



Fire & Hazard Control (FHC) is a leading manufacturer of custom designed & integrated fire protection equipment with over two decades of experience in industrial and commercial applications across the MENA region. Our manufacturing facilities are operated by competent engineers with up-to-date fabrication equipment allowing us to design, produce, and assemble a wide range of fire and safety products and systems.

FHC products and systems are used in Oil & Gas, Petrochemical, Drilling, Mining, Maritime, Power & Water Treatment, Construction and Defense sectors. FHC has deep knowledge in the requirements of these sectors supported by close relationships with world-known manufacturers in the field of fire protection as well as world class services from engineering to full-scale production.

## ***HEAVY METAL FABRICATION***



# HEAVY METAL FABRICATION



Fire and Hazard Control (FHC) is a multinational company specializing in the execution of turnkey projects for the Energy, Mining, and Oil & Gas sectors in different regions around the world. The company also provides specialized erection, commissioning, operation, and maintenance services for firefighting at industrial facilities. FHC has its own capital goods manufacturing units with a footprint of more than 250,000 sq. ft.



Backed by its wide experience in the Oil & Gas industry, FHC is capable of effectively meeting customer's needs by putting its strong expertise at their disposal. FHC is certified according to the main international codes and standards and by major technologists for both petrochemical, refineries, and power plants.



## FHC Performance Spectrum

- Pressure Vessels
- Air Receivers
- De-aerators
- Transport Containers
- Welded Constructions
- Tank Rings
- Plant Structure
- Modules
- Sub assemblies
- Skid Units
- API 650 Storage Tanks
- Flare Tips



## Engineered to meet your application:

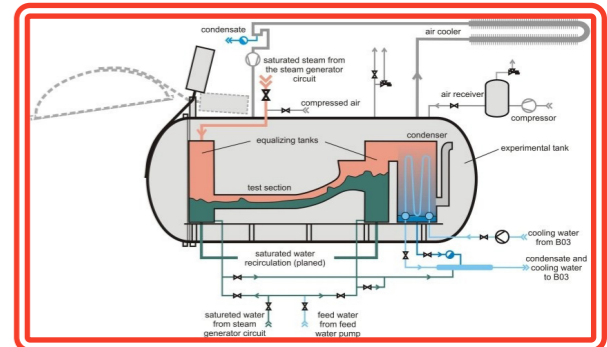
FHC Engineering utilizes the latest versions of industry-leading 3D solid modeling software. Solid modeling streamlines the overall design cycle and manufacturing process, increases the effectiveness of design reviews and supplier/client communication, vastly accelerates, and in some cases, eliminates the need for prototype development. Finite Element Analysis is used for stress analysis, permissible cycle life, wind and seismic loading, fluid flow, and heat transfer. We can produce linear, nonlinear, limit load, and steady state and transient thermal analysis to meet jurisdictional requirements.



Working with 3D models also allows for a seamless integration with our FEA and CFD analysis software and offers us the ability to create photo-realistic renderings and animations useful for design proposals and marketing materials.

## Complete Tank Fabricating and Finishing services:

We engineer and produce a wide range of tank and pressure vessels with accelerated timetables. What matters to us: The integrity of each individual product and how it's built. Integrity runs full circle at FHC from the first weld to the finished assembly. FHC is also a supplier of API 650 tanks. We build a wide range of sizes and materials, including carbon steel and stainless steel. We also can provide many options, such as: Ladders, platforms, man ways, and various types of anchor supports. In addition, each tank is custom-built and shop-fabricated to your requirements. Our welders are ASME certified, which provides our customers with the assurance that all standards are met.



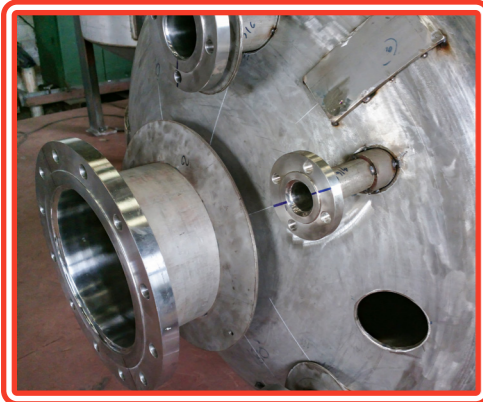


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## Designed and built to be your tank and pressure vessel partner:

FHC is approved and certified as an ASME Code “U” manufacturer of pressure vessels. One visit to any of our production facilities will convince you of our quality, efficiency, and capacity to meet your fabrication needs. Our ASME code-compliant operations assure the integrity of your project from engineering through production, with total project assembly, testing, and certifications conducted on-site. Projects can be built and delivered with all externals and internals in place. This includes the integration of ladders and platforms as well as piping and electrical for reduced time and cost.

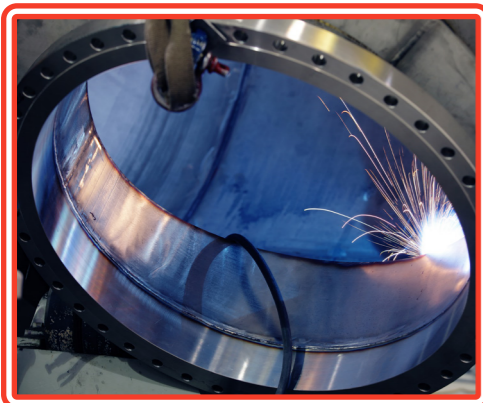


## Modular Construction:

The modularization approach is most indicated to gain cost and schedule advantages and at the same time to reduce risks associated to site assembly and installation. FHC’s facilities, with strategic access inside Industrial Area, provide our customers with the necessary means to fabricate and deliver modules in Oil & Gas and other industrial segments. Completed skids and modules are shipped to the site fully installed, including insulation, cable trays, instruments, cabinets, and junction boxes.



Holding the responsibility for the full scope of supply (design process, procurement of materials, manufacturing process, and final inspection activities) provides considerable advantages to the project. The Unit Packages are ready for final connection at the site. This concept drastically reduces the necessary means and resources on-site (manpower, ancillary equipment, etc.) And avoids interface problems, minimizing the project’s overall execution time. FHC has supplied more than 250 different skid units under this concept to the satisfaction of our customers.



## Turnkey Capabilities:

- Design engineering and design-assist
- Tanks, pressure vessels, skids, piping, ladders, platforms, and add-ons
- Final assembly, blasting, painting, piping, instrumentation, and electrical
- Testing and certifications
- Supervision of ASME authorized inspectors
- EPC documentations



## Production Capacities:

Equipped with state-of-the-art manufacturing technology, FHC is able to cope with the most demanding market requirements. Our main manufacturing capabilities can be summarized as follows:

- ASME Section VIII, Div. 1 Boiler and Pressure Vessels with wide range of tanks and pressure vessels
- ASME certified welders and inspectors with approved WPS & PQR up to 40 mm thickness
- 45 ton fabricating capacity in-house parts and material preparations set the stage for efficient fabrication
- Comprehensive in-house parts production and inventory
- High-definition plasma cutting, 10ft x 20ft capacity, +/- 1/32-inch precision typical
- 14-foot x 1-inch steel plate rolling capacity, 24-inches to 15-foot 6-inches diameter
- Hydraulic presses, CNC & NC shears, bending, punching, iron-workers, milling, rolling, plasma cutting, hot wire automatic orbital welding, auto band saws, etc.
- Automatic flush grinding, edge preparation, and back gouging
- Roller beds supporting up to 15 tons
- Wide materials range fabrication includes carbon steel SA516, SA512, SA-36, SA-106B, stainless steel SA 312, SA 240 etc.
- Pneumatic, hydrostatic, & water flow testing
- Surface preparation & painting facility
- Non-destructive examination (Outsourced) - radiography, dye penetrate, hardness testing - magnetic particle, lining continuity, dry film thickness testing
- Heat-treating and stress-relieving (Outsourced)



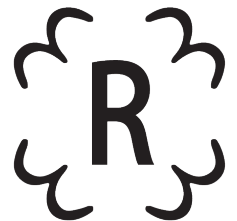
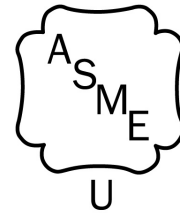
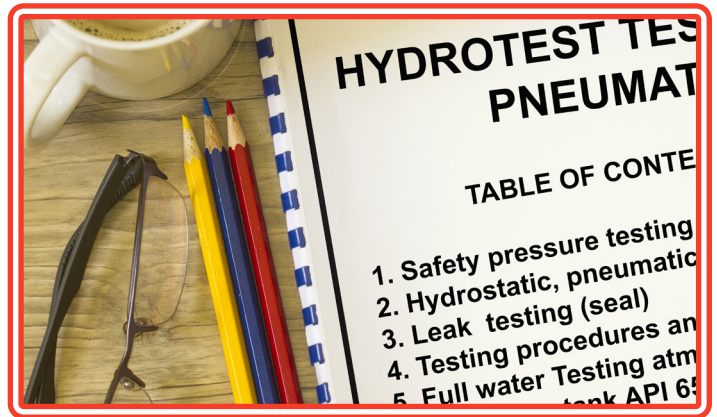
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## Quality and Occupational Health & Safety (OHS):

FHC's Quality and Occupational Safety & Health Management System ensures product quality from receipt of raw materials to the shipment of the finished product, while linking environmental management with day-to-day planning and operation. Thus, FHC's management systems meet the highest quality standards specified by the most stringent international codes. The implementation of sustainable manufacturing tools and methodologies provides the capability of efficiently producing and delivering high quality products.

- ISO 9001:2015
- OHSAS 18001:2007
- U Certificate (U-55259) ASME VIII Div.1
- R Certificate (10660) National Board

The extensive use by FHC of the most up-to-date NDE methods and inspection allows us to provide our customers with the highest quality and reliability delivered on time.



## FHC is consistently in the process of enhancing current business by:

- Continuous technology up-gradation in line with industry benchmarks
- Recognizing the gaps and prioritizing areas of immediate improvement with inter-facility integration
- Identifying better methods through critical analysis for all the critical operations/processes with an overall objective of improving the productivity of all the resources