

Project Case Study

Jellyholm Water Treatment Works

Client	:	East of Scotland Water
Value	:	£3.5 million
Programme	:	98 weeks (contract) 86 weeks (actual)
Flow Rate	:	10.42 MLD
Population	:	20,000
Process	:	Flocculation, Dissolved Air Flotation Rapid Gravity Filtration
Chemicals	:	Aluminium Sulphate, Caustic Soda, Orthophosphoric Acid, Sulphuric Acid Chlorine, Polyelectrolyte Powdered Activated Carbon
Control System	:	Rotork Micro-DCS
Civils	:	George Leslie Ltd (Consortium)
Contract Type	:	Turnkey (Red Book) (Open Book Negotiated)
Scope of Works:	:	Process, Mechanical, Electrical & ICA Works



Description

The treatment works is supplied by the Gartmorn Reservoir which—dating back to the early 18th Century—is the oldest impounding reservoir in Great Britain still in everyday use as a public water supply. Problems with algal blooms and new standards required by drinking water legislation led to the additional of a new dissolved air flotation pre-treatment stage. Also included in Purac's scope of works were:

- Refurbishment and upgrade of existing filters.
- Provision of full automatic control and SCADA.
- New bulk chemical storage facilities and additional chemical treatment.
- Modifications to the existing building and a new structure housing the DAF and filter units.
- Sludge handling and treatment.
- A new stand-by generator and electrical distribution system.
- Upgrading of the access road to facilitate bulk chemical deliveries.

