The highest possible efficiency and straight forward control.

Our Cutter Suction Dredgers are robust, effective and equipped with our C-star MaPoS DGPS system connected to C-star OMS for ease of operation.
The Dekker Cutter Suction Dredgers are used for capital dredging and sand mining. The control room is ergonomic and spacious built and is equipped with air conditioning and heating. The cutter dredgers are robust, effective and straight forward to control.

**Overall**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length over all</td>
<td>55.5m</td>
</tr>
<tr>
<td>Breath</td>
<td>12.80 m</td>
</tr>
<tr>
<td>Depth</td>
<td>8.90 m</td>
</tr>
<tr>
<td>Draught loaded</td>
<td>2.50 m</td>
</tr>
<tr>
<td>Light weight ship</td>
<td>approx 600 ton</td>
</tr>
</tbody>
</table>

**Dredging installation**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner diameter suction pipe</td>
<td>750mm</td>
</tr>
<tr>
<td>Inner diameter discharge pipe</td>
<td>700mm</td>
</tr>
<tr>
<td>Discharge distance</td>
<td>3000 m</td>
</tr>
<tr>
<td>Dredging depth</td>
<td>20.00 m at 45 degrees</td>
</tr>
<tr>
<td>Dredging width, 35 degrees swinging angle @ max depth</td>
<td>57.50 m</td>
</tr>
<tr>
<td>Output dredgepump / capacity 33% sand</td>
<td>9.000m³/hour</td>
</tr>
</tbody>
</table>

**Tank capacities**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>120,000 liters</td>
</tr>
<tr>
<td>Ballast water</td>
<td>50,000 liters</td>
</tr>
</tbody>
</table>

**Dredge pump**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main pump</td>
<td>2 X DP 700 - 28”</td>
</tr>
<tr>
<td>Separate pump room</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Engines
- **Total installed power**: 4723 kW
- **Main Engine**: Caterpillar 3516 C & 3516B genset
- **Aux Engine**: Caterpillar 3512 C

### Generator
- **250KVA**
- **Main generator**: 2x Caterpillar C7.1 marine 125kVA
- **Harbour generator**: Caterpillar C2.2 marine Max. 27kVA

### Cutter
- **Type**: Crown or equivalent (with changable chisels)
- **Wearing parts**: Chisels replaceable
- **RPM**: 0-35
- **Power**: 600 KW

### Spuds
- **Diameter**: 850 mm
- **Length**: 26.0 m
- **System**: Hydraulic spud tilting

### Winches
- **Anchor winch**: 280kN
- **Ladder winch**: 280kN

### Deck Crane
- **Deck crane for maintenance of dredgepump, engine and other components with electric chain hoist**

### Class
- **Lloyds register**: 100 A1 Dredger

### Spud carrier
- **5 meter stroke**
- **Included**
- **Integrated in hull construction**

### Instrumentations
- **Dredging depth indicator**: Yes
- **Vacuum and pressure indication of dredgepump**: Yes
- **Engine control panel (DCU)**: Yes
- **Velocity measurement**: Yes
- **Non nuclear density meter STI**: Yes
Other features

- C-Star Survey monitoring system
  MAPOS_DGPS
- Harbour generator
- Day accommodations
- Communication package
- Production measurements
- Discharge valve and vacuum-relief valve
- Full HSE package
- Cabin ergonomic design equipped with air conditioning
- Easy to control, low maintenance
- Technical service package
- Operational service package
- Accommodation 5-10 men

Optional

- Combined or interchangeable cutterhead and waterjet system
- Manual to fully automation, remote control
- Auxiliary equipment such as multicats, boosters, pipelines etc.
- Dredge Automation package
- Training and consultancy
- Spare program
All our dredgers are equipped with the The MaPoS_DGPS system – short for Marine Position Differential Global Positioning System – is an extraction control system developed by Dekker Dredgers for the efficient extraction of deposits and dredging areas. Our aim: optimal exploitation of extraction areas, the reduction of extraction losses, optimisation of extraction processes, and the minimisation of slope failure risks.

Marine Position Differential Global Positioning System

Your benefits: precise positioning of the dredger and the excavation apparatus, direct visualisation of all information during the dredging process, and simultaneous documentation of all data using the same software. The MaPoS system can be used with any kind of dredger and includes the following components:

• a robust industrial PC with the newest technology installed on board the dredger;
• a touchscreen monitor (no keyboard or mouse necessary for operation);
• dual GPS receiver with integrated digital compass;
• IPC-electronics, sensors (e.g. echo sounders, depth sensor);
• dredger and office analysis software
Because of its modular structure it can be adapted to the respective operating conditions and augmented by numerous elements:

- slope sonar, echo sounders, 360° sonar scanners;
- radio wave gauge;
- direct data transfer from the dredger to the computer in the operation management office;
- device for recording operating data (recording of machine data, such as power consumption, speed of the bucket wheel, flow rate, etc.);
- remote visualisation of the extraction process;
- UPS