The IHC Beaver® 65 DDSP is reliable, fuel-efficient, has low maintenance costs and high-productivity levels at all dredging depths. This robust dredger is equipped with state-of-the-art technology. The key features include:

- low cost per cubic metre
- a diesel directly driven submerged pump (DDSP) that makes it possible to dredge at high-mixture densities
- the Curve® impeller that combines high efficiency with excellent suction performance and low-energy consumption
- first class ergonomics and diagnostics
- wear-resistant parts for the dredge pump
- class certification (BV Coastal area)
- integrated spud carriage installation.

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dredging depth</td>
<td>18.0m (larger depth optional)</td>
</tr>
<tr>
<td>Discharge diameter</td>
<td>650mm (larger diameters optional)</td>
</tr>
<tr>
<td>Total power</td>
<td>2,819kW</td>
</tr>
</tbody>
</table>
**DIMENSIONS**
Length overall (ladder raised), approx. 58.0m
Length over pontoons 43.50m
Breadth 12.44m
Depth 2.97m
Side pontoons 43.50 x 4.67 x 2.97m
Average draught with full bunkers 2.02m (approx.)
Maximum standard dredging depth 18.0m
Suction pipe diameter 650mm
Discharge pipe diameter 650mm
Total installed power 2,819kW

**SWING WIDTH WITH 35° SWING EACH SIDE**
At maximum dredging depth 48.5m
At minimum dredging depth 59.5m

**DREDGE PUMP**
Type IHC HR/MD 121-26-60, with Curve® impeller inside
Engine type Caterpillar 3516C SCAC
Continuous engine power 1,825kW @ 1,600rpm
Specific fuel consumption 206.9g/kWhr

**AUXILIARY POWER (CUTTER, WINCHES AND SPUDS)**
Engine type C32 DITTA Acert
Prime power 994kW
Specific fuel consumption 207.2g/kWhr

**ELECTRICAL INSTALLATION**
Voltage 24V DC
Battery capacity 800Ah
Voltage (50Hz) 230/400V AC
Power (50Hz) 26kW

**CUTTER**
Type IHC 20-CB-ACR-2220-550
Power at shaft 700kW in order to absorb load peaks
Diameter 2,220mm
Maximum speed, approx. 30rpm

**LADDER AND SWING WINCHES**
Line pull, first layer 240kN
Maximum line speed 23m/min
Wire diameter 36mm
Drum diameter 762mm
Swing wires length 150m
Anchor weight 1,500kg

**SPUDS**
Length 23.4m
Diameter 900mm
Weight 15,500kg

**SPUD HOISTING CYLINDERS**
Force 798kN
Spud stroke (each time), approx. 3.75m

**SPUD CARRIAGE TRAVELLING CYLINDER**
Stroke of cylinder 4.50m

**DECK CRANE**
Lifting power 40kN
Outreach 5.10m

**CLASSIFICATION**
Bureau Veritas Class I, hull • MACH Dredger - no propulsion
Coastal area

**OTHER FEATURES**
- standard design, allowing for short delivery times and competitive pricing
- spare parts available from stock
- durable heavy-duty marine engines compliant with IMO Tier II
- efficient fuel consumption
- fresh-water engine cooling system
- dredge pump driven through pivoting gearbox
- 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
- on-board toilet and wash basin
- special tools are supplied for connecting and disconnecting pontoons and the cutter ladder, and for maintenance of the dredge pump and diesel engine
- wide range of services and auxiliary equipment available (including work boats, boosters and pipelines)
- air conditioning.

**OPTIONAL EXTRA’S**
- anchor booms
- IHC Spud Guard®
- swivel bend
- discharge valve and vacuum-relief valve
- Lancelot® cutterhead (special multi-blade)
- production measurement, automation and positioning system
- increased discharge pipeline diameter
- increased dredging depth
- life-cycle support packages (including training, technical support etc.)
- accommodation
- optional packages: comfort; HSE (health, safety and environment); nautical; and inventory plus.
- air conditioning.

**OUTPUTS**
- anchor booms
- IHC Spud Guard®
- swivel bend
- discharge valve and vacuum-relief valve
- Lancelot® cutterhead (special multi-blade)
- production measurement, automation and positioning system
- increased discharge pipeline diameter
- increased dredging depth
- life-cycle support packages (including training, technical support etc.)
- accommodation
- optional packages: comfort; HSE (health, safety and environment); nautical; and inventory plus.

**SOIL**

<table>
<thead>
<tr>
<th>Type</th>
<th>Decisive size</th>
<th>SITU density</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  Fine sand</td>
<td>100µm</td>
<td>1.900kg/m³</td>
</tr>
<tr>
<td>B  Medium sand</td>
<td>235µm</td>
<td>1.950kg/m³</td>
</tr>
<tr>
<td>C  Coarse sand</td>
<td>440µm</td>
<td>2.000kg/m³</td>
</tr>
<tr>
<td>D  Coarse sand and gravel</td>
<td>1.3mm</td>
<td>2.100kg/m³</td>
</tr>
<tr>
<td>E  Gravel</td>
<td>7mm</td>
<td>2.200kg/m³</td>
</tr>
</tbody>
</table>

**NOTE**
Calculated output curves indicate pumping capacity, based on the maximum available power on the pump shaft. 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.