

Chemical Injection

Ferric Sulphate Chemical Injection Package

Date

January 2022

Client

Water Management Service

Location

UK Onshore

Scope

ICR was approached by the client to replace their existing ferric sulphate injection package. The current pumps were oversized for the process requirements resulting in high pulsation and vibration due to the short stroke and fast motor frequency required to meet the flow needs. ICR conducted an engineering site survey, working closely with the client to find the best solution.

ICR delivered a fully automated, containerised ferric sulphate injection package consisting of 6 electric drive, VFD controlled injection pumps (4 duty and 2 standby).

Solution

Ferric Sulphate Injection Package consisting of the following:

- Fully automated ferric sulphate injection package, with required hardware to allow remote monitoring, control and operation via onsite control system
- Package integrated into modified 20-foot shipping container, housing all chemical injection, electrical, and ancillary equipment.
- Container internals lined out with 12mm thick "Aqua-panels", chemical resistant non-slip floor and integral stainless-steel bund
- 3 Polypropylene injection pump cabinets (2 duty and 1 standby) c/w Perspex sliding doors
- Each cabinet contains 2 Milton Roy MAXROY, VFD controlled, electrically driven pumps with each pump being capable of injecting 407.5 litres per hour
- Package control panel with integral HMI touch screen and local VFD touch pads
- Emergency eye bath station

Results & Benefits

- Fully assembled package delivered to site, minimising hook-up and onsite work requirements
- Bespoke package designed to meet client specifications and process parameters
- Fully automated to be integrated into on-site control systems

