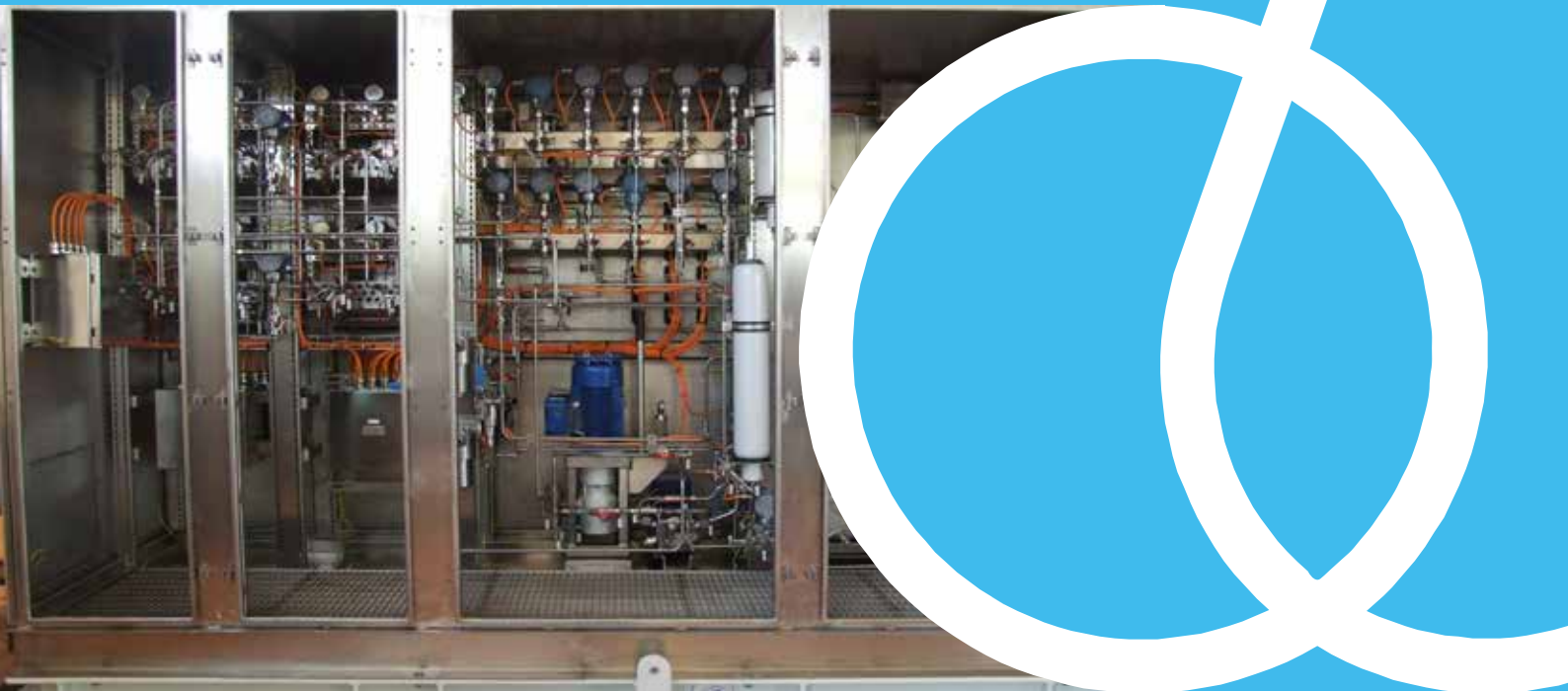


## WellHead Control Valves, Shutdown Panels Chemical Injection Systems Customized Control Panels and Packages



**HydroPneumatic** is leader in the design and integration of Wellhead Control Panels, Valves and Actuators, and Customized Control Skids and Instrumentation Packages for the oil and gas market.

With 50 years of oil & gas experience both onshore and offshore, **HydroPneumatic** offers customized solutions that meet the most demanding operations and safety requirements. Leveraging extensive experience with modular construction, skids, and packaged instrumentation products, **HP** integrates and delivers cost effective, customized solutions with the highest performance, reliability and availability. **HP** manufacturing processes and supply chain ensure compliance with all applicable International Standards, regulations and customer specifications.



## Hydropneumatic

HP offers “turn-key” service to Oil & Gas operators and Engineering Design Companies for the complete lifecycle of a project or safety system per IEC 61511:

- Evaluation, analysis and detailed Engineering
- Cost estimation and Procurement
- Manufacturing and Systems Integration
- Integrated Factory Testing
- On site Commissioning and Startup support
- After Sales Service including Functional testing, performance verification, Trouble Shooting and Maintenance

The HP design and engineering team is composed of multi-discipline engineers and specialized technicians that work together to offer customers an optimized final configuration of the complete integrated system. From valves to actuators to accumulators, from instrumentation to pumps, the HP engineering team has the capabilities to properly match the “Best Available Technology” from major manufacturers worldwide and offer customers both value and reliable operations.

## Hydropneumatic scope of supply includes

### Hydraulic / Electric / Pneumatic Systems

- WHCP - Wellhead Control Panels** (single well, multiwell, onshore, and offshore, hydraulic, pneumatic, electronic, and hybrid solutions). WHCPs built to API requirements for the control of wellhead choke valves SSVs and SSSVs
- Chemical Injection Systems**
- Modular “packaged unit” Control Skids**

### Auxiliary Systems

- HPU - Hydraulic Power Unit**
- Photovoltaic Power Generation System** (solar panels and battery backup)
- Combustible Gas detection**
- Multi phase flowmeter unit**
- Enclosure HVAC and purging systems**
- Customized HMIs**
- Safety certified Safety Logic Solvers** (programmable, solid state, relay based)

### Accessories

- Minimax Pump**
- AZ2 Pressure Sensor**
- Fusible plug**
- ESD panel**
- Sand Monitor system**

### Valves and Actuators

- Choke valves**
- Wellhead Surface Safety Valves (SSV)**
- Well pad Spec Break valves**
- Local Valve Control Panels**
- HIPPS valves**



50 years of experience in Oil & Gas,  
50 years of design and production

# HP System Configurations

HP control systems can be configured as Simplex or Duplex Operation with Duty and/or Duty Standby Operation. They can be manufactured in welded pipe or tubing and can be made from a range of various materials including Carbon Steel, Stainless Steel, or Exotic Alloys as specified by the customer.

## Wellhead Control Panels

A **Wellhead Control Panels** incorporates pneumatic, hydraulic, and electronic valve controls for sequential valve operation (opening & closing of SSV and SSSV), local emergency shutdown, manual override and remote safety shutdown. The **WHCP** pneumatic, hydraulic, or process supply pressure may be generated by air driven or electrically driven pumps and displayed by means of gauges, electronic indicators, and configurable HMI.










Panels are constructed of stainless steel for corrosion resistance (NACE MR-01-75) and designed for ease of operation and access to panel components for maintenance while meeting customer IP and electrical safety specifications.

**Wellhead Control Panels** may be Single Well or Multi Well designed for offshore or onshore applications. Multi Well Control Panels are made up of single well panels, referred to as modules, grouped in a common Panel to allow control a number of wells, e.g. offshore multi-well production platforms. The Modules can be isolated or removed without disrupting the functionality of other modules of the panel.






Solar powered Control Panels provide an alternative energy source for the wellhead control panel when automated control, shutdown, or monitoring is required at a remote wellsite where reliable electric power is not available.

## Single / Multiwell Systems include

### Typical Applications

-  WVSSV Control
-  MVSSV Control
-  SCSSSV Control
-  Choke Control
-  Gas Lift Control
-  Fire Protection
-  Flowline PSL / PSH
-  Remote Control / Stations
-  Emergency Shutdown Local / Remote

### Power Supply Options Include

-  Pneumatic
-  Hydraulic
-  Flow Line Gas
-  Electric/Solar Power
-  Manual Self Contained





# HYDROPNEUMATIC

Wellhead Equipment & Controls

## Chemical Injection Systems (CIS)

CIS are designed from concept to completion to provide safe and reliable well operations. Examples of CIS include agent injection against the formation of hydrates (antifreeze), anti-corrosion, and elemental sulphur. CIS are directly connected to the well and inject fluids into the well, flowline, or pipeline and are supplied as fully assembled, factory tested, modular units.

### Chemical Injection Systems are available for various applications

- Methanol Injection
- Scale Inhibitors
- Wax Inhibitors
- Demulsifiers
- Glycol
- Odorization
- Pour Point Depression
- Elemental sulphur

CIS are supplied as packaged, Skid mounted units to reduce time required for manufacturing, transport and installation and simplify operations and maintenance. CIS may include gas scrubber for the removal of pollutants, with Injection Nozzles, Pulsation dumper, Calibration Pot, Strainer, Pressure Transmitter, Pressure Switches, Filters, Level Transmitter, Level Switches, Tanks, Manifold Valve and other accessories according to customers' specification. They are available also with dosing pumps **HP** series Minimax (Plunger Metering Pumps)



# HYDROPNEUMATIC

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