Ridgistorm-XL powers Scottish hydroelectricity project

Ridgistorm-XL was selected to provide a **water capture solution** in the picturesque Scottish Highlands.

Chambers were airlifted up the mountainside into position

In a demonstration of its versatility, robustness and light weight nature versus traditional materials, Polypipe's Ridgistorm-XL large diameter piping system has been airlifted up the mountainside of the Arrochar Alps to Loch Sloy as part of a rather unusual power sector project.

The mountainside is home to the Loch Sloy Dam and Sloy Reservoir, whose combined catchment area of 31 square miles is collected to supply Scottish and Southern Energy's (SSE) Sloy Hydroelectric Power Station.

Located on the banks of Loch Lomond, the power station converts energy generated by water travelling down the mountainside from Loch Sloy above in pipework, which is then turned into useful electricity, feeding homes across Scotland.

Polypipe's Ridgistorm-XL came to use during repair works to the existing pipework at Sloy Reservoir, which was originally installed in 1946.

The system replaced part of the original pipework to collect excess water from the catchment area of the reservoir to feed the power station.

Polypipe was called upon by SSE to produce a **suitable water management solution** that could not only provide adequate water capture, but that could also be delivered and installed safely in such a remote location. This was achieved using pre-fabricated Ridgistorm-XL with Lifting Points.

CASE STUDY

Project
Loch Sloy Dam

Client
SSE

Application
Water catchment and storage

Products
Ridgistorm-XL
RIDGISTORMTrap Catchpits
Ridgistorm-XL Lifting Points

Polypipe

The location of the site meant that traditional vehicle access was impossible leaving SSE with no option but to lift the system into place by helicopter.

To provide stability while handling and mitigate the risk of damage, Polypipe's in-house Fabrications Team pre-welded Ridgistorm-XL Lifting Points to the RIDGISTORMTrap Catchpits, allowing SSE to airlift them safely with slings into position for installation with the Ridgistorm-XL pipes.

Working with SSE, Polypipe devised a system comprising two RIDGISTORMTrap Catchpits and five lengths of the company's popular Ridgistorm-XL large diameter pipe in 750mm diameters, offering storage for excess water from the catchment area.

Standing at 3.45m high, the RIDGISTORMTrap Catchpits in 1500mm diameters were selected to provide effective separation of silt and debris from water entering the system – a vital consideration given the remoteness of the site.

Manufactured off-site under factory conditions and delivered ready to install, the RIGISTORMTrap Catchpits designed by Polypipe's team were engineered to feature inlets and outlets at exact heights in order to suit the site's gradient and allow the effective flow of water through the system.

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