

CASE STUDY: R&D, HYDRO RENEWABLE CONNECTOR 12kV and 36kV

Drawing on over 35 years of engineering experience, Hydro Group Plc has a proven track record of delivering efficient and versatile solutions to solve subsea challenges facing the marine renewables, oil and gas and defence industries.

The Group continually develops and tests new innovations in line with world-class industry standards. It adheres to the internationally-recognised ISO 9001:2015 approval to design and manufacture specialist underwater and harsh environment equipment, including cables, connector assemblies, penetrators and glands, providing precision-engineered subsea equipment.

PROJECT

With the volume of data required to support subsea operations, Hydro Group established a clear need to develop a versatile, cost-effective connector solution for use in a range of global subsea environments. The product had to be, amongst other challenging objectives, compatible with a range of cabling, designed for long-term use and have a low impact on the seabed.

SOLUTION

Developed and tested with hazardous sea conditions in mind, the Hydro Renewable Connector (HRC) comes in 12 kV and 36 kV applications. Both allow rapid deck mateable connection of two subsea three-phase electrical cables while preserving operation of each circuit, regardless of whether it is on the seabed or journeying to and from the ship deck. Featuring advanced corrosion protection properties and an operating window of -4°C to 25°C, the HRC is ideally-suited to seawater applications to a maximum operating depth of 100 MSW and is fully compatible with free-flooding or dry cable.

BENEFITS

The Hydro Group HRC is a cost-effective solution which can be customised to your exact requirements in our state of the art workshop in Aberdeen, Scotland. Designed for long-term applications, the HRC is maintenance-free and allows cable integrity to be monitored at any time thanks to the use of auxiliary loop-back connectors.

To date the HRC has seen use in a variety of subsea environments including Jeju, the world's first carbon-free island in South Korean waters, as well as the MeyGen tidal turbine project in Scotland.

As a dependable subsea supplier of fibre, electrical and signal data, the HRC played an integral role in the [SEM-REV renewable energy project](#), which Hydro Group supported on the Atlantic coast of France [hyperlink to follow].

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Team: Sales



The Hydro Renewable Connector (HRC) 12kV – a 36kV application is also available



HRC ready to be deployed, June 2017