



DRILLING HOSE SOLUTIONS

HIGH PRESSURE FLEXIBLE LINES FOR A WIDE RANGE OF DRILLING APPLICATIONS



HIGH QUALITY - HIGH STANDARD

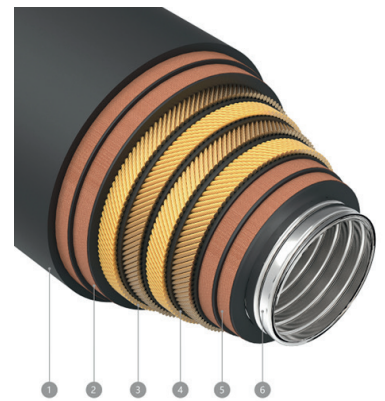
WE DELIVER ACCORDING TO THE HIGHEST LEVELS OF SPECIFICATIONS AND STANDARDS WITH THE MOST COST EFFECTIVE SOLUTIONS ON THE MARKET

OFFSHORE DRILLING HOSES

Flux has during the summer 2017 signed an agreement with Shandong Techfluid Engineering in China to deliver a full range of high quality and fully certified High Pressure (HP) hoses. Techfluid has delivered HP hoses to the Norwegian and international markets for more than 10 years and has acquired a solid track record.

Our comprehensive product portfolio covers all drilling applications whether offshore or onshore. Rotary hoses meet the highest levels of the latest API 7K specification and our Choke and Kill lines exceed the requirements of the demanding API 16C specification.

Flux is committed to continue to develop solutions by working closely with our customers and our suppliers.



HP Hose types Summary

- API 7K: For Mud and Cement hoses - temp -25°C to +100°C - Grade D, Grade E.

Jumper Hose: used to convey high-pressure drilling liquids, located anywhere in the high-pressure mud piping system.

Rotary Hose: used to convey high-pressure drilling liquids between the top of the mud standpipe and the rotary swivel.

Vibrator Hose: used to convey high-pressure drilling liquids between two piping systems or between the mud-pump discharge outlet and the high-pressure mud piping system.

Cement Hose: used strictly for the conveyance of cement slurries at high pressure.

- API 16C: for Choke and Kill Hose - temp -25°C to +100°C, up to 15 K.
Used as an integral part of the surface and subsea blowout prevention equipment.
- API 16D: for Jetting and BOP Hose- temp -40°C to +121°C, fire resistant.
Jetting hoses are used for flushing off pile legs with sea water and BOP hose **for hydraulic control of BOP.**
- API 17K: Bonded Flexible Hose.
For transfer or injection of low sulphur fluid, sour fluid, fluid included with aromatic content; gas transfer; flow lines; risers; jumpers; offshore loading and discharge hose.

ADDITIONAL FEATURES

- Neck Reinforcement on all deliveries - specific reinforcement can be custom designed.
- External Armour - high impact resistance, stainless steel armour or helix wire, polyethylene spiral sleeve.
- Fire resistance - designed to withstand +704°C.
- Sour services - meet NACE MR 01-75 requirements.
- Safegrip - preventing HP hoses from dropping on the drill floor in case of hose failure.
- Heat trace - for extreme cold conditions or where there is a risk fluid may freeze in the hose. Self-regulating electric heating cable can be incorporated in the construction, using patented technology.

Certifications



All products are carefully inspected and carefully tested to ensure we provide the highest quality and exceed the standards required.

Product delivered by Flux and Techfluid are approved according to highest standards:

DNV GL type approval

API 7K, 16C, 16D, 17K certified

ABS type approval



Techfluid has a professional test center and precise quality control process to control quality of each manufacturing steps. The inspection center comprise a variety of testing equipment such as: API 7K hose FSL2 impulse testing rig, full Omega dynamic impulse testbed, API 17B dynamic fatigue testing rig, fire-proof testing rigs according to ISO15541 and API 16C, full-scale gas decompression testing chamber, industrial boroscope, tension/elongation/adhesion testing machine, pressure testing system up to 400Mpa for high pressure testing, rubber rehometer, ozone resistance testing chamber, -60°C ultralow temperature testing chamber, low temperature impacting testing machine, cleanliness inspection/analysis instruments.

FACTORY ACCEPTANCE TESTS (FAT):

- Hydrostatic pressure test: for all pipes, TP=1,5 x DP, min. 8 hours test period.
- Flushing according to specified NAS Class when required.
- Electrical continuity and Resistance test: for pipes that are cathodically protected
- Gauge and Electrical resistance test: for rough bore structures.
- Vacuum and Kerosene test: on customer request, pipes up to 11m.



(Built-in couplings) High-Pressure Mud Hose/ Rotary Hose/ Vibrator Hose

APPLICATION

Flexible connection between top of standpipe and vertically moving swivel on offshore and in-land oil drilling and exploration equipment. Vibrator hose is a flexible connection between mud pump manifold and standpipe, for adjustment and isolating vibration.

- Standard: API Spec 7K / ISO 6807
- API Monogram No.: 7K-0458
- Approvals: API 7 K / ABS / DNV GL
- Sizes: 2" to 6"
- Working temperature range: Class II, -25 to +100° C
- Flexibility specification level: FSL2
- Maximum continuous length: 70m
- Pressure: 5-7,5K PSI



(Swaged couplings) High-Pressure Mud Hose/ Rotary Drilling Hose/ Vibrator Hose/ Cement Hose

APPLICATION

Flexible connection between top of standpipe and vertically moving swivel on offshore and in-land oil drilling and exploration equipment. Vibrator hose is flexible connection between mud pump manifold and standpipe, for adjustment and isolating vibration. Cement hose is a flexible connection between cementing pump and top drive for the delivery of high-pressure cement.

- Standard: API 7K / ISO 6807
- API Monogram No.: 7K-0458
- Approvals: API 7K / ABS / DNV GL
- Sizes: 2" to 6"
- Working temperature range: Class II, -25 to +100° C
- Flexibility specification level: FSL2
- Maximum continuous length: 70m
- Pressure: 5-10K PSI



(Built-in couplings) High-Pressure Cement Hose

APPLICATION

Used in well cementation systems on offshore and land drilling rig. Connection between cementing pump and top drive for delivery of high-pressure cement.

- Standard: API 7K / ISO 6807
- API Monogram No.: 7K-0458
- Approvals: API 7K / ABS / DNV GL
- Sizes: 2" to 4"
- Working temperature range: Class II, -25 to +100° C
- Flexibility specification level: FSL0
- Maximum continuous length: 70m
- Pressure: 10-15K PSI



(Built-in Couplings) Unbalanced Drilling Hose

APPLICATION

Used for delivery of high pressure drilling fluid mixed with gas where unbalanced drilling technology is applied, such as drilling fluid mixed with nitrogen, air and natural gas.

- Standard: API 7K
- API Monogram No.: 7K-0458
- Approvals: API 7K / ABS / DNV GL
- Sizes: 2" to 5"
- Working temperature range: Class II, -25 to +100° C
- Flexibility specification level: FSL3
- Maximum continuous length: 70m
- Pressure: 5-7,5K PSI



Flexible Choke & Kill Hose

APPLICATION

Enable fluid to be pumped to the well when normal circulation through the drill string can't be employed; Additionally the choke line and manifold provide a means of applying back pressure on the formation while circulating out formation fluid influx into the well bore following a kick. Sour services.

Standard: API 16C
 Approvals: API 16C
 Sizes: 2" to 4"
 Metal Connectors: NACE MR0175 / ISO 15156
 Working temperature range: Class II, -25 to +100° C
 Class III, -25 to +121° C
 Flexibility specification level: FSL3
 Maximum continuous length: 70m
 Pressure: 5-15K PSI



Jetting Hose

APPLICATION

Following the completion of drilling a well, pile shoes should be pulled out for moving the pile leg, mud around pile shoe should be flushed off by using high-pressure seawater so as to facilitate pile pulling. Jetting hose is high-pressure flexible connection between main deck of platform and seawater pipe line among pile legs.

Standard: API 16 D
 Approvals: API 16D / ABS / Lloyds Register
 Sizes: 2" to 6"
 Working temperature range: Class II, -30 to +100° C
 Fire resistance: 704° C 5min
 Maximum continuous length: 70m
 Pressure: 2-3K PSI



Flow Line Hose (Inner Wall Armored For Gas Service)

APPLICATION

For transfer or injection of low sulphur fluid, sour fluid, fluid included with aromatic content; gas transfer; flow line.

Standard: API 17K / ISO 13628-10
 API Monogram No.: 17K-0008
 Approvals: API 17K / ABS / DNV GL
 Sizes: 2" to 8"
 Working temperature range: Class II, -25 to +100° C
 Fire resistance: 704° C 30min
 Max. aromatic content 30%
 Max. content of H₂S, 3000ppm at 60° C
 1000ppm at 100° C
 Maximum continuous length: 70m
 Pressure: 3-5K PSI

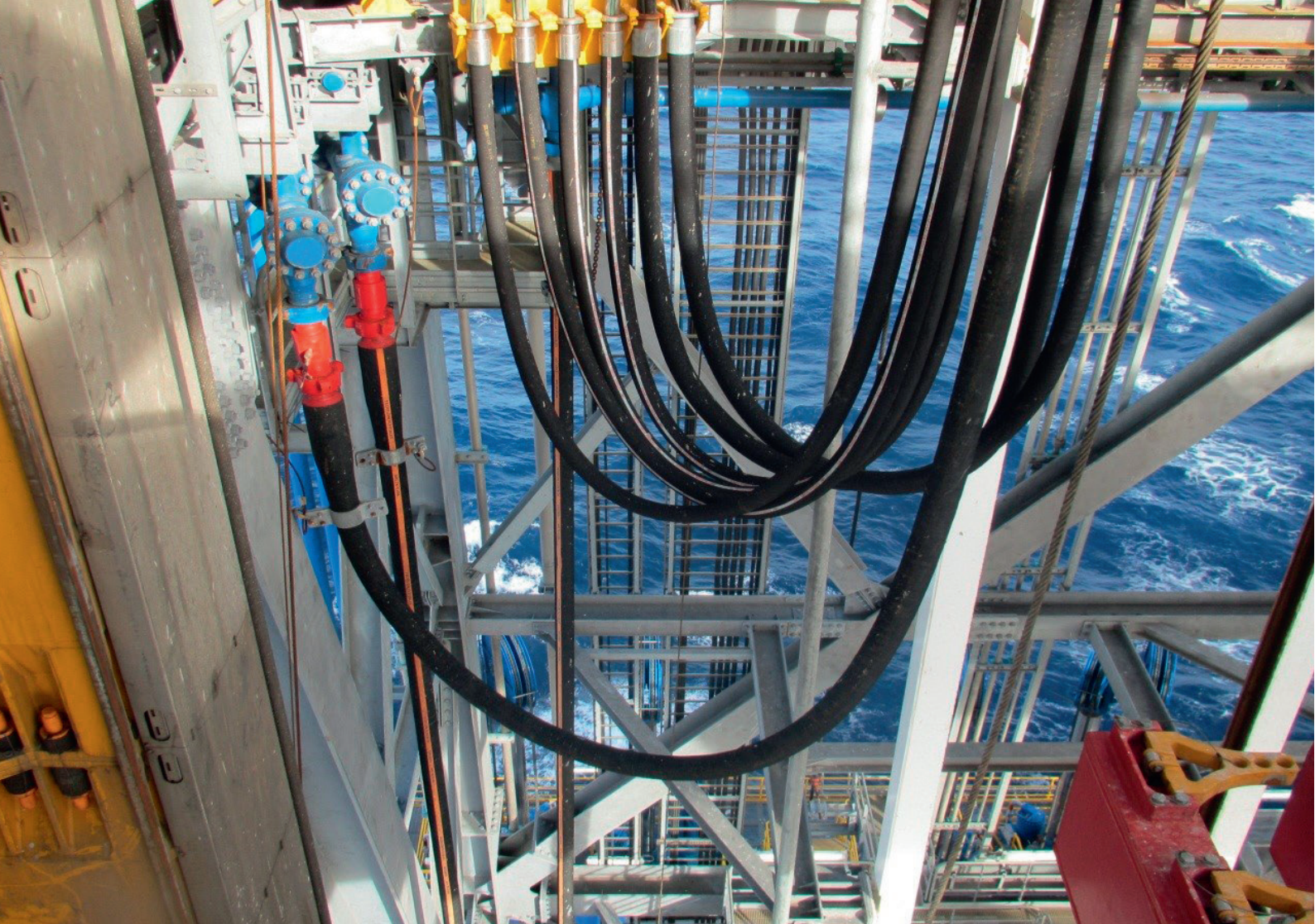


Fire-Rated Tensioner Hose

APPLICATION

Used for transmission of fire resistant hydraulic oil, and used with riser tensioner on deepwater semi-submersible drilling platforms to compensate the drift stroke of the drill pipe.

Standard: API 7K / API 17K / ISO 6807
 API Monogram No.: 7K-0458 / 17K-0008
 Approvals: API 7K / API 17K / ABS / DNV GL
 Sizes: 4" to 8"
 Working temperature range: Class I, -25 to +82° C
 Flexibility specification level: FSL1
 Maximum continuous length: 70m
 Pressure: 3K PSI





Hydro Decoking Hose

APPLICATION

Delayed coking unit is an advanced processing unit in oil refinery industry. Delayed coking process is an important technology for deep processing of heavy oil and residual oil. Hydro decoking hose play an important role in delayed coking unit by delivering high pressure water to coke block cutting equipment in coke tower.

- Standard: API 7K
- Approvals: API 7K / ABS / DNV GL
- Metal Connectors: NACE MR0175 / ISO 15156
- Sizes: 3" to 4"
- Working temperature range: Class II, -25 to +100° C
- Maximum continuous length: 70m
- Pressure: 5K PSI



BOP Hydraulic Hose

APPLICATION

BOP hose is mainly used for hydraulic control of BOP. Operating pressure is 3000PSI. It can be directly exposed to flame for more than 5min at the temperature of 704° C to ensure control system can be operated under emergencies.

- Standard: API 16 D
- Approvals: API 16 D / ABS / Lloyds Register
- Sizes: 2" to 6"
- Working temperature range: Class II, -40 to +121° C
- Fire resistance: 704° C - 5 min
- Maximum continuous length: 70m



Maximise Safety with Flux Safe Grip

REFERENCES



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.



moreld
flux

BERGEN
SJØKRIGSSKOLEVEIEN 15
5165 LAKSEVÅG
NORWAY

STAVANGER
MOSEIDVEIEN 17
4033 STAVANGER
NORWAY