



Dredge pumps

The heart of the dredging challenge

Dredge pumps lie at the heart of the dredging challenge. Their power, capacity, resistance to wear and malfunction, and general robust and reliable character are essential features. IHC Parts & Services produces a wide range of centrifugal dredge pumps which are long proven to be highly successful in the transport of abrasive mixtures.

The IHC Parts & Services dredge pump programme consists of:

- conventional pumps
- high-efficiency pumps
- CutterSpecial® pumps
- and custom-built pumps

Benefits

- reliable long-term operation and long lifetime
- full range to suit all needs
- up to 90 per cent efficiency
- minimum local wear
- robust and easy maintainable.

These pumps can be delivered in three different configurations:

- Heavy Duty; a double-walled pump construction fully equipped with interchangeable wear parts. Excellent configuration for the most demanding operations.
- Performance; a single-walled construction furnished with, where possible, replaceable wear parts. An all-purpose dredge pump and balanced option as regards weight, size and replaceable wear parts.
- Easy; for operations that are less demanding. This is a single-walled construction without any replaceable wear parts - a pump construction with as few components as possible.



Submerged dredge pump on a cutter ladder

The technology innovator.

Pump types

Conventional pumps

The conventional pump has a robust and proven design. For decades it has been used successfully on many dredgers in all circumstances. The conventional series has good suction properties combined with good ball passage. It is the classic and simplest design of dredge pumps delivered by IHC Parts & Services.

High-efficiency pumps

The high-efficiency pump design has been optimised to upgrade pump production and suction characteristics, and reduce wear, though this requires a higher investment than in the case of conventional pumps.

Even a marginal improvement in pump efficiency creates a huge multiplier effect on improving the cost-effectiveness of production and reducing the length of the dredge cycle.

CutterSpecial® pumps

The CutterSpecial® pump is developed specifically for use on cutter suction dredgers. The enlarged width of passage of the pump allows the dredger to pump rocks and bigger stones. The relatively large diameter of the impeller means that the CutterSpecial® delivers high efficiency and high suction capacity. The accessibility needed for maintenance work has been maintained. When dredging rocks, the special characteristics of the pump result in an increase in the number of working hours and increased production levels.



Custom-built pumps

The above mentioned conventional, high efficiency or CutterSpecial® dredge pump types of IHC Parts & Services are applicable in most of the common dredging situations. However, sometimes specific designs are required that are completely tailored to the respective situation. IHC Parts & Services designs and produces custom-built pumps for every dredging challenge.

Onboard or submerged

Dredge pumps can either be installed onboard of the dredging vessels or in the suction pipe or cutter ladder as submerged pump.

Onboard dredge pumps are the primary power source for transporting the mixture to the hopper or discharge location. The dredge pumps are also essential for mixture transport in stationary dredgers and at pipeline booster stations.

IHC Parts & Services submerged dredge pumps are single-walled conventional and high performance types, complete with drive, support and control systems. They can respond to a wide range of operational requirements. Each offers benefits according to dredging materials, circumstances, and weight and space limitations.

Materials

The material to be dredged is almost always abrasive, sometimes to extremes. The threat of wear does not so much lie in the direct cost of an item to be replaced, but in the resulting downtime due to installation, in the case of both larger and smaller vessels.



An installation which is not working while undergoing maintenance or repair can cost many times more than a worn part. Therefore pump casings, impellers and wear plates are available in extremely wear-resistant materials like MaXidur® 5.

Royal IHC

Smitweg 6, 2961 AW Kinderdijk
P.O. Box 1, 2960 AA Kinderdijk
The Netherlands

T +31 78 691 09 11
F +31 78 691 38 66

info@ihcmerwede.com
www.royalihc.com