UMBILICAL

CUSTOM MADE UMBILICALS

SUPPLY CHAIN EXCELLENCE

FAST TRACK AND COST-EFFECTIVE DELIVERIES FROM DESIGN TO SHIPMENT
Active Service established an umbilical production in 2014 to deliver customized design and ensure short lead time. An area in which we specialize is the short-length umbilical market. We provide a custom-engineered service encompassing design, engineering, manufacturing, testing and installation together with back-up support and after-sales service that the medium/large manufacturers cannot match.

We offer fast track turnaround and delivery of finished product due to our extensive stockholding of specialist hydraulic control line hoses, combined with our in-house capability to manufacture bespoke or specialist end connections in both standard and exotic materials such as Monel, Inconel, 6MO, Super Duplex etc. Active Service has close relationships with key suppliers to secure short delivery time and access to a wide range of hoses and fittings. Our Extrusion and Coatings service encompasses the encapsulation of both single hose and hose bundles with a Polymer or Elastomer cover that significantly increases hose service life whilst assuring operational reliability.

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**A TYPICAL PRODUCTION PROCESS**

- **Bundling**: All lines are bundled in the production assembly line.
- **Extrusion & Braiding**: The bundle is typically extruded with a cover of flame-retardant polyurethane or other materials specified by our customers. Armid wire and steel wire for tension relief are available options.
- **Termination**: Upon completion of the extrusion process our certified hose fitters terminate the hoses with the specified connectors / fittings.
- **Testing & Flushing**: All lines undergo a hydrostatic pressure test in accordance to applicable standards and flushing according to customer specification. When requested we invite Third Party to witness the testing.
- **Tag / Marking**: The umbilical will be tagged and marked in accordance with Fluid Control standard procedure. The tags will include customer reference or other requested information. Customer-specific marking is possible.
- **Final Inspection**: Final inspection is an important step of our quality process and performed prior packing and shipment sent to our customer.
Active Service’s umbilical covers a wide range of applications:
- Tension ring umbilical
- Service loop bundles
- Topside Control umbilical
- Topside wellhead control
- BOP Control umbilical
- Hydraulic Flying Leads
- Deck Jumper for intervention workover control system
- Hydraulic service lines
- Lubrication and grease umbilical
- In field wellhead umbilical
- Service lines
- Chemical injection lines
- Wireline umbilical
- Gas umbilical
- Subsea jumpers

Capability and customized features
- Produced in-house; from design to delivery
- Design to customer requirements / specification.
- Continuous lengths in excess of 600mtr
- Fully ISO 13628-5 / API 17E compliant thermoplastic hoses
  - Aramid fiber reinforced hoses
  - Steel wire reinforced hoses
- High Collapse Resistance Hose
- Wide range of HP, HT and chemical compatibility
- Working pressures in excess of 2000 bar / 29000 PSI
- Choice of wire and synthetic strength members and ropes
- Choice of cover options such as material, sheath colors, print and tagging
- Continuous sheaths of Thermoplastic Polyurethane that provides
  - Excellent wear resistance.
  - Total assembly encapsulation preventing sea water ingress
  - Corrosion elimination
  - Resistance against microbial attack
  - Withstands repeated flexing
  - Flame-proof - halogen free.
  - Conductive or non-conductive cover
- Polyethylene over braids cover or plastic spiral guards.
- Bend restrictors / stiffeners
- Terminations can be supplied with:
  - JIC, BSP, NPT, and more
  - AISI 316 / 316Ti, Duplex, 6MO, and more
  - Armour bodies, pull in heads, hang-off collars, MQC, stab-plates, quick-connects

Documentations
Our standard documentation package consists of the following documents:
- Hydrostatic Pressure Test Reports
- Flushing Certificate
- Datasheets
- Drawings
Other documents are available on request.

Service and Repair of Umbilical
- Re-termination of hose fittings
- Testing / Flushing
- Repair of outer sheet
- Re-application armor body
- Molded bend stiffener

Benefits of Using Active Service
- Short lead times
- Customized design
- Certified hose fitters
- Extensive knowledge and competence within the field of flexible hose solutions
- Wide range of hoses and couplings supplied from world class manufacturers in stock
Active Service has its own production line and control each step of the process.

UMBILICAL DATA SHEET Umbilical hose assembly 4 lines

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A HYDRAULIC UMBILICAL 4-WAY

OD: 51.25
PRR STTIC: 453 MPa
MIN DYNAMIC: 329 MPa
WP: 517 BAR
TP: 775 BAR
HOSE WEIGHT APPROX. 2.6 KG PER METER
ACTIVE SERVICE

We are a leading service provider of high quality hoses, couplings and services to the oil and gas industry and other marine players. Active Service performs inspections, detailed maintenance and recertification both onshore and offshore. We work with well recognised suppliers in the industry and strive to deliver supply chain excellence.

A PART OF FLUX GROUP

Flux Group is a provider of products and services across the flow and fluid control sector of the oil and gas industry. Through acquisitions and organic development, we have established attractive positions in valves and piping, and we have ambitions for further growth in selected segments of the oil and gas service industry.