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About Us

AL-BAHAR MCEM (Metal Cabinets & Enclosures Manufacturing) is a regional provider of high quality custom built modules and acoustic enclosures for a wide range of applications and packaging solutions. We have been providing products and services to customers across varying industry segments in GCC & East Asia. We take pride in our products - designed and built to last.

Our products are used in a wide range of applications including; generator enclosures, DNV offshore containers, on-shore & offshore modules, switchgear enclosures, telecommunications systems, cooling equipment, fuel storage, pumps, and compressors.

We spare no efforts on development and are always working on improvements. We strive to provide excellence in our products, services, and processes, by working closely with our long term strategic partners.

Vision

To be the 'Providers of Choice', by supplying advanced innovative solutions with superior quality & unmatched value.

Mission

Work relentlessly on building our capabilities, developing and improving our products and strengthening relationship with our customers. We are devoted to our customers, employees and the environment.

Core Values









Our Production Process and Facility







Our Products

Power Generation and Acoustic Containers

Design to Work, Build to Last

Al-Bahar enclosures are crafted for durability, providing long-lasting protection for the equipment they house.

Flexible Shapes And Sizes

Our 25,000 sqm production facility enables us to manufacture and deliver all sizes, including customized dimensions and weight requirements outside of the standard ISO configurations.

Our products are designed and built to shield the contained equipment from the most challenging external environments while providing the essential sound attenuation and air circulation.

Our experienced engineers ensure that all aspects to each unit, even minute details, are taken care of. This attention to detail makes all Al-Bahar enclosures superior whilst ensuring best performance of in-housed equipment.

Standard Specifications:

- All enclosures are designed and validated with reference to ASTM E90, ASTM E477, ISO 7235, ISO 3741, ISO 140, ISO 3744, ISO 3746, ISO 6798, ISO 8528-10, ISO 6798
- Single lifting point through an eye bolt to ISO 3266/4190 and DIN 580. OR 4 upper lifting points through corner blocks to ISO 1161 lifting at maximum gross weight
- High quality gloss paint finish 80% gloss to ISO 14713, or powder coated semi-glossed finish
- Designed to meet standard noise levels 85 dBA at 3m in free field condition with wool sound absorption on walls to ASTM C553/665 & BS EN 13162
- Ingress protection rating of IP23 to IEC 60529
- Integral exhaust silencers
- Sufficient serving accesses, air ventilation and safety measures
- Built-in base fuel tank with eight hours capacity









• All external fittings are galvanized to ASTM A193/4 or stainless steel to ASTM A240/312

Fuel Storage

Al-Bahar offers safe, standard, and customized, over ground fuel storing solutions designed based on customer requirements. Tank shapes may vary among cylindrical, cubic, rectangular, dish ended or flat ended. We offer single and double walled tanks with capacities ranging from 500 to 50,000 Liters. All tanks are subjected to structural inspection and leakage test prior to delivery.

Standard Features

Shape (Cylindrical and Rectangular)
Fuel fill, supply, return and drainage
Manhole
Air vents
Spare Connections
External Painting
Lifting lugs or lifting buckets
Level gauge
GI Fittings and Accessories
Pressure Tested

Customized Options

Construction (Single wall and Double wall)
Stackable
External painting as per project specifications
Internal surfaces protection
Containment trays
Lifting frame
Service ladder & maintenance platform
Special level gauges (magnetic)
Fittings & accessories
3 rd party testing/ certification











Mufflers and Silencers

Most Al-Bahar enclosures are equipped with exhaust silencers. We also sell them separately to fleet operators and resellers. Our reliable, affordable, and long lasting mufflers are customized and designed to satisfy the stringent noise and pollution reduction requirements, while providing the desirable airflow at the lowest pressure drop.

Options:

Grade	Noise Reduction dB(A)
Industrial	12 -18
Residential	18 - 25
Critical	25 -35

Material	Shape	Spa Arres
Carbon Steel	Cylindrical	Built
Stainless Steel	Rectangular	Exte

ing

Mounting

Horizontal

Vertical

Packaging

Inside Enclosure Outside Enclosure

Power Control And Distribution

Transformer

Al-Bahar transformer packages offer versatile, reliable, portable, and cost effective solution.

The Standard package consist of a 20 feet ISO container configuration, making it easy to handle and transport whilst providing durable heavy duty package able to withstands tough applications & severe weather conditions. Combining power transformer and related switchgear in a compact durable package, makes it an excellent solution for temporary or permanent applications. Our talented design and engineering team will customize the most suitable solution for your application.

Switchgear

Similar to the transformer package the units are designed to host MV and LV switchgear, however they can also be used for UPS, batteries or other electrical equipment. Each unit layout can vary based on the installed components and customer's requirement. The units are fully autonomous and easy to transport.

Electrical Control Room

The ability to adapt is essential for permanency and success in this industry. Increasing market demand of control panels and other electrical components housing coupled with the rapid growth of technology represents a major challenge, which requires nothing less than innovation and robust capabilities. At Al-Bahar MCEM, our abilities and innovations are manifested in our flexibility to meet customer's requirements and providing smart solutions. Options can include but are not limited to natural or forced ventilation, compartmentalized areas, fire control, rockwool insulation, sound control, secure access, and external operations.





Offshore Enclosures and Accommodations

Structure

Al-Bahar enclosures can be built with carbon steel or 316 stainless steel with insulation that is specified to meet A0, A30, A60, H60, and H120 fire protection standards.

Build Options

include:

- Fire dampers
- Zone Lighting
- Access doors
- Fire & Gas detection systems
- Fire suppression systems
- Full acceptance test facility
- Internal lift beams with hoist
- Sound attenuation
- DNV rated containers
- IP54 Enclosures

units.







Additional auxiliary equipment and products can be specified to

MCEM can provide enclosures to comply with DNV Certification for offshore specification. Applications include accommodation, power generation, pumps, Electrical switchgear, and compressor housing

Services

1. Site Installation

Empowered by our experience, logistics, and expertise, we offer installation of a wide range of related products including and not limited to enclosure packages, storage tanks, solar modules, etc. All site activities comply with the local and international work regulations, safety codes, and related standards.

2. Engine & Alternator Coupling

Our services under this category include:

- Design and fabrication of mounting skid
- Installation of engine, radiator and alternator
- Alignment of engine and alternator
- Testing and certifying through laser beam technology

3. Refurbishing & Repairs

We offer smart surveys, assessments, and cost effective solutions for repairs and refurbishment of your used products, rendering longer life and lesser maintenance expenses. The service is customizable to meet unique business needs ensuring full compliance to the operational requirements. Repairs and refurbishing include:

- Blasting & recoating
- Body & structure repairs
- Lighting & electrical upgrades
- Acoustic upgrades
- Fuel system upgrades and more

4. Fuel System Designing & Installation

This turnkey offering is generally related to long-term fuel storages. Our complete service includes site surveys, tank sizing and selection, piping design, operating logic design, instrument selection, and installation of the whole system on site.

5. Power Room Ducting / Piping

We provide efficient ducting systems that minimize leakages and save energy. Our service includes duct designing and selection, routing design, fixing arrangements, insulation covering, and installation of the system on site.

6. Blasting & Painting

With our advanced blasting and painting booths, we offer grit blasting on mild steel surfaces to ISO 8501 SA 2.5 and painting to ISO 14713. The operations are run by highly qualified technicians and under strict management of parameters that influence the surface preparation, profile depth, and coat thickness.

1 Site Installation



2 Engine & Alternator Coupling



5 Power Room Piping



3 Refurbishing & Repairs



4) Fuel System Designing & Installation



6) Blasting





6 Painting



5 Power Rooms Ducting



General Fabrication

Our experts have decades of experience with several companies in the area of general fabrication. Our combination of products and expertise allow us to offer the best to our customers. The type of cutting and welding done in general fabrication require unique solutions for each application.

1. Standard Shipping ISO Containers

Designed and manufactured in accordance with ISO 1496, ISO 668 and ISO 1161. Stackable, reliable and suitable for multiple transport modes such as trucks, rails, and ships. Approved by DNV and identified through international BIC (Bureau International des Conteneurs) code.

• 10 ft. • 20 ft. • 40 ft.

2. Containerized Solutions

- Accommodations
- Site & Mobile Stores
- Site & Mobile Offices
- Workshop

Standard Shipping ISO Containers



Industrial Skid



Earth Moving Attachments



3. Industrial Skids & Frames

- Pumps, compressors, switch gears and heat exchangers skids & frames
- Fuel tanks skids & frames

4. Others

Containerized Accommodations

- Earth Moving Attachments
- Drip Trays
- Mounting Brackets
- Safety Guards





Industrial Frames



Safety Guards















Common Skid







Certifications

Bureau International des Containers et du Transport Intermodal





