The IHC Beaver® 45 is reliable, fuel efficient and has low maintenance costs. This robust and highly productive dredger is equipped with state-of-the-art technology, including the following key features:

- low cost per cubic metre
- an exceptional rate of pumping power
- first class ergonomics and diagnostics
- Cutter Special® pump that combines high efficiency and a large ball passage to provide a high level of availability
- low maintenance and efficient power distribution with a single diesel engine
- environmentally friendly solutions, such as LED lighting
- enhanced safety features.

RELIABLE AND EFFICIENT
The IHC 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
IHC 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
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: 10.0m (larger depth optional)
- Discharge diameter: 450mm (larger diameters optional)
- Total power: 895kW
DIMENSIONS
Length overall (ladder raised), approx. 26.60m
Length over pontoons 16.96m
Breadth 6.99m
Depth 2.01m
Mean draught with full bunkers 1.40m
Maximum standard dredging depth 10.0m
Suction pipe diameter 450mm
Discharge pipe diameter 450mm
Total installed power 895kW

SWING WIDTH WITH 35° SWING EACH SIDE
At maximum dredging depth 23.5m
At minimum dredging depth 29.0m

DREDGE PUMP
Type IHC HRCS 108-23-45, single-walled
Engine type Caterpillar C32 TTA Acert
Heavy duty power 895kW @ 1,800rpm
Specific fuel consumption 205.9g/kWh
Ball passage 225mm

ELECTRICAL INSTALLATION
Voltage 24V DC
Battery capacity 400Ah

CUTTER
Type IHC Lancelot 1330-120-10CB
Power at shaft 110kW
Diameter 1,330mm
Maximum speed, approx. 34rpm

LADDER AND SWING WINCHES
Line pull, first layer 57kN
Maximum line speed 25m/min
Wire diameter 18mm
Drum diameter 390mm
Swing wires length 100m
Anchor weight 360kg

SPUDS
Length 13.85m
Diameter 457mm
Weight 2,260kg

SPUD HOISTING CYLINDERS
Force 100kN
Spud stroke (each time), approx. 3.5m

DECK CRANE
Lifting power 20kN
Outreach 2.80m

OTHER FEATURES
• standard design, allowing for short delivery times and competitive pricing
• spare parts available from stock
• durable heavy-duty marine engine compliant with IMO Tier II
• efficient fuel consumption
• fresh-water engine cooling system
• dredge pump driven through integrated bearing block, clutch and reduction gearbox
• white iron-wear parts for the dredge pump
• cutter drive accepts temporary overload, resulting in high maximum cutter power
• reliable hydraulic system
• completely assembled and fully tested afloat before delivery
• dismountable and transportable by road, rail or sea
• ready for operation on arrival at site
• one-man operation
• wide range of services and auxiliary equipment available (including work boats, boosters and pipelines).

OPTIONAL EXTRA’S
• spud-carriage installation
• anchor booms
• swivel bend
• non-return valve and vacuum-relieve valve
• production measurement, automation and positioning system
• increased discharge pipeline diameter
• increased dredging depth
• life-cycle support packages (including training, technical support etc.)
• optional packages: comfort (including air conditioning); HSE (health, safety and environment); nautical, and inventory plus.

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 IHC for dredging conditions outside these curves.

Pump output calculated for:

Output calculated for:

SOIL

Type
DECISIVE
SITU
GRAIN SIZE
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

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