,800 | Futehally Chemicals (Pvt.) Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|-------------------------------|--------------------|-----------------|-----------------|---------|----------|-----------------|----------------------|-----------------|---|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 59 | Co2 Washing Column | 1 | 12 | 1256 x 7500 | 3 | 1 | CODAP | SA 240 TP 304 L | 1,400 | CSK Distilleries Ltd |
| 60 | Co2 Washing Column | 1 | 12 | 1256 x 7500 | 3 | 1 | CODAP | SA 240 TP 304 L | 1,400 | Dewan Distilleries |
| 60 | Co2 Washing Column | 1 | 12 | 1256 x 7500 | 3 | 1 | CODAP | SA 240 TP 304 L | 1,400 | Premier Distilleries |
| 61 | Co2 Washing Column | 1 | 12 | 1100 x 7500 | 3 | 1 | CODAP | SA 240 TP 304 L | 1,300 | Unicol (Pvt.) Ltd |
| 62 | Co2 Washing Column | 1 | 12 | 1100 x 7500 | 3 | 1 | CODAP | SA 240 TP 304 L | 1,300 | Matol (Pvt.) Ltd |
| 62 | Co2 Washing Column | 1 | 12 | 1100 x 7500 | 3 | 1 | CODAP | SA 240 TP 304 L | 1,300 | Unicol Phase II |
| 63 | Low Pressure Vessels | 2 | | 1240 x 1800 | 6 | 2 | SA 240 316 L | ASME Sec. VIII DIV.1 | 1,200 | Futehally Chemicals (Pvt.) Ltd |
| 64 | Flashing Vessel | 2 | | 1288 x 3400 | 6 | 1 | SA 516 GR 60 | ASME Sec. VIII DIV.1 | 1,200 | Karachi Shipyard & Engg. Works |
| 65 | Ammonia Blow Case | 31 | | 914 x 2440 | 10 | 1 | SA 516 GR. 70 | ASME Sec. VIII DIV.1 | 1,150 | Fauji Jordan Fertilizer Co. |
| 66 | Condensate Receiver Vessel | 3 | | 686 x 1800 | 7 | 3 | SA 285 GR. C | ASME Sec. VIII DIV.1 | 1,000 | Karachi Shipyard & Engg. Works |
| 67 | Knock Out Drum | 80 | | 610 x 1200 | 25 & 90 | 1 | SA 240 TP 304 | ASME Sec. VIII DIV.1 | 950 | Engro Chemical Pak Ltd Formerly "Exxon" |
| 68 | Condensate And Reflux Vessels | 3 | | 500 x 1000 | 3 | 1 | SA 240 TP 304 L | CODAP | 800 | Al Abbas Distilleries |
| 69 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304 L | 650 | Unicol (Pvt.) Ltd |
| 70 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304 L | 650 | Matol (Pvt.) Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|---------------------------|--------------------|-----------------|-----------------|-------|----------|------------------|----------------------|-----------------|--------------------------------|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 70 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304 L | 650 | Unicol Phase II |
| 71 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304 L | 600 | CSK Distilleries Ltd |
| 72 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304 L | 600 | Dewan Distilleries |
| 72 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304 L | 600 | Premier Distilleries |
| 73 | Light Impurities Column | 3 | | 600 x 4450 | 3 | 1 | CODAP | SA 240 TP 304 L | 600 | Al Abbas Distilleries |
| 74 | Light Impurities Column | 3 | | 600 x 4450 | 3 | 1 | CODAP | SA 240 TP 304 L | 600 | Habib Distilleries |
| 75 | Pickup Filtrate Receiver | 3.5 | | 900 x 2500 | 6 | 1 | SA 285 GR. C | ASME Sec. VIII DIV.1 | 500 | Karachi Shipyard & Engg. Works |
| 76 | Wash Filtrate Receiver | 2 | | 900 x 2500 | 6 | 1 | SA 285 GR. C | ASME Sec. VIII DIV.1 | 500 | Karachi Shipyard & Engg. Works |
| 77 | Reactor Vessel | 8 | | 910 x 2120 | 6 | 1 | SA 240 316 L | ASME Sec. VIII DIV.1 | 480 | Futehally Chemicals (Pvt.) Ltd |
| 78 | Low Pressure Surge Vessel | 24 | | 150 x 1200 | 8 | 1 | BS 1501 - 15126A | BS 5500 | 350 | Futehally Chemicals (Pvt.) Ltd |
| 79 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304 L | 295 | CSK Distilleries Ltd |
| 80 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304 L | 295 | Dewan Distilleries |



PAST PERFORMANCE

CODED EQUIPMENT

PRESSURE VESSELS, COLUMNS AND REACTORS

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (mm) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|---------------------|--------------------|-----------------|-----------------|-------|----------|-----------------|-----------------|-----------------|-----------------------|
| | | | | SHELL | | | | | | |
| | | | | OD x LENGTH | THICK | | | | | |
| 80 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304 L | 295 | Premier Distilleries |
| 81 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304 L | 295 | Unicol (Pvt.) Ltd |
| 82 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304 L | 295 | Matol (Pvt.) Ltd |
| 82 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304 L | 295 | Unicol Phase II |
| 83 | Washing Column | 3 | | 406 x 3900 | 3 | 1 | CODAP | SA 240 TP 304 L | 290 | Al Abbas Distilleries |
| 84 | Washing Column | 3 | | 406 x 3900 | 3 | 1 | CODAP | SA 240 TP 304 L | 290 | Habib Distilleries |
| 85 | Oil Decanter Vessel | 2 | | 1700 x 2000 | 3 | 1 | SA 240 TP 304 L | CODAP | 200 | Al Abbas Distilleries |
| 86 | Condensate Vessel | 3 | | 300 x 700 | 3 | 1 | SA 240 TP 304 L | CODAP | 50 | Al Abbas Distilleries |
| 87 | Condensate Vessel | 2 | | 324 x 800 | 3 | 1 | SA 240 TP 304 L | CODAP | 40 | Al Abbas Distilleries |



PAST PERFORMANCE

PRESSURE VESSELS, COLUMNS AND REACTORS

CODED EQUIPMENT

| SR.# | EQUIPMENT | TEST PRESSURE BARS | TRAYS QTY. NOS. | DIMENSIONS (MM) | | QTY NOS. | MATERIAL | DESIGN CODE | TOTAL WEIGHT KG | CLIENT |
|------|--|--------------------|-----------------|-----------------|-------|----------|----------|----------------|-----------------|------------------------|
| | | | | SHELL | | | | | | |
| | | | | OD X LENGTH | THICK | | | | | |
| 88 | Rectification Column | 3 | 68 | 2012 x 31300 | 6,8 | 1 | CODAP | SA 240 TP 316L | 18,000 | Madina Sugar Mills Ltd |
| 89 | Hydro Selection Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304L | 10,600 | Madina Sugar Mills Ltd |
| 90 | Refining Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304L | 10,600 | Madina Sugar Mills Ltd |
| 91 | Low Grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304L | 4,300 | Madina Sugar Mills Ltd |
| 92 | Low Grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304L | 4,250 | Madina Sugar Mills Ltd |
| 93 | Luther Column | 3 | 22 | 958 x 9150 | 4 | 1 | CODAP | SA 240 TP 304L | 2,000 | Madina Sugar Mills Ltd |
| 94 | Stripping, Drgassing, Concentration Column | 3 | 44 | 2312 x 27000 | 6,8 | 1 | CODAP | SA 240 TP 304L | 1,880 | Madina Sugar Mills Ltd |
| 95 | Co2 Washing Column | 1 | 12 | 1100 x 7500 | 3 | 1 | CODAP | SA 240 TP 304L | 1,300 | Madina Sugar Mills Ltd |
| 96 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304L | 650 | Madina Sugar Mills Ltd |
| 97 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304L | 295 | Madina Sugar Mills Ltd |
| 98 | Rectification Column | 3 | 68 | 2012 x 31300 | 6,8 | 1 | CODAP | SA 240 TP 316L | 18,000 | Madina Sugar Mills Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

| | | | | | | | | | | |
|-----|--|---|----|--------------|-----|---|-------|----------------|--------|------------------------|
| 99 | Hydro Selection Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304L | 10,600 | Madina Sugar Mills Ltd |
| 100 | Refining Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304L | 10,600 | Madina Sugar Mills Ltd |
| 101 | Low Grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304L | 4,300 | Madina Sugar Mills Ltd |
| 102 | Low Grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304L | 4,250 | Madina Sugar Mills Ltd |
| 103 | Luther Column | 3 | 22 | 958 x 9150 | 4 | 1 | CODAP | SA 240 TP 304L | 2,000 | Madina Sugar Mills Ltd |
| 104 | Stripping, Drgassing, Concentration Column | 3 | 44 | 2312 x 27000 | 6,8 | 1 | CODAP | SA 240 TP 304L | 1,880 | Madina Sugar Mills Ltd |
| 105 | Co2 Washing Column | 1 | 12 | 1100 x 7500 | 3 | 1 | CODAP | SA 240 TP 304L | 1,300 | Madina Sugar Mills Ltd |
| 106 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304L | 650 | Madina Sugar Mills Ltd |
| 107 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304L | 295 | Madina Sugar Mills Ltd |
| 108 | Rectification Column | 3 | 68 | 2012 x 31300 | 6,8 | 1 | CODAP | SA 240 TP 316L | 18,000 | Madina Sugar Mills Ltd |
| 109 | Hydro Selection Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304L | 10,600 | Madina Sugar Mills Ltd |
| 110 | Refining Column | 3 | 50 | 1512 x 22950 | 6 | 1 | CODAP | SA 240 TP 304L | 10,600 | Madina Sugar Mills Ltd |
| 111 | Low Grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304L | 4,300 | Madina Sugar Mills Ltd |



PAST PERFORMANCE

CODED EQUIPMENT

| | | | | | | | | | | |
|-----|--|---|----|--------------|-----|------------|-------|----------------|------------------|------------------------|
| 112 | Low Grade Concentration | 3 | 33 | 958 x 13950 | 4 | 1 | CODAP | SA 240 TP 304L | 4,250 | Madina Sugar Mills Ltd |
| 113 | Luther Column | 3 | 22 | 958 x 9150 | 4 | 1 | CODAP | SA 240 TP 304L | 2,000 | Madina Sugar Mills Ltd |
| 114 | Stripping, Drgassing, Concentration Column | 3 | 44 | 2312 x 27000 | 6,8 | 1 | CODAP | SA 240 TP 304L | 1,880 | Madina Sugar Mills Ltd |
| 115 | Co2 Washing Column | 1 | 12 | 1100 x 7500 | 3 | 1 | CODAP | SA 240 TP 304L | 1,300 | Madina Sugar Mills Ltd |
| 116 | Light Impurities Column | 4 | 14 | 606 x 4650 | 3 | 1 | CODAP | SA 240 TP 304L | 650 | Madina Sugar Mills Ltd |
| 117 | Washing Column | 1 | | 406 x 4400 | 3 | 1 | CODAP | SA 240 TP 304L | 295 | Madina Sugar Mills Ltd |
| | Total | | | | | 150 | | | 1,362,174 | |



PAST PERFORMANCE

CODED EQUIPMENT

AIR COOLED HEAT EXCHANGERS

| SR.# | DESCRIPTION | QTY. NOS. | PRESSURE BARS | TUBES BUNDLE SIZES | | | TUBES TYPE | TUBES QTY. NOS. | MATERIAL GRADE | | DESIGN CODE | WEIGHT KG | CLIENT |
|--------------|--|-----------|---------------|--------------------|-------|-------|--------------|-----------------|----------------|-----------|-------------|----------------|-----------------------------|
| | | | | LENGTH | WIDTH | HIGHT | | | HEADERS | TUBES | | | |
| | | | | mm | mm | mm | | | | | | | |
| 1 | Cross Flow Heat Exchanger 01-EA-13 A | 1 | 5 | 9,142 | 2,668 | 352 | Finned Tubes | 240 | SA 516 Gr. 70 | A179/B209 | API 661 | 7,308 | National Refinery Ltd. |
| 2 | Cross Flow Heat Exchanger 01-EA-13 B | 1 | 5 | 9,142 | 2,668 | 352 | Finned Tubes | 240 | SA 516 Gr. 70 | A179/B209 | API 661 | 7,308 | National Refinery Ltd. |
| 3 | Air Cooled Cross Flow Heat Exchanger 101-EA-19 B | 1 | 5 | 10,260 | 1545 | 490 | Finned Tubes | 120 | SA 516 Gr. 70 | A179/B209 | API 661 | 4,675 | National Refinery Ltd. |
| 4 | Cross Flow Heat Exchanger 212-EA-02 | 1 | 44 | 9,000 | 1,242 | 480 | Finned Tubes | 108 | SA 516 Gr. 70 | A179/B209 | API 661 | 5,540 | National Refinery Ltd. |
| 5 | Cross Flow Heat Exchanger 212-EA-04 | 1 | 29 | 9,000 | 2,384 | 470 | Finned Tubes | 216 | SA 516 Gr. 70 | A179/B209 | API 661 | 9,156 | National Refinery Ltd. |
| 6 | Cross Flow Heat Exchanger 214-EA-09 A | 1 | 31 | 9,000 | 1,990 | 460 | Finned Tubes | 180 | SA 516 Gr. 70 | A179/B209 | API 661 | 7,457 | National Refinery Ltd. |
| 7 | Cross Flow Heat Exchanger 214-EA-09 B | 1 | 31 | 9,000 | 1,990 | 460 | Finned Tubes | 180 | SA 516 Gr. 70 | A179/B209 | API 661 | 7,457 | National Refinery Ltd. |
| 8 | Cross Flow Heat Exchanger 214-EA-09 C | 1 | 31 | 9,000 | 1,990 | 460 | Finned Tubes | 180 | SA 516 Gr. 70 | A179/B209 | API 661 | 7,457 | National Refinery Ltd. |
| 9 | Cross Flow Heat Exchanger 214-EA-09 D | 1 | 31 | 9,000 | 1,990 | 460 | Finned Tubes | 180 | SA 516 Gr. 70 | A179/B209 | API 661 | 7,457 | National Refinery Ltd. |
| 10 | Cross Flow Heat Exchanger 212-EA-01 A | 1 | 30 | 9,000 | 1,734 | 460 | Finned Tubes | 156 | SA 516 Gr. 70 | A179/B209 | API 661 | 6,788 | National Refinery Ltd. |
| 11 | Cross Flow Heat Exchanger 212-EA-01 B | 1 | 30 | 9,000 | 1,734 | 460 | Finned Tubes | 156 | SA 516 Gr. 70 | A179/B209 | API 661 | 6,788 | National Refinery Ltd. |
| 12 | Inter Stage Coolers For Air Compressor | 2 | 10 | 2,842 | 2,480 | 972 | Finned Tubes | 660 | A 283 Gr. C | Copper | API 661 | 17,500 | Pak Arab Fertilizer Multan |
| 13 | Cross Flow Air Cooler | 1 | 12 | 9,384 | 790 | 767 | Bare Tubes | 76 | SA 516 Gr. 70 | A 179 | API 661 | 4,500 | National Refinery Ltd |
| 14 | Air Heater | 4 | 8 | 1,500 | 500 | 302 | Finned Tubes | 50 | SA 516 Gr. 70 | A 179 | API 661 | 4,000 | Mirpur Khas Sugar Mills Ltd |
| Total | | 18 | | | | | | | | | | 103,391 | |



PAST PERFORMANCE

PROCESS EQUIPMENT

PROCESS EQUIPMENT

| S.R.# | DESCRIPTION | QTY NOS. | DIMENSIONS OD x LENGTH (mm) | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|-------|---|----------|-----------------------------|----------|-----------------|-------------------------------|
| 1 | VERTICAL CRYSTALLIZER 150 M ³ (225 TONS) | 8 | 4000 x 13000 | C.S | 320,000 | Habib Sugar Mills Ltd |
| 2 | VERTICAL CRYSTALLIZER 150 M ³ (225 TONS) | 2 | 4000 x 13000 | C.S | 80,000 | Mirpur Khas Sugar Mills Ltd |
| 3 | VERTICAL CRYSTALLIZER 175 M ³ (262 TONS) | 2 | 4500 x 11000 | C.S | 70,000 | Sadaf Agencies |
| 4 | VERTICAL CRYSTALLIZER 200 M ³ (300 TONS) | 2 | 4570 x 13000 | C.S | 80,000 | Al Noor Sugar Mills Ltd |
| 5 | VERTICAL CRYSTALLIZER 200 M ³ (300 TONS) | 2 | 5050 x 11000 | C.S | 80,000 | Army Welfare Sugar Mills Ltd |
| 6 | VERTICAL CRYSTALLIZER 200 M ³ (300 TONS) | 2 | 4570 x 13000 | C.S | 80,000 | Dewan Sugar Mills Ltd |
| 7 | AIR COOL CRYSTALLIZERS 40 M ³ | 2 | 3000 x 5500 | C.S | 26,500 | Thatta Sugar Mills Ltd |
| 8 | VACUUM CRYSTALLIZERS 30 M ³ | 1 | 2800 x 5000 | C.S | 9,000 | Asonix Industries (Pvt.) Ltd. |
| 9 | OPEN SEED CRYSTALLIZERS 45 M ³ | 2 | 2736 x 7500 | C.S | 21,880 | Asonix Industries (Pvt.) Ltd. |
| 10 | MULTI TRAYS CLARIFIER WITH CENTRAL AGITATOR | 3 | 8000 x 6000 | C.S | 157,500 | Habib Sugar Mills Ltd |
| 11 | MULTI TRAYS CLARIFIER WITH CENTRAL AGITATOR | 1 | 8000 x 6500 | C.S | 60,000 | Faran Sugar Mills Ltd |
| 12 | S.R.I. CLARIFIER | 2 | 5400 x 6813 | C.S | 70,000 | Habib Sugar Mills Ltd |
| 13 | S.R.I. CLARIFIER | 1 | 5400 x 6813 | C.S | 35,000 | JDW Sugar Mills Ltd |
| 14 | BAROMETRIC CONDENCER | 1 | 1000 x 4000 | C.S | 1,400 | Karachi Shipyard & Engg Works |



PAST PERFORMANCE

PROCESS EQUIPMENT

PROCESS EQUIPMENT

| S.R.# | DESCRIPTION | QTY NOS. | DIMENSIONS OD x LENGTH (mm) | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|-------|---|----------|-----------------------------|---------------|-----------------|---|
| 15 | CONDENSER | 1 | 1200 x 4400 | C.S | 1,800 | Sind Abadgar's Sugar Mills Ltd |
| 16 | WATER JET CONDENSER CAPACITY 24 TONS VAPOR / HOUR WITH S.S.NOZZLES. | 3 | 2400 x 4162 | C.S | 15,500 | Habib Sugar Mills Ltd |
| 17 | RAIN & SHOWER TYPE CONDENSER | 3 | 1400 x 5655 | C.S | 18,300 | Habib Sugar Mills Ltd |
| 18 | MULTI JET CONDENSER | 1 | 2400 x 4162 | C.S | 5,167 | Pakistan Industrial Development Corporation |
| 19 | CASCADE CONDENSER | 1 | 1000 x 3500 | C.S | 4,000 | Asonix Industries (Pvt.) Ltd. |
| 20 | JET CONDENSER | 8 | 2000 x 3650 | C.S | 30,000 | Asonix Industries (Pvt.) Ltd. |
| 21 | BAROMETRIC CONDENSER WITH AIR / WATER SEPARATOR | 1 | 1660 x 4000 | C.S | 6,220 | Mirpur Khas Sugar Mills Ltd |
| 22 | CO ₂ GAS SCRUBBER | 1 | 1000 x 1000 | C.S | 900 | Karachi Shipyard & Engg Works |
| 23 | CO ₂ GAS SCRUBBER | 3 | 910 x 4900 | SA 240 TP 304 | 3,000 | Habib Sugar Mills Ltd |
| 24 | CYCLONE | 1 | 1900 x 6000 | C.S | 3,000 | Baluchistan Sugar Mills Ltd |
| 25 | WET DUST CATCHER | 1 | 1500 x 2312 | C.S | 920 | Sind Abadgar's Sugar Mills Ltd |
| 26 | CYCLONE BAGACILLO SEPARATOR | 1 | 1400 x 9350 | C.S | 1,740 | Sind Abadgar's Sugar Mills Ltd |
| 27 | CYCLONE BAGACILLO SEPARATOR & DUCTING | 1 | 1550 x 9500 | C.S | 3,215 | Karachi Shipyard & Engg Works |
| 28 | FLUE GAS DUST COLLECTOR CYCLONE | 1 | 3000 x 6300 | C.S | 6,000 | Mirpur Khas Sugar Mills Ltd |



PAST PERFORMANCE

PROCESS EQUIPMENT

PROCESS EQUIPMENT

| S.R.# | DESCRIPTION | QTY NOS. | DIMENSIONS OD x LENGTH (mm) | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|-------|-------------|----------|-----------------------------|----------|-----------------|--------|
|-------|-------------|----------|-----------------------------|----------|-----------------|--------|

FILTERS AND SCREENS

| | | | | | | |
|---|------------------------------|---|-------------|----------------|--------|-------------------------------|
| 1 | HEAD BOX FRAME OF DSM SCREEN | 2 | 2000 x 3000 | SA 240 TP 304. | 8,400 | Karachi Shipyard & Eng. Works |
| 2 | BAGACILLO SCREEN WITH HOPPER | 1 | 1000 x 1500 | C.S. | 400 | Karachi Shipyard & Eng. Works |
| 3 | DRY SUGAR VIBRATING SCREEN | 1 | 2000 x 4000 | C.S. | 2,800 | Karachi Shipyard & Eng. Works |
| 4 | SAND BED FILTER | 3 | 5000 x 6000 | C.S. | 30,000 | Habib Sugar Mills Ltd |
| 5 | HEAD BOX FRAME OF DSM SCREEN | 3 | 2000 x 3000 | C.S. | 3,000 | Mirpur Khas Sugar Mills Ltd |
| 6 | ROTARY SCREEN | 1 | 2500 x 4000 | SA 240 TP 304. | 3,000 | Habib Sugar Mills Ltd |



PAST PERFORMANCE

PROCESS EQUIPMENT

PROCESS EQUIPMENT

| S.R.# | DESCRIPTION | QTY NOS. | DIMENSIONS OD x LENGTH (mm) | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|-------|-------------|----------|-----------------------------|----------|-----------------|--------|
|-------|-------------|----------|-----------------------------|----------|-----------------|--------|

MIXERS

| | | | | | | |
|----|-------------------------------|---|------------------|---------------|--------|---------------------------------|
| 1 | MAGMA MIXER 7 M ³ | 1 | 1500 x 4000 | C.S. | 5,840 | Karachi Shipyard & Eng. Works |
| 2 | MAGMA MIXER 14 M ³ | 1 | 1750 x 5800 | C.S. | 8,500 | Karachi Shipyard & Eng. Works |
| 3 | MAGMA MIXER 21 M ³ | 1 | 2000 x 6500 | C.S. | 9,500 | Karachi Shipyard & Eng. Works |
| 4 | MUD MIXER | 1 | 1500 x 3500 | C.S. | 1,500 | Karachi Shipyard & Eng. Works |
| 5 | MASSECCUTTE FEEDER MIXER | 1 | 1400 x 4000 | C.S. | 8,500 | Karachi Shipyard & Eng. Works |
| 6 | MASSECCUTTE DILUTER | 2 | 550 x 2650 | C.S. | 1,500 | Karachi Shipyard & Eng. Works |
| 7 | PUG MILL "U" SHAPED | 1 | 1000 x 5500 | C.S. | 2,565 | Mirpur Khas Sugar Mills Ltd |
| 8 | MELTER | 1 | 2000 x 4300 | C.S. | 3,550 | Mirpur Khas Sugar Mills Ltd |
| 9 | FEED MIXER | 1 | 960 x 5200 | C.S. | 2,894 | Tsukishima Kikai Co. Ltd. Japan |
| 10 | CONTINUOUS MELTER | 1 | 2400 x 8000 | C.S. | 9,720 | Habib Sugar Mills Ltd |
| 11 | SIGMA MIXER | 4 | 1 M ³ | SA 240 TP 304 | 8,000 | B.P. Industries (Pvt.) Ltd |
| 12 | A/B MAGMA MINGLER | 4 | 1200 x 3500 | C.S. | 24,000 | Asonix Industries (Pvt.) Ltd |
| 13 | C REMELTER | 1 | 1500 x 4000 | C.S. | 6,500 | Asonix Industries (Pvt.) Ltd |
| 14 | REMELTER 12 M ³ | 1 | 2000 x 4500 | C.S. | 5,100 | Asonix Industries (Pvt.) Ltd |
| 15 | REMELTER 4 M ³ | 4 | 1000 x 3500 | C.S. | 2,385 | Asonix Industries (Pvt.) Ltd |



PAST PERFORMANCE

PROCESS EQUIPMENT

PROCESS EQUIPMENT

| S.R.# | DESCRIPTION | QTY NOS. | DIMENSIONS OD x LENGTH (mm) | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|-------|-------------|----------|-----------------------------|----------|-----------------|--------|
|-------|-------------|----------|-----------------------------|----------|-----------------|--------|

PRESSURE FILTERS AND REACTORS

| | | | | | | |
|---|--|---|-------------|------------------------------|---------|---|
| 1 | ROTARY PRESURE FILTERS 120 M ² Test Pressure = 5 Bars | 9 | 1800 x 4000 | C. S. | 135,000 | Habib Sugar Mills Ltd |
| 2 | ROTARY PRESURE FILTERS 120 M ² Test Pressure = 5 Bars | 2 | 1801 x 4000 | C. S. | 30,000 | Dewan Sugar Mills Ltd |
| 3 | ROTARY PRESURE FILTERS 120 M ² Test Pressure = 5 Bars | 2 | 1802 x 4000 | C. S. | 30,000 | Fauji Sugar Mills Ltd |
| 4 | ROTARY PRESURE FILTERS 120 M ² Test Pressure = 5 Bars | 2 | 1803 x 4000 | C. S. | 30,000 | Larr Sugar Mills Ltd |
| 5 | ROTARY PRESURE FILTERS 120 M ² Test Pressure = 5 Bars | 2 | 1804 x 4000 | C. S. | 30,000 | Tharparkar Sugar Mills Ltd |
| 6 | STEAM JACKETED REACTOR WITH STIRRER | 1 | 3000 x 4000 | A 240 TP 316 L / C.S. Jacket | 4,200 | (Urea Formaldehyde Plant) Baluchistan Particle Board Ltd. |

VACUUM FILTERS

| | | | | | | |
|---|--|------------|-------------|---------------------|------------------|-----------------------|
| 1 | ROTARY DRUM VACUUM FILTERS 60 M ² | 6 | 3000 x 6000 | A 240 TP 304 / C.S. | 135,000 | Habib Sugar Mills Ltd |
| 2 | ROTARY DRUM VACUUM FILTERS 60 M ² | 1 | 3000 x 6000 | A 240 TP 304 / C.S. | 30,000 | Dewan Sugar Mills Ltd |
| | Total | 119 | | | 1,762,896 | |



PAST PERFORMANCE

BOILER PARTS

BOILER PARTS AND ACCESSORIES

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|--|----------|---------------|-----------------|------------------------------------|
| 1 | STEAM DISTRIBUTION HEADER | 1 | SA 516 GR. 70 | 2,500 | Karachi Shipyard & Eng.. Works Ltd |
| 2 | BOILER CASING | 2 | SA 516 GR. 60 | 28,500 | Karachi Shipyard & Eng.. Works Ltd |
| 3 | ASH DISCHARGE HOPPERS | 8 | SA 285 GR. C | 8,000 | Karachi Shipyard & Eng.. Works Ltd |
| 4 | STACKS (CHIMNEY) | 2 | SA 285 GR. C | 40,000 | Karachi Shipyard & Eng.. Works Ltd |
| 5 | DUCT BETWEEN SECONDARY FAN & DISTRIBUTION | 2 | SA 285 GR. C | 6,000 | Karachi Shipyard & Eng.. Works Ltd |
| 6 | DUCT BETWEEN SECONDARY FAN & DUMPING GRATE THROUGH AIR HEATER | 2 | SA 285 GR. C | 8,000 | Karachi Shipyard & Eng.. Works Ltd |
| 7 | DUCT BETWEEN SECONDARY FAN, AIR NOZZLE AND SOOT COLLECTION BOXES | 2 | SA 285 GR. C | 8,000 | Karachi Shipyard & Eng.. Works Ltd |
| 8 | CONTROL DAMPER FOR PRIMARY & SECONDARY AIR FAN | 2 | SA 285 GR. C | 9,000 | Karachi Shipyard & Eng.. Works Ltd |
| 9 | FLUE GAS & AIR DUCT | 2 | SA 285 GR. C | 1,600 | Karachi Shipyard & Eng.. Works Ltd |
| 10 | DUCT BETWEEN FUEL AIR FAN & BURNERS | 2 | SA 285 GR. C | 2,000 | Karachi Shipyard & Eng.. Works Ltd |
| 11 | FLUE GAS DUCT BETWEEN BOILER & DUST COLLECTOR | 2 | SA 285 GR. C | 5,000 | Karachi Shipyard & Eng.. Works Ltd |
| 12 | FLUE GAS DUCT BETWEEN DUST COLLECTOR & AIR HEATER | 2 | SA 285 GR. C | 14,000 | Karachi Shipyard & Eng.. Works Ltd |
| 13 | FLUE GAS DUCT BETWEEN DUST COLLECTOR & INDUCED DRAFT FAN | 2 | SA 285 GR. C | 2,400 | Karachi Shipyard & Eng.. Works Ltd |
| 14 | FLUE GAS DUCT BETWEEN ID FAN & STACK | 2 | SA 285 GR. C | 8,000 | Karachi Shipyard & Eng.. Works Ltd |



PAST PERFORMANCE

BOILER PARTS

BOILER PARTS AND ACCESSORIES

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|---|-----------|--------------|-----------------|------------------------------------|
| 15 | WALKWAYS, STAIRS & RAILING WITH SUPPORTING COLUMNS AROUND MAIN BOILER AT 3 LEVELS, FEEDERS LEVEL, AIR HEATER & DUST COLLECTOR LEVEL | 2 | ST 37 | 104,000 | Karachi Shipyard & Eng.. Works Ltd |
| 16 | SUPPOIRING STRUCTURE & WALKWAY, LADDER & RAILING FOR FEED WATER TANKS | 2 | ST 37 | 10,500 | Karachi Shipyard & Eng.. Works Ltd |
| 17 | BOILER DRUM LIFTING BEAMS | 2 | ST 37 | 10,000 | Karachi Shipyard & Eng.. Works Ltd |
| 18 | ALL DUCTS FOR BOILER, CONTROL DAMPER FOR PRIMARY & SECRONDARY FAN | 2 | SA 285 GR. C | 110,000 | Karachi Shipyard & Eng.. Works Ltd |
| 19 | EXPANSION JOINTS & DUCTS | 2 | H II | 6,500 | Habib Sugar Mills Ltd |
| 20 | CONNECTION BRIDGE BETWEEN BOILER AND STACK | 2 | ST 37 | 5,000 | Habib Sugar Mills Ltd |
| 21 | BOLIER PASS HOPPER | 1 | SA 285 GR. C | 8,000 | Sind Abadgar's Sugar Mills Ltd |
| 22 | FLUE GAS PIPE BOW SHAPED CONNECTIONS, CONES, BENDS, REGULATION FLAP, SUPPORTS AND COMPLETE FLUE GAS DUCTIONG FRAME DAMPER FROM BOILER I.D.FAN | 1 | H II & ST 37 | 15,000 | Habib Sugar Mills Ltd |
| | Total | 47 | | 412,000 | |



PAST PERFORMANCE

DRYERS

DRYERS

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|--|----------|-------------------------------|-----------------|------------------------------|
| 1 | FLUID BED DRYER, AIR HEATER, DRY CYCLONE, WET CYCLONE, AND DRIVE | 1 | SA 240 TP 304 | 18,000 | Karachi Shipyard & Eng Works |
| 2 | COUNTER FLOW FLUE GASES DRYER | 1 | H II | 60,000 | Fauji Sugar Mills Khoski |
| 3 | COUNTER FLOW FLUE GASES DRYER | 1 | H II | 65,000 | Habib Sugar Mills Ltd |
| 4 | ROTARY DRYER WITH INTERNAL HEATING ELEMENTS FOR HOT OIL | 1 | SA 516 GR. 60 & SA 179 | 75,000 | Baluchistan Particle Board |
| 5 | ROTARY SILICA SAND DRYER WITH EXTERNAL JACKET FOR STEAM | 1 | SA 516 GR. 60 & SA 240 TP 304 | 20,000 | Hub Domestic |
| | Total | 5 | | 238,000 | |



PAST PERFORMANCE

TANKS

TANKS (SHOP FABRICATED)

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|--------------------------------------|----------|----------------|-----------------|--------------------------------|
| 1 | Syrup & Molasses Tanks | 4 | SA 283 GR. C | 46,000 | Karachi Shipyard & Eng. Works |
| 2 | Water Tank 50 M ³ | 2 | SA 283 GR. C | 5,650 | Karachi Shipyard & Eng. Works |
| 3 | Clarified Juice Tank | 1 | SA 283 GR. C | 5,000 | Karachi Shipyard & Eng. Works |
| 4 | Continuous Wash Tank | 1 | SA 283 GR. C | 5,000 | Karachi Shipyard & Eng. Works |
| 5 | Screened-Off Collecting Tank | 1 | SA 283 GR. C | 5,000 | Sind Abadgar's Sugar Mills Ltd |
| 6 | Re-Melt Buffer Tank | 1 | SA 283 GR. C | 4,600 | Karachi Shipyard & Eng. Works |
| 7 | Heated Carbonated Re-Melt Tank | 1 | SA 283 GR. C | 4,500 | Karachi Shipyard & Eng. Works |
| 8 | Condensate Receiving Tank | 2 | SA 283 GR. C | 4,400 | Sind Abadgar's Sugar Mills Ltd |
| 9 | Sulphuric Acid Tank | 1 | A 283 Gr C | 4,000 | CSK Distilleries Ltd. |
| 10 | Sulphuric Acid Tank | 1 | A 283 Gr C | 4,000 | Dewan Distilleries |
| 11 | Sulphuric Acid Tank | 1 | A 283 Gr C | 4,000 | Matol (Pvt.) Ltd |
| 12 | Sulphuric Acid Tank | 1 | A 283 Gr C | 4,000 | Unicol (Pvt.) Ltd |
| 13 | Sulphuric Acid Tank | 1 | A 283 Gr C | 4,000 | Habib Distilleries |
| 14 | Sulphuric Acid Tank | 1 | A 283 Gr C | 4,000 | Al Abbas Distilleries |
| 15 | Molasses Tank 30 M ³ Each | 4 | SA 283 GR. C | 4,000 | Karachi Shipyard & Eng. Works |
| 16 | Milk Of Lime Storage Tank | 2 | SA 283 GR. C | 4,000 | Sind Abadgar's Sugar Mills Ltd |
| 17 | Coagulant Solution Tank | 1 | SA 283 GR. C | 3,400 | Sind Abadgar's Sugar Mills Ltd |
| 18 | Filtered Remelt Tank | 1 | SA 283 GR. C | 3,200 | Karachi Shipyard & Eng. Works |
| 19 | Oil Service Tank | 1 | SA 283 GR. C | 3,200 | Karachi Shipyard & Eng. Works |
| 20 | Carbonated Buffer Tank | 1 | SA 283 GR. C | 3,100 | Karachi Shipyard & Eng. Works |
| 21 | Soda Tank | 1 | A 240 TP 304 L | 3,000 | CSK Distilleries Ltd. |
| 22 | CIP Tank | 1 | A 240 TP 304 L | 3,000 | CSK Distilleries Ltd. |
| 23 | Soda Tank | 1 | A 240 TP 304 L | 3,000 | Dewan Distilleries |
| 24 | CIP Tank | 1 | A 240 TP 304 L | 3,000 | Dewan Distilleries |
| 25 | Soda Tank | 1 | A 240 TP 304 L | 3,000 | Matol (Pvt.) Ltd |
| 26 | CIP Tank | 1 | A 240 TP 304 L | 3,000 | Matol (Pvt.) Ltd |
| 27 | Soda Tank | 1 | A 240 TP 304 L | 3,000 | Unicol (Pvt.) Ltd |
| 28 | CIP Tank | 1 | A 240 TP 304 L | 3,000 | Unicol (Pvt.) Ltd |
| 29 | Soda Tank | 1 | A 240 TP 304 L | 3,000 | Habib Distilleries |
| 30 | CIP Tank | 1 | A 240 TP 304 L | 3,000 | Habib Distilleries |
| 31 | Soda Tank | 1 | A 240 TP 304 L | 3,000 | Al Abbas Distilleries |



PAST PERFORMANCE

TANKS

TANKS (SHOP FABRICATED)

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|-------------------------------------|----------|----------------|-----------------|--------------------------------|
| 32 | CIP Tank | 1 | A 240 TP 304 L | 3,000 | Al Abbas Distilleries |
| 33 | Caustic Soda Tank | 1 | SA 240 TP 304 | 3,000 | Karachi Shipyard & Eng. Works |
| 34 | Mud Over Flow Tank | 1 | SA 283 GR. C | 2,700 | Karachi Shipyard & Eng. Works |
| 35 | M.O.L. Tank | 2 | SA 283 GR. C | 2,500 | Karachi Shipyard & Eng. Works |
| 36 | Receiving Tank | 1 | SA 283 GR. C | 2,500 | Sind Abadgar's Sugar Mills Ltd |
| 37 | Limed Juice Retention Tank | 1 | SA 283 GR. C | 2,400 | Sind Abadgar's Sugar Mills Ltd |
| 38 | Separator (spent feints) | 1 | A 240 TP 304 L | 2,300 | CSK Distileries Ltd. |
| 39 | Separator (spent feints) | 1 | A 240 TP 304 L | 2,300 | Dewan Distileries |
| 40 | Separator (spent feints) | 1 | A 240 TP 304 L | 2,300 | Matol (Pvt.) Ltd |
| 41 | Separator (spent feints) | 1 | A 240 TP 304 L | 2,300 | Unicol (Pvt.) Ltd |
| 42 | Separator (spent feints) | 1 | A 240 TP 304 L | 2,300 | Habib Distilleries |
| 43 | Separator (spent feints) | 1 | A 240 TP 304 L | 2,300 | Al Abbas Distilleries |
| 44 | Casuticsoda Tank | 1 | SA 283 GR. C | 2,300 | Karachi Shipyard & Eng. Works |
| 45 | Tanks For Water Softening Equipment | 1 | SA 283 GR. C | 2,300 | Karachi Shipyard & Eng. Works |
| 46 | Weighed Tank | 2 | SA 283 GR. C | 2,100 | Karachi Shipyard & Eng. Works |
| 47 | Diesel Oil Tan Kcapacity 12000 Ltrs | 1 | SA 283 GR. C | 2,000 | Alson Autos (Pvt.) Ltd |
| 48 | Mud Overflow Tank | 1 | SA 283 GR. C | 1,985 | Sind Abadgar's Sugar Mills Ltd |
| 49 | Lime Mixing Tank | 1 | SA 283 GR. C | 1,850 | Sind Abadgar's Sugar Mills Ltd |
| 50 | Knock-Out Drum | 4 | A240 TP 304L | 1,536 | Unicol Limited |
| 51 | Vacuum Breaker | 4 | A240 TP 304L | 1,868 | Unicol Limited |
| 52 | Diesel Oil Tan Kcapacity 6000 Ltrs | 1 | SA 283 GR. C | 1,662 | Alson Autos (Pvt.) Ltd |
| 53 | Whirler Tank | 1 | SA 283 GR. C | 1,570 | Mirpur Khas Sugar Mills Ltd. |
| 54 | Screen Tank | 1 | SA 240 TP 305 | 1,500 | Karachi Shipyard & Eng. Works |
| 55 | Coagulant Stirrer Tank | 1 | SA 283 GR. C | 1,490 | Sind Abadgar's Sugar Mills Ltd |
| 56 | Receiving Tank | 3 | SA 283 GR. C | 1,333 | Karachi Shipyard & Eng. Works |
| 57 | Flash Tank | 1 | SA 283 GR. C | 1,300 | Karachi Shipyard & Eng. Works |
| 58 | Filtrate Receiver | 1 | SA 283 GR. C | 1,200 | Sind Abadgar's Sugar Mills Ltd |
| 59 | Flash Tank | 1 | SA 283 GR. C | 1,150 | Sind Abadgar's Sugar Mills Ltd |
| 60 | Nutrient Tank | 1 | A 240 TP 304 L | 1,000 | CSK Distileries Ltd. |
| 61 | Germicide Tank | 1 | A 240 TP 304 L | 1,000 | CSK Distileries Ltd. |
| 62 | Floculant Tank | 1 | A 240 TP 304 L | 1,000 | CSK Distileries Ltd. |



PAST PERFORMANCE

TANKS

TANKS (SHOP FABRICATED)

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|---------------------------|----------|----------------|-----------------|-------------------------------|
| 63 | Nutrient Tank | 1 | A 240 TP 304 L | 1,000 | Dewan Distileries |
| 64 | Germicide Tank | 1 | A 240 TP 304 L | 1,000 | Dewan Distileries |
| 65 | Floculant Tank | 1 | A 240 TP 304 L | 1,000 | Dewan Distileries |
| 66 | Nutrient Tank | 1 | A 240 TP 304 L | 1,000 | Matol (Pvt.) Ltd |
| 67 | Germicide Tank | 1 | A 240 TP 304 L | 1,000 | Matol (Pvt.) Ltd |
| 68 | Floculant Tank | 1 | A 240 TP 304 L | 1,000 | Matol (Pvt.) Ltd |
| 69 | Nutrient Tank | 1 | A 240 TP 304 L | 1,000 | Unicol (Pvt.) Ltd |
| 70 | Germicide Tank | 1 | A 240 TP 304 L | 1,000 | Unicol (Pvt.) Ltd |
| 71 | Floculant Tank | 1 | A 240 TP 304 L | 1,000 | Unicol (Pvt.) Ltd |
| 72 | Nutrient Tank | 1 | A 240 TP 304 L | 1,000 | Habib Distilleries |
| 73 | Germicide Tank | 1 | A 240 TP 304 L | 1,000 | Habib Distilleries |
| 74 | Floculant Tank | 1 | A 240 TP 304 L | 1,000 | Habib Distilleries |
| 75 | Nutrient Tank | 1 | A 240 TP 304 L | 1,000 | Al Abbas Distilleries |
| 76 | Germicide Tank | 1 | A 240 TP 304 L | 1,000 | Al Abbas Distilleries |
| 77 | Floculant Tank | 1 | A 240 TP 304 L | 1,000 | Al Abbas Distilleries |
| 78 | Mixing Tank | 1 | SA 283 GR. C | 1,000 | Karachi Shipyard & Eng. Works |
| 79 | Condensates Tanks | 9 | A 240 TP 304 L | 965 | CSK Distileries Ltd. |
| 80 | Condensates Tanks | 9 | A 240 TP 304 L | 965 | Dewan Distileries |
| 81 | Floculant Tank | 1 | A 240 TP 304 L | 900 | CSK Distileries Ltd. |
| 82 | Floculant Tank | 1 | A 240 TP 304 L | 900 | Dewan Distileries |
| 83 | Pre Coat Preparation Tank | 2 | SA 283 GR. C | 850 | Karachi Shipyard & Eng. Works |
| 84 | Condensates Tanks | 9 | A 240 TP 304 L | 765 | Matol (Pvt.) Ltd |
| 85 | Condensates Tanks | 9 | A 240 TP 304 L | 765 | Unicol (Pvt.) Ltd |
| 86 | Condensates Tanks | 9 | A 240 TP 304 L | 765 | Habib Distilleries |
| 87 | Condensates Tanks | 9 | A 240 TP 304 L | 765 | Al Abbas Distilleries |



PAST PERFORMANCE

TANKS

TANKS (SHOP FABRICATED)

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|--------------------------------------|----------|----------------|-----------------|---------------------------------|
| 88 | Floculant Tank | 1 | A 240 TP 304 L | 700 | Matol (Pvt.) Ltd |
| 89 | Floculant Tank | 1 | A 240 TP 304 L | 700 | Unicol (Pvt.) Ltd |
| 90 | Floculant Tank | 1 | A 240 TP 304 L | 700 | Habib Distilleries |
| 91 | Floculant Tank | 1 | A 240 TP 304 L | 700 | Al Abbas Distilleries |
| 92 | Condensate Trap Bottle | 4 | A240 TP 304L | 568 | Unicol Limited |
| 93 | Priming Pot | 2 | A240 TP 304L | 174 | Unicol Limited |
| 94 | Over Flow Bottle | 4 | A240 TP 304L | 200 | Unicol Limited |
| 95 | Diesel Storage Tank | 1 | SA 283 GR. C | 650 | Siemens Pakistan Engg. Co. Ltd. |
| 96 | Mash Tank | 1 | A 240 TP 316 L | 620 | CSK Distileries Ltd. |
| 97 | Mash Tank | 1 | A 240 TP 316 L | 620 | Dewan Distileries |
| 98 | Mash Tank | 1 | A 240 TP 316 L | 620 | Matol (Pvt.) Ltd |
| 99 | Mash Tank | 1 | A 240 TP 316 L | 620 | Unicol (Pvt.) Ltd |
| 100 | Mash Tank | 1 | A 240 TP 316 L | 620 | Habib Distilleries |
| 101 | Mash Tank | 1 | A 240 TP 316 L | 620 | Al Abbas Distilleries |
| 102 | M.O.L. Distribution Tank | 1 | SA 283 GR. C | 500 | Karachi Shipyard & Eng. Works |
| 103 | Diesel Fuel Tank 300 Liters Capacity | 1 | SA 283 GR. C | 500 | Karachi Shipyard & Eng. Works |
| 104 | Condensate Tank | 1 | A 240 TP 304 L | 320 | CSK Distileries Ltd. |
| 105 | Condensate Tank | 1 | A 240 TP 304 L | 320 | Dewan Distileries |
| 106 | Condensate Tank | 1 | A 240 TP 304 L | 320 | Matol (Pvt.) Ltd |
| 107 | Condensate Tank | 1 | A 240 TP 304 L | 320 | Unicol (Pvt.) Ltd |
| 108 | Condensate Tank | 1 | A 240 TP 304 L | 320 | Habib Distilleries |
| 109 | Condensate Tank | 1 | A 240 TP 304 L | 320 | Al Abbas Distilleries |
| 110 | Fusel Oil Decanter | 1 | A 240 TP 316 L | 200 | CSK Distileries Ltd. |
| 111 | Fusel Oil Decanter | 1 | A 240 TP 316 L | 200 | Dewan Distileries |
| 112 | Fusel Oil Decanter | 1 | A 240 TP 316 L | 200 | Matol (Pvt.) Ltd |
| 113 | Fusel Oil Decanter | 1 | A 240 TP 316 L | 200 | Unicol (Pvt.) Ltd |
| 114 | Fusel Oil Decanter | 1 | A 240 TP 316 L | 200 | Habib Distilleries |
| 115 | Fusel Oil Decanter | 1 | A 240 TP 316 L | 200 | Al Abbas Distilleries |
| 116 | Condensates Tank | 1 | A 240 TP 304 L | 50 | CSK Distileries Ltd. |
| 117 | Condensates Tank | 1 | A 240 TP 304 L | 50 | Dewan Distileries |



PAST PERFORMANCE

TANKS

TANKS (SHOP FABRICATED)

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|------------------------|------------|----------------|-----------------|-----------------------|
| 118 | Condensates Tank | 1 | A 240 TP 304 L | 50 | Matol (Pvt.) Ltd |
| 119 | Condensates Tank | 1 | A 240 TP 304 L | 50 | Unicol (Pvt.) Ltd |
| 120 | Condensates Tank | 1 | A 240 TP 304 L | 50 | Habib Distilleries |
| 121 | Condensates Tank | 1 | A 240 TP 304 L | 50 | Al Abbas Distilleries |
| 122 | Low Grade Alcohal tank | 1 | A 240 TP 304 L | 6 | CSK Distileries Ltd. |
| 123 | Superfine Alcohal Tank | 1 | A 240 TP 304 L | 6 | CSK Distileries Ltd. |
| 124 | Low Grade Alcohal tank | 1 | A 240 TP 304 L | 6 | Dewan Distileries |
| 125 | Superfine Alcohal Tank | 1 | A 240 TP 304 L | 6 | Dewan Distileries |
| 126 | Low Grade Alcohal tank | 1 | A 240 TP 304 L | 6 | Matol (Pvt.) Ltd |
| 127 | Superfine Alcohal Tank | 1 | A 240 TP 304 L | 6 | Matol (Pvt.) Ltd |
| 128 | Low Grade Alcohal tank | 1 | A 240 TP 304 L | 6 | Unicol (Pvt.) Ltd |
| 129 | Superfine Alcohal Tank | 1 | A 240 TP 304 L | 6 | Unicol (Pvt.) Ltd |
| 130 | Low Grade Alcohal tank | 1 | A 240 TP 304 L | 6 | Habib Distilleries |
| 131 | Superfine Alcohal Tank | 1 | A 240 TP 304 L | 6 | Habib Distilleries |
| 132 | Low Grade Alcohal tank | 1 | A 240 TP 304 L | 6 | Al Abbas Distilleries |
| 133 | Superfine Alcohal Tank | 1.0 | A 240 TP 304 L | 6 | Al Abbas Distilleries |
| | Total | 208 | | 254,338 | |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| S.R.# | EQUIPMENT | DIMENSIONS (Feet) OD X HEIGHT | MATERIAL | DESIGN CODE | QTY NOS. | TOTAL WEIGHT KG | CLIENT |
|-------|--------------------------------------|-------------------------------------|-----------|----------------|-------------|--------------------|-------------------|
| 1 | Molasses Tank R-300A | 112' x 44' | ASTM A-36 | API 650 | 1 | 311,110 | RYK Mills Limited |
| 2 | Molasses Tank R-300B | 112' x 44' | ASTM A-36 | API 650 | 1 | 311,110 | RYK Mills Limited |
| 3 | Molasses Tank R-300C | 112' x 44' | ASTM A-36 | API 650 | 1 | 311,110 | RYK Mills Limited |
| 4 | Molasses Tank R-300D | 112' x 44' | ASTM A-36 | API 650 | 1 | 311,110 | RYK Mills Limited |
| 5 | Biogas Digester TK-2010 | 112' x 48' | ASTM A-36 | API 650 | 1 | 348,753 | RYK Mills Limited |
| 6 | Biogas Digester TK-2020 | 112' x 48' | ASTM A-36 | API 650 | 1 | 350,715 | RYK Mills Limited |
| 7 | Biogas Digester TK-2030 | 112' x 48' | ASTM A-36 | API 650 | 1 | 352,534 | RYK Mills Limited |
| 8 | Biogas Digester TK-2040 | 112' x 48' | ASTM A-36 | API 650 | 1 | 348,753 | RYK Mills Limited |
| 9 | Biogas Digester TK-2050 | 112' x 48' | ASTM A-36 | API 650 | 1 | 350,814 | RYK Mills Limited |
| 10 | A Grade Storage Tank R-602A | 61' x 39' | ASTM A-36 | API 650 | 1 | 82,756 | RYK Mills Limited |
| 11 | A Grade Storage Tank R-602B | 61' x 39' | ASTM A-36 | API 650 | 1 | 82,756 | RYK Mills Limited |
| 12 | A Grade Storage Tank R-902 | 61' x 39' | ASTM A-36 | API 650 | 1 | 82,756 | RYK Mills Limited |
| 13 | B Grade Storage Tank R-604 | 46' x 36' | ASTM A-36 | API 650 | 1 | 52,077 | RYK Mills Limited |
| 14 | Denatured Storage Tank_R-606 | 28' x 34' | ASTM A-36 | API 650 | 1 | 27,087 | RYK Mills Limited |
| 15 | B-Grade Daily Tank_R-603A | 8' x 10' | ASTM A-36 | API 650 | 1 | 2,367 | RYK Mills Limited |
| 16 | B-Grade Daily Tank_R-603B | 8' x 10' | ASTM A-36 | API 650 | 1 | 2,367 | RYK Mills Limited |
| 17 | EDU Feed Tank_R-843 | 23' x 16' | ASTM A-36 | API 650 | 1 | 12,282 | RYK Mills Limited |
| 18 | A-Grade Daily Tanks_R-601A | 23' x 16' | ASTM A-36 | API 650 | 1 | 12,313 | RYK Mills Limited |
| 19 | A-Grade Daily Tanks_R-601B | 23' x 16' | ASTM A-36 | API 650 | 1 | 12,313 | RYK Mills Limited |
| 20 | A-Grade Daily Tanks_R-901 | 23' x 16' | ASTM A-36 | API 650 | 1 | 12,313 | RYK Mills Limited |
| 21 | Fuel Grade Intermediate Tanks_R-900A | 13' x 16' | ASTM A-36 | API 650 | 1 | 5,307 | RYK Mills Limited |
| 22 | Fuel Grade Intermediate Tanks_R-900B | 13' x 16' | ASTM A-36 | API 650 | 1 | 5,307 | RYK Mills Limited |
| 23 | Fuel Grade Buffer Tank_R-905 | 13' x 16' | ASTM A-36 | API 650 | 1 | 5,307 | RYK Mills Limited |
| 24 | Fusel Oil Tank_R-608 | 15' x 16' | ASTM A-36 | API 650 | 1 | 6,062 | RYK Mills Limited |
| 25 | Denatured Blending Tanks_R-605A | 10' x 10' | ASTM A-36 | API 650 | 1 | 2,955 | RYK Mills Limited |
| 26 | Denatured Blending Tanks_R-605B | 10' x 10' | ASTM A-36 | API 650 | 1 | 2,955 | RYK Mills Limited |
| 27 | Fermenters_R-421 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,673 | RYK Mills Limited |
| 28 | Fermenters_R-422 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,712 | RYK Mills Limited |
| 29 | Fermenters_R-423 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,703 | RYK Mills Limited |
| 30 | Fermenters_R-424 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,703 | RYK Mills Limited |
| 31 | Fermenters_R-425 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,663 | RYK Mills Limited |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| | | | | | | | |
|----|--|------------|-----------|---------|---|---------|--------------------------------------|
| 32 | Fermenters_R-426 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,663 | RYK Mills Limited |
| 33 | Fermenters_R-427 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,703 | RYK Mills Limited |
| 34 | Fermenters_R-428 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,703 | RYK Mills Limited |
| 35 | Fermenters_R-429 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,703 | RYK Mills Limited |
| 36 | Fermenters_R-430 | 24' x 35' | ASTM A-36 | API 650 | 1 | 34,703 | RYK Mills Limited |
| 37 | Fermented Mesh Tank_R-432 | 27' x 35' | ASTM A-36 | API 650 | 1 | 38,354 | RYK Mills Limited |
| 38 | Gas Holder_TK-3000 | 51' x 50' | ASTM A-36 | API 650 | 1 | 119,241 | RYK Mills Limited |
| 39 | Sand Filter Back Washing Storage Tank_R-1100 | 16' x 18' | ASTM A-36 | API 650 | 1 | 7,301 | RYK Mills Limited |
| 40 | UF Feed Water Storage Tank_R-1101A | 15' x 16' | ASTM A-36 | API 650 | 1 | 6,131 | RYK Mills Limited |
| 41 | UF Product Storage Tank_R-1101B | 15' x 16' | ASTM A-36 | API 650 | 1 | 6,242 | RYK Mills Limited |
| 42 | Furnace Oil Tank_R-1104 | 13' x 16' | ASTM A-36 | API 650 | 1 | 5,302 | RYK Mills Limited |
| 43 | Treated Stillage Pumping Tank_TK-2056 | 13' x 13' | ASTM A-36 | API 650 | 1 | 5,161 | RYK Mills Limited |
| 44 | Mother Yeast Tanks_R-411 | 17' x 23' | SS-304L | API 650 | 1 | 10,936 | RYK Mills Limited |
| 45 | Mother Yeast Tanks_R-412 | 17' x 23' | SS-304L | API 650 | 1 | 10,964 | RYK Mills Limited |
| 46 | Mother Yeast Tanks_R-413 | 17' x 23' | SS-304L | API 650 | 1 | 10,924 | RYK Mills Limited |
| 47 | Primary Decantation Tank_R-303 | 20' x 11' | SS-304L | API 650 | 1 | 9,247 | RYK Mills Limited |
| 48 | Secondary Decantation Tank_R-304 | 20' x 11' | SS-304L | API 650 | 1 | 9,249 | RYK Mills Limited |
| 49 | Sludges Tank_R-305 | 13' x 16' | SS-304L | API 650 | 1 | 6,751 | RYK Mills Limited |
| 50 | RO Final Permeate Storage Tank_R-1102 | 12' x 16' | SS-304L | API 650 | 1 | 4,151 | RYK Mills Limited |
| 51 | RO Permeate Storage Tank_R-1103 | 25' x 16' | SS-304L | API 650 | 1 | 9,990 | RYK Mills Limited |
| 52 | Post Treated Stillage Pumping Tank_TK-1060 | 13' x 13' | SS-304L | API 650 | 1 | 4,086 | RYK Mills Limited |
| 53 | Caustic Soda Tank_TK-4000 | 10' x 13' | SS-304L | API 650 | 1 | 2,452 | RYK Mills Limited |
| 1 | T- 02 : Bulk Oil Storage Tank (Doom Roof) | 82' x 64' | ASTM A-36 | API 650 | 1 | 308 | Al Noor Termial (Pvt.) Ltd. |
| 2 | T- 01,03,04 : Bulk Oil Storage Tank (Doom Roof) | 74' x 64' | ASTM A-36 | API 650 | 3 | 768 | Al Noor Termial (Pvt.) Ltd. |
| 3 | T- 07 : Bulk Oil Storage Tank (Doom Roof) | 49' x 64' | ASTM A-36 | API 650 | 1 | 133 | Al Noor Termial (Pvt.) Ltd. |
| 4 | T- 05,06 : Bulk Oil Storage Tank (Doom Roof) | 41' x 64' | ASTM A-36 | API 650 | 2 | 205 | Al Noor Termial (Pvt.) Ltd. |
| 5 | T- 08,09,10,11 : Bulk Oil Storage Tank (Doom Roof) | 33' x 64' | ASTM A-36 | API 650 | 4 | 291.084 | Al Noor Termial (Pvt.) Ltd. |
| 6 | T- 12 : W ater Storage Tank (Con Roof) | 33' x 59' | ASTM A-36 | API 650 | 1 | 51.175 | Al Noor Termial (Pvt.) Ltd. |
| 7 | Tank No. 19 Petrochemical Storage Tank | 60' x 60' | SS-400 | API 650 | 1 | 153,407 | Pakistan Molasses Company (Pvt) Ltd. |
| 8 | Tank No. 20 Petrochemical Storage Tank | 60' x 6.1' | SS-400 | API 650 | 1 | 155,153 | Pakistan Molasses Company (Pvt) Ltd. |
| 9 | Tank No. 21 Petrochemical Storage Tank | 60' x 60' | SS-400 | API 650 | 1 | 153,618 | Pakistan Molasses Company (Pvt) Ltd. |
| 10 | Tank No. 22 Petrochemical Storage Tank | 50' x 60' | SS-400 | API 650 | 1 | 105,153 | Pakistan Molasses Company (Pvt) Ltd. |
| 11 | Tank No. 23 Petrochemical Storage Tank | 44' x 60' | SS-400 | API 650 | 1 | 85,692 | Pakistan Molasses Company (Pvt) Ltd. |
| 12 | Tank No. 24 Fire Water Tank (Doom Roof) | 26' x 58' | SS-400 | API 650 | 1 | 33,083 | Pakistan Molasses Company (Pvt) Ltd. |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| | | | | | | | |
|----|--|-------------|-------------|---------|---|---------|---|
| 13 | F1-3701 Conditioning Tank | 14' x 53' | ASTM A-36 | API 650 | 1 | 16,000 | LOTTE Chemical Pakistan Limited |
| 14 | D1-3702 EGSB Reactor Tank | 59' x 53' | ASTM A-36 | API 650 | 1 | 185,000 | LOTTE Chemical Pakistan Limited |
| 15 | F1-3706 Biomass Storage Tank | 28' x 53' | ASTM A-36 | API 650 | 1 | 37,000 | LOTTE Chemical Pakistan Limited |
| 16 | F1-3630 Backlog Metal Setting Vessel | 12' x 27' | ASTM A-36 | API 650 | 1 | 5,800 | LOTTE Chemical Pakistan Limited |
| 17 | AMA Filter Feed Vessel | 8' x 14' | SA-240-316L | API 650 | 1 | 5,800 | LOTTE Chemical Pakistan Limited |
| 18 | Engineering, Procurement and Construction of 5000 MT New EDC Tank. ID= 22M, H= 14M | 72' x 46' | ASTM A-36 | API 650 | 1 | 250,000 | Engro Polymer & Chemical Limited |
| 19 | Fuel Oil Storage Tank | 118' x 48' | SA 283 GR.C | API 650 | 1 | 343,000 | Pakistan State Oil Company |
| 20 | Fuel Oil Storage Tank | 118' x 48' | SA 283 GR.C | API 650 | 1 | 343,000 | Pakistan State Oil Company |
| 21 | Molasses Tank No. 3 | 117' x 40' | SA 283 GR.C | API 650 | 1 | 338,608 | CSK Distilleries Ltd. |
| 22 | Molasses Tank No. 2 | 117' x 40' | SA 283 GR.C | API 650 | 1 | 336,530 | CSK Distilleries Ltd. |
| 23 | Molasses Tank No. 1 | 117' x 40' | SA 283 GR.C | API 650 | 1 | 333,281 | CSK Distilleries Ltd. |
| 24 | Bio Gas Reactor No 1 | 85' x 65' | SA 283 GR.C | API 650 | 1 | 232,036 | Habib Distilleries |
| 25 | Bio Gas Reactor No 2 | 85' x 65' | SA 283 GR.C | API 650 | 1 | 232,036 | Habib Distilleries |
| 26 | Molasses Storage Tank | 76' x 46' | SA 283 GR.C | API 650 | 1 | 175,000 | MAPAK Qasim Bulklers (Pvt.) Ltd. |
| 27 | Edible Oil Storage Tank | 76' x 46' | SA 283 GR.C | API 650 | 1 | 175,000 | MAPAK Qasim Bulklers (Pvt.) Ltd. |
| 28 | Storage Tank 5975 M3 | 79' x 48' | SA 283 GR.C | API 650 | 1 | 157,032 | Karachi Shipyard & Engg. Works Ltd. |
| 29 | Fuel Oil Storage Tank | 80' x 47' | SA 283 GR.C | API 650 | 1 | 155,000 | Pakistan State Oil Company |
| 30 | Alcohol Grade A Main Tank No. 1 | 74' x 40' | SA 283 GR.C | API 650 | 1 | 153,891 | CSK Distilleries Ltd. |
| 31 | Alcohol Grade A Main Tank No. 2 | 74' x 40' | SA 283 GR.C | API 650 | 1 | 153,891 | CSK Distilleries Ltd. |
| 32 | Edible Oil Storage Tank | 50' x 46' | SA 283 GR.C | API 650 | 1 | 85,000 | MAPAK Qasim Bulklers (Pvt.) Ltd. |
| 33 | M.E.G. Storage Tanks | 21.5' x 26' | SA 283 GR.C | API 650 | 1 | 79,200 | (Urea Formaldehyde Plant) Baluchistan Particle Board Ltd. |
| 34 | Alcohol Grade B Main Tank | 45' x 36' | SA 283 GR.C | API 650 | 1 | 49,897 | CSK Distilleries Ltd. |
| 35 | Gas Holder | 34' x 25' | SA 283 GR.C | API 650 | 1 | 37,820 | Habib Distilleries |
| 36 | Furnace Oil Tank 100,000 Gallons | 26' x 30' | SA 283 GR.C | API 650 | 1 | 35,000 | Habib Sugar Mills Ltd. |
| 37 | Fuel Feeder 60,000 Gallons | 25' x 20' | SA 283 GR.C | API 650 | 1 | 23,500 | Mirpurkhas Sugar Mills Ltd. |
| 38 | Fermentor No. R-421 | 24' x 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |
| 39 | Fermentor No. R-422 | 24' x 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |
| 40 | Fermentor No. R-423 | 24' x 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |
| 41 | Fermentor No. R-424 | 24' x 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |
| 42 | Fermentor No. R-425 | 24' x 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |
| 43 | Fermentor No. R-426 | 24' x 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |
| 44 | Fermentor No. R-427 | 24' x 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| | | | | | | | |
|----|---------------------------------------|-----------|---------------|---------|---|--------|--|
| 45 | Fermentor No. R-428 | 24' X 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |
| 46 | Fermented Mash Tank No. R-430 | 24' X 33' | SA 283 GR.C | API 650 | 1 | 22,818 | CSK Distilleries Ltd. |
| 47 | Denaturated Storage Tank | 26' X 35' | SA 283 GR.C | API 650 | 1 | 20,907 | CSK Distilleries Ltd. |
| 48 | Storage Tank 500 M3 | 38' X 33' | SA 283 GR.C | API 650 | 1 | 18,837 | Karachi Shipyard & Engg. Works Ltd. |
| 49 | Raw Water Storage Tank 500 M3 | 28' X 33' | SA 283 GR.C | API 650 | 1 | 18,837 | Karachi Shipyard & Engg. Works Ltd. |
| 50 | Condensate Water Storage Tank 500 M3 | 28' X 33' | SA 283 GR.C | API 650 | 1 | 18,837 | Karachi Shipyard & Engg. Works Ltd. |
| 51 | Raw Water Tank | 29' X 33' | SA 283 GR.C | API 650 | 1 | 18,410 | Mitsubishi Corporation Japan (For Engro Asahi Polymer & Chemical) |
| 52 | Fermentor R 411 | 21' X 33' | SA 283 GR.C | API 650 | 1 | 17,146 | Habib Distilleries |
| 53 | Fermentor R 412 | 21' X 33' | SA 283 GR.C | API 650 | 1 | 17,146 | Habib Distilleries |
| 54 | Fermentor R 413 | 21' X 33' | SA 283 GR.C | API 650 | 1 | 17,146 | Habib Distilleries |
| 55 | Fermentor R 414 | 21' X 33' | SA 283 GR.C | API 650 | 1 | 17,146 | Habib Distilleries |
| 56 | Fermentor R 415 | 21' X 33' | SA 283 GR.C | API 650 | 1 | 17,146 | Habib Distilleries |
| 57 | Fermentor R 416 | 21' X 33' | SA 283 GR.C | API 650 | 1 | 17,146 | Habib Distilleries |
| 58 | Wash Tank | 21' X 25' | SA 283 GR.C | API 650 | 1 | 13,000 | Habib Distilleries |
| 59 | Demineralized Water Tank | 25' X 26' | SA 283 GR.C | API 650 | 1 | 12,840 | Mitsubishi Corporation Japan (For Engro Asahi Polymer & Chemical) |
| 60 | Polished Water Tank | 25' X 26' | SA 283 GR.C | API 650 | 1 | 12,800 | Mitsubishi Corporation Japan (For Engro Asahi Polymer & Chemical) |
| 61 | Fuel Oil Tank | 25' X 26' | SA 283 GR.C | API 650 | 1 | 12,490 | Mitsubishi Corporation Japan (For Engro Asahi Polymer & Chemical) |
| 62 | Amine Storage Tank – Tank No. T 2901 | 18' X 28' | HR 235 / 275 | API 650 | 1 | 11,053 | Clough Engineering Limited - Australia (For Sawan Gas Field Dev. Project) |
| 63 | Amine Storage Tank – Tank No. T 3901 | 18' X 28' | HR 235 / 275 | API 650 | 1 | 11,053 | Clough Engineering Limited - Australia (For Sawan Gas Field Dev. Project) |
| 64 | Alcohol Grade A Daily Tank 1 | 22' X 18' | SA 283 GR.C | API 650 | 1 | 10,959 | CSK Distilleries Ltd. |
| 65 | Alcohol Grade A Daily Tank 2 | 22' X 18' | SA 283 GR.C | API 650 | 1 | 10,959 | CSK Distilleries Ltd. |
| 66 | Mother Yeast Tank R-411 | 17' X 23' | SA 240 TP 304 | CODAP | 1 | 9,962 | CSK Distilleries Ltd. |
| 67 | Mother Yeast Tank R-412 | 17' X 23' | SA 240 TP 304 | CODAP | 1 | 9,962 | CSK Distilleries Ltd. |
| 68 | Mother Yeast Tank R-413 | 17' X 23' | SA 240 TP 304 | CODAP | 1 | 9,962 | CSK Distilleries Ltd. |
| 69 | Mother Yeast Tank R-411 | 17' X 23' | SA 240 TP 304 | CODAP | 1 | 9,962 | Al Abbas Distilleries |
| 70 | Mother Yeast Tank R-412 | 17' X 23' | SA 240 TP 304 | CODAP | 1 | 9,962 | Al Abbas Distilleries |
| 71 | Mother Yeast Tank R-413 | 17' X 23' | SA 240 TP 304 | CODAP | 1 | 9,962 | Al Abbas Distilleries |
| 72 | Diesel Storage Tank – Tank No. T 6201 | 18' X 18' | HR 235 / 275 | API 650 | 1 | 8,878 | Clough Engineering Limited - Australia (For Sawan Gas Field Dev. Project) |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| | | | | | | | |
|-----|---|----------------|---------------|---------|---|-------|--|
| 73 | PW Tank | 23' X 21' | SA 240 TP 304 | API 650 | 1 | 8,717 | Mitsubishi Corporation Japan (For Engro Asahi Polymer & Chemical) |
| 74 | Pre Fermentors R 421 | 17' X 20' | SA 283 GR.C | API 650 | 1 | 8,699 | Habib Distilleries |
| 75 | Pre Fermentors R 422 | 17' X 20' | SA 283 GR.C | API 650 | 1 | 8,699 | Habib Distilleries |
| 76 | Pre Fermentors R 423 | 17' X 20' | SA 283 GR.C | API 650 | 1 | 8,699 | Habib Distilleries |
| 77 | Primary Decantation Tank R-303 | 20' X 28' | SA 240 TP 304 | CODAP | 1 | 8,498 | CSK Distilleries Ltd. |
| 78 | Secondary Decantation Tank R-304 | 20' X 28' | SA 240 TP 304 | CODAP | 1 | 8,498 | CSK Distilleries Ltd. |
| 79 | Primary Decantation Tank R-303 | 20' X 28' | SA 240 TP 304 | CODAP | 1 | 8,498 | Al Abbas Distilleries |
| 80 | Secondary Decantation Tank R-304 | 20' X 28' | SA 240 TP 304 | CODAP | 1 | 8,498 | Al Abbas Distilleries |
| 81 | Fuel Oil Storage Tank | 12' X 20' | SA 283 GR.C | API 650 | 1 | 7,800 | MAPAK Qasim Bulkers (Pvt.) Ltd. |
| 82 | Sludge Tank R-305 | 14' X 28' | SA 240 TP 304 | CODAP | 1 | 6,345 | CSK Distilleries Ltd. |
| 83 | Sludge Tank R-305 | 14' X 28' | SA 240 TP 304 | CODAP | 1 | 6,345 | Al Abbas Distilleries |
| 84 | Fusel Oil storage Tank | 12' X 18' | SA 283 GR.C | API 650 | 1 | 5,150 | CSK Distilleries Ltd. |
| 85 | BFW Tank | 10.5' X 23' | SA 283 GR.C | API 650 | 1 | 5,014 | Mitsubishi Corporation Japan (For Engro Asahi Polymer & Chemical) |
| 86 | Drinking Water Tank | 13' X 18' | SA 283 GR.C | API 650 | 1 | 5,004 | Mitsubishi Corporation Japan (For Engro Asahi Polymer & Chemical) |
| 87 | Fuel Oil Storage Tank | 12' X 17' | SA 283 GR.C | API 650 | 1 | 4,000 | Engro Npk Project - Port Qasim |
| 88 | Fuel Oil Storage Tank | 12' X 17' | SA 283 GR.C | API 650 | 1 | 4,000 | Engro Npk Project - Port Qasim |
| 89 | Denaturated Blending Tank | 8' X 10' | SA 283 GR.C | API 650 | 1 | 1,841 | CSK Distilleries Ltd. |
| 90 | Alcohol Grade B Daily Tank | 8' X 7' | SA 283 GR.C | API 650 | 1 | 1,533 | CSK Distilleries Ltd. |
| 91 | Alcohol Grade B Daily Tank | 8' X 7' | SA 283 GR.C | API 650 | 1 | 1,533 | CSK Distilleries Ltd. |
| 92 | Hot Water Tank | 9' 4" X 13' 1" | SA 240 TP 304 | API 650 | 1 | 2,350 | Century Paper & Board Mills Limited |
| 93 | Foam Tank (SOP Line) | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 1,917 | Century Paper & Board Mills Limited |
| 94 | Stand pipe 1 (mw line) | 6' 3" X 18' 0" | SA 240 TP 304 | API 650 | 1 | 2,180 | Century Paper & Board Mills Limited |
| 95 | Foam Tank (ONP Line) | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 1,911 | Century Paper & Board Mills Limited |
| 96 | Filtrate Cloud Tank | 9' 4" X 13' 1" | SA 240 TP 304 | API 650 | 1 | 2,463 | Century Paper & Board Mills Limited |
| 97 | Mixing Chest (Top Layer) | 9' 4" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 3,091 | Century Paper & Board Mills Limited |
| 98 | Machine Chest (Top Layer) | 9' 4" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 3,000 | Century Paper & Board Mills Limited |
| 99 | Silo Tank (Top Layer) | 6' 5" X 13' 3" | SA 240 TP 304 | API 650 | 1 | 2,059 | Century Paper & Board Mills Limited |
| 100 | Mixing Chest (Under Top Layer) | 9' 4" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 3,084 | Century Paper & Board Mills Limited |
| 101 | Machine Chest (Under Top Layer) | 9' 4" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 3,000 | Century Paper & Board Mills Limited |
| 102 | Silo Tank (Under Top Layer) | 6' 5" X 13' 3" | SA 240 TP 304 | API 650 | 1 | 1,922 | Century Paper & Board Mills Limited |
| 103 | Nozzle Detail Seal Pit Tank (Under Top Layer) | 7' 8" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,350 | Century Paper & Board Mills Limited |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| | | | | | | | |
|-----|---------------------------------------|-----------------|---------------|---------|---|-------|-------------------------------------|
| 104 | Silo Tank (Filler Layer) | 8' 5" X 13' 0" | SA 240 TP 304 | API 650 | 1 | 2,608 | Century Paper & Board Mills Limited |
| 105 | 1st Screen Reject Tank (Filler Layer) | 7' 8" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,401 | Century Paper & Board Mills Limited |
| 106 | Mixing Chest (Black Layer) | 9' 4" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 3,099 | Century Paper & Board Mills Limited |
| 107 | Machine Chest (Black Layer) | 9' 4" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 3,000 | Century Paper & Board Mills Limited |
| 108 | Silo Tank (Black Layer) | 6' 5" X 25' 1" | SA 240 TP 304 | API 650 | 1 | 3,111 | Century Paper & Board Mills Limited |
| 109 | Seal Pit Tank (Black Layer) | 7' 8" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,392 | Century Paper & Board Mills Limited |
| 110 | Sodium Silicate Tank | 9' 4" X 13' 1" | SA 240 TP 304 | API 650 | 1 | 2,386 | Century Paper & Board Mills Limited |
| 111 | Caustic Soda Tank | 9' 4" X 13' 1" | SA 240 TP 304 | API 650 | 1 | 2,389 | Century Paper & Board Mills Limited |
| 112 | FAS Storage Tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 1,519 | Century Paper & Board Mills Limited |
| 113 | Cationic Starch Storage Tank | 9' 4" X 13' 1" | SA 240 TP 304 | API 650 | 1 | 3,040 | Century Paper & Board Mills Limited |
| 114 | Caustic Soda Storage Tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 1,468 | Century Paper & Board Mills Limited |
| 115 | Clay 1 Storage Tank | 9' 4" X 13' 1" | SA 240 TP 304 | API 650 | 1 | 2,309 | Century Paper & Board Mills Limited |
| 116 | Clay 2 Storage Tank | 9' 4" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,949 | Century Paper & Board Mills Limited |
| 117 | CaCo3 1 Storage Tank | 9' 4" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,949 | Century Paper & Board Mills Limited |
| 118 | CaCo3 2 Storage Tank | 9' 4" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,949 | Century Paper & Board Mills Limited |
| 119 | Talc Storage Tank | 9' 4" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,948 | Century Paper & Board Mills Limited |
| 120 | Pre coating storage tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 2,092 | Century Paper & Board Mills Limited |
| 121 | Back Coating Storage Tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 2,092 | Century Paper & Board Mills Limited |
| 122 | Middle Coating Storage Tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 2,092 | Century Paper & Board Mills Limited |
| 123 | Top Coating Storage Tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 2,092 | Century Paper & Board Mills Limited |
| 124 | Oxidized Starch Storage Tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 2,095 | Century Paper & Board Mills Limited |
| 125 | Cationic Starch Storage Tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 2,089 | Century Paper & Board Mills Limited |
| 126 | Oxidized Starch Storage Tank | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 1,722 | Century Paper & Board Mills Limited |
| 127 | Soft water tank ass'y | 9' 4" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 1,837 | Century Paper & Board Mills Limited |
| 128 | Filler storage tank ass'y | 7' 8" X 9' 8" | SA 240 TP 304 | API 650 | 1 | 1,772 | Century Paper & Board Mills Limited |
| 129 | Fresh Recovery Tank | 13' 6" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 4,758 | Century Paper & Board Mills Limited |
| 130 | Dilution Water Tank (LBKP Line) | 13' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,100 | Century Paper & Board Mills Limited |
| 131 | Dump Chest (LBKP Line) | 18' 8" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 6,461 | Century Paper & Board Mills Limited |
| 132 | Dump Chest (NBKP Line) | 14' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,085 | Century Paper & Board Mills Limited |
| 133 | Refiner Chest (LBKP Line) | 13' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 4,551 | Century Paper & Board Mills Limited |
| 134 | Refiner Chest (NBKP Line) | 13' 6" X 13' 8" | SA 240 TP 304 | API 650 | 1 | 4,098 | Century Paper & Board Mills Limited |
| 135 | CDilution Water Tank (SOP Line) | 11' 5" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 4,250 | Century Paper & Board Mills Limited |
| 136 | Dump Chest (SOP Line) | 20' 9" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,789 | Century Paper & Board Mills Limited |
| 137 | Hole Screen Chest (SOP Line) | 13' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 4,556 | Century Paper & Board Mills Limited |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| | | | | | | | |
|-----|--------------------------------|-----------------|---------------|---------|---|---------|-------------------------------------|
| 138 | Thickner Chest (SOP Line) | 14' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,000 | Century Paper & Board Mills Limited |
| 139 | Thickner W.W. Tank (SOP Line) | 13' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,353 | Century Paper & Board Mills Limited |
| 140 | Storage Chest (SOP Line) | 20' 9" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,700 | Century Paper & Board Mills Limited |
| 141 | Dump Chest (MW Line) | 20' 9" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,778 | Century Paper & Board Mills Limited |
| 142 | H. D. Cleaner Tower (350m3) | 26' 2" X 35' 6" | SA 240 TP 304 | API 650 | 1 | 40,604 | Century Paper & Board Mills Limited |
| 143 | Reject Chest (MW Line) | 13' 6" X 13' 8" | SA 240 TP 304 | API 650 | 1 | 4,102 | Century Paper & Board Mills Limited |
| 144 | Hole Screen Chest (MW Line) | 20' 9" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,709 | Century Paper & Board Mills Limited |
| 145 | Thickener Chest (MW Line) | 20' 9" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,727 | Century Paper & Board Mills Limited |
| 146 | Thickener W.W. Tank (MW Line) | 18' 8" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,933 | Century Paper & Board Mills Limited |
| 147 | Storage Chest (MW Line) | 20' 9" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,718 | Century Paper & Board Mills Limited |
| 148 | Dilution Water Tank (ONP Line) | 11' 5" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 4,211 | Century Paper & Board Mills Limited |
| 149 | Dump Chest (ONP Line) | 20' 9" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,782 | Century Paper & Board Mills Limited |
| 150 | Hole Screen Chest (ONP Line) | 13' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 4,555 | Century Paper & Board Mills Limited |
| 151 | Thickener W.W. Tank (ONP Line) | 13' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,341 | Century Paper & Board Mills Limited |
| 152 | Storage Chest (ONP Line) | 20' 9" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 7,700 | Century Paper & Board Mills Limited |
| 153 | Broke Intermediate Chest | 14' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,090 | Century Paper & Board Mills Limited |
| 154 | Stand Pipe (Black Layer) | 28' 9" X 56' 7" | SA 240 TP 304 | API 650 | 1 | 77,513 | Century Paper & Board Mills Limited |
| 155 | Broke Chest | 14' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,000 | Century Paper & Board Mills Limited |
| 156 | Fiber Recovery Chest | 14' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,000 | Century Paper & Board Mills Limited |
| 157 | Filtrate Clear Tank | | SA 240 TP 304 | API 650 | 1 | 7,219 | Century Paper & Board Mills Limited |
| 158 | Clarified Water Tank (800m3) | 28' 9" X 56' 7" | SA 240 TP 304 | API 650 | 1 | 76,546 | Century Paper & Board Mills Limited |
| 159 | Seal Pit Tank (Top Line) | 15' 7" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,180 | Century Paper & Board Mills Limited |
| 160 | Mixing Chest (Filler Layer) | 14' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,173 | Century Paper & Board Mills Limited |
| 161 | Machine Chest (Filler Layer) | 14' 6" X 16' 4" | SA 240 TP 304 | API 650 | 1 | 5,000 | Century Paper & Board Mills Limited |
| 162 | Seal Pit Tank (Filler Line) | 15' 7" X 13' 1" | SA 240 TP 304 | API 650 | 1 | 4,867 | Century Paper & Board Mills Limited |
| 163 | Latex 1 Storage Tank | 10' 4" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,668 | Century Paper & Board Mills Limited |
| 164 | Latex 2 Storage Tank | 10' 4" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 2,668 | Century Paper & Board Mills Limited |
| 165 | Reel Pit Pulper | | SA 240 TP 304 | API 650 | 1 | 7,333 | Century Paper & Board Mills Limited |
| 166 | Calender Pit Pulper | | SA 240 TP 304 | API 650 | 1 | 6,620 | Century Paper & Board Mills Limited |
| 167 | Couch Pit Pulper | | SA 240 TP 304 | API 650 | 1 | 7,245 | Century Paper & Board Mills Limited |
| 168 | Bleaching Tower | 13' 6" X 14' 8" | SA 240 TP 304 | API 650 | 1 | 7,830 | Century Paper & Board Mills Limited |
| 169 | Molasses Storage Tank | 110' X 45' | CS-HR-235 | API 650 | 1 | 300,000 | Unicol Limited Pase 1 |
| 170 | Denatured Storage Tanks | 27' X 33' | CS-HR-235 | API 650 | 1 | 20,961 | Unicol Limited Pase 1 |
| 171 | B-Grade Daily Tank | 8' 6" X 7' 3" | CS-HR-235 | API 650 | 2 | 2,900 | Unicol Limited Pase 1 |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| | | | | | | | | |
|-----|----------------------------------|----------------|---------------|---------|---|-----------|----------------|--------|
| 172 | B-Grade Main Storage Tank | 45' X 36' | CS-HR-235 | API 650 | 1 | 55,000 | Unicol Limited | Pase 1 |
| 173 | Denatured Blending Tank | 8' 4" X 10' | CS-HR-235 | API 650 | 1 | 2,410 | Unicol Limited | Pase 1 |
| 174 | Fuesel Oil Tnk | 16' 6" X 20' | CS-HR-235 | API 650 | 1 | 8,000 | Unicol Limited | Pase 1 |
| 175 | Digester Tank | 110' X 45' | CS-HR-235 | API 650 | 4 | 1,216,000 | Unicol Limited | Pase 1 |
| 176 | A Grade Daily Storage Tank | 22' X 20' | CS-HR-235 | API 650 | 2 | 25,000 | Unicol Limited | Pase 1 |
| 177 | Fermenter Daily Molasses Tank | 22' X 33' | CS-HR-235 | API 650 | 9 | 162,000 | Unicol Limited | Pase 1 |
| 178 | Soda Tank | 9' X 16' 6" | CS-HR-235 | API 650 | 1 | 4,945 | Unicol Limited | Pase 1 |
| 179 | CIP Tank | 9' X 16' 6" | SS-HR-235 | API 650 | 1 | 4,945 | Unicol Limited | Pase 1 |
| 180 | A Grade Main Storage Tank | 60' X 56' | CS-HR-235 | API 650 | 2 | 216,000 | Unicol Limited | Pase 1 |
| 181 | H SO Tank | 7' 8" X 21' 8" | CS-HR-235 | API 650 | 1 | 4,581 | Unicol Limited | Pase 1 |
| 182 | Chemical Preparation Tank | | SS-HR-235 | API 650 | 1 | 350 | Unicol Limited | Pase 1 |
| 183 | Condensate Tank | | SS-HR-235 | API 650 | 1 | 320 | Unicol Limited | Pase 1 |
| 184 | Caustic Soda Tank | | CS-HR-235 | API 650 | 1 | 3,500 | Unicol Limited | Pase 1 |
| 185 | Digester Storage Tanks | 111' X 44' | SA 283 GR.C | API 650 | 5 | 1,585,415 | Unicol Limited | Pase 1 |
| 186 | Fermenter Tanks | 22' X 32' | SA 283 GR.C | API 650 | 9 | 163,746 | Unicol Limited | Pase 1 |
| 187 | Mother Yeast Tank R-411 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 1 |
| 188 | Mother Yeast Tank R-412 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 1 |
| 189 | Mother Yeast Tank R-413 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 1 |
| 190 | Mother Yeast Tank R-411 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 1 |
| 191 | Mother Yeast Tank R-412 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 1 |
| 192 | Mother Yeast Tank R-413 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 1 |
| 193 | A Grade Storage Tank | 22' X 20' | SA 283 GR.C | API 650 | 2 | 24,750 | Unicol Limited | Pase 1 |
| 194 | B Grade Storage Tank | 8' X 7' | SA 283 GR.C | API 650 | 2 | 4,228 | Unicol Limited | Pase 1 |
| 195 | Mother Yeast Tank | 17' X 22' | SA 240 TP 304 | API 650 | 3 | 30,777 | Unicol Limited | Pase 1 |
| 196 | Gas Holder Tank (Floating Cover) | 51' X 49' | SA 283 GR.C | API 650 | 1 | 124,089 | Unicol Limited | Pase 1 |
| 197 | Molasses Storage Tank | 110' X 45' | CS-HR-235 | API 650 | 1 | 300,000 | Unicol Limited | Pase 2 |
| 198 | Denatured Storage Tanks | 27' X 33' | CS-HR-235 | API 650 | 1 | 20,961 | Unicol Limited | Pase 2 |
| 199 | B-Grade Daily Tank | 8' 6" X 7' 3" | CS-HR-235 | API 650 | 2 | 2,900 | Unicol Limited | Pase 2 |
| 200 | B-Grade Main Storage Tank | 45' X 36' | CS-HR-235 | API 650 | 1 | 55,000 | Unicol Limited | Pase 2 |
| 201 | Denatured Blending Tank | 8' 4" X 10' | CS-HR-235 | API 650 | 1 | 2,410 | Unicol Limited | Pase 2 |
| 202 | Fuesel Oil Tnk | 16' 6" X 20' | CS-HR-235 | API 650 | 1 | 8,000 | Unicol Limited | Pase 2 |
| 203 | Digester Tank | 110' X 45' | CS-HR-235 | API 650 | 4 | 1,216,000 | Unicol Limited | Pase 2 |
| 204 | A Grade Daily Storage Tank | 22' X 20' | CS-HR-235 | API 650 | 2 | 25,000 | Unicol Limited | Pase 2 |
| 205 | Fermenter Daily Molasses Tank | 22' X 33' | CS-HR-235 | API 650 | 9 | 162,000 | Unicol Limited | Pase 2 |



PAST PERFORMANCE

STEEL STORAGE TANKS FOR TANKS FARMS, TERMINALS & INDUSTRIES

TANKS FARMS

| | | | | | | | | |
|-----|----------------------------------|----------------|---------------|---------|------------|-------------------|----------------|--------|
| 206 | Soda Tank | 9' X 16' 6" | CS-HR-235 | API 650 | 1 | 4,945 | Unicol Limited | Pase 2 |
| 207 | CIP Tank | 9' X 16' 6" | SS-HR-235 | API 650 | 1 | 4,945 | Unicol Limited | Pase 2 |
| 208 | A Grade Main Storage Tank | 60' X 56' | CS-HR-235 | API 650 | 2 | 216,000 | Unicol Limited | Pase 2 |
| 209 | H SO Tank | 7' 8" X 21' 8" | CS-HR-235 | API 650 | 1 | 4,581 | Unicol Limited | Pase 2 |
| 210 | Chemical Preparation Tank | | SS-HR-235 | API 650 | 1 | 350 | Unicol Limited | Pase 2 |
| 211 | Condensate Tank | | SS-HR-235 | API 650 | 1 | 320 | Unicol Limited | Pase 2 |
| 212 | Caustic Soda Tank | | CS-HR-235 | API 650 | 1 | 3,500 | Unicol Limited | Pase 2 |
| 213 | Digester Storage Tanks | 111' X 44' | SA 283 GR.C | API 650 | 5 | 1,585,415 | Unicol Limited | Pase 2 |
| 214 | Fermenter Tanks | 22' X 32' | SA 283 GR.C | API 650 | 9 | 163,746 | Unicol Limited | Pase 2 |
| 215 | Mother Yeast Tank R-411 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 2 |
| 216 | Mother Yeast Tank R-412 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 2 |
| 217 | Mother Yeast Tank R-413 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 2 |
| 218 | Mother Yeast Tank R-411 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 2 |
| 219 | Mother Yeast Tank R-412 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 2 |
| 220 | Mother Yeast Tank R-413 | 17' X 23' | SA 240 TP 304 | API 650 | 1 | 10,259 | Unicol Limited | Pase 2 |
| 221 | A Grade Storage Tank | 22' X 20' | SA 283 GR.C | API 650 | 2 | 24,750 | Unicol Limited | Pase 2 |
| 222 | B Grade Storage Tank | 8' X 7' | SA 283 GR.C | API 650 | 2 | 4,228 | Unicol Limited | Pase 2 |
| 223 | Mother Yeast Tank | 17' X 22' | SA 240 TP 304 | API 650 | 3 | 30,777 | Unicol Limited | Pase 2 |
| 224 | Gas Holder Tank (Floating Cover) | 51' X 49' | SA 283 GR.C | API 650 | 1 | 124,089 | Unicol Limited | Pase 2 |
| | TOTAL | | | | 331 | 17,870,264 | | |



PAST PERFORMANCE

PIPING

PLANT PIPING

| S.No. | Description | Diameter | | Piping Quantity | | Material | Client |
|-------|--|--------------|----|-----------------|----------|---------------------------------|---|
| | | Range | mm | Diameter Inches | Length M | | |
| 1 | Plant piping fabrication and installation work. | Ø 15 - 400 | | 113,000 | | SS 304 Sch.10&20 | Century Paper & Board Mills Limited |
| 2 | Plant piping fabrication and installation work. | Ø 15 - 400 | | 11,500 | | CS 400 Sch.40&80 | Century Paper & Board Mills Limited |
| 3 | Cross-county Pipe line (for VCM) from Engro Terminal to Engro Asahi Polymer & Chemicals Ltd. | Ø 150 | | | 6,000 | SA 106 Gr. B | Engro Asahi Polymer & Chemicals Ltd. |
| 4 | Modification of Crude feed line at plant (Shut down) | Ø 610 | | | 500 | SA 106 Gr. B | Pakistan Refinery Limited |
| 5 | Piping work at Cooling Tower No: 5 | Ø 150 - 406 | | | 42 | SA 106 Gr. B | National Refinery Limited |
| 6 | Plant Piping for Tank Lorry Loading facilities at PSO KT-A including Supply, Civil, Steel structures, Piping, Equipment works etc. | Ø 12.7 - 305 | | | 1,000 | SA 106 Gr. B | Pakistan State Oil Co. Ltd. |
| 7 | Piping for Fire Fighting System at Kemari Terminal-C including Supply, Civil, Piping and Mechanical Works. | Ø 12.7 - 200 | | | 895 | SA 106 Gr. B | Pakistan State Oil Co. Ltd. |
| 8 | Plant Piping for Diesel Oil Storage Terminal. | Ø 12.7 - 610 | | | 3,354 | SA 106 Gr. B & API 5L Gr. B | Overseas Trading Corporation (Oil Division) |
| 9 | Plant Piping for Glass Furnace | Ø 6 - 250 | | 2,500 | | SS 304 & SA106 Gr.B | Baluchistan Glass Ltd. |
| 10 | Plant Piping For Distillery Plant | Ø 12.7 - 406 | | 20,000 | | SS 304 L, SS 316 L & SA106 Gr.B | AL Abbas Distilleries |
| 11 | Plant Piping For Distillery Plant | Ø 12.7 - 610 | | 25,000 | | SS 304 L, SS 316 L & SA106 Gr.B | Habib Distilleries |
| 12 | Plant Piping For Distillery Plant | Ø 12.7 - 610 | | 45,000 | | SS 304 L, SS 316 L & SA106 Gr.B | CSK Distilleries Ltd. |
| 13 | Plant Piping For Distillery Plant | Ø 12.7 - 610 | | 40,000 | | SS 304 L, SS 316 L & SA106 Gr.B | Unicol Limited |
| 14 | Plant Piping For Molasses Storage Tanks Area | Ø 75 - 406 | | 5,000 | | SA106 Gr.B | CSK Distilleries Ltd. |
| 15 | Plant Piping For Alcohol Storage Tanks Area | Ø 12.7 - 406 | | 4,000 | | SA106 Gr.B | CSK Distilleries Ltd. |
| 16 | Plant Piping For Steam, Fuel and Water. | Ø 25.4 - 200 | | 4,500 | | SA106 Gr.B | CSK Distilleries Ltd. |
| 17 | Plant Piping For Juice Heater | Ø 150 - 250 | | 2,500 | | SA106 Gr.B | Dadu Sugar Mills Ltd. |



PAST PERFORMANCE

PIPING

PLANT PIPING

| S.No. | Description | Diameter | Piping Quantity | | Material | Client |
|-------|------------------------------------|---------------|-----------------|---------------|------------|-------------------------|
| | | Range mm | Diameter Inches | Length M | | |
| 18 | Plant Piping For Juice Heater | Ø 150 - 250 | 2,500 | | SA106 Gr.B | Thatta Sugar Mills Ltd. |
| 19 | Plant Piping For Evaporator | Ø 12.7 - 1200 | 3,000 | | SA106 Gr.B | Faran Sugar Mills Ltd. |
| 20 | Plant Piping For Expansion Project | Ø 12.7 - 1200 | 20,000 | | SA106 Gr.B | Dewan Sugar Mills Ltd |
| 21 | Plant Piping For Expansion Project | Ø 12.7 - 1200 | 35,000 | | SA106 Gr.B | Habib Sugar Mills Ltd |
| | Total | | 333,500 | 11,791 | | |



PAST PERFORMANCE

STEEL STRUCTURES

STEEL STRUCTURE

| SR.# | DESCRIPTION | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|--|----------|-----------------|--|
| 1 | Fabrication & Erection of Steel Structure for Pre-Heater Tower, Chimney and Equipment. | S 275 JR | 3,450,000 | Attock Cement Pakistan Limited |
| 2 | Steel Structure For Pre-Heater Tower | A 36. | 900,000 | Galadari Cement (Gulf) Ltd. |
| 3 | Fabrication, Sand Blasting And Painting Of Steel Structure For Flare Line Trestles, Wellhead Platforms, Platforms Nos. 2, 4, 11,12,13, 14, 15, 211,212,213, 214, Junction Box Frames, Trestle Type Steel Pipe Supports and Miscellaneous Steel Pipe Supports . | S 275 JR | 808,895 | Clough Engineering Limited - Australia (Sawan Gas Field Development Project) |
| 4 | Steel Structure for Complete Ethanol Plant | A 36. | 300,000 | CSK Distilleries Ltd. |
| 5 | Piping Structure works. | SS 304 | 180,000 | Century Paper & Board Mills Limited |
| 6 | Steel Structure for Complete Ethanol Plant | A 36. | 150,000 | Habib Distilleries |
| 7 | Floor At Level + 3000 B / W D & E, At Level + 7500 B / W & C At Level + 7500 B / W C & E, At Level + 7500 B / W E & H, At Level + 7500 B / W H & L, At Level + 7500 B / W L & O, At Level + 11000. | SA 36. | 138,204 | Karachi Shipyard & Engg. Works |
| 8 | Plate Fabricated Gantry Lines From "A" To "O" (Size Ipe 650) | SA 36. | 133,016 | Karachi Shipyard & Engg. Works |
| 9 | Shelves, Racks, Conveyor Table, Jigs & Fixtures, Container And Work Benches. | SA 36. | 130,000 | Al-Ghazi Tractor Limited |
| 10 | Steel Structure | SA 36. | 120,000 | Al-Asad Engineering |
| 11 | Steel Structure For Walk-Way (Partial Material Supplied By Client) | SA 36. | 112,000 | CHEC (Engro Pak Tank Terminal) |
| 12 | Walkways, Stairs & Railing With Supporting Columns Around Main Boiler At 3 Levels, Feeders Level, Air Heater & Dust Collector Level. | SA 36. | 104,000 | Karachi Shipyard & Engg. Works |
| 13 | Steel Structure for Glass Furnace | A 36. | 86,000 | Baluchistan Glass Limited |
| 14 | Base Frames For Turbine And Gearing Of Mill No. 1,2,3, & 4. | SA 36. | 60,000 | Habib Sugar Mills Ltd. |
| 15 | Structure For Mill House | SA 36. | 46,820 | Habib Sugar Mills Ltd. |
| 16 | Floor At Level + 6000 B / W 6 & 6', 5 & 6, 4 & 5, 3 & 4 | SA 36. | 46,500 | Karachi Shipyard & Engg. Works |
| 17 | Steel Structure for Vacuum Pan | A 36. | 40,000 | Larr Sugar Mills Ltd. |
| 18 | Structure For Boiler House | SA 36. | 36,641 | Habib Sugar Mills Ltd. |
| 19 | Service Platform And Gang Ways For Complete Mill House | SA 36. | 35,550 | Karachi Shipyard & Engg. Works |
| 20 | Supporting Frame For Dryer | SA 36. | 35,400 | Habib Sugar Mills Ltd. |
| 21 | Structure For Auxiliary And Main Carries | SA 36. | 32,586 | Karachi Shipyard & Engg. Works |
| 22 | Structure For Auxiliary And Main Carries | SA 36. | 32,586 | Karachi Shipyard & Engg. Works |



PAST PERFORMANCE

STEEL STRUCTURES

STEEL STRUCTURE

| SR.# | DESCRIPTION | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|--|----------|--------------------|----------------------------------|
| 23 | Structure For Cane Feeding Table And Tippler Platform | SA 36. | 32,000 | Fauji Sugar Mills Ltd. |
| 24 | Racks | SA 36. | 30,000 | Allied Tractors |
| 25 | Supporting Frame, Continuous Centrifugal | SA 36. | 29,869 | Karachi Shipyard & Engg. Works |
| 26 | Structure For Bagasses Carrier And Elevator | SA 36. | 26,650 | Karachi Shipyard & Engg. Works |
| 27 | Supporting Frame, Continuous Centrifugal | SA 36. | 25,877 | Karachi Shipyard & Engg. Works |
| 28 | Steel Structure Columns, Beams, Staircase Railing, Supports, Bracing And Platform | SA 36. | 25,000 | Mirpurekhas Sugar Mills Ltd |
| 29 | Supporting Structure & Walkway, Ladder & Railing For Feed Water Tanks | SA 36. | 21,000 | Karachi Shipyard & Engg. Works |
| 30 | Structure For Primary And Secondary Carriers | SA 36. | 20,700 | Mehran Sugar Mills Ltd. |
| 31 | Steel Structure for Pump House | A 36. | 20,000 | MAPAK Qasim Bulkers (Pvt.) Ltd. |
| 32 | Boiler Drum Lifting Beams | SA 36. | 20,000 | Karachi Shipyard & Engg. Works |
| 33 | Staging Pillars For Bagasse Dryer | SA 36. | 20,000 | Habib Sugar Mills Ltd. |
| 34 | Floor At Level+12000 & + 13000 | SA 36. | 19,108 | Karachi Shipyard & Engg. Works |
| 35 | Lower Support Frame, Tower Assembly And Trestle | SA 36. | 15,158 | Sind Abadgar's Sugar Mills Ltd |
| 36 | Platform For Hydraulic Dampers | SA 36. | 14,000 | Karachi Shipyard & Engg. Works |
| 37 | Supporting Structure For Electric Hoist | SA 36. | 12,000 | Karachi Shipyard & Engg. Works |
| 38 | Stabilities B / W A & B Line 2' & 3, C & D Line 3, D & E Line 1" At Level + 3000, Line 2' B / W E & F, Line 2' And 3 B / W N & O | SA 36. | 11,800 | Karachi Shipyard & Engg. Works |
| 39 | Staging Under Sugar Vibrating Screen And Storage Hopper (Drying & Bagging House) | SA 36. | 11,420 | Karachi Shipyard & Engg. Works |
| 40 | Structure For Bagasse Dryer | SA 36. | 10,000 | Fauji Sugar Mills Ltd. |
| 41 | Supporting Frame For Batch Centrifugal | SA 36. | 9,848 | Karachi Shipyard & Engg. Works |
| 42 | Gang Way + 37500 | SA 36. | 9,567 | Karachi Shipyard & Engg. Works |
| 43 | Columns C' 6, D' 6, F' 6, G' 6, C' 5, D' 5, G' 5, F' 5, C'4, E' 4, F' 4 And G'4 | SA 36. | 9,109 | Karachi Shipyard & Engg. Works |
| 44 | Steel Structure for Pipe supports | A 36. | 6,500 | Overseas Trading Corp. (Oil Div) |
| 45 | Anchors Bolts | | 5,683 | Karachi Shipyard & Engg. Works |
| 46 | Stability H & J, K & L On Line 3 & 4 J & K On Line | SA 36. | 5,268 | Karachi Shipyard & Engg. Works |
| 47 | Gang Way + 10000 Level At Clarifier, Gang Way + 4500 Level | SA 36. | 4,593 | Karachi Shipyard & Engg. Works |
| 48 | Gang Way + 14527 & Stair + 7500 To 11000 To 14527 | SA 36. | 4,380 | Karachi Shipyard & Engg. Works |



PAST PERFORMANCE

STEEL STRUCTURES

STEEL STRUCTURE

| SR.# | DESCRIPTION | MATERIAL | TOTAL WEIGHT KG | CLIENT |
|------|---|----------|------------------|--------------------------------|
| 49 | Steel Structure for Monorail | SA 36. | 4,200 | VA TECH WABAG |
| 50 | Wedges | HR 275 | 3,062 | Karachi Shipyard & Engg. Works |
| 51 | Steel Structure For Tank Lorry Loading facilities at PSO KT-A. & KT-C | A 36. | 3,000 | Pakistan State Oil Co. Ltd. |
| 52 | Stability B / W Columns C' 6 - D' 6, D' 5 - F' 5, C' 4 - C' 5 & G' 4 - G' 5 | SA 36. | 2,872 | Karachi Shipyard & Engg. Works |
| 53 | Stair From + 4500 (P.H) To 7500 & + 0 To 7500 Stair Case E1, E2) | SA 36. | 2,862 | Karachi Shipyard & Engg. Works |
| 54 | Crane Girder With Supporting Structure | SA 36. | 2,500 | Karachi Shipyard & Engg. Works |
| 55 | Stair Case B / W 3 To 5 At G' At Level + 6000 To 13000 | SA 36. | 2,085 | Karachi Shipyard & Engg. Works |
| 56 | Working Platform At Vertical Crystallizer | SA 36. | 1,880 | Karachi Shipyard & Engg. Works |
| 57 | Stair 7500 To 12000 & 5000 To 7500 | SA 36. | 1,600 | Karachi Shipyard & Engg. Works |
| 58 | Stair Case To + 7500 | SA 36. | 1,550 | Karachi Shipyard & Engg. Works |
| 59 | Structure For Magnetic Separator & Belt Conveyor | SA 36. | 1,200 | Karachi Shipyard & Engg. Works |
| 60 | Gang Way At Level + 7.25 Om | SA 36. | 1,033 | Karachi Shipyard & Engg. Works |
| 61 | Gang Way B / W Batch Centrifugal Floor + 5000 | SA 36. | 1,013 | Karachi Shipyard & Engg. Works |
| 62 | Stability C4 - E4 At Level 6000 To + 12000 | SA 36. | 400 | Karachi Shipyard & Engg. Works |
| | Total | | 7,426,985 | |



PAST PERFORMANCE

STEEL STRUCTURES

STRUCTURAL STEEL WORK FOR JETTY CONSTRUCTION

| SR.# | DESCRIPTION | DIMENSION (mm) TH.XODXLENGTH | QTY NOS. | TOTAL WEIGHT KG. | MATERIAL | CODE | CLIENT |
|------|---|---|-------------|------------------------|---------------------|---------|---|
| 1 | BREASTING DOLPHIN WITH PLATFORM & ACCESSORIES | 23 x Ø 2,300 x 3,500 | 4 | 41,500 | API-5L-X52 & Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 2 | MOORING DOLPHIN WITH PLATFORM & ACCESSORIES | 18 x Ø 1,820 x 1,750 | 10 | 87,000 | API-5L-X52 & Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 3 | BREASTING DOLPHIN WITH PLATFORM & ACCESSORIES | 16 x Ø 1,420 x 3,800 | 2 | 8,000 | API-5L-X52 & Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 4 | WELDING OF TUBULAR STEEL PILES FOR JETTY INCLUDING FABRICATION OF PILE TIPS & TOP | 12.7 x Ø 609 x 33,500 | 53 | 345,787 | API-5L-X52 & Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 5 | WELDING OF TUBULAR STEEL PILES FOR JETTY INCLUDING FABRICATION OF PILE TIPS & TOP | 12.7 x Ø 508 x 32,000 | 43 | 224,081 | API-5L-X52 & Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 6 | WALKWAY (STEEL STRUCTURE) JETTY & OFFSHORE STATION | | | 112,000 | A 36 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 7 | STEEL CONDUCTORS | 20 x Ø 3030 x 27000 & 20 x Ø 3030 x 27000 | 3 | 140,000 | API-5L-X52 & Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 8 | STEEL PILES | 12 x Ø 1,200 x 8,500 | 6 | 18,304 | Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |



PAST PERFORMANCE

STEEL STRUCTURES

STRUCTURAL STEEL WORK FOR JETTY CONSTRUCTION

| SR.# | DESCRIPTION | DIMENSION (mm) TH.XODXLENGTH | QTY NOS. | TOTAL WEIGHT KG. | MATERIAL | CODE | CLIENT |
|------|---|---------------------------------|-------------|------------------------|----------|---------|--|
| 9 | STEEL PILES | 12 x Ø 600 x 12,810 | 18 | 41,788 | Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 10 | ANVIL FOR CONDUCTOR | 100 x Ø 3070 x 1900 | 1 | 16,000 | Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 11 | PILE SHEATH FOR CONDUCTOR WITH HAMMER CAGE | 20 x Ø 3440 x 4560 | 1 | 20,000 | Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| 12 | EMBEDDED STEEL SUPPORTS | 60 x 300 x 300 | 185 | 35,000 | Fe 360 | BS-5950 | China Harbor Engg Company (Engro Pak Tank Terminal Project) |
| | Total | | 326 | 1,089,460 | | | |



PAST PERFORMANCE

STEEL STRUCTURES

PLATE FABRICATED STRUCTURES, COLUMNS AND MASTS

| SR.# | DESCRIPTION | DIMENSIONS (mm) TH. X OD X LENGTH | QTY | TOTAL WEIGHT (KG.) | MATERIAL | CODE | CLIENT |
|------|--|--------------------------------------|------------|--------------------|----------------------|---------------------|----------------------------------|
| 1 | SELF SUPPORTED TUBULAR LIGHT TOWERS | 12-18 x Ø 900-1600 x 53000 | 3 | 90,000 | HR 275 | BS-5950 & AS 1170.2 | Philips Electric Co. of Pakistan |
| 2 | BREASTING DOLPHIN WITH PLATFORM & ACCESSORIES | 23 x Ø 2.300 x 3,500 | 4 | 41,500 | API-5L-X 52 & Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 3 | MOORING DOLPHIN WITH PLATFORM & ACCESSORIES | 18 x Ø 1,820 x 1,750 | 10 | 87,500 | API-5L-X 52 & Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 4 | BREASTING DOLPHIN WITH PLATFORM & ACCESSORIES | 16 x Ø 1420 x 3800 | 2 | 8,000 | API-5L-X 52 & Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 5 | WELDING OF TUBULAR STEEL PILES INCLUDING FABRICATION OF PILE TIPS & TOP | 12.7 x Ø 609 x 33,500 | 53 | 345,787 | API-5L-X 52 & Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 6 | WELDING OF TUBULAR STEEL PILES OF ACCESSORIES BRIDGE AND WALK-WAY INCLUDING FABRICATION OF PILE TIPS & TOP | 12.7 x Ø 508 x 32000 | 43 | 224,081 | API-5L-X 52 & Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 7 | STEEL CONDUCTORS | 20-30 x Ø 3030 x 27000 | 3 | 126,000 | API-5L-X 52 & Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 8 | STEEL PILES | 12 x Ø 1200 x 8500 | 6 | 18,304 | Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 9 | STEEL PILES | 12 x Ø 600 x 12810 | 18 | 41,788 | Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 10 | ANVIL FOR CONDUCTOR | 100 x Ø 3070 x 1900 | 1 | 16,000 | Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| 11 | PILE SHEATH FOR CONDUCTOR WITH HAMMER CAGE | 20 x Ø 3440 x 4560 | 1 | 20,000 | Fe 360 | BS-5960 | CHEC (Engro Pak Tank Terminal) |
| | | | 144 | 1,018,960 | | | |



PAST PERFORMANCE

ROTARY MACHINES

ROTARY MACHINES

| SR. # | DESCRIPTION | QTY. NOS. | TOTAL WEIGHT KG | CLIENT |
|-------|--|-----------|-----------------|-------------------------------|
| 1 | HIGH EXTRACTION 6 ROLLERS CANE CRUSHING MILLS WITH HYDRAULIC LIFTING ARRANGEMENT ON TOP & FEED ROLLERS. | 4 | 488,000 | Habib Sugar Mills Ltd |
| 2 | DE-PITHER COMPLETE WITH CASING, ROTOR, FEEDER AND DISCHARGE HOPPER / DISTRIBUTOR AND STEEL STRUCTURE | 1 | 55,000 | Habib Sugar Mills Ltd |
| 3 | CONTINUOUS CENTRIFUGAL MACHINES (TSK) | 8 | 49,600 | Habib Sugar Mills Ltd |
| 4 | CANE LEVELER, SCREW CONVEYOR, CYCLONE BAGASILLO, LIME ELEVATOR, LIME SLACKER AND DRY SUGAR VIBRATORY SCREEN. | 6 | 45,000 | Larr Sugar Mills Ltd |
| 5 | HEAVY DUTY HAMMER CRUSHER (CANE FIBERIZER) 6000 TCD | 1 | 45,000 | Mehran Sugar Mills Ltd. |
| 6 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 45,000 | Tharparkar Sugar Mills Ltd. |
| 7 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 8000 TCD | 1 | 35,000 | Faran Sugar Mills Ltd |
| 8 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Habib Sugar Mills Ltd |
| 9 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Sanghar Sugar Mills Ltd |
| 10 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Abidi Business Associates |
| 11 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 2 | 30,000 | Baz Enterprises (Pvt.) Ltd |
| 12 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Ittefaque Foundry (Pvt.) Ltd |
| 13 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Tandlianwala Sugar Mills Ltd. |
| 14 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Fauji Sugar Mills Ltd. |
| 15 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Mirza Sugar Mills Ltd. |
| 16 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Larr Sugar Mills Ltd |
| 17 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | 1 | 30,000 | Noon Sugar Mills Ltd. |
| 18 | CANE SHREDDER 3000 TCD | 1 | 22,000 | Habib Sugar Mills Ltd |
| 19 | HEAVY DUTY ROTARY CANE CUTTER 5060 MM WIDE | 1 | 18,000 | Habib Sugar Mills Ltd |



PAST PERFORMANCE

ROTARY MACHINES

ROTARY MACHINES

| SR. # | DESCRIPTION | QTY. NOS. | TOTAL WEIGHT KG | CLIENT |
|-------|---|-----------|------------------|--------------------------------|
| 20 | CONTINUOUS CENTRIFUGAL MACHINES (BMA) | 3 | 18,000 | J.D.W. Sugar Mills Ltd |
| 21 | CHIP BOARD FORMING MACHINES AND ACCESSORIES | 1 | 15,005 | Sind Particle Board |
| 22 | CONTINUOUS CENTRIFUGAL MACHINES (BMA) | 3 | 15,000 | Habib Sugar Mills Ltd |
| 23 | BASCO CENTRIFUGAL MACHINES TYPE B-6 | 3 | 14,100 | Habib Sugar Mills Ltd |
| 24 | CONTINUOUS CENTRIFUGAL MACHINES (BMA) | 2 | 12,000 | Dewan Sugar Mills Ltd |
| 25 | CHIP BOARD FORMING MACHINES AND ACCESSORIES | 1 | 12,000 | Baluchistan Particle Board |
| 26 | BREQUETTING PRESS | 1 | 10,000 | Habib Sugar Mills Ltd |
| 27 | ROTARY BAGASSE FEEDERS FOR BOILER. | 6 | 9,000 | Abidi Business Associates |
| 28 | ROTARY CANE CUTTER 1800 MM WIDE | 1 | 8,600 | Habib Sugar Mills Ltd |
| 29 | REVERSE CANE CUTTER WITH ANVIL PLATE | 1 | 8,000 | Mehran Sugar Mills Ltd. |
| 30 | ROTARY BAGASSE FEEDERS FOR BOILER. | 6 | 7,500 | Mirpur Khas Sugar Mills Ltd |
| 31 | FINISHING ROTARY CANE CUTTER | 1 | 7,000 | Karachi Shipyard & Engg. Works |
| 32 | CANE LEVELLER | 1 | 3,600 | Karachi Shipyard & Engg. Works |
| 33 | ROTARY FEEDING VALVES FOR GAGASSE DRYER. | 3 | 3,000 | Fauji Sugar Mills Ltd. |
| 34 | LIME SLACKER | 1 | 2,000 | Karachi Shipyard & Engg. Works |
| 35 | ROTARY CANE LEVELLER DRUM | 1 | 1,500 | Tharparkar Sugar Mills Ltd. |
| 36 | CO ₂ COMPRESSOR | 1 | 1,200 | Habib Sugar Mills Ltd |
| | Total | 71 | 1,250,105 | |



PAST PERFORMANCE

ROTARY MACHINES

CARRIERS, BELT CONVEYORS AND SCREW CONVEYORS

| SR.# | DESCRIPTION | QTY. NOS. | DIMENSIONS WIDE X LONG mm | MATERIAL | WEIGHT KG | CLIENT |
|------|-------------|-----------|---------------------------|----------|-----------|--------|
|------|-------------|-----------|---------------------------|----------|-----------|--------|

CARRIERS

| | | | | | | |
|----|---|---|--------------|-----|--------|-------------------------------|
| 1 | PRIMARY AND SECONDARY CANE CARRIER (APRON TYPE) | 2 | 2100 x 70000 | C.S | 75,000 | Mehran Sugar Mills Ltd |
| 2 | MAIN CANE CARRIER (APRON TYPE) | 1 | 1900 x 50000 | C.S | 45,000 | Habib Sugar Mills Ltd |
| 3 | AUXILIARY & MAIN CARRIER (APRON TYPE) | 2 | 1800 x 67000 | C.S | 58,000 | Karachi Shipyard & Eng. Works |
| 4 | AUXILIARY & MAIN CONVEYOR | 2 | 1800 x 65000 | C.S | 55,000 | Karachi Shipyard & Eng. Works |
| 5 | CANE FEED TABLE WITH TRUCK END DUMPER | 1 | 6000 x 12000 | C.S | 29,650 | Fauji Sugar Mills Ltd |
| 6 | CANE FEED TABLE WITH TRUCK END DUMPER | 1 | 6001 x 12000 | C.S | 29,650 | Fauji Sugar Mills Ltd |
| 7 | ELEVATOR BAGASSE CONVEYOR | 1 | 1400 x 26000 | C.S | 13,500 | Karachi Shipyard & Eng. Works |
| 8 | HORIZONTAL DISTRIBUTOR CONVEYOR | 1 | 1400 x 61200 | C.S | 28,000 | Karachi Shipyard & Eng. Works |
| 9 | RECLAIMING BAGASSE CONVEYOR | 1 | 1400 x 65000 | C.S | 24,000 | Karachi Shipyard & Eng. Works |
| 10 | AUXILIARY BAGASSE ELEVATOR | 1 | 1900 x 20000 | C.S | 15,763 | Habib Sugar Mills Ltd |
| 11 | AUXILIARY BAGASSE CARRIER | 1 | 1900 x 23600 | C.S | 18,600 | Habib Sugar Mills Ltd |
| 12 | BAGASSE RETURN CARRIER | 1 | 1900 x 16800 | C.S | 13,000 | Habib Sugar Mills Ltd |
| 13 | BAGASSE CARRIER | 1 | 1900 x 60000 | C.S | 39,500 | Habib Sugar Mills Ltd |
| 14 | ELEVATOR BAGASSE CARRIER | 1 | 1900 x 33000 | C.S | 30,500 | Habib Sugar Mills Ltd |
| 15 | DRAG TYPE CONVEYOR | 1 | 1800 x 15000 | C.S | 16,000 | Karachi Shipyard & Eng. Works |
| 16 | INTER CARRIER RAKE TYPE | 2 | 1800 x 8000 | C.S | 30,000 | Habib Sugar Mills Ltd |



PAST PERFORMANCE

ROTARY MACHINES

CARRIERS, BELT CONVEYORS AND SCREW CONVEYORS

| SR.# | DESCRIPTION | QTY. NOS. | DIMENSIONS WIDE X LONG mm | MATERIAL | WEIGHT KG | CLIENT |
|------|---|-----------|---------------------------|----------|-----------|--------------------------------|
| 17 | SCRAPER CONVEYOR CONSISTING OF FRAME STRUCTURE, SUPPORT, BOTTOM PLATE, CHAIN SPROCKETS, INSPECTION COVER, CONNECTION PIECES WITH CONVEYOR FRAME | 3 | 1900 x 9000 | C.S | 70,500 | Habib Sugar Mills Ltd |
| 18 | MUD CAKE CONVEYOR | 1 | 500 x 15000 | C.S | 1,200 | Karachi Shipyard & Eng. Works |
| 19 | MUD CAKE CONVEYOR & CAKE BUNKER | 1 | 1500 x 20000 | C.S | 2,700 | Karachi Shipyard & Eng. Works |
| 20 | CONVEYOR TABLE | 4 | 1500 x 48000 | C.S | 17,500 | Al-Ghazi Tractor Limited |
| 21 | CONVEYOR TABLE | 1 | 1500 x 14000 | C.S | 5,000 | Al-Ghazi Tractor Limited |
| 22 | BELT CONVEYOR | 2 | 800 x 12000 | C.S | 4,000 | Habib Sugar Mills Ltd |
| 23 | RUBBER BELT CONVEYOR WITH LEVELLER AND STRUCTURE | 2 | 2150 x 6700 | C.S | 19,000 | Karachi Shipyard & Eng. Works |
| 24 | MAGNETIC SEPARATOR BELT CONVEYOR WITH LEVELER | 1 | 1800 x 6000 | C.S | 8,500 | Habib Sugar Mills Ltd |
| 25 | MAGNETIC SEPARATOR BELT CONVEYOR | 2 | 1800 x 8000 | C.S | 7,500 | Mirpur Khas Sugar Mills Ltd |
| 26 | BELT CONVEYOR FOR BAGGING HOUSE | 1 | 850 x 25000 | C.S | 2,450 | Al-Noor Sugar Mills Ltd |
| 27 | MOVEABLE BELT CONVEYOR FOR SUGAR BAGS | 4 | 800 x 5000 | C.S | 8,000 | Al-Noor Sugar Mills Ltd |
| 28 | RUBBER BELT CONVEYOR | 1 | 600 x 4000 | C.S | 1,350 | Futehally Chemicals (Pvt.) Ltd |
| 29 | TRUCK LOADER CONVEYOR | 25 | 700 x 6850 | C.S | 52,500 | Ali Noor (Pvt.) Ltd |
| 30 | FEED TABLE CONVEYOR | 25 | 600 x 3000 | C.S | 34,375 | Ali Noor (Pvt.) Ltd |



PAST PERFORMANCE

ROTARY MACHINES

CARRIERS, BELT CONVEYORS AND SCREW CONVEYORS

| SR.# | DESCRIPTION | QTY. NOS. | DIMENSIONS WIDE X LONG mm | MATERIAL | WEIGHT KG | CLIENT |
|------|-------------|-----------|---------------------------|----------|-----------|--------|
|------|-------------|-----------|---------------------------|----------|-----------|--------|

BELT CONVEYORS

| | | | | | | |
|----|---------------------------------------|----|--------------|-----|--------|--------------------------------|
| 31 | TROLLEY FOR LOADER | 2 | | C.S | 5,000 | Ali Noor (Pvt.) Ltd |
| 32 | BELLY CONVEYOR TYPE TRUCK LOADER | 16 | | C.S | 32,000 | Mega Equipment (Pvt) Ltd |
| 33 | FEED TABLE CONVEYOR | 16 | | C.S | 32,000 | Mega Equipment (Pvt) Ltd |
| 34 | TRUCK LOADER CONVEYOR | 12 | 700 x 6850 | C.S | 25,200 | Dilawar Brothers |
| 35 | FEED TABLE CONVEYOR FOR BAGS SHIFTING | 12 | 600 x 3000 | C.S | 16,500 | Dilawar Brothers |
| 36 | FABRICATED BELT CONVEYOR | 1 | 800 x 15000 | C.S | 2,250 | Bawany Sugar Mills Ltd |
| 37 | MUD BELT CONVEYOR | 1 | 500 x 12000 | C.S | 1,830 | Asonix Industries (Pvt.) Ltd |
| 38 | RUBBER BELT CONVEYOR | 1 | 1040 x 10000 | C.S | 3,000 | Balochistan Particle Board Ltd |

SCREW CONVEYORS

| | | | | | | |
|----|-----------------------------------|---|---------------|---------------|-------|------------------------------|
| 39 | CUSH CUSH CONVEYOR FOR MILL HOUSE | 2 | Ø 450 x 7410 | SA 240 TP 304 | 1,168 | Karachi Shipyard & Works Ltd |
| 40 | CUSH CUSH CONVEYOR FOR MILL HOUSE | 1 | Ø 450 x 7410 | SA 240 TP 304 | 1,168 | Tharparkar Sugar Mills Ltd |
| 41 | SCREW CONVEYOR | 1 | Ø 760 x 14300 | C.S | 3,750 | Karachi Shipyard & Works Ltd |
| 42 | SCREW CONVEYOR | 1 | Ø 624 x 10200 | C.S | 2,250 | Karachi Shipyard & Works Ltd |
| 43 | SCREW CONVEYOR FOR "C" SUGAR | 1 | Ø 508 x 7000 | C.S | 2,066 | Mirpur Khas Sugar Mills Ltd |
| 44 | CUSH CUSH CONVEYOR FOR MILL HOUSE | 1 | Ø 534 x 5500 | SA 240 TP 304 | 1,850 | Mirpur Khas Sugar Mills Ltd |



PAST PERFORMANCE

ROTARY MACHINES

CARRIERS, BELT CONVEYORS AND SCREW CONVEYORS

| SR.# | DESCRIPTION | QTY. NOS. | DIMENSIONS WIDE X LONG mm | MATERIAL | WEIGHT KG | CLIENT |
|------|--|--------------|---------------------------------|----------|----------------|------------------------|
| 45 | SCREW CONVEYOR FOR "A" SUGAR, COMPLETE WITH DRIVING UNIT | 1 | Ø 500 x 6000 | C.S | 2,053 | Bawany Sugar Mills Ltd |
| 46 | SCREW CONVEYOR FOR "B" SUGAR | 1 | Ø 500 x 7000 | C.S | 2,200 | Bawany Sugar Mills Ltd |
| | | 163 | | | 890,023 | |



PAST PERFORMANCE

ROTARY MACHINES

FABRICATED BLOWERS AND FANS (DYNAMICALLY BALANCED)

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | CLIENT |
|------|--|----------|----------|--------------------------------|
| 1 | IMPELLER FOR EXHAUST FAN Ø 2690 MM | 2 | C.S | Attock Cement Pakistan Limited |
| 2 | BAGAOILLO BLOWER | 1 | C.S | Karachi Shipyard & Engg Works |
| 3 | FABRICATED FAN Ø 940 MM | 2 | C.S | Gharib Sons Limited |
| 4 | DUST BLOWER | 1 | C.S | Baluchistan Particle Board Ltd |
| 5 | PROTEIN DRYER BLOWER FAN Ø 650 MM | 1 | C.S | Habib Arkady Limited |
| 6 | RAW MILL FAN Ø 2050 MM X 434 MM WIDTH | 1 | C.S | Pak Land Cement Limited |
| 7 | BLOWER FAN Ø 400MM WITH CASING | 1 | C.S | Pak Chemicals Limited |
| 8 | BLOWER FAN Ø 750MM X 250MM WIDTH | 1 | C.S | Gum International |
| 9 | AIR BLOWER FAN AND CASING | 1 | C.S | International Industries Ltd. |
| 10 | SPRAY DRIER BLOWER FAN Ø 500 MM X WIDTH 212 MM | 1 | C.S | Karam Ceramics Limited |
| 11 | AXIAL TUBE FAN Ø 20" | 60 | C.S | International Industries Ltd. |
| 12 | IMPELLER Ø 540 MM | 6 | C.S | Baluchistan Particle Board Ltd |
| 13 | IMPELLER Ø 715 MM | 9 | C.S | Baluchistan Particle Board Ltd |



PAST PERFORMANCE

ROTARY MACHINES

FABRICATED BLOWERS AND FANS (DYNAMICALLY BALANCED)

| SR.# | DESCRIPTION | QTY NOS. | MATERIAL | CLIENT |
|------|--|----------|----------|---|
| 14 | IMPELLER Ø 785 MM | 5 | C.S | Baluchistan Particle Board Ltd |
| 15 | IMPELLER Ø 1075 MM | 3 | C.S | Baluchistan Particle Board Ltd |
| 16 | BLOWER FAN WITH CASING | 3 | C.S | International Industries Ltd. |
| 17 | BLOWER FAN Ø 25" WITH OUTER CASING | 1 | C.S | Industrial Combustion And Controls (Pvt.) Ltd |
| 18 | IMPELLER Ø 675 MM X 200 MM WIDE | 2 | C.S | Baluchistan Particle Board Ltd |
| 19 | FABRICATED DUST FAN IMPELLERS Ø 700 MM | 2 | C.S | Baluchistan Particle Board Ltd |
| 20 | ALUMINIUM CASTED FAN OF 2 BLADES COMPLETE WITH OUTER CASING | 4 | C.S | International Industries Ltd. |
| 21 | FORCED COLLER FAN | 1 | C.S | International Industries Ltd. |
| 22 | COMPLETE BLOWER WITH 100 HP DRIVE FOR BAGASSE DRIER F Ø 2000 X 600 MM WIDE | 1 | C.S | Fauji Sugar Mills Khoski |
| 23 | COMPLETE BLOWER WITH 100 HP DRIVE FOR BAGASSE DRIER F 3000 X 600 MM WIDE | 1 | C.S | Habib Sugar Mills Ltd |
| 24 | PITH BLOWER Ø 1500 X 300 MM WIDE | 1 | C.S | Habib Sugar Mills Ltd |
| 25 | FABRICATED BLOWER CASING AND FAN | 1 | C.S | Pak Chemicals Limited |



PAST PERFORMANCE

REFURBISHMENT JOBS

REFURBISHMENT OF SHELL & TUBE TYPE HEAT EXCHANGERS (RE-TUBING, NOZZLES REPLACEMENT, HYDROSTATIC TESTING AND JET BLAST CLEANING)

| S.# | Equip # | Type | Arrangement | Qty. Nos. | Test Pressure | | Tubes Details | | | | | Tube Sheet Detail | | | | Shell Details | | | Client |
|-----|----------|---------|-----------------|--------------|---------------|--------------|---------------|-----------|-------------|------|-----------|-------------------|--------|-------------|---------|---------------|-----------------|---|--------|
| | | | | | Shell Psig | Tube Psig | OD in. | Length ft | Material | Qty. | HS Ft2 | Sheet No. 1 | | Sheet No. 2 | | OD (in) | Length (ft.) | Th. (in) | |
| | | | | | | | | | | | | OD in. | Thk in | OD in. | Thk In. | | | | |
| 1 | D2-0301A | AFT/AET | Series Floating | 1 | 450 | 450 | 0.75 | 24 | SA249 TP304 | 195 | 919 | 21.5 | 2 | 26.5 | 2 | 22 | 28 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 2 | D2-0301B | | | 1 | 450 | 450 | 0.75 | 24 | SA214 | 195 | 919 | 21.5 | 2 | 26.5 | 2 | 22 | 28 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 3 | D2-0301C | | | 1 | 450 | 450 | 0.75 | 24 | SA214 | 195 | 919 | 21 | 2 | 26 | 2 | 22 | 28 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 4 | D2-0304A | AFT/AET | Series Floating | 1 | 450 | 390 | 0.75 | 16 | SA214 | 198 | 622 | 21 | 2 | 26 | 2 | 22 | 18.5 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 5 | D2-03046 | | | 1 | 450 | 390 | 0.75 | 16 | SA214 | 198 | 622 | 21 | 2 | 26 | 2 | 22 | 18.5 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 6 | D2-0307A | AFT/AET | Floating | 1 | 385 | 400 | 1 | 20 | SA199T1 | 323 | 1,691 | 31 | 3 | 38 | 3.5 | 32.5 | 22 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 7 | D2-0307B | | | 1 | 385 | 400 | 1 | 20 | SA-209T1 | 323 | 1,691 | 31 | 3 | 37 | 2.5 | 32 | 25.17 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 8 | D3-0307C | | | 1 | 385 | 400 | 1 | 20 | SA-209T1 | 323 | 1,691 | 31 | 2.5 | 37 | 2.5 | 32 | 25.17 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 9 | D2-0310A | AFT/AET | Series Floating | 1 | 375 | 400 | 0.75 | 16 | SA214 | 246 | 773 | 23 | 2 | 28 | 2 | 24 | 18.7 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 10 | D2-03108 | | | 1 | 375 | 400 | 0.75 | 16 | SA214 | 246 | 773 | 23 | 2 | 28 | 2 | 24 | 18.7 | Bosicor Pakistan Ltd. (Oil Refinery) | |
| 11 | D2-0314 | AKT | Floating | 1 | 225 | 450 | 0.75 | 16 | SA214 | 454 | 1,426 | 21 | 2 | 26.5 | 2 | 36 | 36.85 | Bosicor Pakistan Ltd. (Oil Refinery) | |



PAST PERFORMANCE

REFURBISHMENT JOBS

REFURBISHMENT OF SHELL & TUBE TYPE HEAT EXCHANGERS (RE-TUBING, NOZZLES REPLACEMENT, HYDROSTATIC TESTING AND JET BLAST CLEANING)

| S.# | Equip # | Type | Arrangement | Qty. Nos. | Test Pressure | | Tubes Details | | | | | Tube Sheet Detail | | | | Shell Details | | | Client |
|-----|----------|---------|--------------------|--------------|---------------|--------------|---------------|-----------|----------|------|-------|-------------------|--------|-------------|---------|---------------|-----------------|-------------|---|
| | | | | | Shell Psig | Tube Psig | OD in. | Length ft | Material | Qty. | HS | Sheet No. 1 | | Sheet No. 2 | | OD (in) | Length (ft.) | Th. (in) | |
| | | | | | | | | | | | | OD in. | Thk in | OD in. | Thk In. | | | | |
| 12 | D2-0330 | AET/AFT | | 1 | | | 0.75 | 20 | CS? | | - | | | | | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 13 | D2-0331 | | | 1 | | | | 18.5 | | | - | | | | 16 | 22.83 | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 14 | D2-0334 | AET/AKT | | 1 | | | 0.75 | 16 | CS? | | - | | | | 24 | 1.67 | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 15 | D2-0201 | AET/AFT | Floating | 1 | 85 | 340 | 0.75 | 20 | SA214 | 566 | 2,223 | 35 | 2.5 | 35 | 2.5 | 36 | 27.16 | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 16 | D2-0204A | AET/AFT | Series Floating | 1 | 150 | 300 | 0.75 | 16 | SA214 | 124 | 390 | 22.5 | 1.5 | 17 | 1.5 | 18.2 | 18 | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 17 | D2-0204B | | | 1 | 150 | 300 | 0.75 | 16 | SA214 | 124 | 390 | 22.5 | 1.5 | 17 | 1.5 | 18.2 | 18 | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 18 | D2-0204C | | | 1 | 150 | 300 | 0.75 | 16 | SA214 | 124 | 390 | 22.5 | 1.5 | 17 | 1.5 | 18.2 | 18 | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 19 | D2-0205A | AET/AFT | Series Floating | 1 | 150 | 300 | 0.75 | 20 | SA214 | 110 | 432 | 22.5 | 1.5 | 17 | 1.5 | 18 | 22.16 | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 20 | D2-0205B | | | 1 | 150 | 300 | 0.75 | 20 | SA214 | 110 | 432 | 22.5 | 1.5 | 17 | 1.5 | 18 | 22.16 | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 21 | D2-0205C | | | 1 | 150 | 300 | 0.75 | 20 | SA214 | 110 | 432 | 22.5 | 1.5 | 17 | 1.5 | 18 | 22.16 | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 22 | D2-0206 | | | 1 | | | | 20 | | | - | | | | | 30 | 25 | | Bosicor Pakistan Ltd. (Oil Refinery) |



PAST PERFORMANCE

REFURBISHMENT JOBS

REFURBISHMENT OF SHELL & TUBE TYPE HEAT EXCHANGERS (RE-TUBING, NOZZLES REPLACEMENT, HYDROSTATIC TESTING AND JET BLAST CLEANING)

| S.# | Equip # | Type | Arrangement | Qty. Nos. | Test Pressure | | Tubes Details | | | | | Tube Sheet Detail | | | | Shell Details | | | Client |
|-----|-----------|-----------|-----------------|--------------|---------------|--------------|---------------|-----------|----------|------|-------|-------------------|--------|-------------|---------|---------------|-----------------|-------------|---|
| | | | | | Shell Psig | Tube Psig | OD in. | Length ft | Material | Qty. | HS | Sheet No. 1 | | Sheet No. 2 | | OD (in) | Length (ft.) | Th. (in) | |
| | | | | | | | | | | | | OD in. | Thk in | OD in. | Thk In. | | | | |
| 23 | D2-0208 | | | 1 | | | 0.75 | 20 | | | - | | | | | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 24 | D2-0210 | AET/AFT | Floating | 1 | 157 | 263 | 0.75 | 20 | SA214 | 236 | 927 | 28.5 | 1.75 | 23 | 1.5 | | 24 | 23 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 25 | D2-0211A | AFT/G-lin | Series Floating | 1 | 150 | 150 | 0.75 | 12 | SA214 | 218 | 514 | 26.5 | 1.5 | 21 | 1.5 | | 22 | 15 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 26 | D2-0211B | | | 1 | 150 | 150 | 0.75 | 12 | SA214 | 218 | 514 | 26.5 | 1.5 | 21 | 1.5 | | 22 | 15 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 27 | D2-0213 | AFT | Floating | 1 | 225 | 150 | 1 | 24 | SA214 | 620 | 3,896 | 47 | 2.5 | 42 | 2.5 | | 30 | 27 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 28 | D2-0216A | | | 1 | | | | 20 | | | - | | | | | | 30 | 25 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 29 | D2-0216B | | | 1 | | | | 20 | | | - | | | | | | 30 | 25 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 30 | D2-0218 | | | 1 | | | | | | | - | | | | | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 31 | 21-E-1(3) | Finned | | 1 | 750 | 450 | 1.9 | 20 | A-53 | 6 | 60 | | | | | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 32 | 21-E-2(3) | Finned | | 1 | 655 | 655 | 1.9 | 20 | A-53 | 8 | 80 | | | | | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 33 | 21-E4 | BKU | | 1 | 750 | 90 | 0.75 | 16 | SA214 | 128 | 402 | | | | | | 24 | 20 | Bosicor Pakistan Ltd. (Oil Refinery) |



PAST PERFORMANCE

REFURBISHMENT JOBS

PUMPS AND MOTORS REFURBISHMENT

(REPAIRS, DYNAMIC BALANCING, MOTOR'S INSULATION AND REWINDING AND TESTING)

| S.# | Pumps # | Qty. | Specifications | | | | | | | Client | |
|-----|----------|------|---------------------|-------|--------|-------|--------------|-----------------------------|-------|--------|--------------------------------------|
| | | | Nozzles Size (Inch) | | | Motor | Mounting | Nozzle DirectionHo r/Ver | | | Flow Rate |
| | | | Nos. | Suct. | Disch. | Total | HP | Hor/Ver | Inlet | | Outlet |
| 1 | P-54A | 1 | 6.00 | 5.00 | 11.00 | 60 | Vert. Inline | 0° | 180° | 900 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 2 | P-54B | 1 | 6.00 | 4.00 | 10.00 | 60 | Vert. Inline | 0° | 180° | 900 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 3 | D3-0333 | 1 | 2.50 | 1.50 | 4.00 | 15 | Vert. Inline | 0° | 180° | 154 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 4 | D3-0209 | 1 | 2.00 | 1.50 | 3.50 | 10 | Vert. Inline | 0° | 90o | 110 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 5 | D3-0211 | 1 | 2.50 | 1.50 | 4.00 | 15 | Vert. Inline | 0° | 180° | 105 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 6 | D3-0303 | 1 | 2 | 1.50 | 3.50 | 5 | Vert. Inline | 0° | 180° | 46 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 7 | D3-0304 | 1 | 1.50 | 1 | 2.50 | 5 | Vert. Inline | 0° | 180° | 46 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 8 | D3-0311 | 1 | 3 | 2 | 5.00 | 5 | Vert. Inline | 0° | 180° | 115 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 9 | D3-0312 | 1 | 2.5 | 1.50 | 4.00 | 5 | Vert. Inline | 0° | 180° | 115 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 10 | D3-0309A | 1 | 2.50 | 1.50 | 4.00 | 7.5 | Vert. Inline | 0° | 180° | 53 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 11 | D3-0309B | 1 | 2.50 | 1.50 | 4.00 | 7.5 | Vert. Inline | 0° | 180° | 53 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 12 | D3-0332 | 1 | 2.50 | 1.50 | 4.00 | 7.5 | Vert. Inline | 0° | 180° | 128 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 13 | D3-0215 | 1 | 6 | 4 | 10.00 | 15 | Horizontal | 0° | 180° | 450 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 14 | D3-0331 | 1 | 3 | 2 | 5.00 | 15 | Vert. Inline | 0° | 180° | 128 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 15 | D3-0335 | 1 | 2 | 1.50 | 3.50 | 7.5 | Horizontal | 0° | 180° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 16 | P-78 | 1 | | | 0.00 | 7.5 | Horizontal | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 17 | P-79 | 1 | 4 | 3 | 7.00 | 7.5 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 18 | P-56B | 1 | 5 | 4 | 9.00 | 10 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 19 | P-93 | 1 | 2 | 1.50 | 3.50 | 15 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 20 | D3-0212 | 1 | 3 | 1.50 | 4.50 | 20 | Vert. Inline | 0° | 180° | 211 | Bosicor Pakistan Ltd. (Oil Refinery) |



PAST PERFORMANCE

REFURBISHMENT JOBS

PUMPS AND MOTORS REFURBISHMENT

(REPAIRS, DYNAMIC BALANCING, MOTOR'S INSULATION AND REWINDING AND TESTING)

| S.# | Pumps # | Qty. | Specifications | | | | | | | | Client |
|-----|----------|------|---------------------|-------|--------|-------|---------------------|-------------------------|-------|-----------|--------------------------------------|
| | | | Nozzles Size (Inch) | | | Motor | Mounting | Nozzle DirectionHor/Ver | | Flow Rate | |
| | | | Nos. | Suct. | Disch. | Total | HP | Hor/Ver | Inlet | Outlet | |
| 21 | D3-0213 | 1 | 2.50 | 1.50 | 4.00 | 25 | Horizontal | 0° | 90° | 211 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 22 | D3-0334 | 1 | 4 | 3 | 7.00 | 15 | Vert. Inline | 0° | 180° | 154 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 23 | P-19B | 1 | 3 | 2 | 5.00 | 20 | Horizontal | 0° | 90° | 300 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 24 | P-21 | 1 | 6 | 4 | 10.00 | 30 | Horizontal | 0° | 90° | 800 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 25 | 21-P-8 | 1 | 4 | 2 | 6.00 | 10 | Vert. Turbine barre | 0° | 90° | 160 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 26 | 21-P-10 | 1 | 6 | 6 | 12.00 | 20 | Vert. Turbine barre | 0° | 90° | 400 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 27 | 21-p-9 | 1 | 6 | 4 | 10.00 | 15 | Vert. Inline | 0° | 180° | 400 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 28 | 21-P-EXS | 1 | | | 0.00 | 25 | Vert. Turbine barre | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 29 | P-19A | 1 | 6 | 6 | 12.00 | 75 | Vert. Inline | 0° | 180° | 900 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 30 | P-22A | 1 | 6 | 6 | 12.00 | 75 | Vert. Inline | 0° | 180° | 900 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 31 | P-22B | 1 | 6 | 6 | 12.00 | 75 | Vert. Inline | 0° | 180° | 900 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 32 | 21-P-7A | 1 | 10 | 8 | 18.00 | 100 | Horizontal | 0° | 90° | 1700 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 33 | 21-P-7B | 1 | 10 | 8 | 18.00 | 100 | Horizontal | 0° | 90° | 1700 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 34 | P-17B | 1 | | | 0.00 | 5 | Horizontal | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 35 | 21-P-11 | 1 | 4 | 3 | 7.00 | 25 | Vert. Inline | 0° | 180° | 400 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 36 | 21-P-1 | 1 | 1.50 | 0.75 | 2.25 | 5 | Vert. Inline | 0° | 180° | 45 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 37 | 21-P-5A | 1 | 2.50 | 1.50 | 4.00 | 7.5 | Vert. Inline | 0° | 180° | 25 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 38 | 21-P-5B | 1 | 2.50 | 1.50 | 4.00 | 7.5 | Vert. Inline | 0° | 180° | 60 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 39 | P-17A | 1 | 6 | 6 | 12.00 | 25 | Horizontal | 0° | 90° | 450 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 40 | P-39 | 1 | 6 | 6 | 12.00 | 25 | Horizontal | 0° | 90° | 450 | Bosicor Pakistan Ltd. (Oil Refinery) |



PAST PERFORMANCE

REFURBISHMENT JOBS

PUMPS AND MOTORS REFURBISHMENT

(REPAIRS, DYNAMIC BALANCING, MOTOR'S INSULATION AND REWINDING AND TESTING)

| S.# | Pumps # | Qty. | Specifications | | | | | | | | Client |
|-----|----------|------|---------------------|-------|--------|-------|--------------------|-------------------------|-------|-----------|--------------------------------------|
| | | | Nozzles Size (Inch) | | | Motor | Mounting | Nozzle DirectionHor/Ver | | Flow Rate | |
| | | | Nos. | Suct. | Disch. | Total | HP | Hor/Ver | Inlet | Outlet | |
| 41 | P-15A | 1 | 6 | 6 | 12.00 | 25 | Horizontal | 0° | 90° | 850 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 42 | P-67 | 1 | 6 | 6 | 12.00 | 25 | Horizontal | 0° | 90° | 850 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 43 | P-68 | 1 | 6 | 6 | 12.00 | 25 | Horizontal | 0° | 90° | 850 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 44 | P-69 | 1 | 6 | 6 | 12.00 | 25 | Horizontal | 0° | 90° | 850 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 45 | P-16 | 1 | 3 | 2 | 5.00 | 50 | Horizontal | 0° | 180° | 150 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 46 | P-84 | 1 | 4 | 4 | 8.00 | 15 | Horizontal | 0° | 180° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 47 | P-86A | 1 | 4 | 4 | 8.00 | 15 | Horizontal | 0° | 180° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 48 | P-91 | 1 | 8 | 8 | 16.00 | 50 | Horizontal | 0° | 180° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 49 | P-86B | 1 | 6 | 4 | 10.00 | | Horizontal | 0° | 0° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 50 | P-89 | 1 | | | 0.00 | | Horizontal | | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 51 | P-14 | 1 | 6 | 6 | 12.00 | 25 | Horizontal | 0° | 90° | 450 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 52 | 21-P-EX6 | 1 | | 1 | 1.00 | 7.5 | Horizontal | 0° | 90° | 70 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 53 | MS-004 | 1 | 8 | 6 | 14.00 | 200 | Horizontal | 0° | 180° | 1500 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 54 | D3-0230 | 1 | 8 | 5 | 13.00 | 40 | Horizontal | 0° | 180° | 1000 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 55 | D3-0231 | 1 | 8 | 5 | 13.00 | 40 | Horizontal | 0° | 180° | 1000 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 56 | P-90 | 1 | 6 | 6 | 12.00 | 50 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 57 | P-97 | 1 | 3 | 3 | 6.00 | 7.5 | Ver. Turbine barro | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 58 | P-98 | 1 | 3 | 3 | 6.00 | 7.5 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 59 | P-94 | 1 | 4 | 4 | 8.00 | 5 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 60 | P-13B | 1 | 5 | 4 | 9.00 | 10 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |



PAST PERFORMANCE

REFURBISHMENT JOBS

PUMPS AND MOTORS REFURBISHMENT (REPAIRS, DYNAMIC BALANCING, MOTOR'S INSULATION AND REWINDING AND TESTING)

| S.# | Pumps # | Qty. | Specifications | | | | | | | Client | |
|-----|-----------|------|---------------------|-------|--------|-------|--------------------|-----------------------------|-------|--------|--------------------------------------|
| | | | Nozzles Size (Inch) | | | Motor | Mounting | Nozzle DirectionHo r/Ver | | | Flow Rate |
| | | | Nos. | Suct. | Disch. | Total | HP | Hor/Ver | Inlet | | Outlet |
| 61 | P-92 | 1 | 2 | 1.50 | 3.50 | 15 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 62 | D3-PXX9 | 1 | 2 | 1.50 | 3.50 | 1 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 63 | D3-PXX4 | 1 | 3 | 3 | 6.00 | 30 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 64 | D3-PXX5 | 1 | 3 | 3 | 6.00 | 30 | Horizontal | 0° | | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 65 | D3-PXXI | 1 | 4 | 4 | 8.00 | 7.5 | Horizontal | 0° | | 28 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 66 | P-56A | 1 | 2 | 2 | 4.00 | 25 | Vert. Inline | 0° | 180° | 181 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 67 | D3-0214 | 1 | 2 | 2 | 4.00 | 40 | Vert. Inline | 0° | 90° | 642 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 68 | D3-0206 | 1 | 2.50 | 1.50 | 4.00 | 10 | Ver. Turbine barro | 0° | 90° | 125 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 69 | P-99 | 1 | 6 | 4 | 10.00 | 75 | Horizontal | 0° | 180° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 70 | 21-P-EX4 | 1 | 4 | 4 | 8.00 | 5 | Horizontal | 0° | 180° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 71 | D3-PXX6 | 1 | 1.25 | 1 | 2.25 | 3 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 72 | 21-P-EX3A | 1 | 2 | 2 | 4.00 | 5 | Vert. Inline | 0° | 90° | 50 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 73 | D3-PXX7 | 1 | 2 | 1.50 | 3.50 | 5 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 74 | 21-P-EX2 | 1 | 2 | 1.50 | 3.50 | 7.5 | Horizontal | 0° | 180° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 75 | P-95 | 1 | 2 | 2 | 4.00 | 7.5 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 76 | P-96 | 1 | 2 | 2 | 4.00 | 7.5 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 77 | 21-P-EX3B | 1 | 2 | 2 | 4.00 | 10 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 78 | D3-PXX8 | 1 | 1.50 | 1.50 | 3.00 | 10 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |
| 79 | P-13A | 1 | 4 | 2 | 6.00 | 25 | Ver. Turbine barro | 0° | 90° | 20 | Bosicor Pakistan Ltd. (Oil Refinery) |
| 80 | 21-P-7C | 1 | 6 | 6 | 12.00 | 50 | Horizontal | 0° | 90° | | Bosicor Pakistan Ltd. (Oil Refinery) |



PAST PERFORMANCE

FIELD SERVICES / ERECTION EXPERIENCE

ERECTION JOBS

ABS has successfully completed the on location fabrication and erection of following equipment, machines, structures and tanks.

| SR.# | DESCRIPTION | DIMENSIONS (mm) | QTY | TOTAL | CLIENT OR DESIGNER |
|--|------------------------------|---------------------|-----|--------|--------------------------|
| | | OD / WIDE x LENGTH | | WEIGHT | |
| | | SHELL | | KG | |
| SHELL AND TUBE TYPE HEAT EXCHANGERS, REBOILERS AND CONDENSERS | | | | | |
| 1 | Condenser Vertical | 2712 x 4800 | 1 | 16,600 | CSK Distilleries Ltd |
| 2 | Condenser Vertical | 1410 x 4800 | 1 | 4,450 | CSK Distilleries Ltd |
| 3 | Condenser Vertical | 1008 x 3750 | 1 | 2,350 | CSK Distilleries Ltd |
| 4 | Mash Preheater | 1158 x 6800 | 1 | 4,680 | CSK Distilleries Ltd |
| 5 | Condenser Horizontal | 2012 x 6800 | 1 | 15,700 | CSK Distilleries Ltd |
| 6 | Condenser Vertical | 1008 x 3900 | 1 | 2,360 | CSK Distilleries Ltd |
| 7 | Condenser Vertical | 2012 x 4800 | 1 | 9,200 | CSK Distilleries Ltd |
| 8 | Reboiler Vertical | 2712 x 4800 | 1 | 16,900 | CSK Distilleries Ltd |
| 9 | Condenser Vertical | 2012 x 4800 | 1 | 9,200 | CSK Distilleries Ltd |
| 10 | Condenser Vertical | 1610 x 6800 | 1 | 9,925 | CSK Distilleries Ltd |
| 11 | Condenser Vertical | 910 x 3900 | 1 | 1,850 | CSK Distilleries Ltd |
| 12 | Reboiler Vertical | 1158 x 3350 | 1 | 2,800 | CSK Distilleries Ltd |
| 13 | Reboiler Vertical | 508 x 2900 | 1 | 600 | CSK Distilleries Ltd |
| 14 | Shell & Tube Type Condencer | 758 x 3600 (TS/TS) | 1 | 1,350 | Habib Distilleries |
| 15 | Shell & Tube Type Re-Boiler | 1160 X 4650 (TS/TS) | 1 | 3,000 | Habib Distilleries |
| 16 | Shell & Tube Type Condencer | 708 x 3600 (TS/TS) | 1 | 1,200 | Habib Distilleries |
| 17 | Shell & Tube Type Re-Boiler | 908 x 3150 (TS/TS) | 1 | 1,450 | Habib Distilleries |
| 18 | Shell & Tube Type Pre-Heater | 1008 X 6800 (TS/TS) | 1 | 3,450 | Habib Distilleries |
| 19 | Shell & Tube Type Condencer | 858 x 3750 (TS/TS) | 1 | 1,650 | Habib Distilleries |
| 20 | Shell & Tube Type Re-Boiler | 2162 x 4650 (TS/TS) | 1 | 9,500 | Habib Distilleries |
| 21 | Shell & Tube Type Re-Boiler | 2162 x 4650 (TS/TS) | 1 | 9,500 | Habib Distilleries |
| 22 | Shell & Tube Type Re-Boiler | 1610 x 4650 (TS/TS) | 1 | 5,400 | Habib Distilleries |



PAST PERFORMANCE

FIELD SERVICES / ERECTION EXPERIENCE

ERECTION JOBS

ABS has successfully completed the on location fabrication and erection of following equipment, machines, structures and tanks.

| SR.# | DESCRIPTION | DIMENSIONS (mm) | QTY | TOTAL | CLIENT OR DESIGNER |
|------|---------------------------------------|---------------------|-----|--------|---|
| | | OD / WIDE x LENGTH | | WEIGHT | |
| | | SHELL | | KG | |
| 23 | Shell & Tube Type Re-Boiler | 1610 x 4650 (TS/TS) | 1 | 5,400 | Habib Distilleries |
| 24 | Shell & Tube Type Condencer | 1610 x 6800 (TS/TS) | 1 | 9,350 | Habib Distilleries |
| 25 | Shell & Tube Type Condencer | 1310 x 6800 (TS/TS) | 1 | 6,000 | Habib Distilleries |
| 26 | Shell & Tube Type Re-Boiler | 406 x 2800 (TS/TS) | 1 | 390 | Habib Distilleries |
| 27 | Shell & Tube Heat Exchanger | 1320 x 5000 (TS/TS) | 4 | 36,952 | Mirpur Khas Sugar Mills Ltd |
| 28 | Dynamic Pre Condenser | 2000 x 8000 (TS/TS) | 1 | 25,000 | Habib Sugar Mills Ltd |
| 29 | Shell & Tube Heat Exchanger | 1679 x 4538 (TS/TS) | 1 | 10,700 | Matiari Sugar Mills Ltd |
| 30 | Shell & Tube Heat Exchanger | 1580 x 4600 (TS/TS) | 6 | 66,000 | Habib Sugar Mills Ltd |
| 31 | Shell & Tube Heat Exchanger | 1450 x 4315 (TS/TS) | 3 | 27,960 | Habib Sugar Mills Ltd |
| 32 | Shell & Tube Heat Exchanger | 1670 x 5180 (TS/TS) | 1 | 12,240 | Dewan Sugar Mills Ltd |
| 33 | Shell & Tube Heat Exchanger | 1136 x 6580 (TS/TS) | 1 | 8,550 | Thatta Sugar Mills Ltd |
| 34 | Shell & Tube Heat Exchanger | 1136 x 6580 (TS/TS) | 1 | 8,550 | Dadu Sugar Mills Ltd |
| 35 | Shell & Tube Heat Exchanger | 1300 x 5000 (TS/TS) | 1 | 10,200 | Mirpur Khas Sugar Mills Ltd |
| 36 | Contact Furnace (Shell & Tube Type) | 708 x 3500 (TS/TS) | 2 | 2,483 | (Urea Formaldehyde Plant) Baluchistan Particle Board Ltd. |
| | SHELL AND TUBE TYPE EVAPORATOR | | | | |
| 37 | Shell And Tube Tybe Evaporator | 3000 x 9270 | 1 | 37,000 | Faran Sugar Mills Ltd |
| 38 | Shell And Tube Tybe Evaporator | 4080 x 7890 | 1 | 48,600 | Habib Sugar Mills Ltd |
| 39 | Shell And Tube Tybe Evaporator | 4830 x 7930 | 1 | 70,000 | Habib Sugar Mills Ltd |
| 40 | Shell And Tube Tybe Evaporator | 5526 x 9296 | 1 | 91,000 | Mirpur Khas Sugar Mills Ltd |
| 41 | Shell And Tube Tybe Evaporator | 3725 x 9285 | 1 | 31,684 | Matiari Sugar Mills Ltd |
| 42 | Shell And Tube Tybe Evaporator | 4000 x 9050 | 1 | 50,533 | Karachi Shipyard & Engg. Works Ltd |
| 43 | Shell And Tube Tybe Evaporator | 4830 x 7930 | 1 | 70,000 | Habib Sugar Mills Ltd |



PAST PERFORMANCE

FIELD SERVICES / ERECTION EXPERIENCE

ERECTION JOBS

ABS has successfully completed the on location fabrication and erection of following equipment, machines, structures and tanks.

| SR.# | DESCRIPTION | DIMENSIONS (mm) | | QTY | TOTAL | CLIENT OR DESIGNER |
|--|---|--------------------|--|-----|---------|---|
| | | OD / WIDE x LENGTH | | | WEIGHT | |
| | | SHELL | | | KG | |
| 44 | Shell And Tube Type Evaporator | 4732 x 14000 | | 1 | 56,000 | Habib Sugar Mills Ltd |
| 45 | Vapor Cell Evaporator | 5332 x 9635 | | 2 | 115,000 | Dewan Sugar Mills Ltd. |
| 46 | Vapor Cell Evaporator | 2900 x 9490 | | 1 | 28,400 | Habib Sugar Mills Ltd |
| SEMI KESTNER (FALLING FILM) EVAPORATORS | | | | | | |
| 47 | Semi Kestner Evaporators | 3404 x 11611 | | 1 | 52,320 | Habib Sugar Mills Ltd |
| 48 | Semi Kestner Evaporators | 3200 x 6614 | | 1 | 40,263 | Habib Sugar Mills Ltd |
| 49 | Semi Kestner Evaporators | 3372 x 9472 | | 1 | 53,400 | Mehran Sugar Mills Ltd |
| SHELL AND TUBE TYPE VACUUM PANS | | | | | | |
| 50 | Vacuum Pan 80 Tons Cap | 5630 x 6783 | | 3 | 157,200 | Habib Sugar Mills Ltd |
| 51 | Vacuum Pan 50 Tons Cap | 4736 x 6570 | | 3 | 107,250 | Habib Sugar Mills Ltd |
| 52 | Vacuum Pan 80 Tons Cap | 5700 x 5720 | | 1 | 42,700 | Sanghar Sugar Mills Ltd |
| 53 | Vacuum Pan 60 Tons Cap | 4582 x 7373 | | 1 | 38,000 | Pakistan Industrial Development Corporation |
| 54 | Vacuum Pan 60 Tons Cap | 4842 x 8691 | | 1 | 36,925 | JDW Sugar Mills Ltd |
| 55 | Vacuum Pan 70 Tons Cap | 4842 x 8831 | | 1 | 40,500 | JDW Sugar Mills Ltd |
| 56 | Vacuum Pan 45 Tons Cap | 4452 x 5105 | | 2 | 62,580 | Fauji Sugar Mills Ltd |
| 57 | Vacuum Pan 80 Tons Cap | 5202 x 6040 | | 6 | 253,800 | Faran Sugar Mills Ltd |
| 58 | Vacuum Pan 80 Tons Cap | 5630 x 6183 | | 2 | 87,400 | Dewan Sugar Mills Ltd |
| PRESSURE VESSELS, COLUMNS AND REACTORS | | | | | | |
| 59 | Boiler Feed Water Tank | 3000 x 8500 | | 2 | 18,000 | Karachi Shipyard & Engg. Works |
| 60 | Distillation Column With Degazine Section | 2116 x 24900 | | 1 | 16,271 | Habib Distilleries |
| 61 | Rectifying Column | 1862 x 30300 | | 1 | 16,200 | Habib Distilleries |
| 62 | Hydro selection Column | 1710 x 23130 | | 1 | 11,000 | CSK Distilleries Ltd |



PAST PERFORMANCE

FIELD SERVICES / ERECTION EXPERIENCE

ERECTION JOBS

ABS has successfully completed the on location fabrication and erection of following equipment, machines, structures and tanks.

| SR.# | DESCRIPTION | DIMENSIONS (mm) | | QTY | TOTAL | CLIENT OR DESIGNER |
|------|--------------------------------|--------------------|--|-----|--------|--------------------------------|
| | | OD / WIDE x LENGTH | | | WEIGHT | |
| | | SHELL | | | KG | |
| 63 | Refining Column | 1710 x 23050 | | | 10,980 | CSK Distilleries Ltd |
| 64 | Refining Column | 1462 x 22700 | | 1 | 10,150 | Habib Distilleries |
| 65 | Hydroselection Column | 1412 x 22700 | | 1 | 9,850 | Habib Distilleries |
| 66 | Air Storage Vessels | 1600 x 6800 | | 1 | 8,100 | Futehally Chemicals (Pvt.) Ltd |
| 67 | Low grade Concentration | 1008 x 13950 | | 1 | 4,530 | CSK Distilleries Ltd |
| 68 | Low grade Concentration | 1008 x 13950 | | 1 | 4,475 | CSK Distilleries Ltd |
| 69 | Carbonation Vessel | 3000 x 4810 | | 1 | 3,984 | Futehally Chemicals (Pvt.) Ltd |
| 70 | Air Receiver Vessels | 1500 x 2400 | | 2 | 3,900 | Futehally Chemicals (Pvt.) Ltd |
| 71 | Low Grade Concentration Column | 858 x 12900 | | 1 | 3,370 | Habib Distilleries |
| 72 | Low Grade Concentration Column | 858 x 12900 | | 1 | 3,370 | Habib Distilleries |
| 73 | Steam Distributor | 1800 x 3490 | | 1 | 2,500 | Karachi Shipyard & Engg. Works |
| 74 | Condensate Receiver | 1500 x 2500 | | 1 | 2,500 | Karachi Shipyard & Engg. Works |
| 75 | Luther Column | 1008 x 9150 | | 1 | 2,100 | CSK Distilleries Ltd |
| 76 | Lutter Column | 858 x 9150 | | 1 | 1,840 | Habib Distilleries |
| 77 | High Pressure Surge Vessel | 300 x 2500 | | 3 | 1,800 | Futehally Chemicals (Pvt.) Ltd |
| 78 | Co2 Washing Column | 1256 x 7500 | | 1 | 1,400 | CSK Distilleries Ltd |
| 79 | Low Pressure Vessels | 1240 x 1800 | | 2 | 1,200 | Futehally Chemicals (Pvt.) Ltd |
| 80 | Flashing Vessel | 1288 x 3400 | | 1 | 1,200 | Karachi Shipyard & Engg. Works |
| 81 | Condensate Receiver Vessel | 686 x 1800 | | 3 | 1,000 | Karachi Shipyard & Engg. Works |
| 82 | Light Impurities Column | 606 x 4650 | | 1 | 600 | CSK Distilleries Ltd |
| 83 | Light Impurities Column | 600 x 4450 | | 1 | 600 | Habib Distilleries |
| 84 | Pickup Filtrate Receiver | 900 x 2500 | | 1 | 500 | Karachi Shipyard & Engg. Works |
| 85 | Wash Filtrate Receiver | 900 x 2500 | | 1 | 500 | Karachi Shipyard & Engg. Works |
| 86 | Reactor Vessel | 910 x 2120 | | 1 | 480 | Futehally Chemicals (Pvt.) Ltd |



PAST PERFORMANCE

FIELD SERVICES / ERECTION EXPERIENCE

ERECTION JOBS

ABS has successfully completed the on location fabrication and erection of following equipment, machines, structures and tanks.

| SR.# | DESCRIPTION | DIMENSIONS (mm) | | QTY | TOTAL WEIGHT KG | CLIENT OR DESIGNER |
|---|---|--------------------|--|-----|--------------------|--------------------------------|
| | | OD / WIDE x LENGTH | | | | |
| | | SHELL | | | | |
| 87 | Low Pressure Surge Vessel | 150 x 1200 | | 1 | 350 | Futehally Chemicals (Pvt.) Ltd |
| 88 | Washing Column | 406 x 4400 | | 1 | 295 | CSK Distilleries Ltd |
| 89 | Washing Column | 406 x 3900 | | 1 | 290 | Habib Distilleries |
| ROTARY PRESSURE FILTERS AND REACTORS | | | | | | |
| 90 | ROTARY PRESSURE FILTER 120 M2 | 1914 x 3060 | | 9 | 90,000 | Habib Sugar Mills Ltd |
| 91 | ROTARY PRESSURE FILTER 120 M2 | 1914 x 3060 | | 2 | 20,000 | Dewan Sugar Mills Ltd |
| 92 | ROTARY PRESSURE FILTER 120 M2 | 1914 x 3060 | | 2 | 20,000 | Fauji Sugar Mills Ltd |
| PROCESS EQUIPMENT | | | | | | |
| 93 | VERTICAL CRYSTALLIZER 160 M ³ | 4000 x 13000 | | 8 | 320,000 | Habib Sugar Mills Ltd |
| 94 | VERTICAL CRYSTALLIZER 160 M ³ | 4000 x 13000 | | 2 | 80,000 | Mirpur Khas Sugar Mills Ltd |
| 95 | VERTICAL CRYSTALLIZER 160 M ³ | 4500 x 11000 | | 2 | 70,000 | Sadaf Associate |
| 96 | VERTICAL CRYSTALLIZER 175 M ³ | 4500 x 11000 | | 2 | 80,000 | Al Noor Sugar Mills Ltd |
| 97 | VERTICAL CRYSTALLIZER 240 M ³ | 5050 x 12000 | | 2 | 85,000 | Army Welfare Sugar Mills Ltd |
| 98 | VERTICAL CRYSTALLIZER 200 M ³ | 4500 x 13000 | | 2 | 84,000 | Dewan Sugar Mills Ltd |
| 99 | MULTI TRAYS CLARIFIER WITH CENTRAL AGITATOR | 8000 x 6000 | | 3 | 157,500 | Habib Sugar Mills Ltd |
| 100 | MULTI TRAYS CLARIFIER WITH CENTRAL AGITATOR | 8000 x 6500 | | 1 | 60,000 | Faran Sugar Mills Ltd |
| 101 | S.R.I. CLARIFIER | 7500 x 4000 | | 2 | 40,000 | Habib Sugar Mills Ltd |
| 102 | S.R.I. CLARIFIER | 7500 x 4000 | | 1 | 40,000 | JDW Sugar Mills Ltd |
| 103 | WATER JET CONDENSER | 2400 x 4535 | | 3 | 15,500 | Habib Sugar Mills Ltd |
| 104 | RAIN & SHOWER TYPE CONDENSER | 1400 x 5655 | | 3 | 18,300 | Habib Sugar Mills Ltd |
| ROTARY MACHINES | | | | | | |



PAST PERFORMANCE

FIELD SERVICES / ERECTION EXPERIENCE

ERECTION JOBS

ABS has successfully completed the on location fabrication and erection of following equipment, machines, structures and tanks.

| SR.# | DESCRIPTION | DIMENSIONS (mm) | | QTY | TOTAL WEIGHT KG | CLIENT OR DESIGNER |
|---|---|--------------------|--|-----|--------------------|----------------------------|
| | | OD / WIDE x LENGTH | | | | |
| | | SHELL | | | | |
| 105 | HIGH EXTRACTION 6 ROLLERS CANE CRUSHING MILLS WITH HYDRAULIC LIFTING ARRANGEMENT TAT TOP & FEED ROLLERS | | | 4 | 488,000 | Habib Sugar Mills Ltd |
| 106 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | | | 1 | 30,000 | Habib Sugar Mills Ltd |
| 107 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | | | 1 | 45,000 | Mehran Sugar Mills Ltd |
| 108 | HEAVY DUTY HAMMER CRUSHER (CANE SHREDDER) 6000 TCD | | | 1 | 45,000 | Tharparkar Sugar Mills Ltd |
| 109 | CONTINUOUS CENTRIFUGAL MACHINE (BMA) | | | 2 | 5,000 | Dewan Sugar Mills Ltd |
| 110 | BASCO CENTRIFUGAL TYPE B-6 | | | 3 | 4,700 | Habib Sugar Mills Ltd |
| 111 | BREQUETTING MACHINE UNIT TYPE H-100/200 | | | 1 | 15,000 | Habib Sugar Mills Ltd |
| 112 | QUADRUPLE MUD PUMPS | | | 4 | 2,000 | Habib Sugar Mills Ltd |
| 113 | REVERSE CANE CUTTER WITH ANIVL | | | 12 | 8,000 | Mehran Sugar Mills Ltd |
| 114 | HEAVY DUTY CANE CUTTER 4000 MM WIDE | | | | 15,000 | Habib Sugar Mills Ltd |
| 115 | CANE CUTTER 1800 MM WIDE | | | 12 | 8,600 | Habib Sugar Mills Ltd |
| 116 | ROTARY BAGASSE FEEDERS FOR BOILER | | | 8 | 9,000 | Habib Sugar Mills Ltd |
| CARRIERS, BELT CONVEYORS & SCREW CONVEYORS | | | | | | |
| 117 | PRIMARY AND SECONDARY CANE CARRIER | | | 2 | | |
| 118 | MAIN CANE CARRIER (SALTS TYPE) | 1900 x 50000 | | 1 | 45,000 | Mehran Sugar Mills Ltd |
| 119 | CANE FEED TABLE WITH TRUCK END DUMPER | 12' x 24' | | 1 | 29,650 | Habib Sugar Mills Ltd |
| 120 | CANE FEED TABLE WITH TRUCK END DUMPER | 12' x 24' | | 1 | 20,650 | Fauji Sugar Mills Ltd |
| 121 | BAGASSE CARRIER | 1900 x 60000 | | | 39,500 | Fauji Sugar Mills Ltd |



PAST PERFORMANCE

FIELD SERVICES / ERECTION EXPERIENCE

ERECTION JOBS

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| SR.# | DESCRIPTION | DIMENSIONS (mm) | | QTY | TOTAL WEIGHT KG | CLIENT OR DESIGNER |
|------------------------|---|--------------------|--|-----|--------------------|-----------------------------|
| | | OD / WIDE x LENGTH | | | | |
| | | SHELL | | | | |
| 122 | ELEVATOR BAGASSE CARRIER | 1900 x 33000 | | 1 | 30,500 | Habib Sugar Mills Ltd |
| 123 | HORIZONTAL BAGASSE DISTRIBUTION CARRIER | 1900 x 23600 | | 1 | 18,000 | Habib Sugar Mills Ltd |
| 124 | BAGASSE RECLAIMING CARRIER | 1900 x 16800 | | 1 | 13,000 | Habib Sugar Mills Ltd |
| 125 | INTER CARRIER RAKE TYPE | 1800 x 8000 | | 2 | 25,000 | Habib Sugar Mills Ltd |
| 126 | SCRAPER TYPE INTERCARRIER | 1900 x 19000 | | | 70,500 | Habib Sugar Mills Ltd |
| 127 | DRAG TYPE INTER-CARRIER | 1720 x 15500 | | 1 | 6,790 | Mirpur Khas Sugar Mills Ltd |
| 128 | SCREW CONVEYOR FOR "C" SUGAR | Ø 508 x 7000 | | 1 | 2,066 | Mirpur Khas Sugar Mills Ltd |
| 129 | CUSH CUSH CONVEYOR | Ø 534 x 5500 | | 1 | 1,850 | Mirpur Khas Sugar Mills Ltd |
| 130 | BELT CONVEYOR | 800 x 20000 | | | 1,912 | Habib Sugar Mills Ltd |
| 131 | BELT CONVEYOR | 1800 x 6000 | | 1 | 7,500 | Habib Sugar Mills Ltd |
| DRYERS | | | | | | |
| 132 | COUNTER FLOW FLUE GASES DRYER | | | 1 | 60,000 | Fauji Sugar Mills Ltd |
| 133 | COUNTER FLOW FLUE GASES DRYER | | | 1 | 65,000 | Habib Sugar Mills Ltd |
| 134 | ROTARY DRYER WITH INTERNAL HEATING ELEMENTS FOR HOT OIL | | | 1 | 75,000 | Baluchistan Particle Board |
| STEEL STRUCTURE | | | | | | |
| 135 | STAGING PILLARS FOR BAGASSE DRYER | | | | 20,000 | Habib Sugar Mills Ltd |
| 136 | SUPPORTING FRAME FOR DRYER | | | | 22,000 | Habib Sugar Mills Ltd |
| 137 | SUPPORT FOR ARCH TUBE | | | | 5,000 | Habib Sugar Mills Ltd |
| 138 | CONNECTION BRIDGE | | | | 8,400 | Habib Sugar Mills Ltd |
| 139 | ROOF TRUSSES, COLUMNS, PURLING AND WIND TIES | | | | 120,000 | Al-Asad Engineering Works |



PAST PERFORMANCE

FIELD SERVICES / ERECTION EXPERIENCE

ERECTION JOBS

ABS has successfully completed the on location fabrication and erection of following equipment, machines, structures and tanks.

| SR.# | DESCRIPTION | DIMENSIONS (mm) | | QTY | TOTAL WEIGHT | CLIENT OR DESIGNER |
|------|--|-----------------------|--|------------|------------------|--------------------------------|
| | | OD / WIDE x LENGTH | | | KG | |
| | | SHELL | | | | |
| 140 | STAGGING STRUCTURE FOR EVAPORATOR AND VACUUM PANS | | | | 100,000 | Habib Sugar Mills Ltd |
| 141 | STEEL STRUCTURE OF CANE CARRIERS & BAGASSE CARRIERS | | | | | Habib Sugar Mills Ltd |
| 142 | STEEL STRUCTURE OF CANE CARRIERS & BAGASSE CARRIERS | | | | | Mehran Sugar Mills Ltd |
| 143 | WELDING OF TUBELAR STEEL PILES INCLUDING FABRICATION OF PILE TIPS & TOP | 12.7 x Ø 609 x 33,500 | | 53 | 40,684 | CHEC (Engro Pak Tank Terminal) |
| 144 | WELDING OF TUBELAR STEEL PILES OF ACCESSORIES BRIDGE AND WALK-WAY INCLUDING FABRICATION OF PILE TIPS & TOP | 12.7 x Ø 508 x 32000 | | 43 | 31,539 | CHEC (Engro Pak Tank Terminal) |
| 145 | STEEL STRUCTURE FOR WALK-WAY (PARTIAL MATERIAL SUPPLIED BY CLIENT) | 1300 x 287500 | | 1 | 88,889 | CHEC (Engro Pak Tank Terminal) |
| | Total | | | 326 | 4,880,810 | |