

## Single Wellhead Control Panel (Air/Gas Driven)

This Wellhead Control Panel designed to control single wells; It generally comprises of supply reservoir, air/gas driven hydraulic pumps, accumulators, pressure regulators, hand pump, filters and associated control and instrumentation for both, the LP(logic) pneumatic supply header and the HP hydraulic supply headers. In this type of WHCP, LOW and HIGH pressure of pipeline are sensed by mechanical Adjustable Pilot Valves.

The panel is designed to withstand pneumatic pressures of up to 150 PSI and hydraulic pressure of up to 15000 PSI. The Hydraulic pressure is generating by air/gas driven pumps. The Pneumatic pressure is supply from Nitrogen rack bottles or instrumented air or gas of pipeline. The complete panel is enclosed in a Stainless Steel enclosure up to 3mm in thickness, which encapsulates instrumentation and tubing.

The Wellhead Control panel is designed for the highest levels of safety.

### WHCPs may have multiple applications, which include, but are not limited to:

- Safe and Sequential Operation of Wellhead Valves (SSSV/SSV)
- Emergency and Fire Shutdown
- Safe Operation of Riser Valves
- Flow Line Pressure Control
- Well Test Operation
- HIPPS /ESD/ Choke Valve Control



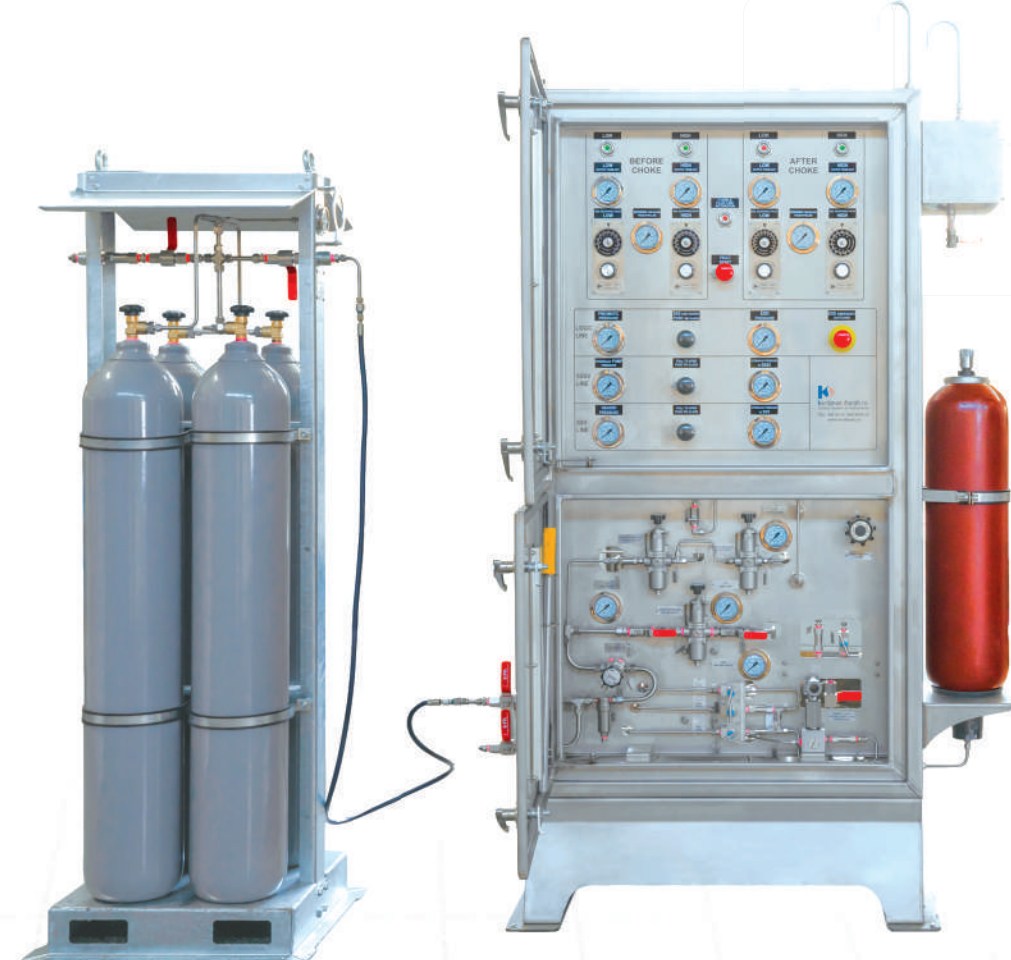
These types of Wellhead Control Panels can be solar power operated and would reduce Carbon footprint and also help make operations more cost effective by eliminating the use of external electricity, compressed air and reduced maintenance cost while improving equipment availability.

WHCP is supplied with solar power system which contains 3 main components:

Solar modules, Charge regulator(s) & Battery bank. Solar modules are assembled on a structure & mounted on top of the panel.

Solar module produces DC power and is wired through the charge regulator to charge the battery bank. The two main functions of the charge regulator are to prevent the battery from being overcharged and to eliminate any reverse current flow from the batteries back to the solar modules at night. Charge controller is provided inside the Local Control Panel, in case of low voltage or over voltage. It disconnects batteries from charge circuit and as well from load circuit to protect the solar system.

The battery bank stores the energy produced by the solar array during the day for use at any time of day or night. Batteries come in many sizes and grades.



### Key Features

- Can be integrated with Solar Power
- Hydraulic Fusible Plug Loop
- Mostly used in Onshore Environment
- API RP 14C / API RP14B
- IP65 Certified Panel
- NACE MR0175/ ISO-15156 Compliant Panels
- Cleanliness Level to any NAS, ISO, SAE Level
- Protective coating for Harsh Environmental Conditions
- High Pressure High Temperature (HPHT) Panels
- Arctic Service Panels
- 3D Model Design Review
- Reliability and Availability Study
- SS316L Tubing Material

### Additional Services

- Installation / Training
- Start-Up Supervision
- Extended warranty
- Customized System