



# **HMC**

## **Instrumentation & Controls LLC**



HMC Instrumentation & Controls was founded in 2006 and has upheld a reputation of providing quality products and services to our customers for over 8 years. We offer a wide variety of Products and services encompassing every element of instrumentation & controls and we consistently strive for continual improvement and ultimately reaching our goal of complete 100% customer satisfaction.

## **Mission Statement**

Our commitment to customer service is an important and distinguishing characteristic of our company and is the foundation from which we continue to grow. Our primary goal is establishing and sustaining long-term relationships with our customers by consistently providing quality products and services, safely and on time.

## **Our Infrastructure**

Our manufacturing facility consist of cutting edge computer systems, manufacturing equipment and special tools which helps us design, manufacture and supply world class Automation and Control Systems. Whether it's design, assembly, testing, or training, we have in-house modern facilities with everything we need to get the job done right.

## **Our Personnel**

We are a team of skilled, dedicated professionals. From engineering & design to manufacturing, from field service to customer service we are here to make a positive impact on our industry. With our team of professionals working together, we have the capabilities of designing and building to your specifications and all the industry standards.

## **Our Quality**

Quality is of paramount importance to us. Our focus on quality enables us to ensure that we offer the best quality products to our clients. Our quality control process is in accordance with the framework established by ISO 9001:2000 satisfying both national and international quality standards. We take pride in everything we do.

## Safety

Safety is everyone's job. It is the responsibility of all of the members of our team to work together to proactively identify potential hazards, observe all rules and guidelines and implement the training they have received and to work closely with our customers when we're on your site to recognize your Health, Safety and Environmental objectives.



## Quality

The entire HMC Instrumentation team recognizes the challenging environment in which our customers operate. We are committed to delivering the highest quality results in products, and documentation to our customers. We use a set of overarching policies and procedures that are based on the framework of ISO9000:2000. These top-level policies represent HMC's plans or protocols for achieving product quality and customer satisfaction, and one applicable to all HMC facilities and locations.



## Teamwork

Our team is composed of highly knowledgeable project managers, designers, foremen, assemblers and fabricators who work together with an objective of achieving our quality and safety objectives. Redundant quality checks are incorporated throughout the design, manufacturing, and service process. From design to fabrication to programming integration to project management and commissioning, and on-site service, we make sure that every step is of the highest quality and completed with the highest expectation of a safe outcome. Whether on your site or in our facility, safety and quality are embedded in our planning and execution. Our team becomes your team.







## Manufacturing

HMC Instrumentation & Controls prides itself in the supply of high quality manufactured products that are custom designed to the customer's needs. As part of our product delivery, we also provide full on-site installation and commissioning services for all of our manufactured products. This includes the provision of all required installation and commissioning procedures and incorporated requirements of the original equipment vendors, operators and third party certification authority. We turnkey manufacture production control equipment for Topsides or Subsea applications.

### Topside/Subsea

Wellhead Controls, Hydraulic Power Units, Fire Water Systems, Diverter Controls, Test & Flush Equipment, Topside Umbilical Termination Unit, Umbilical & Hose Reel, Remote Control Panels, Subsea Manifolds Subsea Pods, R.O.V's.

### Other Equipment Includes:

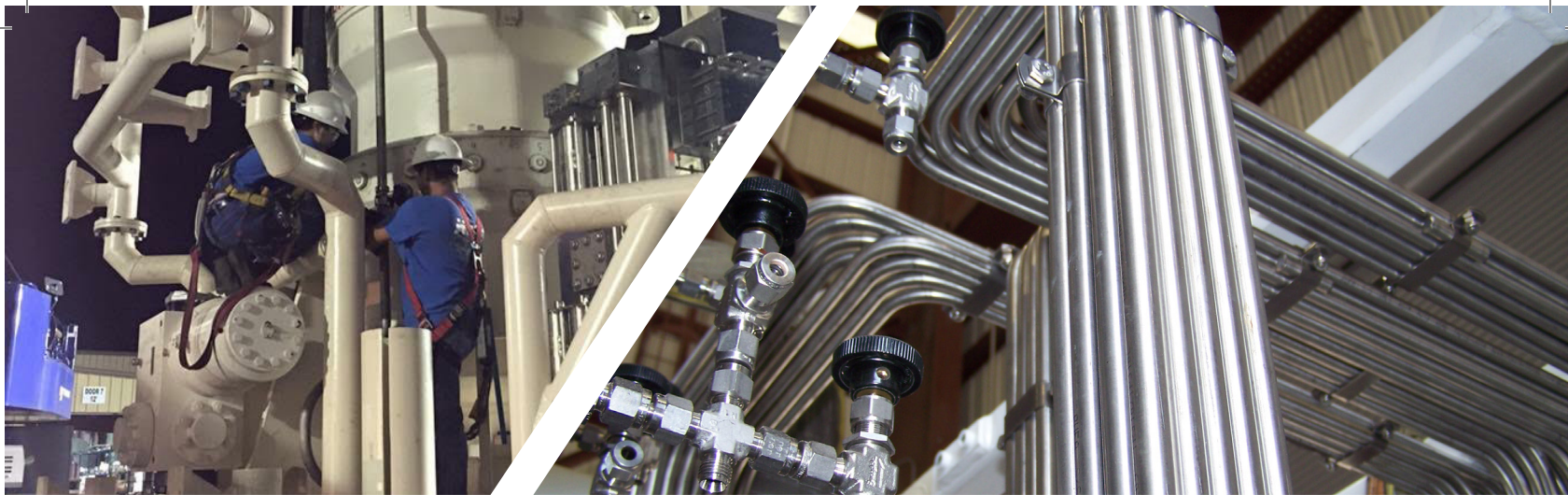
PLC Control Panels, Pipeline Metering Stations, Metering Gas Sites, Fire & Gas Systems, ESD Fire Loop Systems, Fire Pump Skids, Compressor Packages, and Lubrication Systems for Natural Gas Compressors, Unload Systems on Compressors, and Industrial Gas Chromatograph Analyzer Units

We use only the best quality materials, parts and components available and all of our products are designed and built to last. Each comes with Operation & Maintenance manuals including drawings, diagrams and schematics. We take pride in everything we do and our products are fully covered by our 1 year manufacturer warranty.

### Fabrication Services

Our facility has over 15000 square feet of space dedicated entirely to fabrication. Holding ABS and DNV approved welding procedures helps to ensure that our products are built to the highest standard. Our turnkey manufacturing service of production control equipment is the one to choose when you need reliable pneumatic and hydraulic control systems that are built to last. Fit-up Cutting, Sub Arc Welding, Manual/ Hand Welding Grinding, Heat Treat, Pipe Work, Structural Blasting, Painting, Hydro, Assembly - HMC Instrumentation & Controls offers a wide variety of welding capabilities meeting the following industry standards, processes and materials:

- |                   |                      |                          |                    |
|-------------------|----------------------|--------------------------|--------------------|
| ▪ API 1104        | ▪ AWS D1.1/D1.2/D1.6 | ▪ GTAW (TIG)             | ▪ SAW (Subarc)     |
| ▪ ASME section IX | ▪ GMAW (MIG)         | ▪ Mild steels            | ▪ Stainless steels |
| ▪ FCAW (Fluxcore) | ▪ SMAW (Stick)       | ▪ Duplex stainless steel | ▪ Aluminum         |



## Field Services

### Onshore/Offshore

Domestic or international, with more than 250 field service hands, we provide professional quality installation and maintenance on a variety of control systems and equipment. Trouble shooting, repair work, or new construction, you can expect a high level of expertise and professionalism from our service hands.

Instrument Fitters  
Electricians, Welders  
Pipefitters  
Mechanical Assemblers

We provide certified crews for hook-up, commissioning and completions.

### RESPONSE TIME

We make every effort to respond quickly to your order for service and we can have your project staffed with professional industry experienced support in just a few hours in some cases.

## Our Personnel

### Hydraulic/Pneumatic - Instrument Fitters

Our instrument fitters are professional craftsmen. Their expertise and knowledge comes with a focus on safety, quality and production schedule. Whether you need trouble shooting, repair work, or new construction, you can depend on HMC Instrumentation & Controls to get the job done safely, on time and of the highest quality in the industry.

### Electrical / Wiring - Electricians

Our electricians are licensed journeymen experienced with equipment relating to the upstream sector of the oil & gas industry. They are skilled troubleshooters who have solid understanding of electrical principles and safety working on a full range of voltages up to 13.2 KVAC.

### Fabrication / Welding - Welders

HMC provides welders and welding services for the oil and gas industry. Whether it is stainless steel tubing applications, socket weld 6G or A36 steel plate, our welders are proven to get the job done right. All of our welders go through the standard certification testing process and are qualified before they perform work for us or any of our clients. (GMAW, GTAW, FCAW, and/or SMAW). HMC welders are certified according to our welding specifications.

### Pipe Fitters

Typically our pipe fitters have a minimum of 4 years of experience working as a pipe fitter and strong working knowledge of the pipe fitter trade. A large number of our pipe fitters have multiple years of experience as a journeyman and NCCER certification with a working knowledge of pipe fitting techniques and methods for different types of piping systems and pipe couplings.





## Inspection Service

Onshore, offshore, international and domestic our inspectors have logged thousands of hours performing inspection for our clients including MT, PT, UT, VT, PHASED ARRAY, HARDNESS & TPI.

Our NDT inspectors are trained in accordance to the American Society of Nondestructive Testing (ASNT) Level III and Level II. Our NDT service utilizes a variety of advanced equipment capable of performing quality inspections for virtually any form of ferrous material, component, or assembly in the in the field. Our highly-trained staff of certified inspectors utilize advanced instrumentation and data reporting capabilities to quickly and accurately detect and identify flaws and measure material depth for a variety of applications in the oil & gas industry.



Upon completion of our inspection our client will receive a certificate of conformance certifying the integrity of their project. This includes all documentation and data collected during the inspection process.



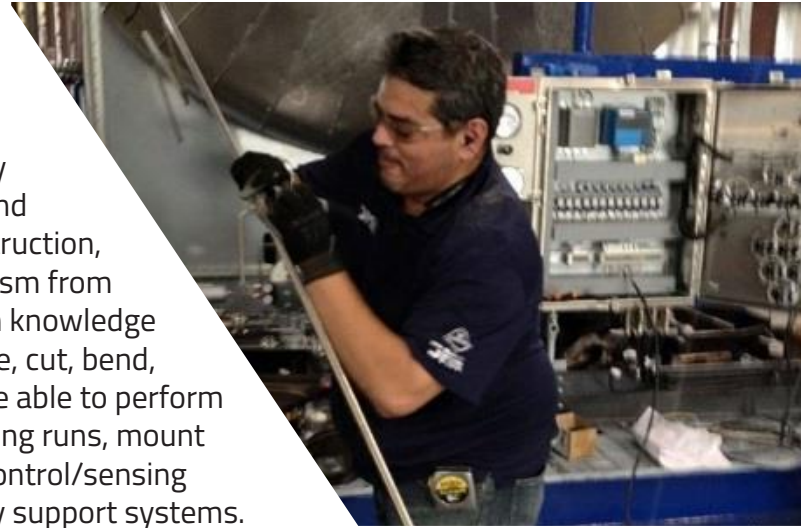
**Magnetic Particle or MT:** For ferromagnetic materials such as castings, weldments, turbine components, forgings, and machined or stamped parts, this is one of the most sensitive nondestructive examinations.

**Ultrasonic Inspection or UT:** With this method, NDT inspectors only need access to one side of a material. A transducer sends the ultrasound through the sample and the inner wall of a defect surface will send the wave bouncing back. It is also very portable and efficient.

**Phased Array:** Phased array probes typically consist of a transducer assembly with from 16 to as many as 256 small individual elements that can each be pulsed separately. These may be arranged in a strip (linear array), a ring (annular array), a circular matrix (circular array), or a more complex shape. As is the case with conventional transducers, phased array probes may be designed for direct contact use, as part of an angle beam assembly with a wedge, or for immersion use with sound coupling through a water path.

## Instrument Fitters

Onshore, offshore, international and domestic our instrument fitters are professional craftsmen who perform quality installation and maintenance on a variety of pneumatic, hydraulic and electronic control systems and equipment. Trouble shooting, repair work, and new construction, you can expect a high level of expertise and professionalism from our technicians. HMC Instrument Fitters have a thorough knowledge of various pneumatic and hydraulic systems and measure, cut, bend, thread, assemble, and install ss tubing and our Fitters are able to perform multi-line panel breakout, and configure group (rack) tubing runs, mount and install control panels, instruments, and associated control/sensing devices. Measure, cut, assemble cable tray and cable tray support systems. Install tubing and clamps into cable tray systems. Observe function of installed equipment and system to detect hazards and need for adjustments, relocation, or replacement.



HMC Instrument fitters can repair or replace faulty tubing, valves, instruments, and other devices. Maintain technical competence by attending all classes and meetings as required. HMC Fitters consistently demonstrate an adequate amount of communication with customers to resolve any issues or any needs. HMC Instrument Fitters can read ISO's, Schematics, install service, and repair pneumatic and hydraulic equipment and controls. Our Fitters consistently work to meet customer specification in a neat, timely and accurate manner. An HMC Instrument fitter can plan new or modified installations in compliance to P&ID's, Safe Charts, and schematics.

Our Instrument Fitters service a wide range of equipment including: Pipeline Metering Stations, Metering Gas Sites, Fire & Gas Systems, ESD Fire Loop Systems, Fire Pump Skids, Compressor Packages, and LUBRICATION systems for Natural Gas Compressors, unload systems on Compressors, and Industrial Gas Chromatograph Analyzer Units, HPU's, Diverters, Motion Compensators, Subsea Pods, Bop Stack, Subsea Manifolds, Wellhead Panels, Sample Systems and more. Onshore or offshore, domestic or international, with HMC Instrumentation & Controls on the project, you get a team of highly experienced industry professional instrument fitters.

When you utilize the personnel from our field service department, you will have a crew that is qualified to complete your project safely, on time and constructed of the highest quality craftsmanship.



## Autoclave Cone & Threading

HMC Instrumentation and controls rents Autoclave cone and threading machines. These Autoclave machines have the ability to cone on one side and thread on the other this machine makes easy work of large jobs or jobs using larger size tubing which cannot be coned and threaded by hand. Autoclave coning and threading machine used for medium and high pressure tubing end preparation.



### BENEFITS

Cone and thread tubing quickly and accurately with an Autoclave self contained coning and threading machine. Designed for ease of operation and set up, along with the ability to cone and thread simultaneously this machine provides superior production results.

We rent autoclave tools such as autoclave Torque Wrench, Adapters, and Torque Values, Re-Seating Tool, Hydraulic Sleeve Set Tool, Manual Coning and Threading Tools and Hydraulic Tube Benders.

These are specialized tools used for autoclave applications that require medium to high pressure tubing.

### Rent Autoclave Equipment!

HMC Instrumentation & Controls rents Autoclave equipment to make it easy and convenient for you to find a cost effective way to get the right autoclave machine, tools and fittings for your application. Increase your production and complete your job safely and on time. You will enjoy the professional customer service you receive when you rent your autoclave equipment from HMC!

Autoclave's high pressure coned and threaded fittings for use with 1/4" to 1" tubing rated to 150,000 psi (10342 bar).



Elbows, Tees, Crosses, Straight and Bulkhead Couplings

Autoclave high pressure fittings are used as fluid handling components for the chemical/petrochemical, research, and oil and gas industries and water blast industries.

The high-pressure series uses Autoclave's high-pressure coned and threaded connection. These components provide dependable performance in gas and liquid applications.



HMC Instrument Fitters are experts at coning, threading, bending, and installing Autoclave tubing from 1/4" up to 1-1/2". Call the professionals when you need autoclave tubing installed or repaired or your system needs troubleshooting.

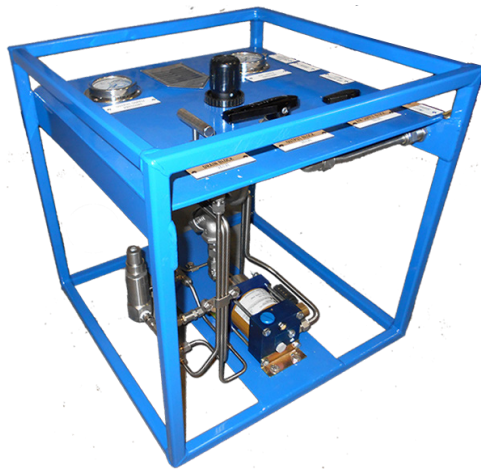


## Tool & Equipment Rentals

### **Mobile Test Bench**

Our mobile test bench gives you the luxury of a fixed test console just about anywhere you need to test. The sturdy construction includes stainless steel gauge panel, industrial casters and table area with plenty of room to lay out your documents and schematics.

*Specifications:* two air driven pumps, high-pressure 0-10,000 psi / low pressure 0-5,000 psi, connections for external source and 5 gallon hydraulic reservoir. Dimensions: 3'Wx6'Lx4'H.



### **Portable Pressure Unit**

Light weight and durable, our portable pressure units can create pressure up to 30,000 psi using Hydraulic fluid or water base liquids.

*Specifications:* air driven pump, high-pressure 0-30,000 psi with 2 gallon reservoir for hydraulic use and external hook ups for choice of testing medium, (ie: water glycol, hydraulic oil)

### **Portable Transfer / Flushing Cart**

This equipment enables you to easily perform some of the necessary functions used during testing in a portable unit that goes where you need to go.

*Specifications:* 30 gpm, 1 micron sock filter, 1" inlet/outlet, block valves and sample port.



HMC Instrumentation & Controls rents tools used in the manufacturing of pneumatic, hydraulic and electronic instrumentation packages. We have specialized tools, individual tools and tool packages used in the construction of a wide range of equipment for the Oil & Gas Industry. Such as:

- Parker 632 Hydraulic Bender with hardened Guide Block Set
- Parker Crank Bender with Stand
- Rigid Ratchet Pipe Threader
- AutoClave Cone and Threading Tool
- Gang Boxes (Fully Loaded)

## Testing Service

### Hydrostatic Testing

Our testing solutions provide our clients with a way to accurately prove the integrity of all flanged joints, fittings, and valves before introduction of life-system contents. With in-house, mobile and rental options, we make it convenient for you to find the right answer to your testing needs. Our experienced personnel, selection of equipment, instrumentation and test benches are available to support your testing program.

HMC Instrumentation & Controls has been active in testing hydraulic-pneumatic components and systems for over 8 years. Products range from a wide variety of oil & gas industry equipment. We are dedicated to delivering premium value to clients through superior technical expertise, advanced technology, and our deep commitment to customer satisfaction.

### Test Facilities

**HPU/Flushing Station** – Our facility has infrastructure and equipment that enables us to test a wide variety of oilfield equipment in-house. 17545 Huffmeister has 2,000 sqft dedicated to testing.

Specifications: triplex pump 0-7,500 psi, 120 gallon accumulation, 300 gallon tank, water glycol medium, multiple outputs and returns, 1 micron sock filter, block and bleed valves, Mobile Blast Walls, 100,000 lb. Hill Mont rollers, 15500 forklift and A-frame with hoist. Dual 10 ton cranes with 25-1/2' hook height.

**Test control room** equipped with the test console, monitors, chart recorders, data loggers, computer equipment, etc. Blast booths - 2 stations each 20'x20', equipped with cameras.

**Station 1:** air driven pump with high-pressure output 0-50,000 psi, low pressure output 0-5,000 psi, manipulator valve for two function test, output for digital data and analog chart recorders, equipped with block and bleed for performing test, relief valves, 500 gallon tank.

**Station 2:** air driven pumps, high-pressure output 0-30,000 psi, low pressure output 0-5,000 manipulator valve for two function test output for digital data and analog chart recorders, equipped with block and bleed for performing test, relief valves, and a 500 gallon tank. Used for testing valve bodies, shell testing of new equipment, hydrostatic testing of various oil field equipment.



## Control Panel Design & Manufacturing

We have created a Panel Shop environment that supports creativity and provides the atmosphere needed to concentrate on details and collaboration. Over 10,000 square feet of our shop also includes a segregated work area to be utilized by our client's personnel when programming and testing.

### ATEX certified UL certified

We have the following UL Listing capabilities:

UL 508 for General Purpose Control Panels.

UL for Explosion-proof and Purged Enclosures.

UL 698 for Hazardous Location Panels with Intrinsic Safe Circuits.



Our team specializes in providing UL explosion-proof (NEMA 7, ATEX, IEC Ex) and stainless steel UL Type 4X, (NEMA 4X) panels for hazardous locations and corrosive environments.

Our product solutions include panels with main breakers, main lug only (MLO), and fusible disconnects.

HMC is also capable of building per UL 508a (Category NITX), NNNY hazardous-locations for UL Class I Division I & II. We also have ATEX solutions for CE Marking and 5 KV IEC Ex Type Z purge solutions.

We stock a large variety of parts and can accommodate you if have your own parts or want to purchase parts and have them delivered to us. Your parts are always kept in a designated area arranged neatly and always stored securely. Parts that are ready to be used during construction are clearly marked and stored in an area designated only for the related project.

### Testing

All panels fabricated by HMC undergo a detailed, documented Panel Checkout Procedure developed specifically for each panel. To assure that your panel matches its specifications perfectly, we have a 65 point QA checklist and every control panel is hot tested before delivery. All PLC output points and hardwired circuits are hot verified. All high voltage circuits are checked for continuity and ground faults.

Panel Quality Assurance Checkouts include, but are not limited to:

Panel power-up and fusing testing, Wire continuity testing, I/O simulation,

Operator Interface verification, Terminal torque testing, Nameplate and wire tagging verification. We offer other testing as required for complete functionality 100% testing, Instrument set up and calibration, and Device Simulation.

### Control Panel Services

- |                         |                          |
|-------------------------|--------------------------|
| ▪ PLC Programming,      | ▪ Trouble Shooting       |
| ▪ PLC Panel repair      | ▪ Control Panel Assembly |
| ▪ PLC Panel Testing     | ▪ Consulting             |
| ▪ EX Panel Builds       | ▪ Start up               |
| ▪ Atex Panel Turnkey    | ▪ Installation &         |
| ▪ UL Panel Turnkey      | ▪ Commissioning          |
| ▪ Maintenance & Repairs |                          |

Our customer service representatives are ready to assist you now. Call 832-252-9280.



Safety, Quality, Teamwork is more than just our motto. It is our culture and constant reminder to always put safety first, to work together as a team and to consistently provide quality products and services to our clients. We are professionals and we take pride in everything we do.



# **HMC**

## **Instrumentation & Controls LLC**

16940 Grant Road | Cypress, Texas 77429  
Tel: 832-252-9280 | Fax: 713-462-1453  
[www.hmcic.com](http://www.hmcic.com)