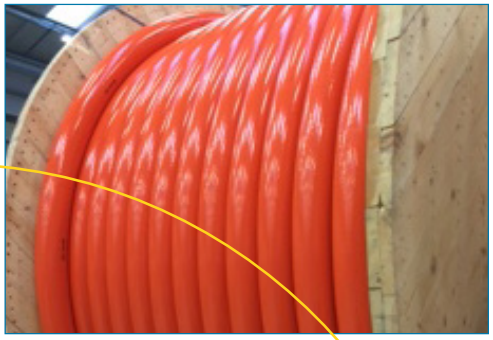
CASE STUDY

Containment Response System

Interventor™ as surface to seabed dispersant conduit



Background

Through the experience gained from many years of providing fluid transfer solutions, Hydrasun identified an industry requirement for a load bearing, low minimum bend radius light weight flexible hose for surface to seabed fluid transfer. The key objective for Hydrasun's technology team was to develop a hose with an optimal combination of tensile strength, bend radius, fatigue resistance and weight. Target applications included pipeline commissioning, well intervention and emergency response.

Hydrasun's solution was Interventor™– a 2-inch lightweight flexible service intervention line, that generally meets the requirements of ISO 13628-5 / API 17E.

Customer Requirement

A major operator required a light weight, compact, air transportable hose with load bearing capabilities for use in their emergency containment response system (CRS). The function of the hose in the system was two fold: firstly to deploy a manifold, and secondly to transfer chemical dispersants from the surface to the manifold.

Hydrasun Solution

Hydrasun reviewed the customer requirement and developed Interventor™ – a flexible hose with aramid reinforcement.

Interventor™ was designed to both deploy the subsea chemical dispersant manifold to depth, and to deliver the dispersants from the surface to the manifold. This dual functionality negates the use of a crane for the deployment and retrieval of the manifold. Flying leads connected to the manifold with dispersant wands are then utilised to inject the dispersants at the required location.

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At a glance...

Customers

Major Operator

Location

To be utilised worldwide on Containment Response System (CRS).

Customer Requirement

A loadbearing hose that could be used to deploy a subsea manifold and also act as a conduit for surface to seabed fluid delivery of hydrocarbon dispersant. Hose needed to be air transportable and readily/ easily integrated into a Containment Response System.

Hydrasun Solution

Use of the Hydrasun developed Interventor™ product – a lightweight load-bearing flexible hose with aramid reinforcement which can be used for subsea applications including well intervention, pipeline commissioning and emergency response.

Benefits

- Reduced overall project cost
- Operational & deployment efficiencies
- Enhanced technical integrity & reliability
- HSE benefits

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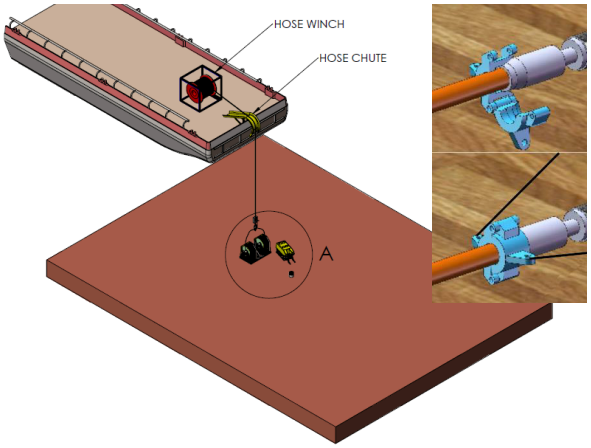
An additional benefit that contributed to Interventor being selected for the CRS is that due to the use of only aramid reinforcement, fatigue issues were minimised and corrosion concerns were eliminated. Furthermore the choice of reinforcement material results in light weight and low minimum bend radius with the associated benefits of ease of handling, compact reel size and reduced deck space.

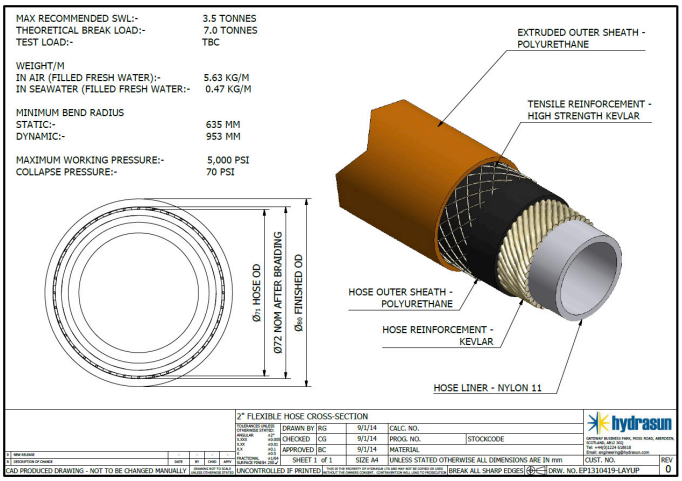
A comprehensive analysis and fatigue test programme was carried out in order to qualify Interventor™ for use in their CRS. Additionally, Hydrasun worked with Strathclyde University in partnership with OGIC (the Oil & Gas Innovation Council) on further testing that was required.



The Result

Hydrasun worked with the operator and the company responsible for the design, maintenance and operation of the CRS, to ensure the successful integration of the hose into the overall system.

Subsequently Hydrasun was awarded an order for 6 complete lines that were delivered in July 2016.



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