

Chemical Injection

Sodium Hypochlorite Dosing Skid

Date

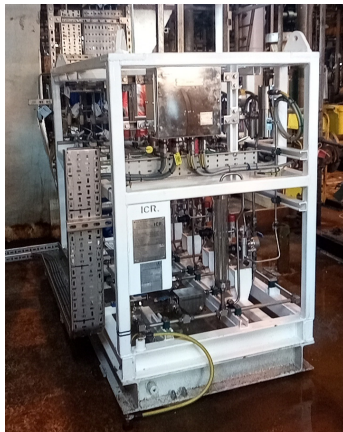
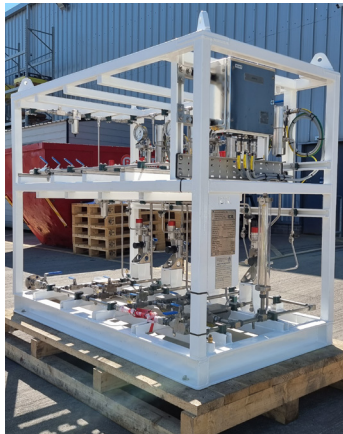
April 2022

Client

North Sea Operator

Location

UKCS

**Scope**

ICR was approached by a major North Sea operator to design and manufacture a bespoke, permanent Injection Pump Package for dosing of Sodium Hypochlorite to four seawater lift pump caissons on a UKCS Platform.

Solution

ICR supplied a package with 4-off air driven, API-675 dosing pumps for Sodium Hypochlorite dosing to respective seawater lift pump caissons. Each pump was served by a dedicated Solenoid Valve (SOV) to start / stop pump on signal from platform Integrated Control and Safety System (ICSS).

The package included a back-pressure control valve on each pump discharge line to prevent syphoning of the sodium hypochlorite solution from existing hypochlorite storage tank.

The package comprised of the following:

- 1 of painted carbon steel base frame c/w titanium drip tray
- 4 off (4 off duty) Williams Milton Roy CRLD200-TI-TFE air driven hydraulic actuated diaphragm chemical injection pumps
- Process tubing, fittings, and wetted metallic parts supplied in Grade 2 Titanium.
- Suction manifold incorporating all valves, suction filter for each pump and common calibration pot
- Discharge lines for each pump incorporating a pressure relief valve (PRV) routed to pump suction, pressure indicator, back pressure control valve and isolation valve
- Air manifold incorporating isolation valves, filters, and regulator
- Pneumatic installation on the package incorporating 4-off SOVs (each supplied with manual override) on each pump supply (for individual pump start/stop control)
- Instrument junction box, located at skid edge to facilitate connection of client cabling

Results & Benefits

- Fully assembled package delivered to site, minimising hook-up, and onsite work requirements
- Bespoke package designed, built and fully tested to meet client specifications and process parameters.