

## Effluent Treatment Plant Panel from R&R Engineering



### Project Overview

R&R Engineering are a leading Control Systems Integrator and Switchboard manufacturer.

We design, manufacture, deliver and commission a full range of LV switchboards and control and monitoring systems associated with several different industries.

The above example was manufactured for local food manufacturing company – Dale Farm.

This panel was designed to provide controls for an upgrade to the existing Effluent Treatment Plant at Cookstown, where wastewater from the plant is processed before discharge back into the local river.

Because of restrictions in the size of the plantroom, the panel was designed 'back-to-back' providing 10 metres of panel controls within 5 metres of length. All controls and switchgear were from the Siemens range giving uniformity throughout.

A 630A 4pole ASTA certified busbar system allowed for Mains Distribution Supplies to various plant and local control panels to be included. Motor control was provided from Siemens Variable Speed Drives and Simocode intelligent starters which linked via a Profinet network back to a Siemens S7-1500 PLC. All ethernet cabling was completed to industry recommendations providing segregation between communication and control cables. Operator interface was available from a 6inch Siemens HMI.

Programming of the VSD's and the PLC was undertaken in-house by our experienced engineers and the panel was fully tested and certified before leaving for site. Significant work was required on-site to re-join the panel which had been split for transporting and moving into place. Site Acceptance Tests were performed on completion of this work.

All panels and switchboards are provided with full detailed AutoCAD schematic drawings.

This project was delivered to site in autumn 2019 and commissioned by R+R Engineering to complete the full turnkey package offered by our experienced team.

**For all Control Panels, PLC's, LV Switchboards and full turnkey system designs please feel free to contact us.**