

Chemical Injection Unit

High Pressure Chemical Injection Unit

The High Pressure Chemical Injection Unit is used for injection / dosing of small volumes of chemicals into the service line.

Product description

The CIU can either be installed as a single unit or as several units for redundancy and/or injection of different chemicals simultaneously.

The CIU is equipped with pneumatic operated high-pressure pump. It is supplied through a proportional analog air regulator, lined up with actuator operated valves, system pressure gauge, relief valve, and dual fluid strainers with status monitoring. All covered in a stainless-steel cabinet.

A controlled amount of injected chemicals are achieved by the control system.

The CIU together with the HMM control system gives the operator opportunity to remotely have an optimized and flexible chemical injection system to minimize possible exposure to chemicals and time spent on deck.

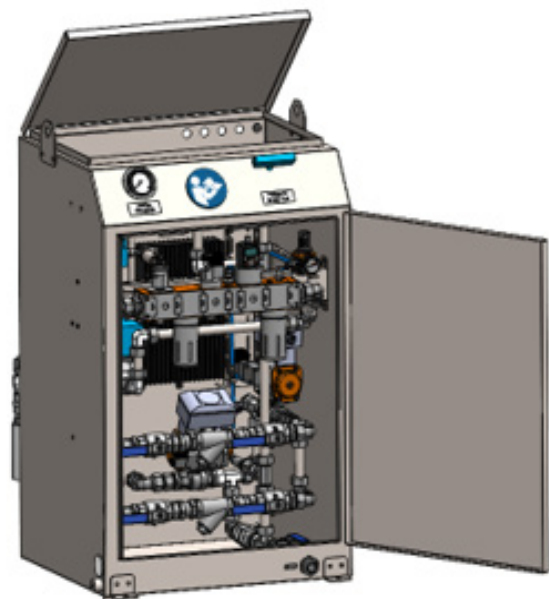
Benefits

- Standardized design with standard components.
- Normal operation is done remotely from a control system.
- The equipment is very compact and user-friendly with easy access for operation and maintenance.
- Removable front and top cover for easy access to components
- Thermostat-controlled heater included for safe operations at low ambient temperatures
- Analogue pressure gauge.
- Nozzles included for external connections
- For outdoor environment

Control system

The CIU itself is delivered with the required instrumentation and cables for an operation. Please note that it is essential to have the CIU connected to a control system for optimal utilization. This can either be a standalone system with its own Programmable Logic Controller (PLC), or by connecting to an existing PLC that is previously delivered by HMM.

- 1 pcs or more CIU
- 1 pcs RIO cabinet with local control panel
- 1 pcs junction box for power supply to heater
- 1 pcs control system
- 1 pcs standard documentation



Example of installation

3 of CIU's for maximum flexibility and redundancy. Remote-operated valves and by-pass lines included in the CIU's gives the operator the possibility to shift unit but continue injection of a particular fluid.



Technical specifications

This product is intended for use on vessels with DNV, ABS or Lloyds Class. It has the Hazardous Area Classification ATEX Zone 2 (other requirements on request), and the Explosion protection standard (electrical) II 3G Ex nA h IIB T3 Gc - 10°C <Ta< +45°C, which fulfills the Certification Standards for Components for Explosive Atmospheres. CE marking within EU/EEA jurisdiction is available upon request.

	HP Chemical Injection Unit
Instrument air side in CIU	Max inlet pressure: 10 bar (150 psi) Nominal flow (air) @7 bar: 5,23 Sm ³ /min (1382 US gpm)
Chemicals / fluid side in CIU	Max. working pressure: 690 bar Nominal flow (fluid) @690 bar: 1,5 l/min (0,4 US gpm)
Dimensions	Weight: 190 kg (419 lbs) Length: 670 mm (26,4 in) Widht: 680 mm (26,8 in) Height: 1090 mm (42,3 in)
Temperatures	Design temperature min.: -10°C (14°F) Design temperature, max.: +45°C (113°F)
Electrical Requirements, 1-Phase Power	Voltage: 115-240 VAC Frequency: 50/60 Hz Total power consumption: 0,35 KW

Data is subject to confirmation by the manufacturer.