



Industrial Metal Fabrication

Design | Engineering | Procurement | Fabrication Painting | Pickling & Passivation







As part of our ongoing effort to further our presence across the globe, we are relentlessly developing solutions in Stainless Steel and Exotic Metals and support it with continuous lifecycle services.

Being a 50 year old company, we are proud of our dynamic growth in architectural, industrial and service industry. To achieve this growth, HIDAYATH has capitalized on select opportunities including strategic expansion, several discrete acquisitions and exciting forays into new geographic markets.

Our ambitions are to provide total solutions in stainless steel and allied metals across different industries and services. As part of our ongoing effort to further our presence across Middle East, South East Asia, Africa, Europe, Australia and C I S Countries, we are tirelessly developing solutions by offering expertise in design and support it with continuous life-cycle services. Commitment to training our personnel, along with continuously upgrading and modernizing our equipment and methods cements further our relationship with our diverse clientele.

Going forward, as a business partner, our commitment is that HIDAYATH Group of Companies will continue to strengthen its position as the premier solution provider in the existing markets and beyond.

Sincerely

Hidayathulla AbbasChairman hidayath group

As a company with ISO 9001, ISO 14001 and ISO 45001, and approved by ASME for 'U', 'S', 'PP' & NATIONAL BOARD 'R' STAMPS, we have emerged as the partner of choice to upstream, midstream and lowstream industries.

Hidayath Heavy Industry L.L.C, headquartered in Dubai, is the flagship company of the reputable and leading business conglomerate in GCC- **Hidayath Group of Companies**, which boasts of over four decades of innovativeness in stainless steel and allied metals, from manufacturing to trading and project management to services. Our group activities amicably cater to Architectural and Industrial needs across various sectors in many emerging markets.

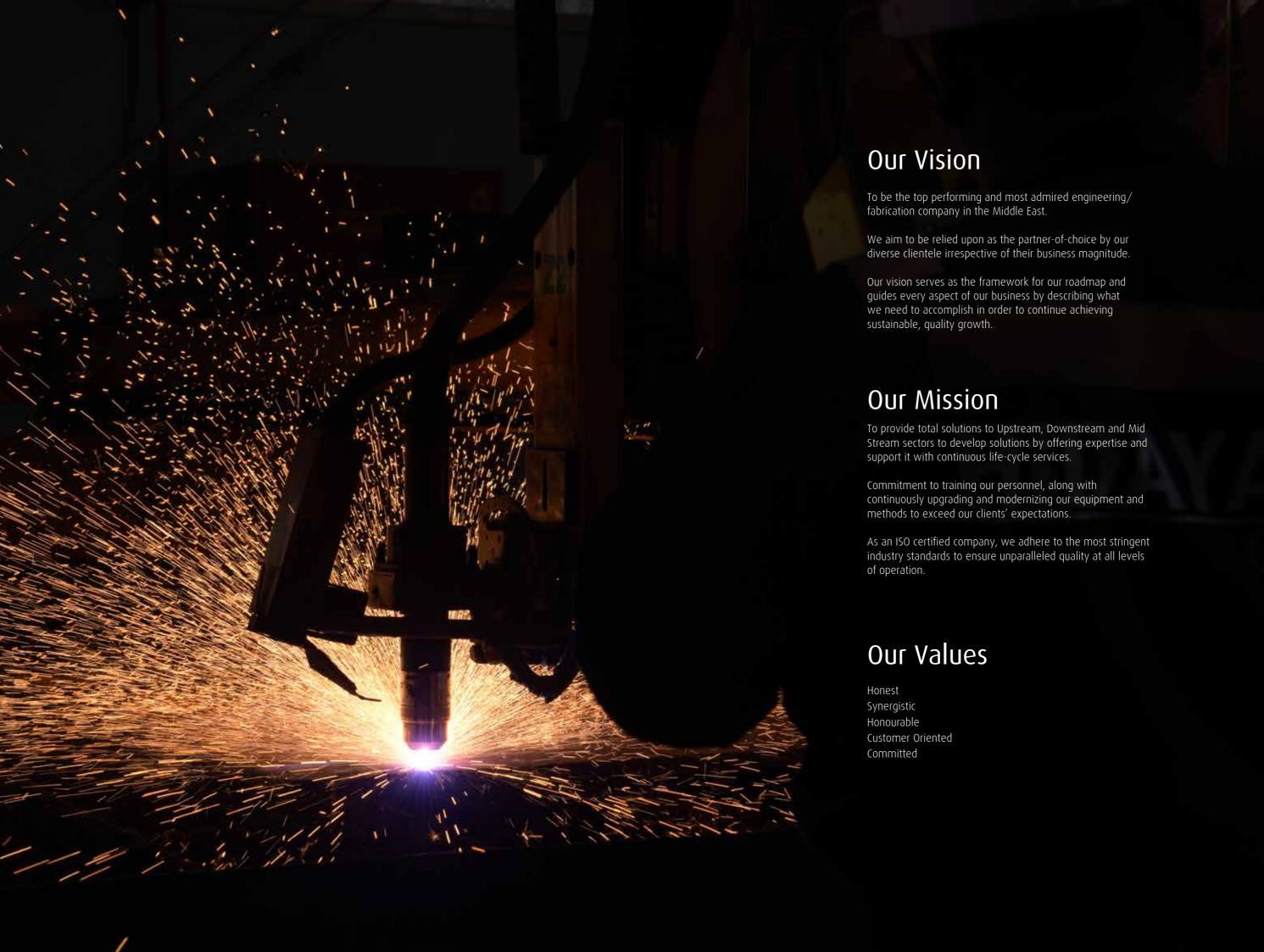
Our state of the art manufacturing facility is located in Dubai Industrial city, Dubai, UAE with strategic access to seaport and airport thus enabling us to have better connectivity to any destination across the globe for faster & smoother deliveries. This also gives an added advantage of transporting large Vessels & Skids etc to any destination of choice.

Our expertise are in Design & Engineering,

Procurement, Manufacturing, Supply, Installation & Commissioning of Tank Farms, Pressure Vessels, Skid Packages, Boilers, Heat Exchangers, Piping Spools and Tailor made fabrications in STAINLESS STEEL AND EXOTIC METALS.

The Total area of our premise is around 53,000 m² consisting of office, on /off loading area and the workshop equipped with the latest machinery and tools that can provide the best Technical support. We also stock over 15,000 tons of Stainless steel in grade 304, 316 and 2205. Our well trained and experienced team is available with a short notice providing our customers the best after-sales-service. Hidayath Group -Trading division stocks huge range of SS. Sheets, Plates, Coils and other major components to support the customers with urgent and emergency needs.





Our continuous technological advancement, strategic acquisitions and well planned forays into new markets, we have emerged as a global enterprise catering a vast clientele across North America, Europe, Middle East and South East Asia.

Hidayath Group began its humble voyage in 1976 with trading in hardware and gradually gained sustainable momentum in becoming the market leader in stainless steel and allied metal industry. Under the aegis of the group chairman, Mr. Hidayathulla Abbas, the group went from strength to strength and in just forty years HIDAYATH GROUP has become the most recognized name in the Middle East Steel and allied metal Industry.

Our pragmatic growth is an attribute to our able leadership and a dedicated work force which understands and complies with the group initiatives and underlined objectives.

With continuous technological advancement, strategic acquisitions and well planned forays into new markets, we have made concrete inroads in Architectural and Industrial sectors.

With our offices in UAE, Oman, Qatar, Saudi Arabia, India and America, we are geographically well poised to cater to our ever increasing customer base across Middle East, Africa, South East Asia, North America and CIS Countries.

Our group expertise range from Material Supplies to Project Management of Supplies and from manufacturing to Services of architectural and industrial products and solutions in stainless steel and allied metals.

Group History & Milestones

1976

We commenced our voyage as a mediocre establishment, trading in hardware products in Abu Dhabi.





1980

We made foray into steel and other allied metal products, particularly into stainless steel Flat and Long products.

1996

We established the first stainless steel service center and surface processing plant in GCC within an area of 6000 sqm





2003

we set up the largest Waterjet Cutting facility in GCC.

2005

We established the first Investment Casting plant in GCC.





10

2006

We set up the first stainless steel Tube Mill in the United Arab Emirates. 2007

We installed the first Titanium Coating (PVD) plant for stainless steel in the United Arab





2008

We set up the first Coil-to-Coil Perforation machine in GCC.

2009

We established the first Hot Rolled stainless steel Cut-to-length in GCC.





2010

we diversified into manufacture of Process Equipment for industial application across many upstream and downstream sectors.

2011-2020

We expanded our geographical footprint across Middle East and Asia through our manufacturing and stocking facilities.



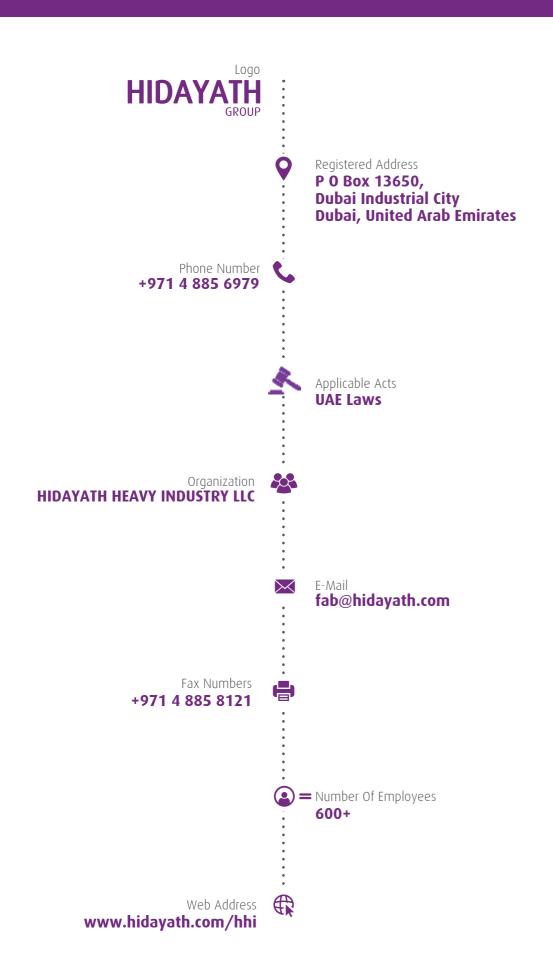


2017

We opened up our state of the art headquarters in Dubai Industrial Park compassing a total area of 53,000 M².

General Information

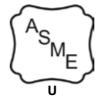
Certifications













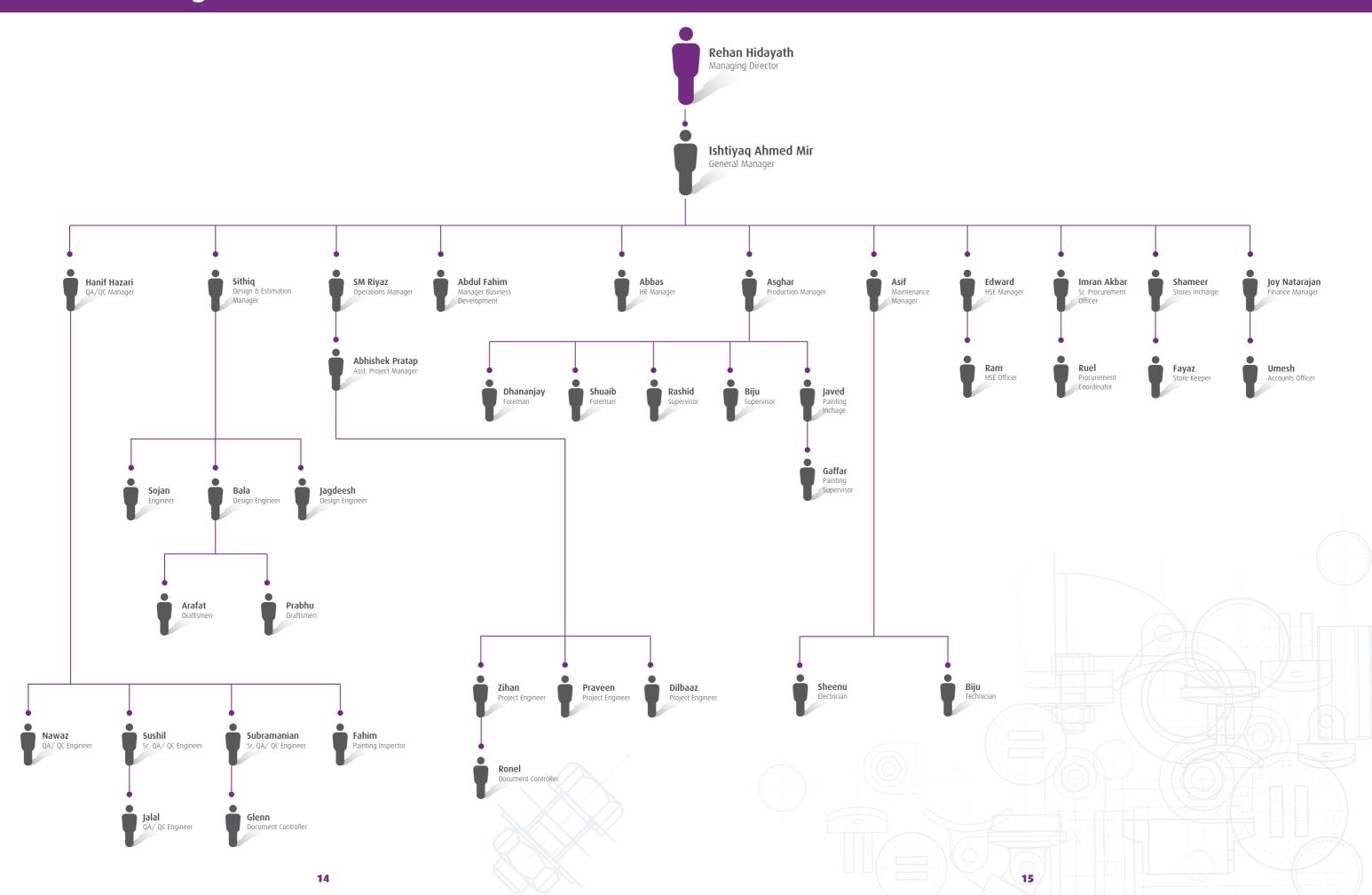








Organizational Chart



Key Sectors Applications

Petrochemical and Refinery





Pharmaceuticals

Food & Beverages

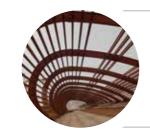




Power and Water Desalination

Maritime & Ship Building





16

Structural

Pressure Vessels





Storage Tanks

Skid Pacakages





Structurals

Air Filtration System





Pipe Spools

56,000 SQ MTRS OF INNOVATION, DESIGN AND PRODUCTION

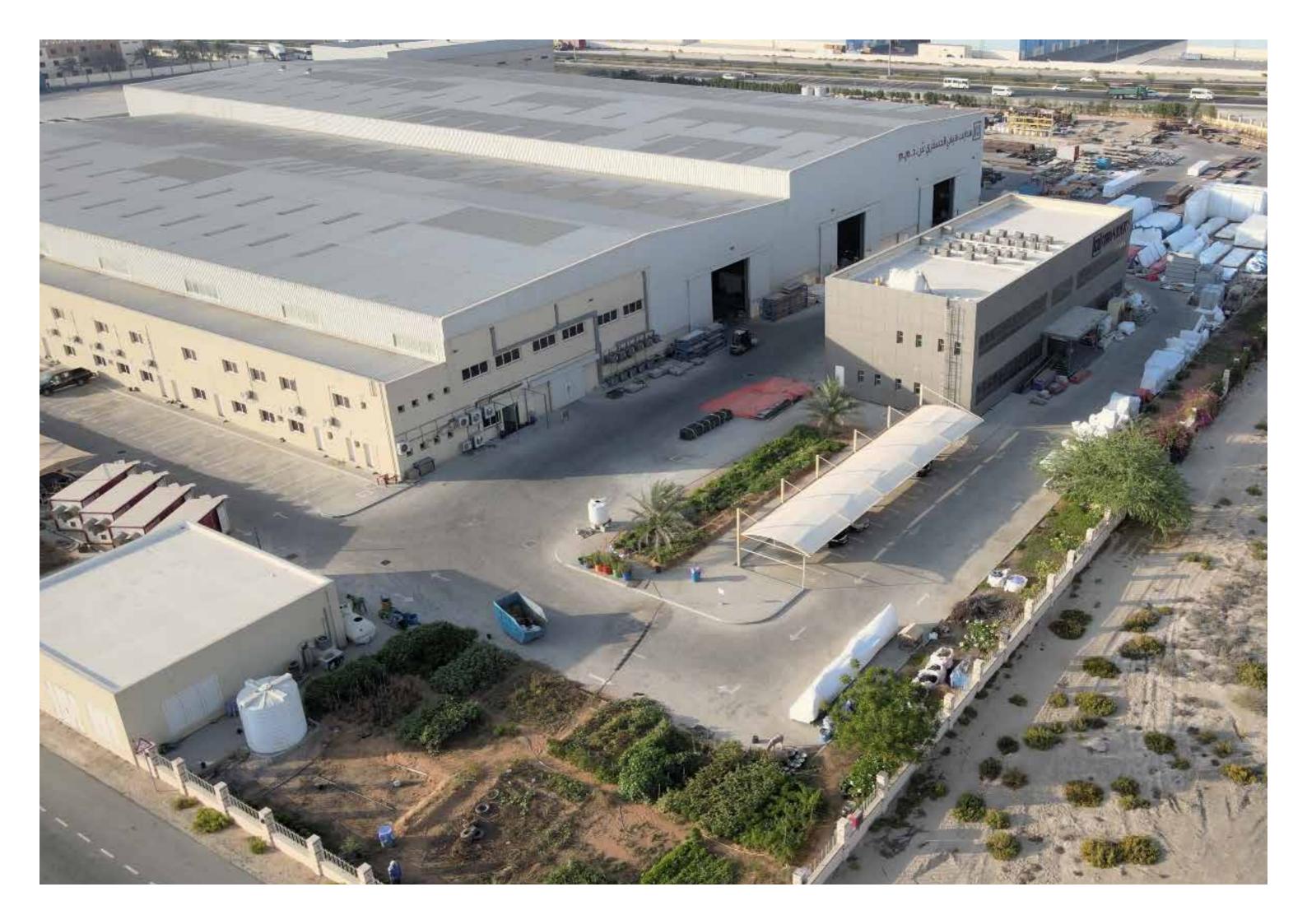
Our factory and offices are situated in one of the most strategic business hubs - Dubai Industrial Park, Dubai, that facilitates us to network with our esteemed clientele across the globe.

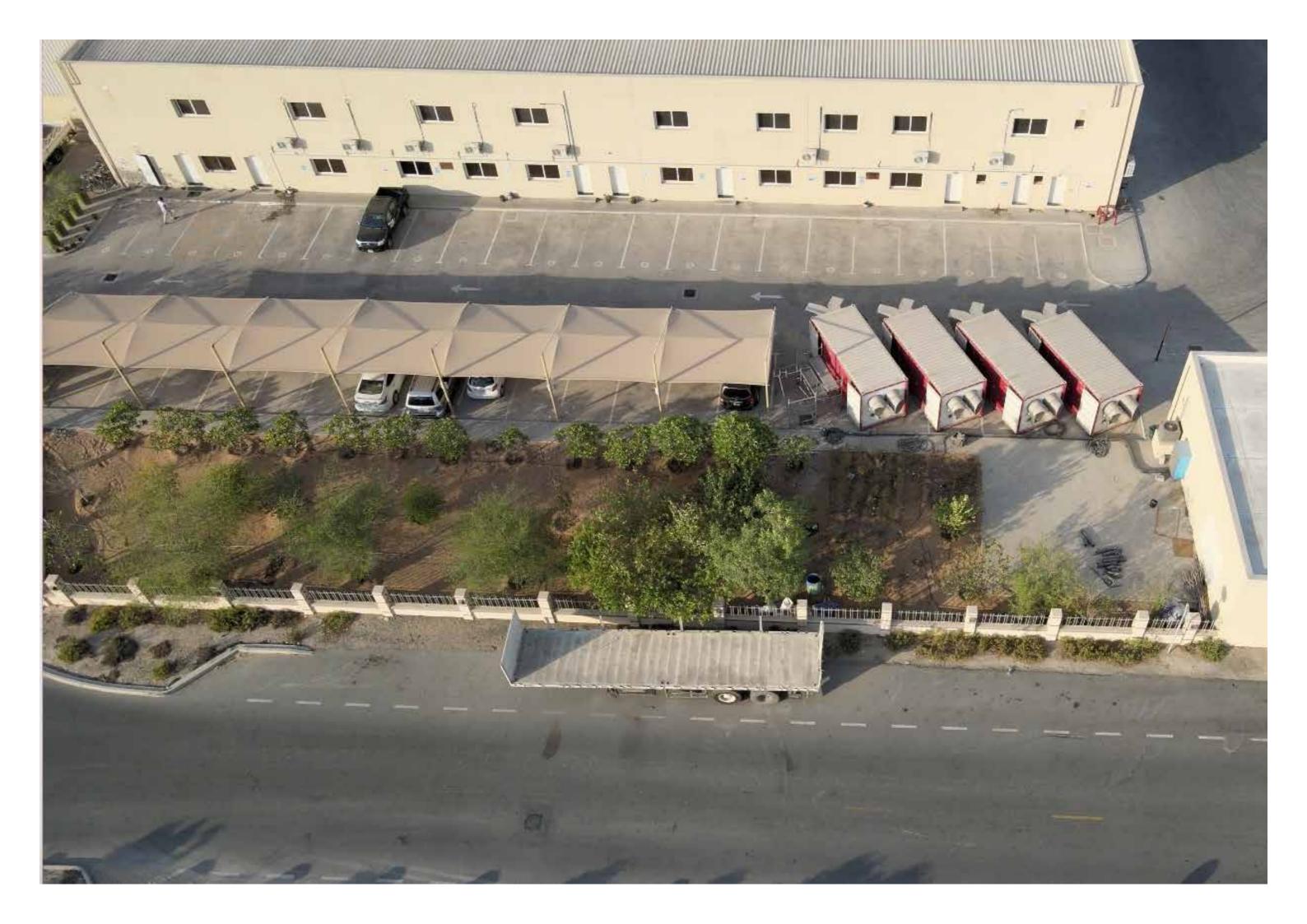
Our state-of-the-art manufacturing facility is equipped with the latest machinery and equipment to carry out any complexed project of any magnitude.

Open Area (Office + Factory): 56,000 Sq Mtr General Area

Office Building
16,000 Sq Mtr







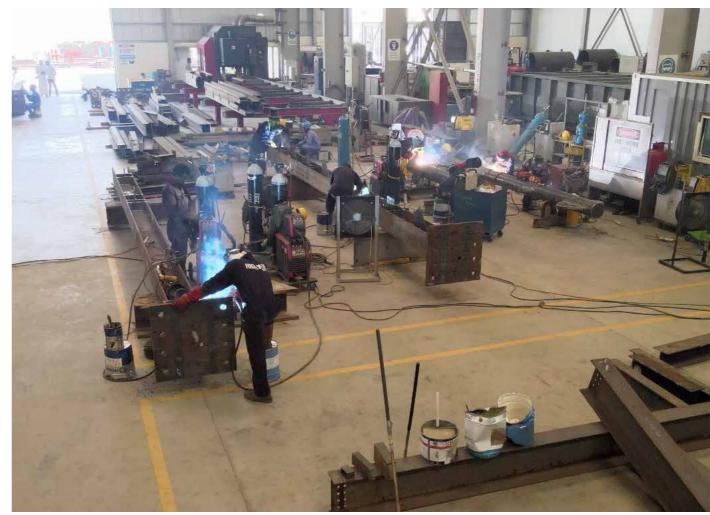










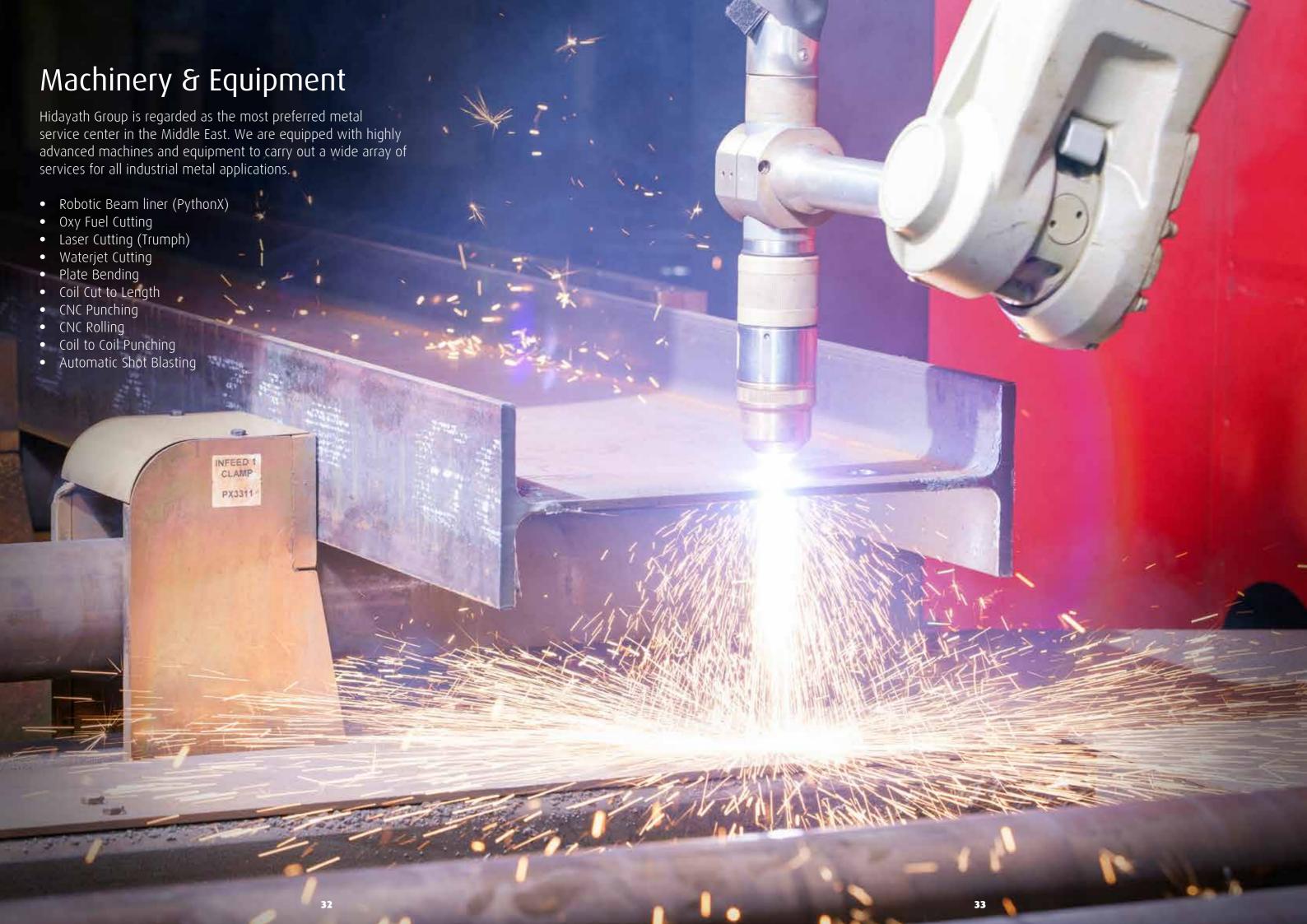




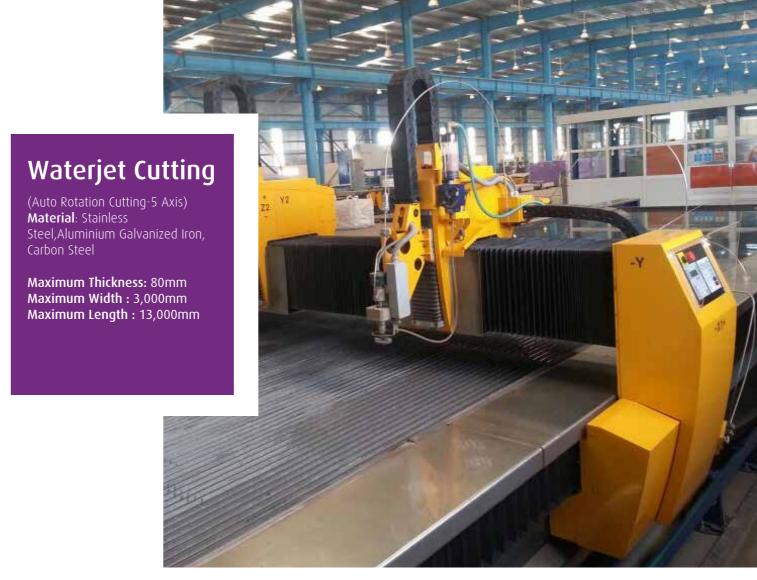




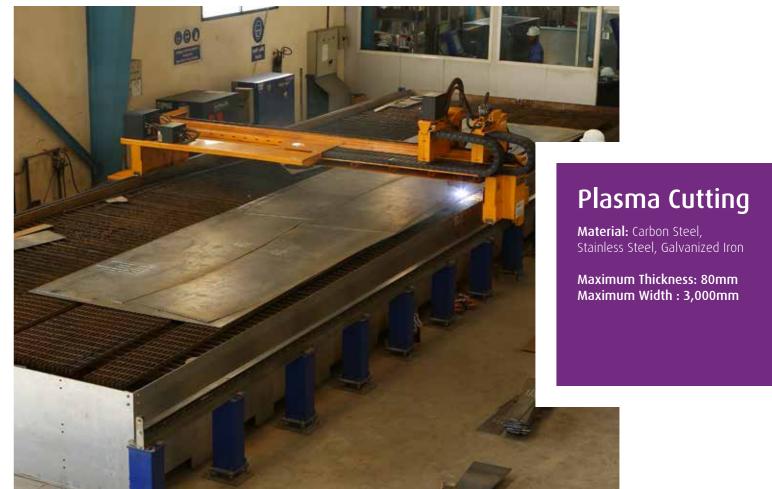




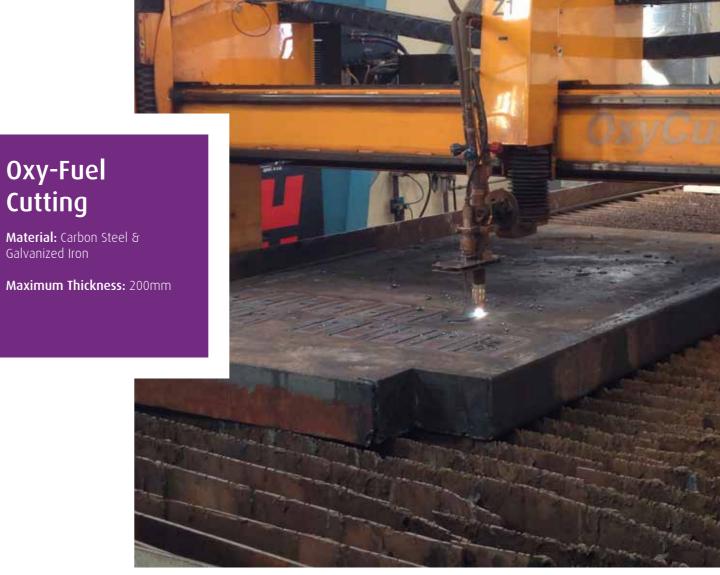


















Cold Arc Welding

Electropolishing

It is the ultimate process in the surface finishing of stainless steel producing a superior finish with unique properties.

The process is carried out by immersion in a tank with an electrolyte and a DC power passed through a rectifier having the opposite effect of electroplating the process removes a layer of material between 5 to 40um (microns). As the process has no impact to the surface and the process solution, temperature is far low the critical structure formation zone. This renders the surface chemically pure, clean and thus, undisturbed crystalline structures are exposed. These surfaces have several features and characteristics unmatched by any other surface finishing treatment.

Increased Corrosion Resistance

Selective removal of Iron enriches the surface with Chromium and Nickel. Oxygen is liberated at the anode (Positive) side of the electrolytic process and these gases flow upward reacting and oxidizing recently expose layers thus further improving the corrosion resistance.

Ultra Clean

Selective removal of Iron enriches the surface with Chromium and Nickel. Oxygen is liberated at the anode (Positive) side of the electrolytic process and these gases flow upward reacting and oxidizing recently expose layers thus further improving the corrosion resistance.

Місго Finishing

The flow of the current and the natural action is to remove the peaks at a faster rate than in the troughs in the surface topography, leading to the elimination of micro roughness and has a further feature of deburring. Additionally, the surface is super smooth, making it hard for deposits and residues to attach themselves, which makes the surface exceptionally easy to clean.





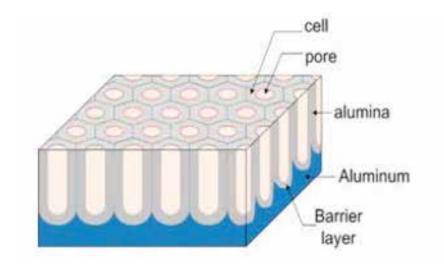






Anodising (Hard and Colour)

Anodising (Anodic Oxidation) is a process method of electrolysis in which a controlled rate Aluminium Oxide is built on the surface forming a ceramic like parallel film which is very corrosion, wear resistant and non conductive. Processes offered include Conventional, Dyed and Hard Anodising to high level Military Specification MIL-A-8625 Type II, Type III, Class 1 & 2 including PTFE dry film and impregnation.



Anodic films are employed in numerous industrial sectors where application properties are desired and also used for aesthetic, identification purposes where the formed porous film can absorb pigments dyestuffs of an infinitive range of colours. Hard Anodising produces much thicker films with tighter pore structure having exceptional resistance to wear making it ideal for bearing surfaces and moving parts.







Pickling

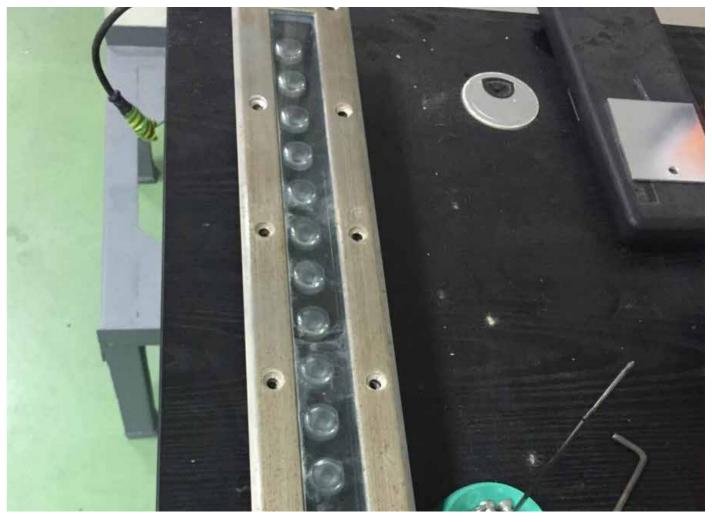
The thermal oxides from any heat treatment process and welding mainly Iron Oxides of various states, readily corrode and in almost every application, will contaminate product media in which they are in contact with. It is vital to remove these oxides to maintain the surface properties of stainless steel.

Mechanical treatments can remove the bulk of these oxides, although these methods can smear the surface entrapping contaminants which may later release, causing failure to the function of the product. For example, if an abrasive wheel employed to remove the oxides, it can have the dual action of decontaminating and recontaminating the surface.

Passivation

To ensure a fabrication or components corrosion resistance is optimized prior to delivery, it should undergo a passivation stage. Employing high oxidizing agents all surfaces are either sprayed or immersed in a solution which really oxidizes the Chromium. This rapidly forms the inert layer on the material and creates the critical surface property relied upon in service.

Several methods of passivation are employed depending on the Alloy, pre-treatment and type of application. Both ISO 15730 and ASTM A967 Stainless Steel Passivation specification details each process in depth.

















- Experienced professionals (more than 10 years)
- Good exposure in design packages
- Good knowledge in Process Equipment
- Complete detail engineering by in-house facility

Team knowledge

- Pressure Vessels
- Shell & Tube Heat Exchangers
- Air Cooled Heat Exchangers
- Atmospheric Storage Tanks
- Air Filter Duct Packages
- Structural Fabrications
- Process Skid Packages

Pressure Vessels

- Design & detail engineering
- Complete fabrication drawing preparation
- Material requisition preparation
- Preparation of technical delivery condition in-line with project MR
- Co-ordination with client/ TPI/ AI
- As-built drawing & document preparation
- Package support





Shell & Tube Heat Exchangers

- Thermal design & equipment sizing
- Mechanical design & detail engineering
- Complete fabrication drawing preparation
- MR & TDC preparation in-line with project requirements
- Co-ordination with client/ TPI/ AI
- As-built drawing & document preparation
- Package support







Air Cooled Heat Exchangers

- Thermal design & equipment sizing
- Mechanical design & detail engineering
- Complete fabrication drawing preparation
- MR & TDC preparation in-line with pro ECT requirements
- Co-ordination with client / TPI / AI
- As-built drawing & document preparation
- Package support











Atmostpheric Storage Tanks

- Design & detail enngineering
- Complete fabrication drawing preparation
- Material requisition preparation
- Preparation of technical delivery condition in-liine with MR
- Co-ordination with client/ TPI/ AI
- As-built drawing & document preparation
- Package support





Air Filter Duct Packages

- Design & detail enngineering
- Complete fabrication drawing preparation
- Material requisition preparation
- Preparation of technical delivery condition in-line with MR
- Co-ordination with client/ TPI
- As-built drawing & document preparation
- Package support



Structural **Fabrication**

- Complete fabrication drawing preparation
- Material requisition preparation
- Preparation of technical delivery condition in-line with MR
- Co-ordination with client/TPI
- As-built drawing & document preparation
- Package support



Process Skid Packages

- Thermal design & equipment sizing
- Mechanical design & detail engineering
- Piping analysis
- Skid analysis
- Complete fabrication drawing preparation
- Lifting plan & lifting analysis
- As-built drawing & document preparation

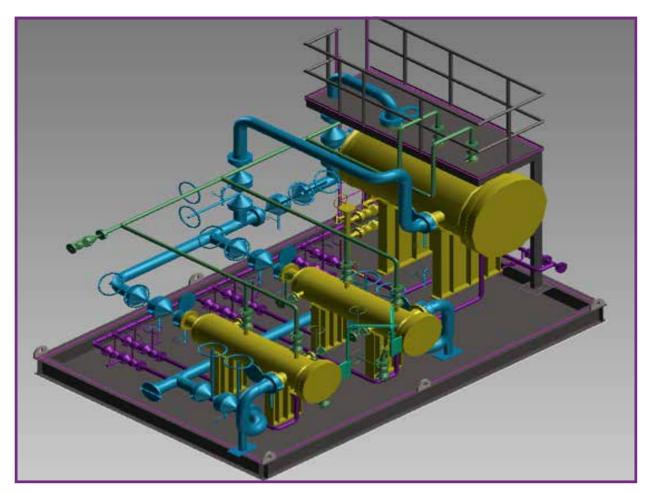


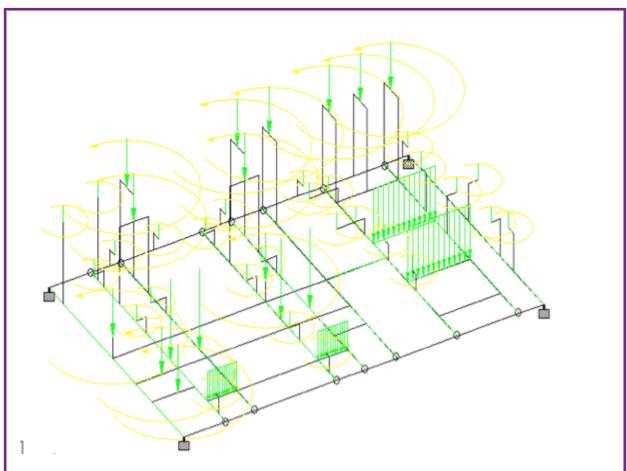


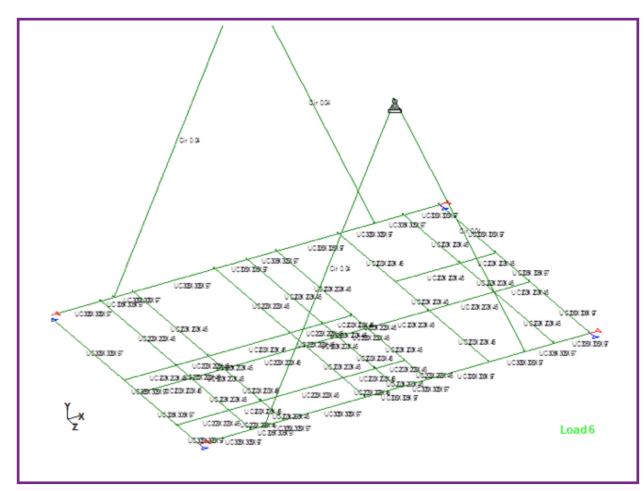


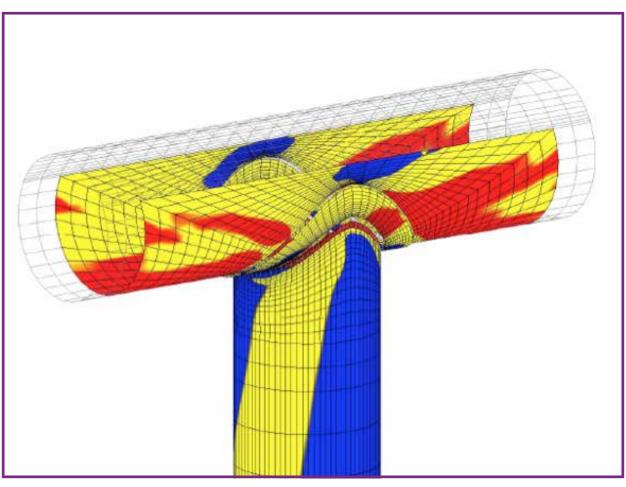


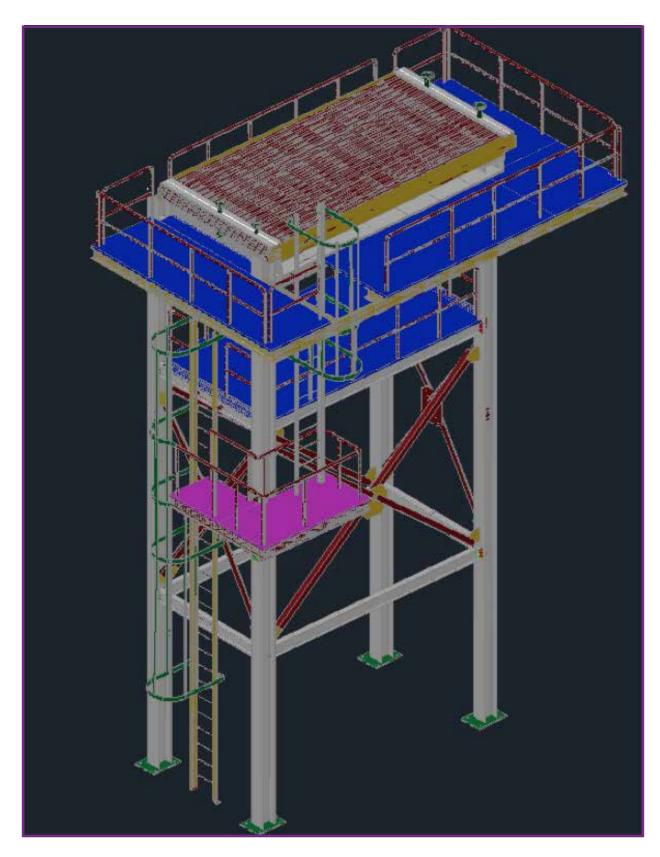






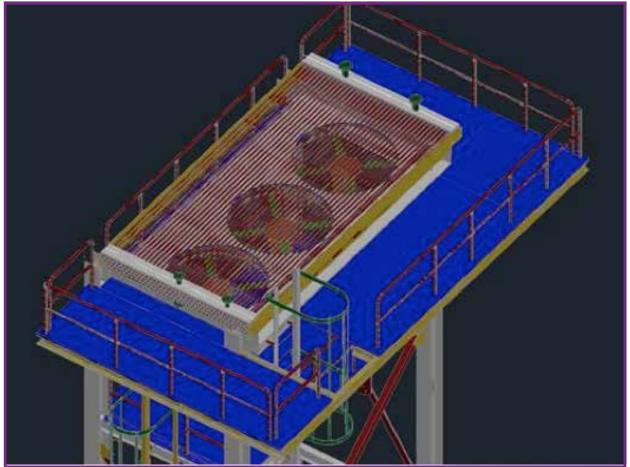


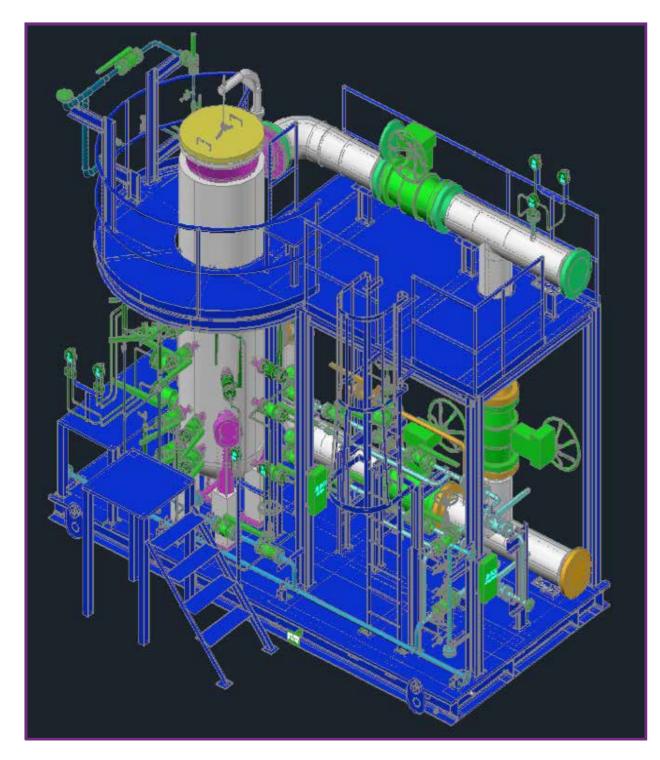




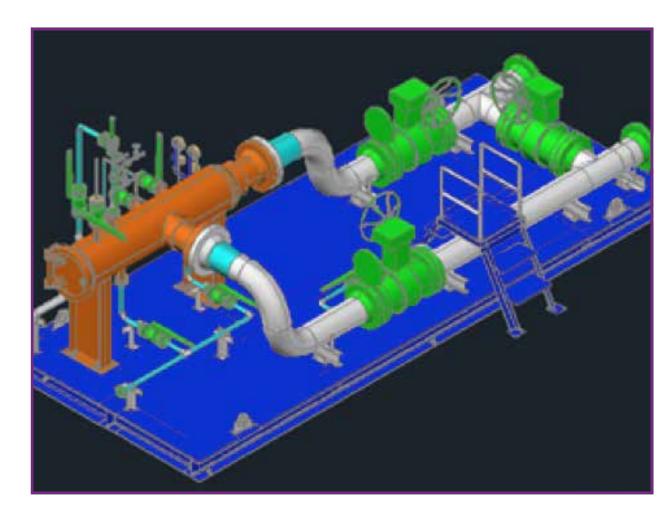
Air cooled heat exchanger package: thermal, mechanical, structure, electrical & controlling philosophy

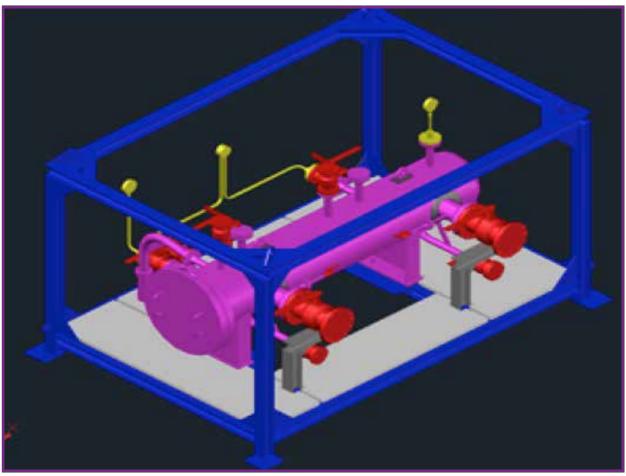


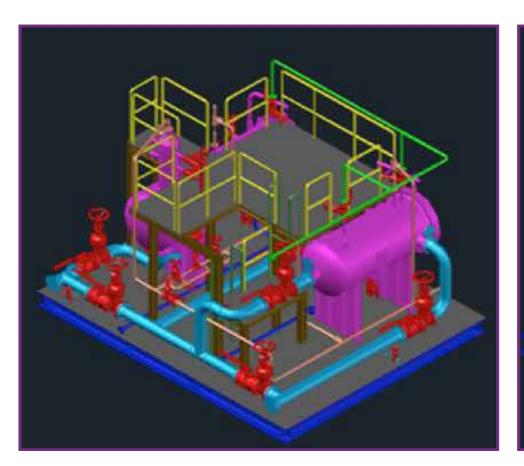


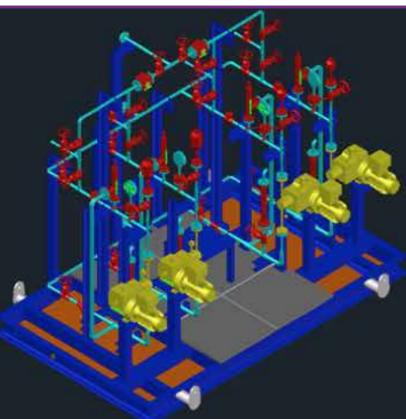


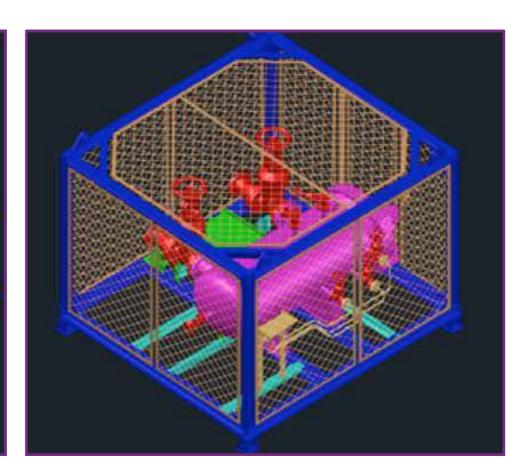
Wastani plant expansion : pre-filter & coalescer package



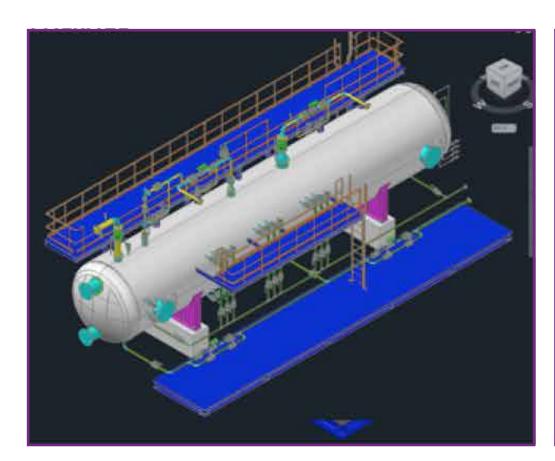


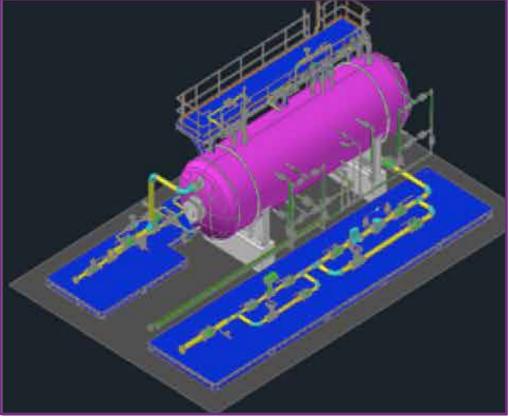


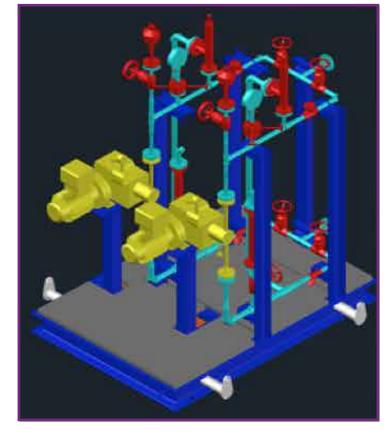




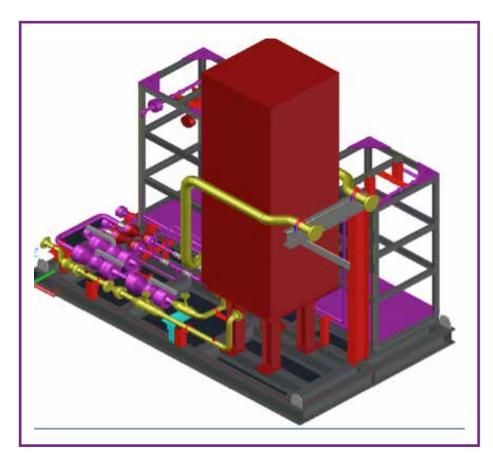
Disposal well purification package

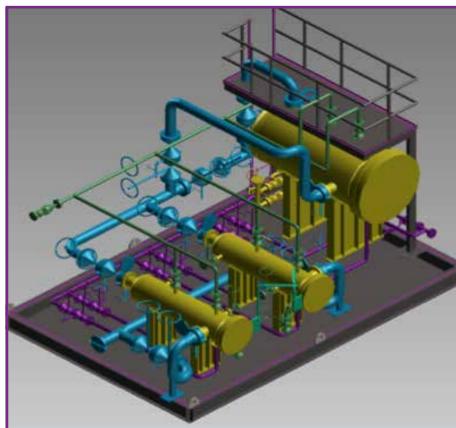


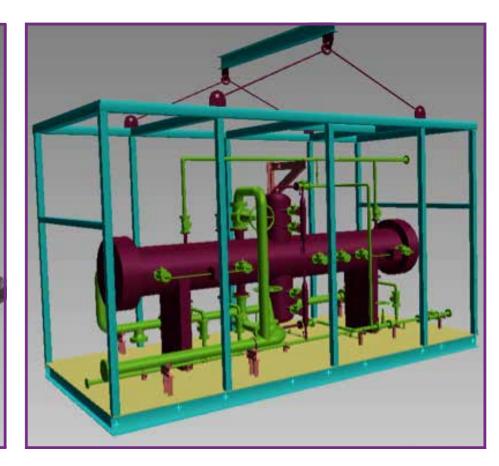




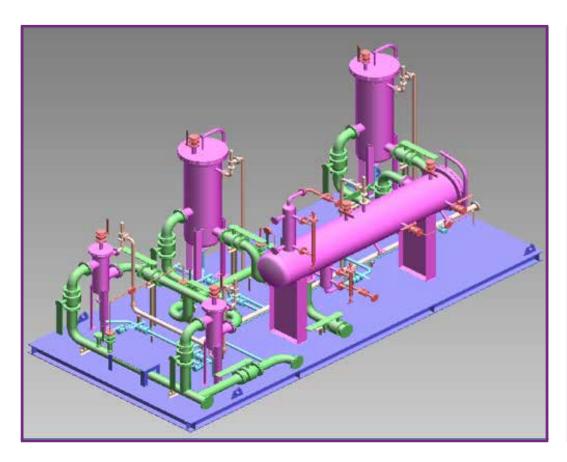
Al rawat refinery expansion project

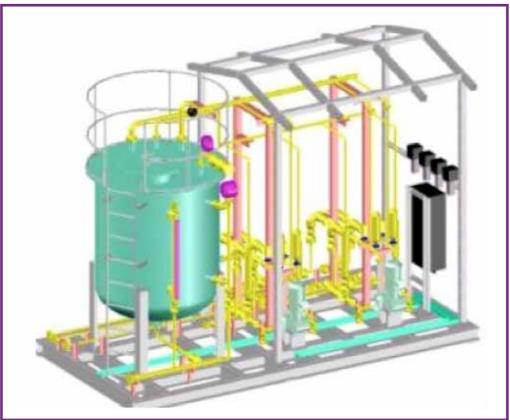


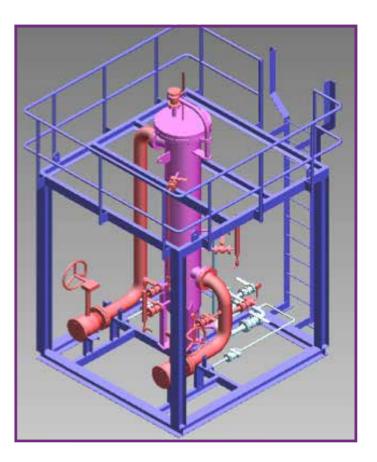




N2 purification skid Pic filtration skid Duplex separation unit







Fine & coarse separation unit

Chemical injection skid

Filtration skid

Key Projects

Our diversified operations with experienced management backing every project enables us to capitalize on our in-house experience. The presence of Engineering, Procurement, project management, Commissioning and our world calss equipment and manufacturing capabilities give us a strong edge to execute projects within budget and shorter delivery cycles; assuring our clients quality and value every step

We enjoy the track record of successful project completions within challenging schedules. Our project management team establishes priorities, coordinates activities, monitors closely and controls all operation during entire execution of project.



Pressure Vessels



Skid Packages



Storage Tanks



Pipe Spools



Air Filtration System



Structural





PRESSURE VESSELS







































































STORAGE TANKS



























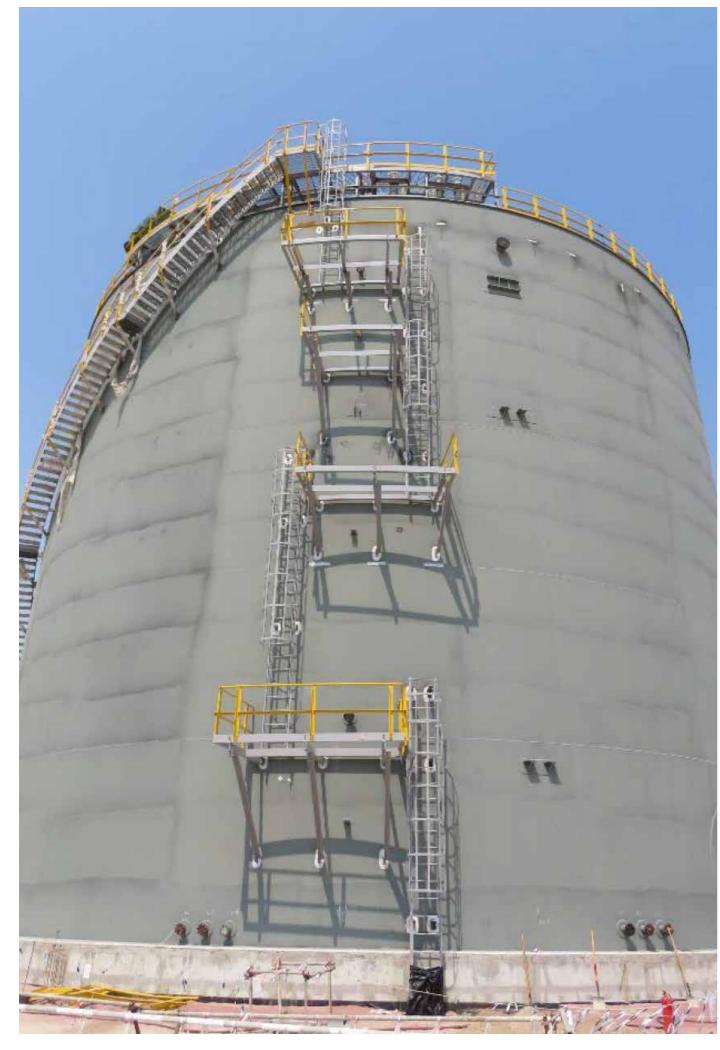






















SKID PACKAGES

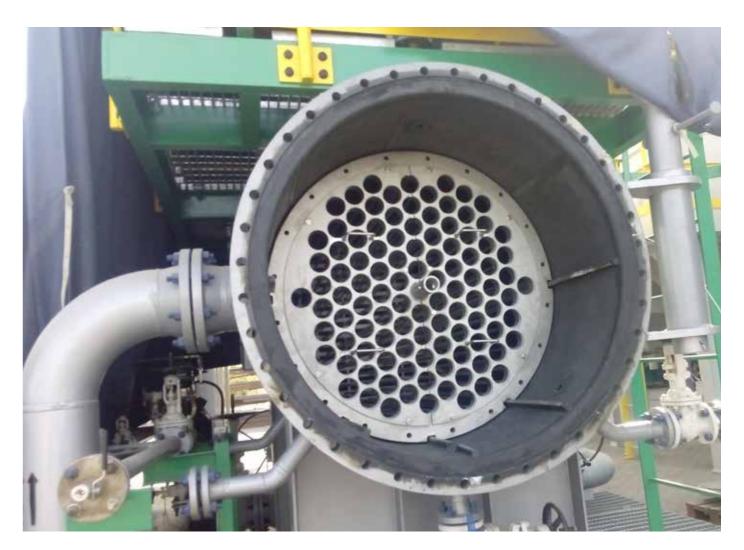












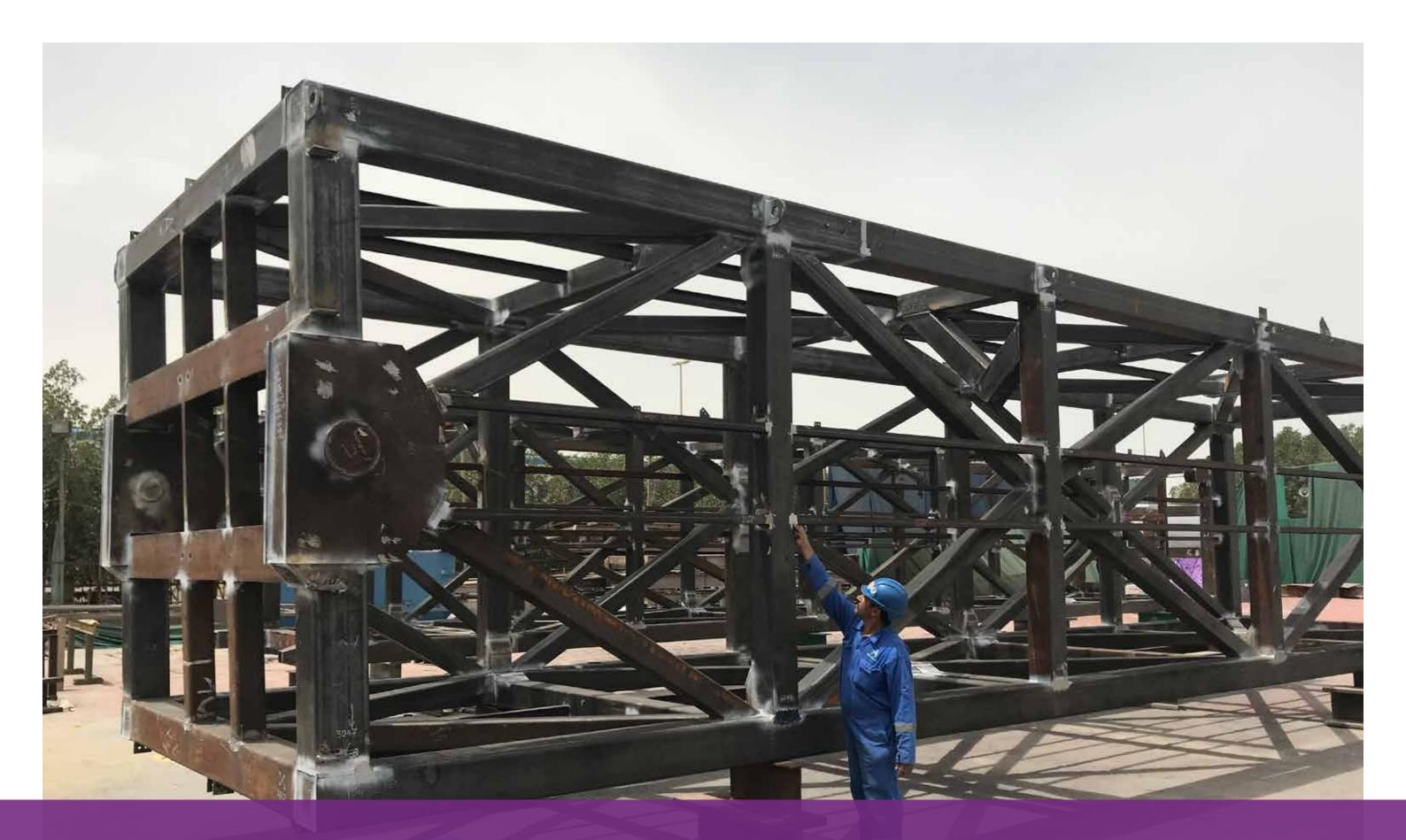




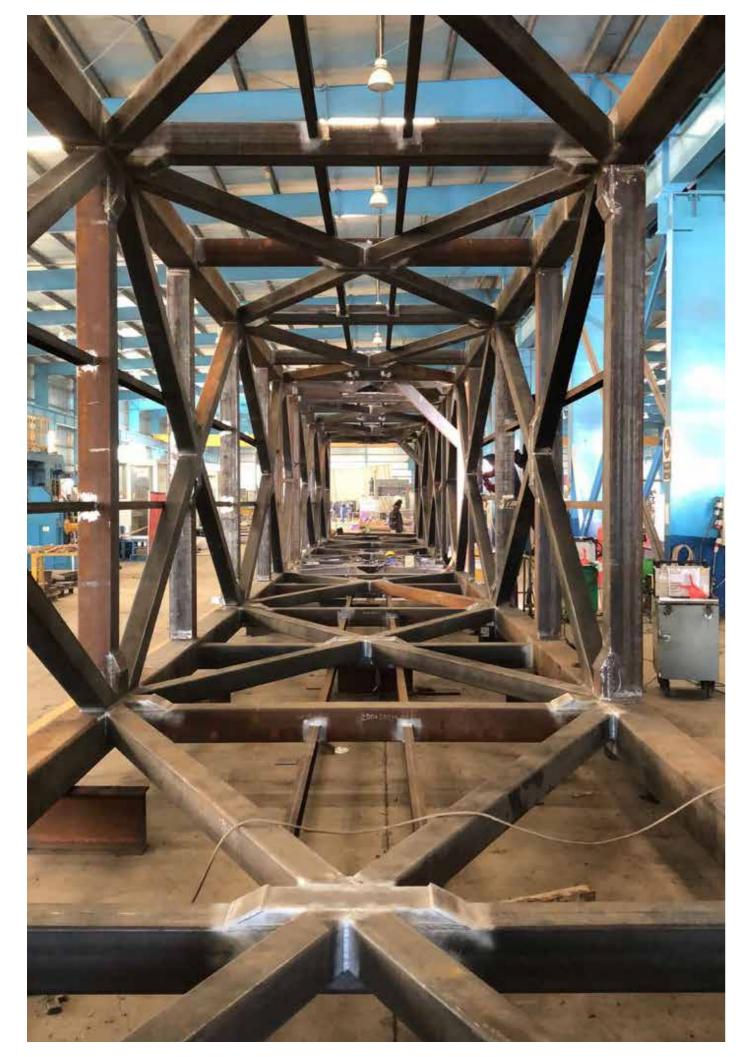








STRUCTURAL



























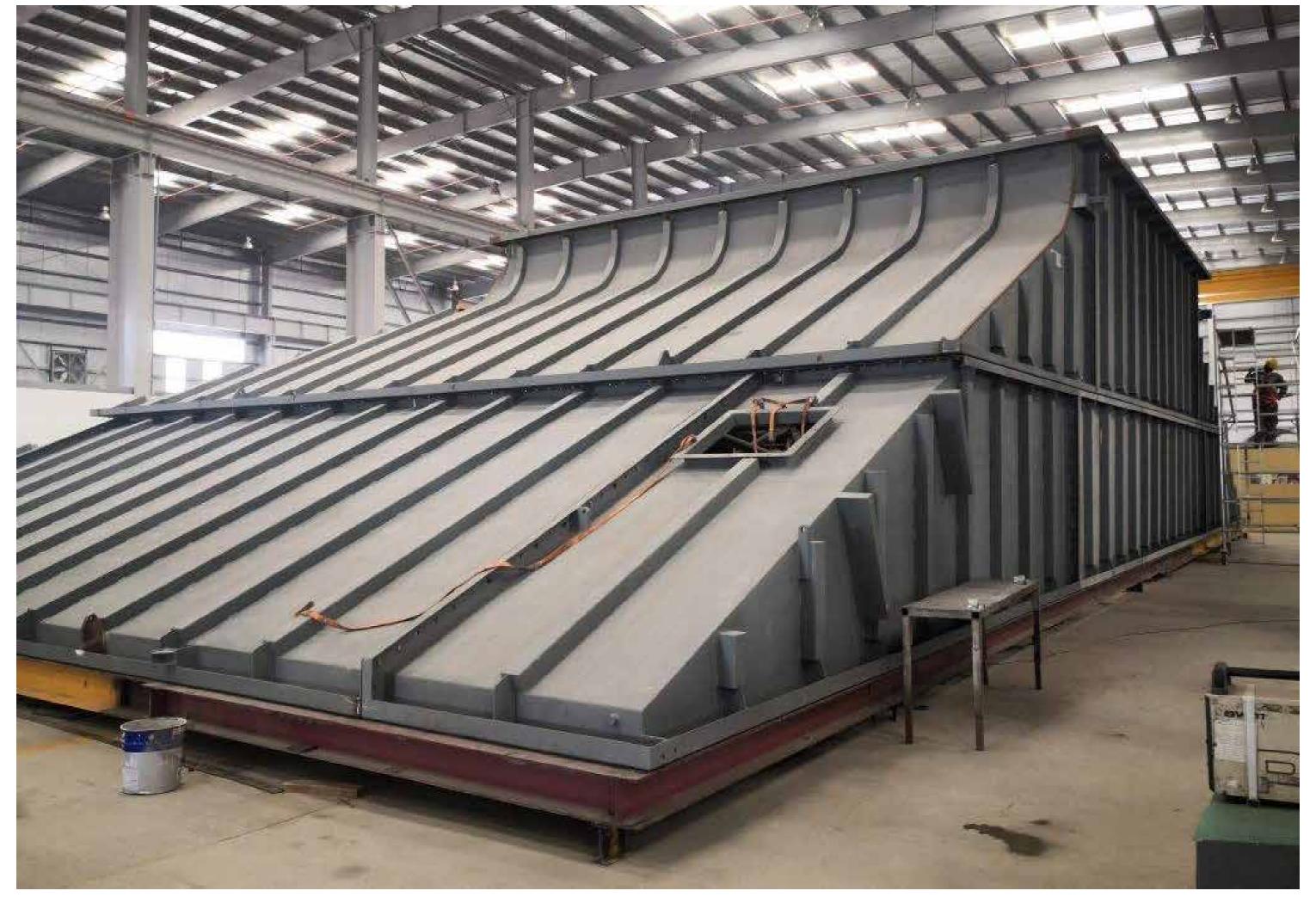


AIR FILTRATION SYSTEM















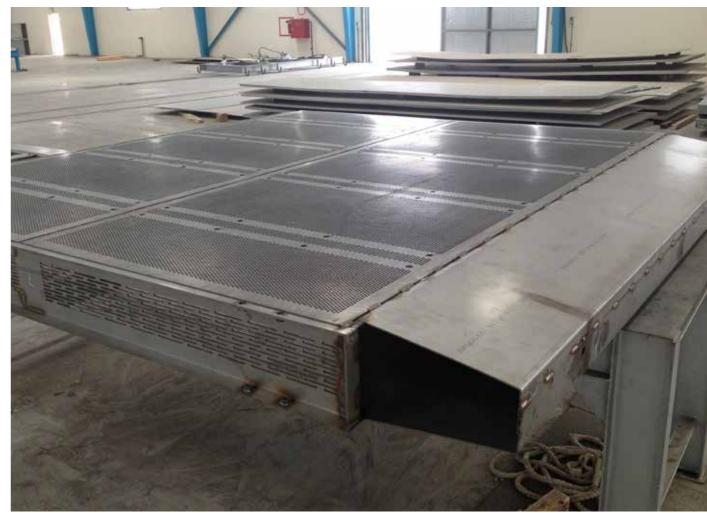


Air Filtration System







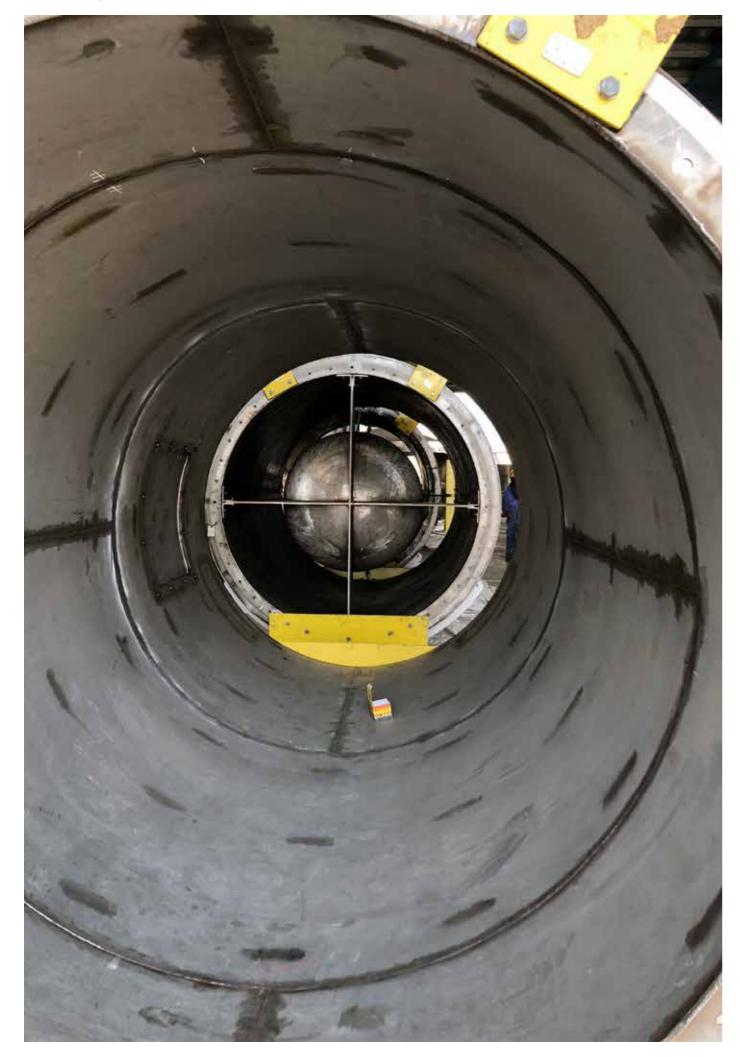
























































PIPE SPOOLS











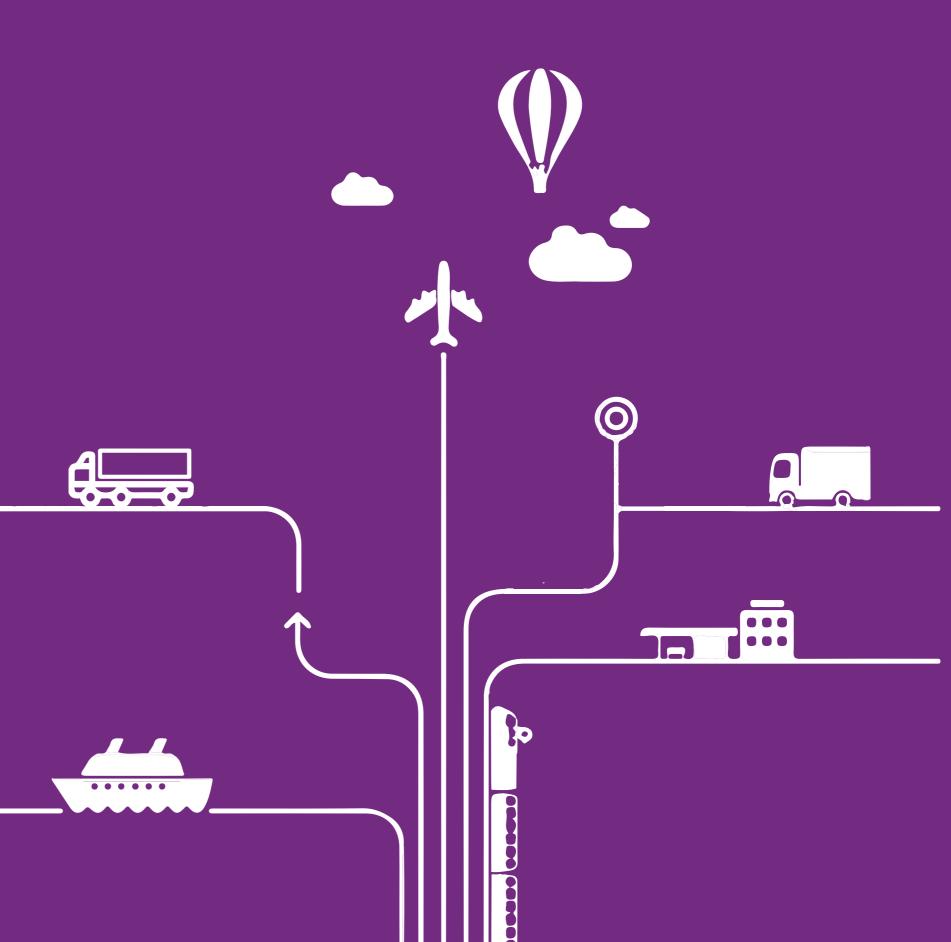


Packaging

We offer "Smart & Safe Packaging" for every fabricated product/ system to ensure zero risk transportation and delivery. Our packaging department has marveled in designing and developed customized packaging to suit any product, any mode of transportation and/or any sort of atmospheric condition. Our packaging comes with proper marking and Inspection Hatch Opening.

Our "Smart & Safe Packaging" primarily comprises of three types;

- Sea Weather Packaging
- Land Transport Packaging
- Air Transport Packaging



Our Major Clients

We have accomplished numerous complex projects for our esteemed clientele across various sectors globally. Below are some of our key clients that rely on our design, engineering and fabrication expertise





































































































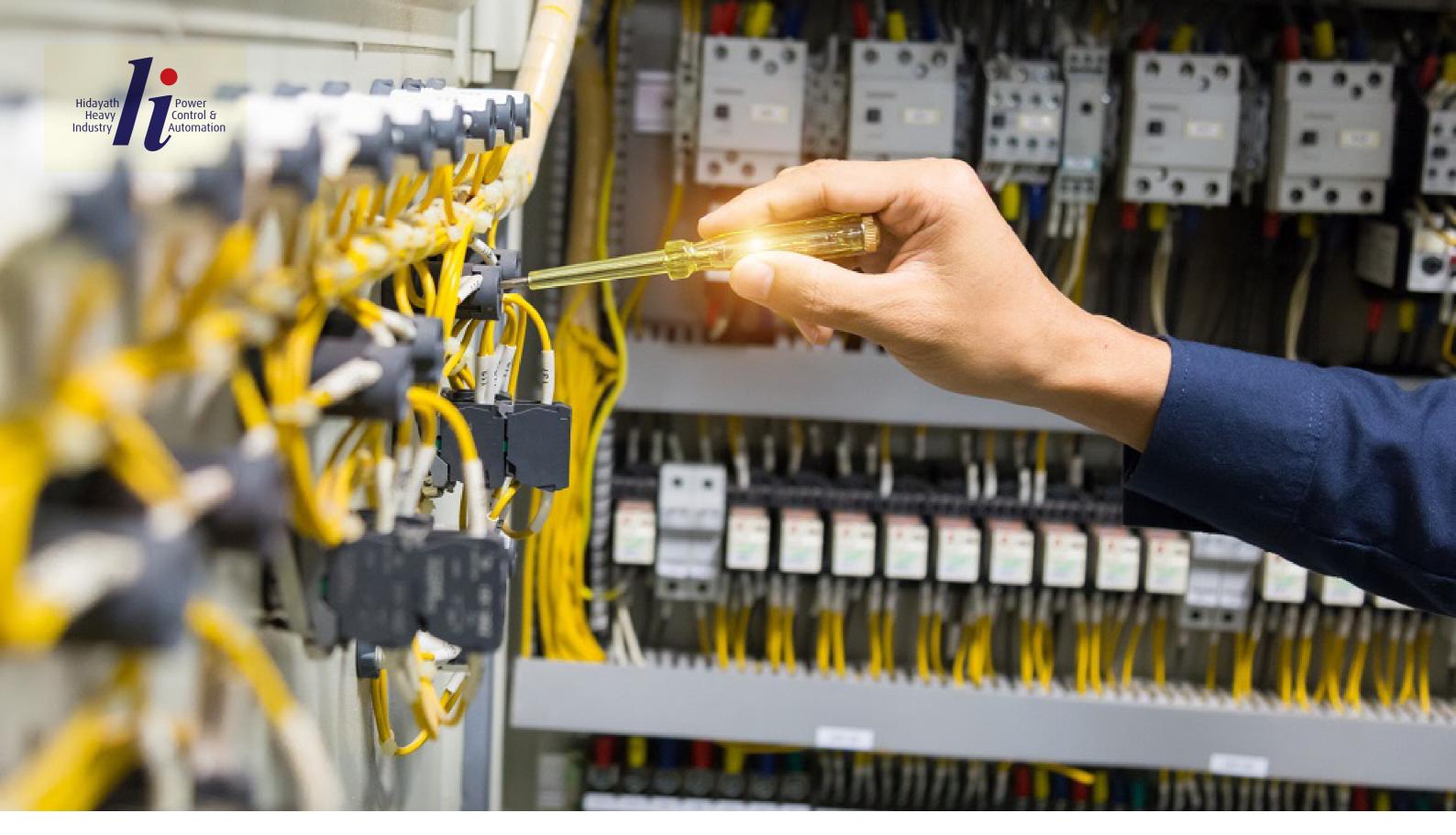












Power, Control & Automation Design, Manufacture, Installation & Commissioning

The Electrical & Instrumentation Division of Hidayath Heavy Industry has been engaged in design and manufacture of world-class Low Voltage Switchgear solutions and products. Most of our products and solutions are internally used to augment our Process Equipment Manufacture.

As an integrated energy solutions provider, we produce Modular Wiring Solutions to Low Voltage Switchgear,

Low Voltage Power Distribution, Protection and Control solutions as well as Control, Automation and Instrumentation services.

We deliver capabilities to transform from site-to-site to an integrated company management. Our integrated solutions are built with safety, reliability and cyber security for your homes, buildings, data centres, infrastructure and industries.

Main Distribution Board (Mdb)

Main Distribution Board up to 6300A

- Type tested (ASTA & UL) as per IEC 61439-1 (Major worldclass brands).
- Withdrawal & Fixed version.
- Safe and reliable system
 with properly engineered
 system for thermal rise, short
 circuit withstand, internal
 arc withstand and adequate
 corrosion protection from
 ambient conditions.
- Form-4, Form-2, Versions Custom designed.
- Designed and built with high quality breakers and ensuring customer satisfaction.

Applications

- Residential, Industrial, Malls, Hospitals, Hotels
- Seaports, Airports, Sewage, Desalination and Process Plants.



Capacitor Banks

- Type tested, compliant with local/ International standard and as per IEC-61439-1
- Flexible, easy to install, maintain and operate.

Capacitor Bank

- Comprehensive solution for improvement of power factor using microprocessor based controller, detuned reactors, capacitors and switching contactors/ thyristors.
- Detuning frequencies from 135Hz to 215Hz
- Fully factory tested ready to install and plug in the power.
- Maintenance free for 3 years/ subject to installations and standards.

Advantages

- Protection against network pollution
- Advantage on utility billing
- Energy saving

Applications

• For all kind of electrical load



Motor Control System (MCC)

Variable Frequency Drive, Soft Starter, Star Delta Starter

Motor Control Centres

- manufactured as per IEC 61439-1 standard un to 6300A.
- integrity control and automation along with fixed and draw out version, user friendly.
- Integration with BMS. PLC , fire alarm systems, as per customer requirement.
- Convenient maintenance access and operational safe.

Application

0.0

- Industries
- Process Plants
- Hospitals
- Oil & Gas Industries
- Residential & Commercial Buildings / Malls
- Airports

210 211

..

Modular Integrated Transportable Sub Stations

ATS and BYPASS Panels / Generator Control

- PLC logic and microprocessor based automatic transfer panels.
- High performance, safe and reliable
- Load manager, auto synchronization, with field control system

Applications

All Standby Operations at

- Hospitals
- Oil and Gas
- Airports
- Essential Loads
- Pumping Station



Electrical Instrumentation & Automation Panels

Multi Disciplinary Engineering Team (Installation & Commissioning)

Electrical & Instrumentation

- FEED and EPC, detail CAD design of instrumentation and control system for oil and gas industry (offshore/ onshore)
- Review and preparation of PA & ID general arrangement, drawings, cable block diagrams, instrument locations, lookup cable routing with detail designing, SCADA, and telecommunication system.
- Troubleshooting during commissioning and check out process
- Conduct engineering study and risk based analysis and make recommendation to improve the performance.
- Strategic development of instrument related working procedure.



Retrofit Services

Retrofit solution minimizes

- Waste
- Money (circular economy concept)
- Helps the environment by reusing/ recycling the products.

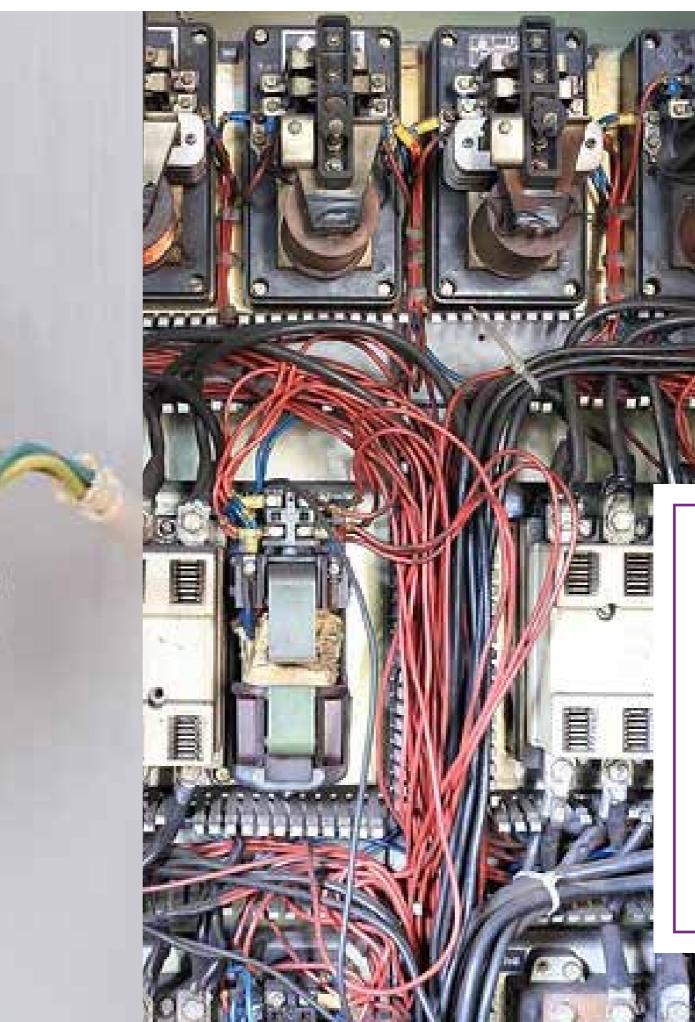
What we do

- Study the electrical and load distribution systems
- Highlight the problematic areas in the system
- Make the revised proposal along with electrical design system such that:
 - **a.** switchboards and accessories can be revised
 - **b.** obsolete components can be refurbished, repaired or recycled to minimize the waste.

We ensure that

- Life cycle of operational equipment is prolonged and less money is spent
- Our concept is 'RE'- reuse, refurbish, recycle, renew.

The cradle to cradle concept is achieved by our long lasting design using the 'RE' concept



Retrofit Services

We can Retrofit/ upgrade / modernize

- All kind of switchgear
- Control panels
- Motor control centres
- Capacitor banks
- Frequency Drives
- Cable termination

All above is achieved using state-of-the-art end of life processes considering the stringent international and local regulations, considering the criticality of the processes affected in your industry.

Retrofit **Services**

Cost saving on retrofit solutions versus new installation can be furnished as per the following criteria:

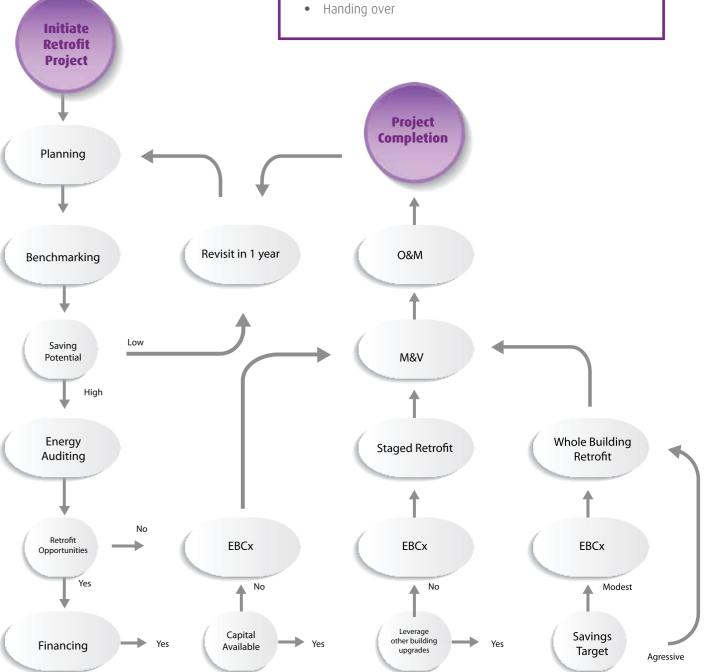
- Equipment Price
- Project Management Cost
- Civil Works
- Cable/ Wiring Cost
- Recycling Cost
- Commissioning Cost
- Training Cost
- Cost due to loss of Production
- Deep analysis using above data it is concluded that retrofit solution will cost unto 60-65% less than new installation.

Retrofit Services

How It works

- Conduct site visit and provide preliminary RE concept.
- Present the preliminary survey report of retrofit proposal
- Commercial proposal for preliminary design
- Commercial approvals for different stages.
- Complete survey in detail and proposal for discussion.
- Implementation programme
- Testing commissions programmes





Key Sectors



Commercial & Industrial Buildings

Petrochemical Process Plant



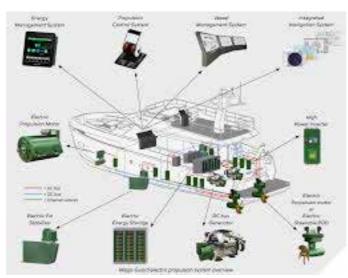
Gas & Leakage Monitoring Systems



Reverse Osmosis Plants



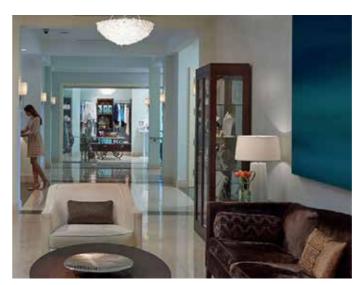
Fuel Ta nk Farm Monitoring Systems



Energy Management System



Metal Processing Plant



Schools & Hospitals



Sewerage Treatment Plant



Water Pumping Networks



Oil & Gas Process Plants



Military Projects

OIL & GAS



- 3phase Well Test
- Separator • Indirect Water Bath Heater
- 90' Burner Boom
- Chemical Injection Pump Skid
- Well Head ESD Control Panel
- Chemical Injection Mini Package
- Gas Booster Package
- Pressure Test Pump
- Nitrogen Booster

Industrial Construction



- Electrical
- Instrumentation
- Fire And Gas System

Industrial Construction E&I Designing **HVAC** Designing

F&G Designing E&I and HVAC Material Supply. E&I and HVAC Construction Work. E&I and HVAC Commissioning F&G Construction Work. F&G Commissioning



Power Energies



- Engine Supply And Installation
- Generator Installation
- and Testing Substation and Switch Gear Work • Transformer Installation

instruments

• F&G equipment's

parts

pneumatic panel spare

E&I Engineering



- Electrical designing and site survey
- Instrumentation designing and site survey
- pneumatic logic control
- panel designing
- electrical control panel designing
- PLC micro logic control panel designing

Fire Rated Cabins

E &I Designing E&I Material Supply ESD Panel Supply Chemical Injection Pump Instrument Tubing Work Electrical Construction Separator Pressure Test



Trading E&I Equipment



- light fitting and small power equipment's
- E&I cables and accessories
- special type of field

Maintenance & Servicing



- Engine servicing and maintenance E&I cables and accessories pneumatic control
- panel modification and servicing
- revamping for the E&I skid equipment's

Water Bath Heater

E&I Designing E&I Material Supply F&G Designing E&I Construction Testing and Commissioning For 2 Stage Burner And Water Bath Heater. 10k Psi Pressure Testing For Coil Pipe



Well Head ESD Control Panel

The emergency shutdown control panel is used to generate signal to pneumatically control the hydraulic actuated flow head and other fail safe hydraulic actuated valve including SSV and SCSSV.ESD system is designed to remote or manually control in response to any leakage equipment fail or other emergency situation.

The pane consist of 30Ltr hydraulic oil reservoir, relief valve, pressure pump, bladder accumulator, pneumatic logical Relays & pressure gauge and 3ESD logic included remote and local pull station, HI-LOW pilot &fusible bulb.

Application

All well test SSV valve shut down operations.

Feature

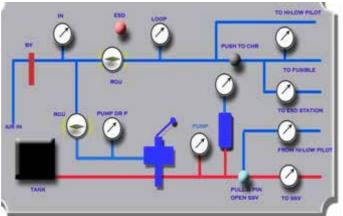
Operation area: class 1 Div. 1, group C and D Skid and Enclosure; SS Air Supply; Clean & dry air 100 to 200PSIG. Hydraulic Circuit: 3000PSIG or 6000PSIG. Hydraulic Pump: Manual & Pneumatic Type,

Extra Items Prior To Order

Pull station SSV Hydraulic hose Pneumatic air hose Fusible bulb HI-LOW Pilot

Panel Front Operating View





Latest Projects

Project: Oil transfer Pump Skid **Scope:** Supply, installation, cabling, pump alignment work and testing for Exd pump soft starter panel





Project: Workshop container

Scope: Electrical design and supply of the (Exd DB, Light, socket cable and glands workshop container







Project: Refurbishing well test package 1440 PSI

Scope: Supply and installation of Tubing work and all valves and instrument functional test.







Project: 1440PSI well test Separator Package Trailer mounted

Scope: Design, Supply, installation and testing for the E&I.





Project: Water bath heater

Scope: Design, Supply, installation and testing for the E&I System.







Project: Filtration unit

Scope: Supply, installation and testing for the Electrical and Instrumentation.





Project: chemical injection skid

Scope: Construction work for Tubing and Electrical and Instrumentation.





Project: 1440PSI well test DNV skid package

Scope: Design, Supply, installation and testing for the E&I.





Project: Injection skid

Scope: Construction work for Tubing and Electrical and Instrumentation.





Project: Oil and water booster and transfer skid

Scope: Supply, installation and testing for the Electrical and Instrumentation.







Project: Oil booster, Export and desalination skid

Scope: Supply, installation and testing for the Electrical and Instrumentation.







Quality Policy

The management of Hidayath Heavy Industry LLC is committed to continuous quality improvement and is most conscious of the need to;

- Sustain continuous improvement in quality standards of services provided by the company and ensure that all contractual requirements of its customers are consistently achieved.
- Provide documented assurance to determinate that specified customer requirements have, can, and will be achieved.

To meet these objectives, the application of the Quality System outlined in Quality Manual has been developed in accordance with the requirement of ISO 9001:2008.

Compliance with the requirements of the detailed procedures outlined in the Quality Manual is mandatory for all staff members.

HSE Policy

At Hidayath Heavy Industry, we care about the safety, health and wellbeing of our employees. We value the contributions our employees make toward our success, support local community interests, and value honesty, integrity, and teamwork.

We Value Our Employees

Our business operates with a goal of zero damage to people, property and product. At Hidayath, everyone shares equally the responsibility of identifying hazards, following safety rules and oper- ating practices. All jobs and tasks must be performed in a safe manner, as safety is crucial to the quality of our products/service.

Our commitment

At Hidayath, no phase of the operation is considered more important than accident prevention. We are com- mitted to provide and maintain safe working conditions and to follow operating practices that will safeguard all employees. No jobwill be considered properly completed unless it is performed in a safe manner. Hidayath is concerned about the health and good work habits of its employees. In the event you are injured or unable to perform your job, we want to help you obtain the best treatment, so you can return to your regular job as soon as possible.

All employees shall ensure alignment of their plans and activities with this policy and commit to the guiding principles of company's Occupational Health & Safety Management System OHSAS 18001: 2007.

Research & Development

Our efficient R & D enhances the current business by:

- Continuous technology up-gradation by identifying industry benchmarks
- Identifying the gaps and prioritize areas of immediate improvement
- Ensuring inter-facility integration
- Speedy application and implementation of advanced technology
- Identifying better methods through critical analysis & brainstorming for all the critical operations/processes with an overall objective of improving the productivity of all there sources.





