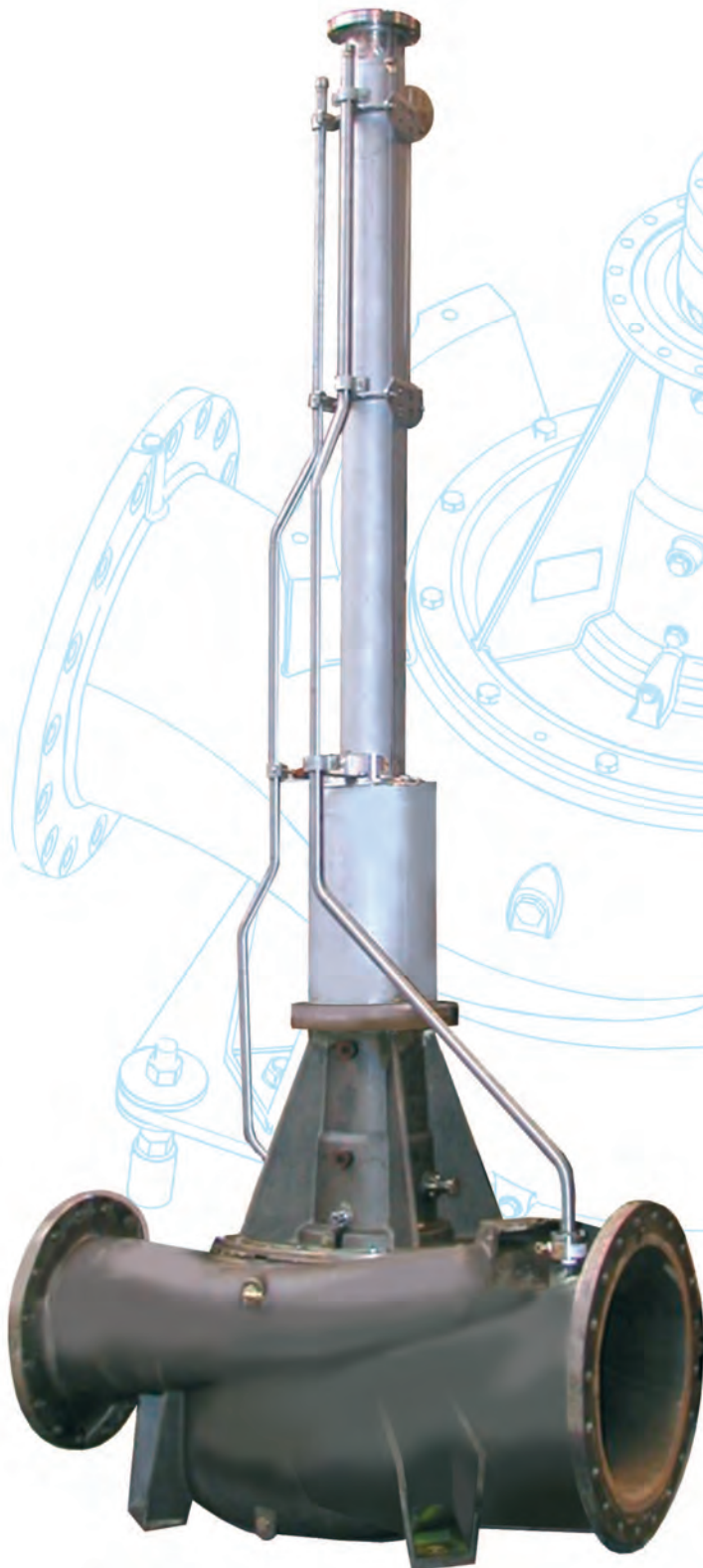


Svanehøj Deepwell Ballast Pumps



Single-stage Oil-lubricated Pump



This brochure describes Deepwell Ballast Pumps type C2G-SUB for tank ships.

The pumps have been developed by Svanehøj through extensive research.

The pump is based on our well-known pump technology taken from the DL pump type and combined with Svane høj's more than 40 years of experience within the marine market.

The pump is a single suction in-line centrifugal pump, designed for a reliable and efficient operation.

The compact design of the pump gives low weights of parts to be handled.

The Deepwell Ballast Pump consists of four major sections:

Electric motor,

in approved explosion-proof and weatherproof execution for open deck installation.

Suitable for speed regulation with frequency converters.

Deck arrangement,

with motor stool, integrated lubricating oil header tank, upper drive shaft bearing, purging and priming connections.

Pipestack,

consisting of an oil-filled drive shaft column with side bearings. The oil-lubricated bearings are held in position by flexible O-rings. The transmission shaft is made of carbon steel alloy. For lengths above 8 metres an intermediate support to bulkhead is required.

Pump head,

with double mechanical shaft seal, bronze casing, stainless steel shaft and ball bearing arrangement.

The shaft seal arrangement consists of a primary seal against the sea water and a secondary seal against the lubricating oil in the drive shaft column.

The cofferdam between the two mechanical shaft seals has pipe connections to deck for purging.

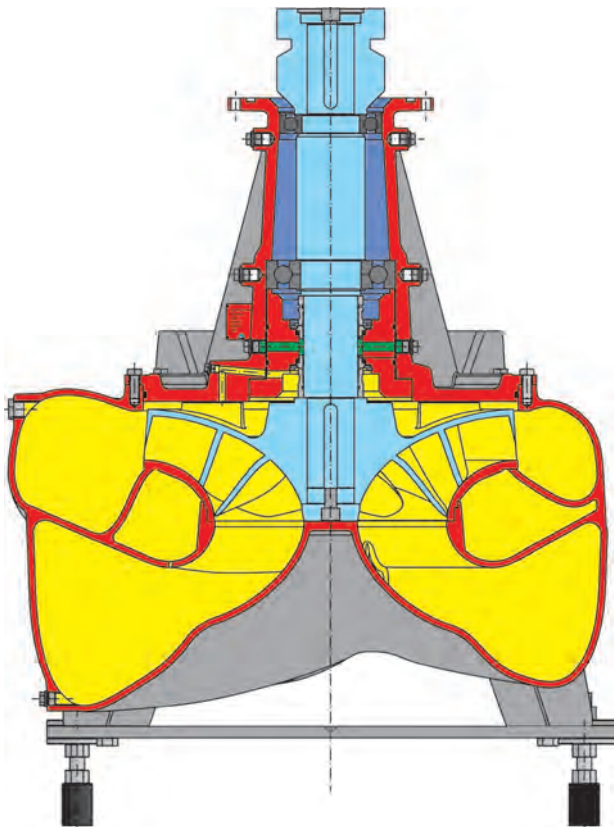
As standard the suction/discharge flanges are made according to EN 1092, PN16. At request other standards, such as ANSI and JIS, are available.

The Deepwell Ballast Pump is designed for DOL starting and can also be operated with frequency converter or other means of variable speed regulation.

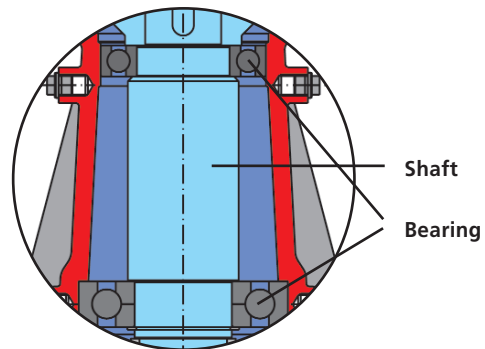
The Deepwell Ballast Pump is available with certificate from any classification society, e.g. LRS - DNV - GL - ABS - BV - KR - RS - NK - CCS and RINA.

The motor will be delivered with PTB certificate and class certificate where required.

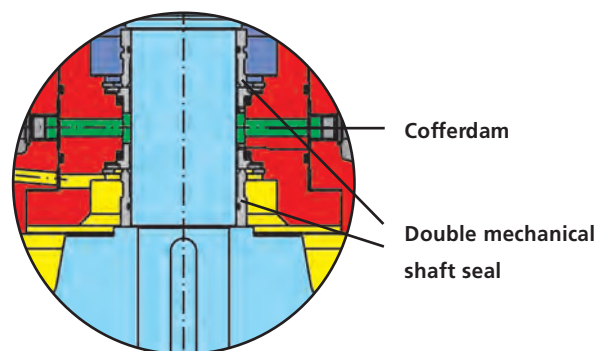
Deepwell Ballast Pump



Bearing arrangement



Shaft sealing arrangement



Purging System

The shaft seal system consists of an upper and a lower mechanical seal with a cofferdam in between. The upper seal seals against the oil-lubricated transmission shaft, which is embedded in an oil-filled pipe. The lower seal is placed on the back of the impeller and seals against the sea water.

To the cofferdam, there are two pipe connections. Purging with air/nitrogen on the inlet on deck detects a leakage, if any, from either the lower (sea water side) shaft seal or from the upper (oil side) shaft seal.

Ballast Pump Priming

The Deepwell Ballast Pump can be supplied/mounted with external priming system in EEx-design.

Example:

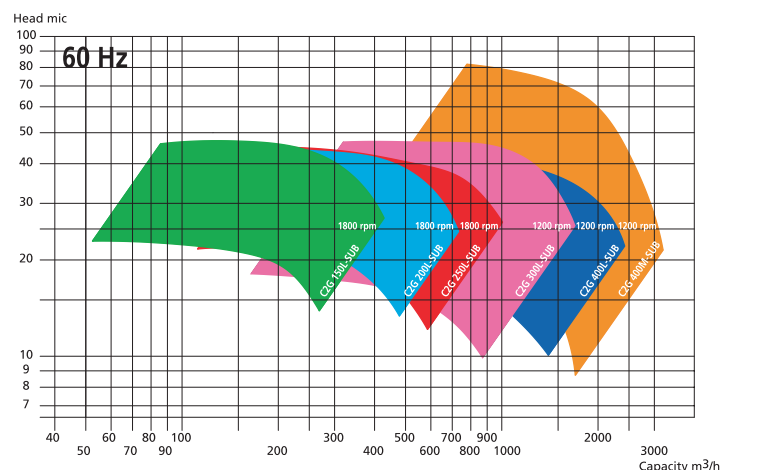
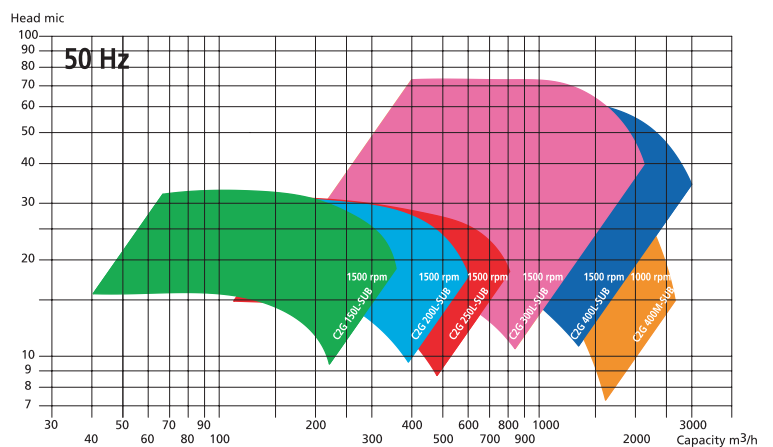
The Self-Priming System is an excellent way to pre-evacuate the piping system belonging to the ballast pump.

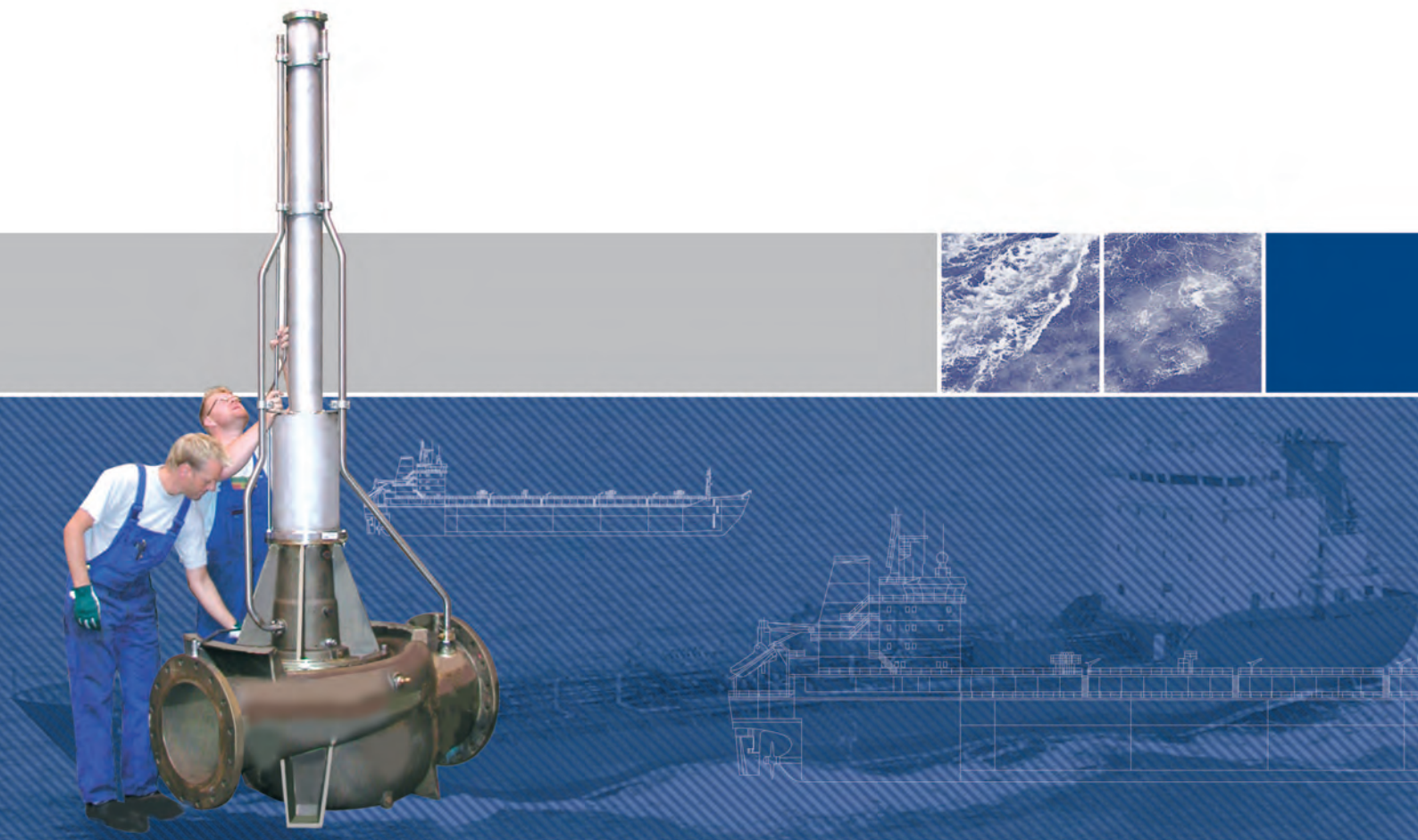
The system distinguishes itself by easy operation and maximum reliability due to the simple construction. Each ballast pump includes an independent Self-Priming System mounted on open deck.

All electrical parts meet the international standards for operation in hazardous area.

Ask for separate data sheet.

Capacity Range





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A subsidiary of Hamworthy plc.

**Hamworthy**

The manufacturer reserves the right to alter the specification and data to incorporate improvements in design. Certified drawings will be issued on request.

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