

An automated system to control the filling of compressed gas cylinders in high ambient temperature regions.

Key features

- Avoids pauses in the cylinder filling process due to high temperatures
- Reduction in filling times in high ambient conditions
- Ensures system design temperatures are not compromised

The Solution

An automated liquid bypass system which when reaching an adjustable setpoint proportionally opens a liquid bypass control valve introducing cold liquid into the gas stream after the ambient vaporiser.

Equipment

- Proportional liquid control valve complete with 4-20 Ma controller
- Inline temperature block and element
- Weatherproof control system c/w;
 - o Siemens LOGO PLC
 - o Panel mounted system status lamps
 - o Remote E Stop
 - o Remote system enable
 - o Volt free contact – to provide pump trip in case of low temperature, exit vaporiser
 - o Interface with client process / operating system
 - o Adjustable; temperature set point & maximum valve open position
 - o Control loop tuning parameters – control optimisation
 - o Logo screen displays; System status, temperature, set points and alarms

Engineering / Design

- Process Design (P&ID)
- Software
- Mechanical layout
- Instrument and electrical design
- Factory Acceptance Testing
- Commissioning documentation
- Operating Instructions
- Remote commission support
- Onsite Commissioning (if required)
- Full documentation
- Post project support

Ordering information

1. Gases and system pressures
2. Vaporiser to safety panel / buffer – distance
3. Safety panel to fill module – distance
4. Buffer size
5. Fill module to filling station – distance

