Wellhead Safety Valve Control System

(Wellhead Control Panel)

1. Single Well Control Panel (Electric)

Application:

- Working as control system for subsurface and surface controlled safety valves in a predetermined sequence; and for the safety operation of unmanned oil & gas fields. Effectively prevent or eliminate the accidents of oil & gas wells, and hydrocarbon emissions to the atmosphere or the surrounding environment.
- Operating environment: onshore, including the harsh environment such as desert, or the fields that feature high pressure, high-yield and high-risk.
- Service conditions: 220V or 380V power supply shall be provided.

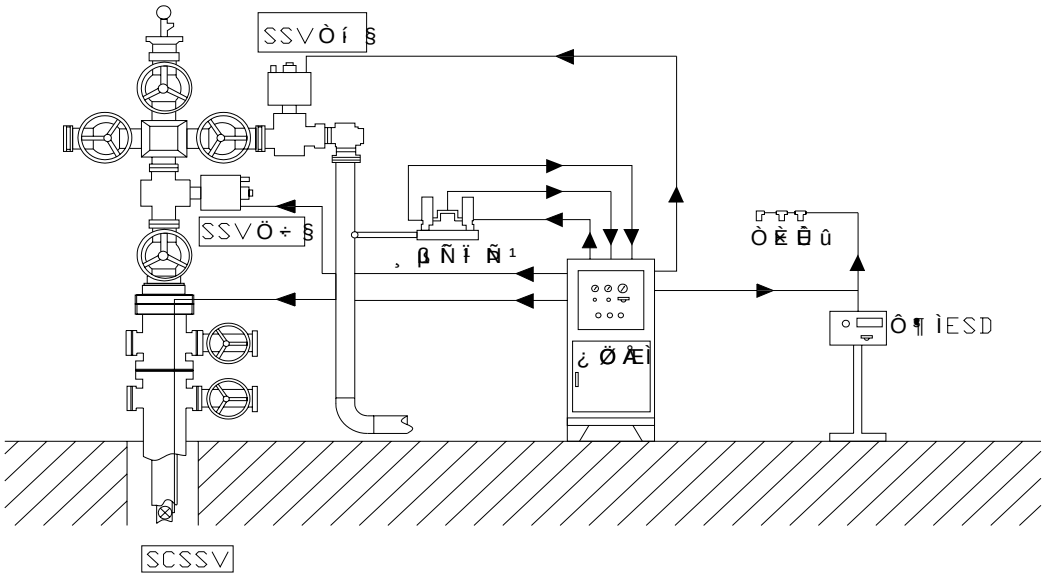
Technical Data:

- Output pressure range: 0 15,000psi
- Pilot control pressure: 80 100psi
- Ambient temp.: -40 121
- Fusible plug melting temp.: 130
- Explosion-proof grade: ExdIIBT4
- Protection grade: IP65
- Control valves: SCSSV & SSV
- Power supply: 220 230V 380 400V, 50/60Hz

Features & Benefits:

- Electric pump as high pressure source, fitted for the occasions where is furnished with power supply;
- Oil & gas-Industry-specific ground safety components, such as BWB automatic/manual relay valve and high/low pilots;

- Outstanding high pressure tubing & fittings made in USA with 316SS, like Swagelok, HIP and etc;
- Sturdy and robust cabinet adopts a fully enclosed and stainless steel structure, especially suitable for long-term operating in harsh environment;
- Sequence control on SSV, SCSSV and WV;
- Multiple wellhead safety protection functions: local and remote ESD (emergency shutdown);
- Automatic shutdown of wells against fire, abnormal pipeline pressure and excessive gas concentration along with alarming;
- The implementation of closing & opening of safety valves can be achieved per the needs of specific production processing;



2. Single Well Control Panel (Pneumatic)

Application:

- Working as control system for subsurface and surface controlled safety valves in a predetermined sequence; and for the safety operation of unmanned oil & gas fields. Effectively prevent or eliminate the accidents of oil & gas wells, and hydrocarbon emissions to the atmosphere or the surrounding environment.
- Operating environment: onshore, including the harsh environment such as desert, or the fields that feature high pressure, high-yield and high-risk.
- Service conditions: compressed air or solar-powered devices shall be provided.

Technical Data:

- Output pressure range: 0 15,000psi
- Pilot control pressure: 80 100psi
- Ambient temp.: -40 121
- Fusible plug melting temp.: 130
- Explosion-proof grade: ExdIIBT4
- Protection grade: IP65
- Control valves: SCSSV & SSV
- Drive air: 150psi, 1.5Nm³/min

Features & Benefits:

- Air operated pump as high pressure source, fitted for the occasions where is furnished with air supply devices, or with solar-powered air compressor system (24VDC);

3. Multi-well Control Panel (Electric)

Application:

- Working as control system for subsurface and surface controlled safety valves in a predetermined sequence; and for the safety operation of unmanned oil & gas fields. Effectively prevent or eliminate the accidents of oil & gas wells, and hydrocarbon emissions to the atmosphere or the surrounding environment.
- Operating environment: offshore platforms or artificial islands.
- Service conditions: 220V or 380V power supply shall be provided.

Technical Data:

- Output pressure range: 0 15,000psi
- Pilot control pressure: 80 100psi (Hydraulic)
- Ambient temp.: -40 121
- Fusible plug melting temp.: 130
- Explosion-proof grade: ExdIIBT4
- Protection grade: IP65
- Control valves: SCSSV & SSV
- Power supply: 220V 230V 380V 400V, 50/60Hz

Features & Benefits:

- Electric pump (380VAC 50Hz) as high pressure source, fitted for the occasions where is furnished with power supply with backup devices;
- Hand pump is furnished in case of electric pump failure
- Modular design, easy, simple and independent maintenance,
- Automatically pressure releasing and compensating, the system pressure will be compensated automatically via accumulator to maintain normal operations when the hydraulic pressure of safety valves is dropping down due to temperature changes or pipeline leaks; the excessive high pressure will be released automatically through the relief valve whenever higher temperature or fault operation happened accidentally.

4. Multi-well Control Panel (Pneumatic)

Application:

- Working as control system for subsurface and surface controlled safety valves in a predetermined sequence; and for the safety operation of unmanned oil & gas fields. Effectively prevent or eliminate the accidents of oil & gas wells, and hydrocarbon emissions to the atmosphere or the surrounding environment.
- Operating environment: offshore platforms or artificial islands.
- Service conditions: compressed air of 100~150psi or solar-powered devices shall be provided.

Technical Data:

- Output pressure range: 0 15,000psi
- Pilot control pressure: 80 100psi (Pneumatic)
- Ambient temp.: -40 121
- Fusible plug melting temp.: 130
- Explosion-proof grade: ExdIIBT4
- Protection grade: IP65
- Control valves: SCSSV & SSV
- Drive air: 150psi, 1.5Nm³/min

Features & Benefits:

- Air operated pump as high pressure source, fitted for the occasions where is furnished with air supply devices, or with solar-powered air compressor system (24VDC);
- Air operated pump features wide range of output pressure, stable and reliable logic control;
- Modular design, easy, simple and independent maintenance,
- Automatically pressure releasing and compensating, the system pressure will be compensated automatically via accumulator to maintain normal operations when the hydraulic pressure of safety valves is dropping down due to temperature changes or pipeline leaks; the excessive high pressure will be released automatically through the relief valve whenever higher temperature or fault operation happened accidentally.