

CASE STUDY: POTABLE WATER CABLES

Hydro Group's specialist subsidiary Hydro Cable Systems designs and manufactures durable subsea cables compliant with internationally-recognised engineering standards.

Our range of 'off the shelf' applications and bespoke options are not just used by subsea oil and gas or renewable energy operators; they are also suitable for applications outwith the world of energy. Our solutions can be tailored to the exact requirements of your project, whether for business or personal use.

PROJECT

With 30 years of subsea cable engineering experience, Hydro Cable Systems can supply cables for use in a variety of mild to harsh subsea environments, including cool water applications up to 23°C.

Responding to customer demand, Hydro Cable Systems has developed its CS 1366 cable, suitable for permanent immersion in potable water with no adverse side effects on the environment or cable operation.

SOLUTION

Following an exhaustive R&D phase, the CS 1366 cable was developed. As standard, it features a nominal overall diameter of 15mm, with a laid-up diameter of 10.5mm. With a maximum continuous length of 2300 metres, it is perfect for use in environments where a longer length cable is required.

A two-core twisted pair makes up the innards of the cable, with a double-wrap of polyester tape and high density polyethylene (PE) insulation. In addition, two twisted pairs – bundled with a combination of fillers depending on the application – are twisted around a central Vectran cord, giving the cable superior strength, before again being wrapped in polyester tape.

A polyurethane (PU) bedding sheath is applied along with a Vectran braid, with a final coating of PU extruded over the finished cable to protect it from the elements.

BENEFITS

With a working voltage of 750 V, pressure rating of up to 2000 PSI and weighing less than 1kg/km in water, CS 1366 is ideal for cool potable water applications. It is fully-compliant with the Water Regulations Advisory Scheme (WRAS) Tests of Effect on Water Quality/BS 6920:2000 for cold water applications, and its versatile construction ensures durability without adding unnecessary weight.

CS 1366 cables are suited for a wide array of domestic applications such as connecting control equipment in water features or aquatic environments, or water sanitisation systems.



As the cable is proven to be harmless in cold water environments, it would also be suited to aquaculture activity such as salmon farming provided it is installed and maintained correctly.

Get in touch with us at sales@hydrogroup.plc.uk to learn more about our potable water cable solutions or to design your perfect application.