



This is a sample of recent projects.

Client	Details
Wilkins & Sons Tiptree, UK	<p>Food Production Effluent Treatment Plant</p> <p>Allen-Bradley CompactLogix control system integrated with HMI and variable speed drives communicating through ethernet. Centralised operator control is achieved via an HMI which displays plant mimics, process trends and alarms. Access to process setpoints are available through HMI pages with various levels of password security. A VPN facility allows remote viewing of the operator's HMI in addition to remote monitoring and programming of the PLC.</p>
GE Aerospace Hamble, UK	<p>Treatment of Waste Water from metal finishing</p> <p>Control of the plant is based on a Mitsubishi PLC and HMI with CC-Link remote i/o. Main control panel serves as a monitoring station for satellite panels through hardwire electrical signalling. A comprehensive alarm system sends both SMS messages and emails to selected groups of engineers. The control system has UPS back-up to maintain monitoring and alarms in case of power failure.</p>
British Forces Post Office Northolt, UK	<p>Parcel Conveying System</p> <p>Siemens PLC based system with 224 input/output points. Complex parcel sorting system, with 30 conveyors and multiple routing points. A HMI provides a mimic of the system and flexible routing enables the operator to select source and destination for multiple routes through the intuitive touch screen display.</p>
Rama Industries Mumbai, India	<p>Gelatin Plant</p> <p>A multiple column ion-exchange process on hot gelatin controlled by an Allen-Bradley PLC. The process involves sequencing through several hundred steps dependant on process conditions and involves the sequencing of over 50 pneumatic valves. Process visualisation and control are provided by a colour touchscreen HMI. A water cooled heat exchanger is fitted to the cabinet to cope with the high ambient temperatures.</p>
Rolls Royce Virginia, USA	<p>Etch Line Effluent Treatment Plant</p> <p>Allen-Bradley PLC with 600 input/output points distributed over 15 HMI operated control panels using industrial ethernet communication. The equipment controlled includes 46 motor drives and 140 solenoid pneumatic valves.</p>
Heathrow Airport, Snowbase London, UK	<p>Surface Water Run off Treatment Plant</p> <p>Controlled by Allen-Bradley CompactLogix PLC with 248 input/output points. The PLC automatically optimises the effluent blending process in response to measured values from various analytical instruments to ensure compliance with the discharge limits Operator control is by the touchscreen HMI displaying plant mimics, process trends and alarms with historical logging.</p> <p>The system employs 19 Motor drives including 8 variable speed plus automatic valves and ancillary equipment. The control system was integrated with the site-wide supervisory system and other controls supplied by third parties.</p>
Jersey Harbours St. Helier, Channel Islands	<p>Harbour Facilities Monitoring and Control</p> <p>Dual redundant SCADA system networked to 6 PLCs and 20 remote i/o locations to monitor and control equipment across the harbour area</p>



Client	Details
Pembroke Power Station Pembrokeshire, UK	<p>Power Station Water Treatment</p> <p>Water treatment control system for Pembroke Combined Cycle Gas Turbine Power Station. Due to highly critical processes, a Siemens S7-400 PLC with dual profibus network & hot standby capability was employed. 12 distributed control panels were constructed, with a total of 1,400 I/O points.</p>
PDK Apsheronsk Russia	<p>Treatment Plant for Waste Water from MDF production</p> <p>Siemens PLC controlling an effluent treatment process including dosing, filtration, filterpress and bulk chemical handling. Distributed i/o is employed on Profibus networking.</p>
Veolia Basra, Iraq	<p>Scrubbing Tower Control Panels</p> <p>Eighty small panels were produced for control of extraction fans and water supply pumps. Designed and manufactured to withstand the environmental extremes of the Iraq climate.</p>
Greencore Inc North Carolina, USA	<p>Food Production Effluent Treatment Plant</p> <p>Controlled by Allen-Bradley CompactLogix PLC with 240 input/output points. Industrial ethernet network provides communication to the operator touchscreen HMIs, variable speed drives and remote i/o in satellite panels.</p>
British Aerospace Salisbury, UK	<p>Waste Water Treatment Plant</p> <p>Allen-Bradley CompactLogix PLC with 500 input/output points. Controlling 52 motor drives and tank heaters in addition to 100 Pneumatic valves distributed in local satellite panels. Operator control is by the touchscreen HMI displaying plant mimics, process trends and alarms with historical logging.</p>
Surface Technology East Kilbride, UK	<p>Waste Water System</p> <p>The system is treating waste water from a metal plating plant. It employs a Siemens PLC with Profinet distributed i/o for the control of 25 drives and 60 solenoid pneumatic valves. Process visualisation and control is through a colour touchscreen HMI which also provides alarm logging and trending.</p>
Tallent Automotive Cannock, UK	<p>Treatment of Waste water from metal finishing</p> <p>Controlled by compact Siemens PLC and handling bulk chemicals, pH correction, flocculation and sludge filter press. System alarms are automatically emailed to the engineers.</p>



Client	Details
Shell Aviation Gatwick Airport, UK	Operations Control Panel Tank farm monitoring and alarm facilities at Gatwick Airport. Based on a Schneider Modicon PLC with 136 input/output points on remote I/O. Operator interface is provided by hardware indicators, switches and an alarm annunciator panel.
Ford Motor Co Dagenham, UK	Oily Waste Treatment Plant The controls are housed in a 9 column MCC with 62 motor drives. The process is controlled by an Allen-Bradley PLC with 512 input/output points. Operator control is via a PC based SCADA system.
Dr Oetker Leyland, UK	Transfer Pump Control Panel A small Siemens PLC provides autonomous operation but networked by profinet to the Main Plant PLC for data exchange A small touchscreen HMI provides alarm and status information.
Greggs Bakery Enfield, UK	Effluent Treatment using Dissolved Air Flotation Treating food production waste water. The system is controlled by a Mitsubishi PLC with a colour touchscreen HMI providing mimics, trends, alarms and data logging plus operator controls and access to process setpoints.
Rampton Hospital Cofley, UK	Effluent Treatment Plant Biological treatment plant for sewage, employing closed loop controlled variable speed blowers with a total of 27 motor drives and a combination of motorized and pneumatic valves Operator control is by colour touchscreen HMI.
Alcoa	Smelting process off gas scrubbing Critical high temperature gas cooling system incorporating multiple back-up systems to ensure safe operation. It has an Allen Bradley PLC with 48 input/output points and Devicenet connected variable speed drives. A colour touchscreen HMI provides process visualisation and operator controls.
Chromalloy	Plating line effluent treatment plant A system employing a Siemens PLC controlling a simple continuous treatment process for plating line effluent. A GSM module on the PLC is used to send emails and SMS messages to engineering staff in the event of plant alarms. Operator control and process visualisation is via a colour touchscreen HMI.



Client	Details
GATX Terminals Ltd Belfast	Tanker Additive Loading Control A system employing an Omron PLC with 112 input/output points, controlling additive injections to road fuel during the road tanker loading process and providing individual load and summary reports on quantities and concentrations to a control room PC.
R. Wiseman Dairies Droitwich, UK	Dairy Effluent Treatment Controls are distributed between two panels, each with Allen-Bradley CompactLogix PLCs totalling 270 input/output points. Fibre ethernet and Devicenet are used for communication between control panels and field devices.
I.F.F Haverhill, UK	Flue Gas Abatement A Siemens PLC is used to control a gas scrubbing plant and chemical dosing of the scrubbing water. The main extract uses a 22KW inverter driven variable speed fan. Multiple analogue pressure monitoring is used to modulate fan speed and damper controls. Control and visualisation is provided by touchscreen HMI and the system is fitted with GSM communications for remote monitoring and support.
KCS Herr Voss Egypt	Effluent Treatment An industrial effluent plant consisting of pH control, flocculation, settlement and sludge handling, controlled by a small Siemens PLC. A colour touchscreen HMI gives overview mimics of the process giving easily read status information. Alarm logging and trend histories enable close monitoring of plant performance.
Sharp Interpack Kent, UK	Production line Conveyor System A system of 19 conveyors controlled by an Allen-Bradley PLC. Various operating modes are selectable. Conveyors subject to frequent starting and stopping are controlled by solid state contactors to reduce the maintenance requirements. The colour touchscreen HMI provides an overview mimic of the system giving clear status indication to the operator and complete system control.
Sutton and East Surrey Water Surrey, UK	Ammonia Gas Safety Monitor and Extraction A small hardwired panel using gas detection equipment and controlling automatic valves and extract fans to ensure safe shut down of the gas supplies in the event of leakage.