The Beaver® 50 is reliable, fuel efficient, has low maintenance costs and is extremely productive at all dredging depths. It is equipped with state-of-the-art technology, including the following key features:

- low cost per cubic metre
- an exceptional rate of pumping power – unrivalled in its class
- improved ergonomics and diagnostics
- Cutter Special® pump that combines high efficiency and a large spherical passage to provide a high level of availability
- class certification (BV Coastal area)
- low maintenance and efficient power distribution with a single diesel engine
- environmentally friendly solutions, such as LED lighting
- enhanced safety features, such as a separate pump room.

**Reliable and efficient**

The Beaver® is well known for its robust construction, reliable operation and excellent performance. To date, Royal IHC has supplied more than 800 of these standard cutter suction dredgers worldwide.

**Transportable and deliverable from stock**

Beaver® dredgers can be dismantled for transport via road, rail or sea. A wide range of optional equipment is available, as well as complementary auxiliary equipment, such as work boats and discharge pipelines. These vessels are mostly delivered from stock.

**Service and support**

Royal IHC can provide a complete package of spare parts, maintenance support, equipment training programmes, dredging advisory services and dredge operators for hands-on instruction and commissioning.

**Main parameters**

- Dredging depth: 14.0m (larger depth optional)
- Discharge diameter: 500mm (larger diameters optional)
- Total power: 1,350kW
Dimensions
Length overall (ladder raised), approx. 33.0m
Length over pontoons 22.65m
Breadth 7.87m
Depth 2.44m
Side pontoons 19.25 x 2.40 x 2.44m
Average draught (50% consumables) 1.5m (approx.)
Maximum design draught 1.65m
 Maximum standard dredging depth 14.0m
Suction pipe diameter 550mm
Discharge pipe diameter 500mm
Total installed power 1,350kW

Swing width with 35° swing each side
At maximum dredging depth 29.5m
At minimum dredging depth 36.5m

Dredge pump
Type IHC HRCS2 1200-250-500, single-walled
Engine type Caterpillar 3512C HD SCAC
Continuous engine power 1,350kW @ 1,600rpm
Specific fuel consumption 199.5g/kWhr
Ball passage 250mm

Electrical installation
Voltage 24V DC
Battery capacity 660Ah
Voltage (50Hz) 230V AC
Power (50Hz) 8kW

Cutter
Type IHC 10-CB-AL-1455-180-V04
Power at shaft 170kW
Diameter 1,455mm
Maximum speed, approx. 30rpm

Ladder and Swing winches
Line pull, first layer 90kN
Maximum line speed 20m/min
Wire diameter 22mm
Drum diameter 457mm
Swing wires length 100m
Anchor weight 500kg

Spuds
Length 19.0m
Diameter 559mm
Weight 5,570kg

Output calculated for:

Soil type            Decisive grain size   Situ density
A Fine sand          100μm             1,900kg/m³
B Medium sand        235μm            1,950kg/m³
C Coarse sand        440μm            2,000kg/m³
D Coarse sand and gravel  1.3mm   2,100kg/m³
E Gravel             7mm              2,200kg/m³

Note
Calculated output curves only indicate pumping capacity, based on the maximum available power on the pump shaft and free-flowing material. In actual practice, properties may vary from free-flowing, easily excavated to compacted, hard-to-excavate material. When used for estimation actual outputs, the nature of the material to be dredged and local job conditions must be considered. Please consult Royal IHC for dredging conditions outside these curves.