

## Overview

Design and manufacture of subsea and topside composite cables and connectors



## Hydro Group plc

'One team, two companies, unique strength'

Hydro Group plc comprises Hydro Bond Engineering Ltd, Hydro Cable Systems Ltd, Hydro Group Asia Pte and Hydro Group Systems, Inc.

We are the market leader in bespoke engineered cable/connector assembly solutions for subsea applications in both domestic and international markets.

Hydro Group are at the forefront in the development and innovation of subsea product technologies, with involvement from prototype concept through to design, manufacture and project management. Hydro Group manufacture the complete package including FAT at its state-of-the-art facilities in Aberdeen, Scotland; umbilical cables, electrical, optical connection systems and assemblies for data, power and signal transmission.



Manufacturing Headquarters in Aberdeen, Scotland

Hydro Group employs approximately one hundred full time staff in Scotland, Singapore and the USA. We operate on a global platform providing total solutions to a portfolio of prime contractors, major operators, OEMs, defence organisations and the UK MOD.

Our focus is subsea cable and connector assembly innovation. Our day-to-day business is product design, engineering and manufacturing.

## Certification

Hydro Group plc holds the certification approval to ISO 9001:2008 to design and manufacture subsea electrical and optical connectors, electrical pressure hull penetrators, associated subsea electrical cable terminations, installation of electrical and optical connectors, specialist underwater and harsh environment electrical and optical composite cables, tethers and umbilicals.

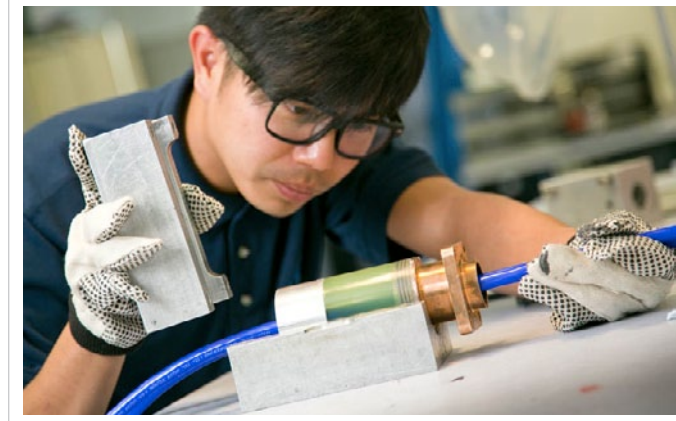


## Hydro Group Asia Pte Ltd

'Connecting solutions worldwide'

Hydro Group Asia Pte Ltd was formed in 2012 to service markets across Asia and beyond. From headquarters in Singapore, Hydro Group Asia designs, manufactures, repairs, tests and certifies a broad range of qualified subsea cable and cable systems, subsea connectors, penetrators and terminations for the subsea oil and gas, renewable energy, defence and aerospace industries.

Hydro Group Asia can help with most subsea cables and connectors. We have professional engineers, specialised equipment and purpose-built facilities to design and manufacture a full range of harsh environment power cables and connectors.

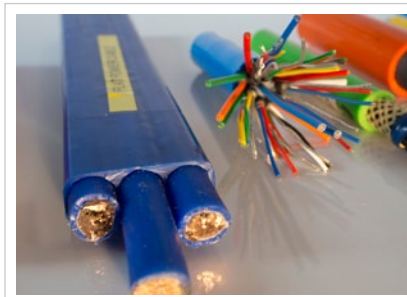


Hydro Group Asia, cable / connector termination

Hydro Group Asia have vast experience in the design and manufacture of subsea cables and offer an on-site inspection and repair service. We also stock common cable configurations, subsea connectors and penetrators for global delivery. Hydro Group Asia can also design, manufacture and supply bespoke connector solutions for any subsea or topside application.

### Scope of work includes:

- ROV cables
- Diver umbilical and integrated control terminations
- Subsea Wellheads and Manifolds
- Bottom Seismic Applications
- Cable systems for air gun arrays, lead inns, air gun cable terminations
- Jumpers (Oil-filled pressure compensated Jumpers and Cables)
- Electrical, signal, fibreoptic, high voltage and hydraulic
- Pressure, Mechanical and Electrical testing

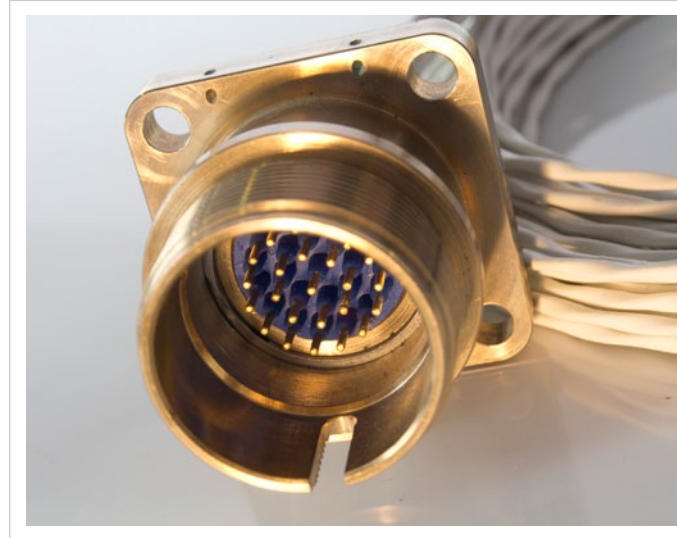


## Hydro Bond Engineering Ltd

'New pressures need new solutions'

Hydro Bond Engineering Ltd was formed in 1982 by a team of experienced and qualified engineers with one objective: to design innovative and unique underwater electrical and optical connectors, connector-cable assemblies and penetrators for the subsea oil and gas, renewable energy, defence and aerospace industries.

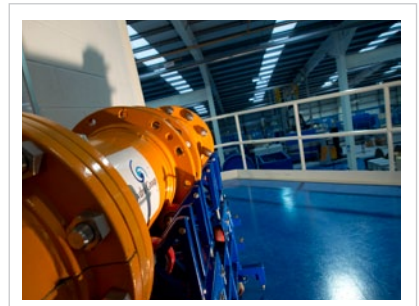
The growing complexity of oil and gas subsea engineering projects necessitated specialist capabilities from specialist companies. Hydro Bond Engineering witnessed rapid expansion in its field of subsea engineering. To support this new growth, Hydro Cable Systems Ltd was established in Arbroath in 1985. The new company was relocated to Aberdeen in 1991 to work alongside its sister company.



Hydro Bond deck mateable subsea connector (HDM/SDM)

### Scope of work includes:

- Submarine Pressure Hull Glands
- Penetrators NPT, UNF, DDC, Fibre Optic
- Connectors: Deck mateable, underwater mateable and non-magnetic
- Terminations: Optical, Kevlar, Wire Armour, Hybrid Connectors
- Installation and termination, moulding Polyurethane (P.U), Polyethylene (P.E), P.V.C, Hytrel, Neoprene
- Miniature Connectors
- EXD-rated connectors
- Sensors / Junction Boxes
- Cable termination and moulding / moulding kits
- Pressure Testing to 10,000 PSI / 6860 MSW / 689 BAR
- Project management





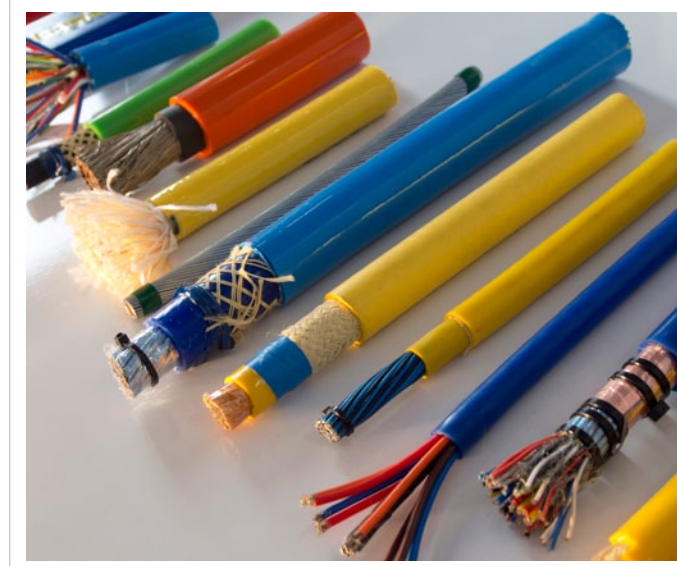
## Hydro Cable Systems Ltd

'Connecting innovation underwater'

Hydro Cable Systems Ltd was established in the operational centre of North Sea activities by experienced engineers in 1985. The company was created to support the growth of its sister company Hydro Bond Engineering Ltd (est. 1982).

Hydro Cable Systems design and manufacture subsea electrical cables, fibre optical subsea cables, hybrid subsea cables, tethers and underwater umbilicals. Our focus is on subsea cable design, cable innovation, cable engineering and manufacturing for both subsea and topside applications for the oil and gas, renewable energy, defence and aerospace industries.

The vast majority of our subsea cables are customised to the client's specification; we do stock some of the more popular cable configurations.



Hydro Cable Systems, optical, electrical and hybrid cables

### Scope of work includes:

Design, manufacture and delivery of:

- Fibre optic cables
- Diver communication cables
- ROV Tether cables
- Cat 5 cables
- Mini TV cables
- Push rod cables
- Halogen-free cables
- Armoured Cables
- Buoyant cables
- Kevlar strain cables
- Towed arrays
- Range cables
- Towed sonar cable
- Thin wall conductor cables
- Welding cables
- Production control cables
- Completion control cables
- Cable, Component, Hose Bundles

