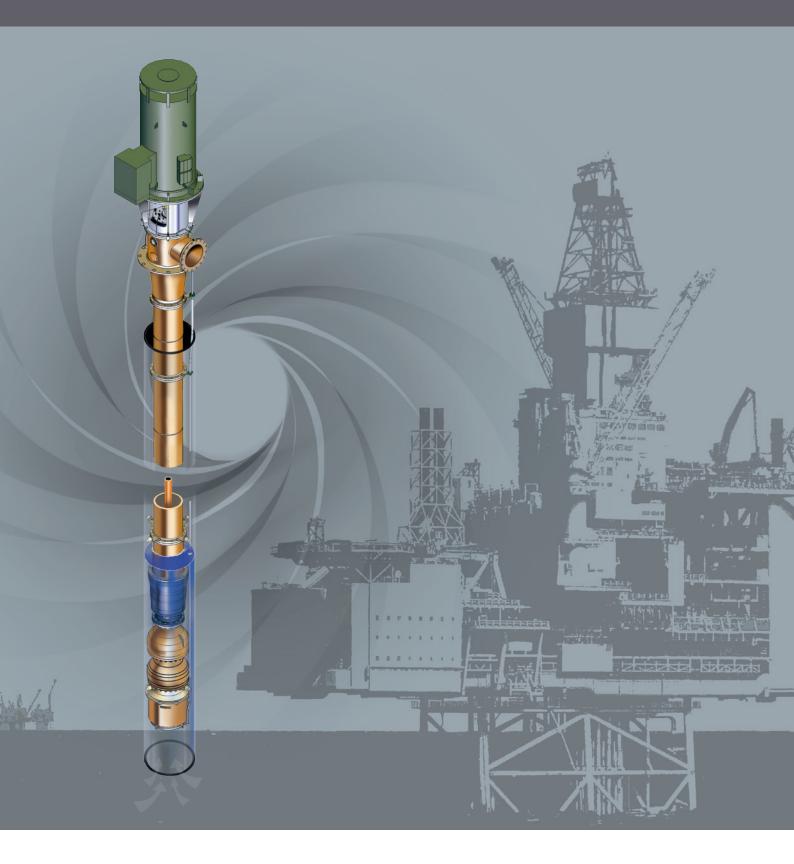
## EUREKA SEA WATER LIFT PUMPS



# **EUREKA**

Keep going. Keep safe.

#### RELIABILITY THROUGH **EXPERIENCE** FPSO, Fixed Platforms, Semisubs, Onshore



STATFJORD B, STATOIL



**KRISTIN SEMISUB, STATOIL** 



OSEBERG SEMISUB, HYDRO



ENFIELD FPSO, WOODSIDE



**GULLFAKS A, STATOIL** 



ORMEN LANGE, ONSHORE, SHELL

ALHALL REDEVELOPMENT, BP



GOLIAT, ENI



SKARV, BP





PIERCE FPSO, SHELL

COLDEN EAGLE, NEXEN EKOFISK, CONOCOPHILLIPS OVER 200 PUMPS IN SEA WATER DUTY delivered to the marine, offshore & onshore markets

#### EUREKA SEA WATER LIFT PUMPS IN GENERAL

**Design criteria:** Both API 610 and Marine pump design available.

**Strong offshore experience** Significant experience through 30 years in the offshore market.

**Largest supplier of pumps to the Norwegian continental** 200 units supplied to StatoilHydro.

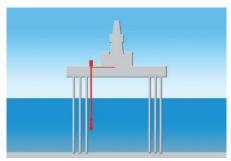
**No limitation in product range / hydraulic coverage** Capacity up to 10000 m3/h and pump head up to 250 mlc. **Long time between overhaul** More than 150.000 h in continuous operation between overhaul.

**High availability** Average availability 99,8 % for our products.

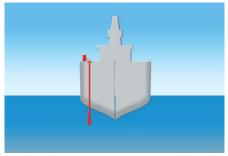
**Experience with all corrosion resistant materials** NiAl Bronze, 22 % Cr Duplex and 25 % Cr Duplex.

### SEA WATER LIFT PUMP SELECTION

**DEEPWELL PUMPS** 

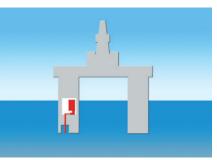


LINESHAFT



EL. SUBMERGE

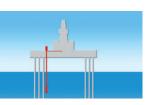
DRY MOUNTED



VERTICAL



HORIZONTAL



#### SEA WATER DEEPWELL PUMPS LINESHAFT PUMPS

#### The most reliable solution today

**DESCRIPTION:** The Eureka lineshaft deepwell pump is a vertical turbine product lubricated pump driven by a standard dry mounted electric motor. The pump is designed according to API 610 for continuous duty under all operating conditions.

Journal bearing distance is according to API 610. The running speed of the pump is max. 75 % of the critical speed. This gives an under-critical tolerance of min. 25 %.

Balancing of the resulting forces on the rotor ensures optimum thrust bearing lifetime. The reduced thrust forces on the pump minimise any material fatigue.

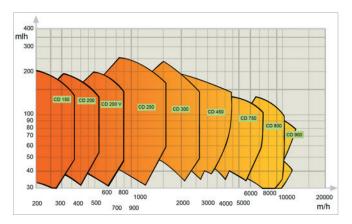
All critical parts are easily accessible from above deck level in the pump top unit or electro motor.

Standard rolling element bearing handling the thrust forces. Min. 25.000 hours. Easily accessible from deck level.

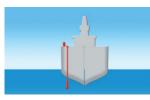
The labyrinth seal is a non contact design with the same life time as the pump.

Experience with lineshaft pump solutions up to 50 meter length.

Capacity range is from 500-10000 m<sup>3</sup>/h and head up to 250 mlc.







#### SEA WATER DEEPWELL PUMPS SUBMERGED ELECTRIC

**DESCRIPTION:** The Eureka submerged electric deepwell pump is a vertical turbine product lubricated pump driven by a submerged electric motor. The pump is designed according to API 610 for continuous duty under all operating conditions.

Balancing of the resulting forces on the rotor ensures optimum thrust bearing lifetime. The reduced thrust forces on the pump minimise any material fatigue.

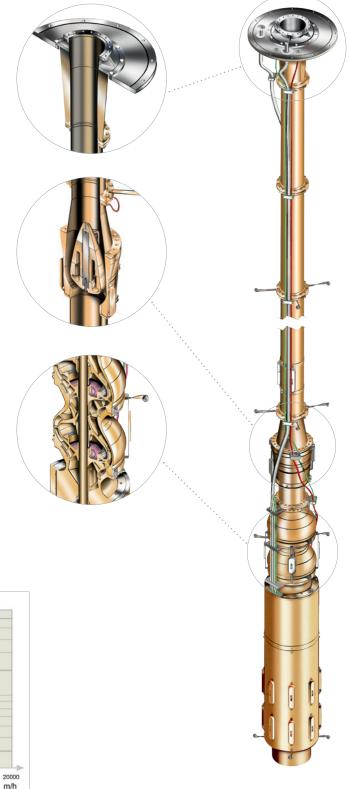
Experience with pump solutions up to 50 meter length.

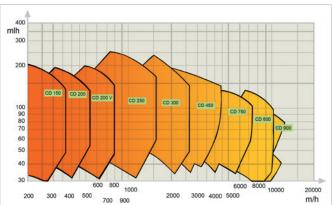
Capacity range is from 500-10000 m<sup>3</sup>/h and head up to 250 mlc.

The submerged electric motor can be supplied with all voltages between 400-11.000 V.

The windings in the motors are water glycol filled with insulated windings. Any leakage of sea water inside the motor will not cause a short circuit of the motor.

A deck head container supplies the motor with water/glycol securing a constant overpressure in the motor, preventing any leakage of sea water inside the motor during operation.







#### DRY MOUNTED SEA WATER PUMP API 610 DESIGN



**DESCRIPTION:** The Eureka BB2 pump is a single stage, double suction, double volute, radially split API 610 pump. It is designed for continuous duty and is particularly adaptable for the sea water lift application.

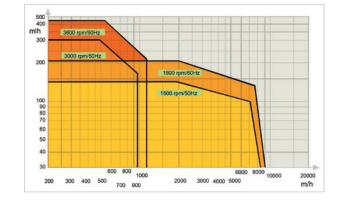
It is available both in vertical and horizontal execution.

Vertical execution in both in-line and side-side configurations.

Balancing of the resulting forces on the rotor ensures optimum thrust bearing lifetime. The reduced thrust forces on the pump minimise any material fatigue.

Capacity range is from 500-10000 m3/h and head up to 200 mlc for high capacities and up to 400 mlc for medium capacities.







#### DRY MOUNTED SEA WATER PUMP MARINE EXECUTION

**DESCRIPTION:** The pump is a, single stage, double suction, double volute, axially split pump. It is designed for continuous duty and is particularly adaptable for the sea water application for offshore.

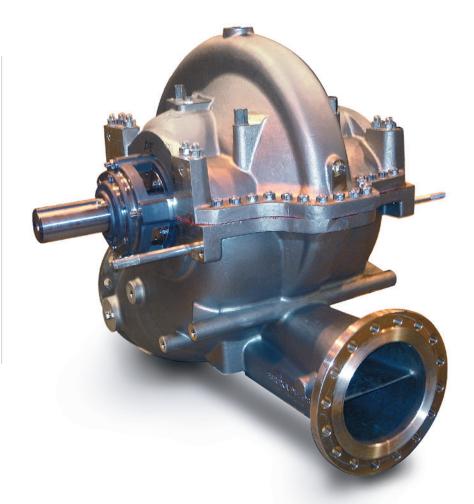
It is available both in vertical and horizontal execution.

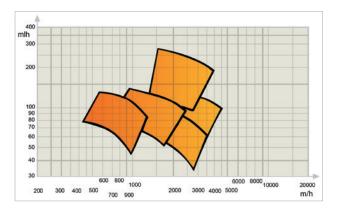
Multiple flange combinations are available.

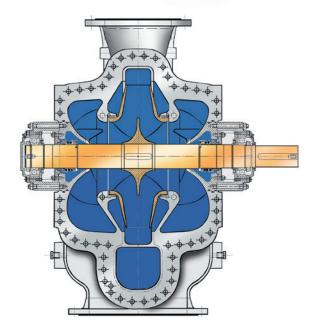
Balancing of the resulting forces on the rotor ensures optimum thrust bearing lifetime. The reduced thrust forces on the pump minimise any material fatigue.

Cost and weight efficient solution.

Capacity range is from 800-4000 m3/h and head up to 250 mlc.



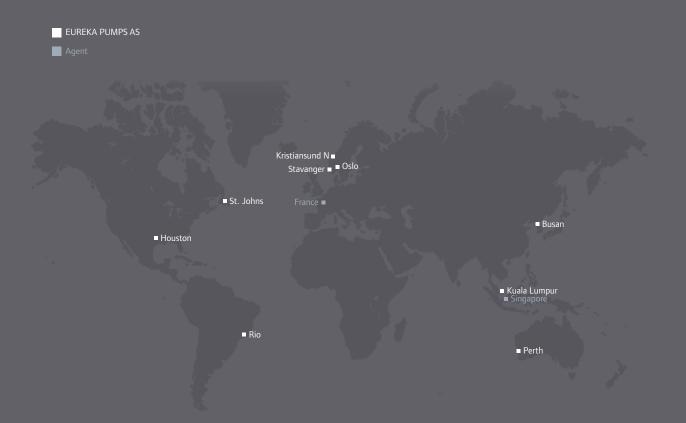




EUREKA PUMPS AS is a Norwegian pump supplier with more than 35 years of experience in the oil and gas industry, offering a range of pumps and generator sets that covers a majority of applications. EUREKA PUMPS supplies to new builds and operates advanced maintenance and service. The company also offers services for upgrading, modification, equipment testing, and installation.

EUREKA PUMPS is a market leader among companies operating on the Norwegian Continental shelf, and it is also present in International markets with selected applications, based on own technology. EUREKA PUMPS main office is in Oslo (Lysaker), Norway, and has branch offices in Houston, St. Johns, Rio, Busan, Kuala Lumpur and Perth.

EUREKA PUMPS is one of five companies in the ALIGN group, a leading supplier of production equipment and safety critical products and solutions. ALIGN offers services ensuring continuous production, a perspective that safeguards optimal operations and lower life-cycle costs. ALIGN is a result of the demerger of Bjørge AS, which was carried out in December 2010. The ALIGN group is owned by Converto Capital and HitecVision.



Tel. + 47 815 31 002

www.eureka.no