The standard cutter dredger CSD 750 is well equipped to operate in a wide range of coastal zones with several materials up to compact soils. It is specialized for maintenance and land reclamation work also in shallow water areas. The dredger is optimized for dredging compact sand, clay, weak rock.

**Specifications**

**Main Particulars**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length overall</td>
<td>76.7 m</td>
</tr>
<tr>
<td>Length over deck</td>
<td>66.2 m</td>
</tr>
<tr>
<td>Breadth, molded</td>
<td>15.2 m</td>
</tr>
<tr>
<td>Depth main pontoon</td>
<td>4.3 m</td>
</tr>
<tr>
<td>Design draught</td>
<td>3.2 m</td>
</tr>
<tr>
<td>Dredging depth min/max</td>
<td>4 / 22 m</td>
</tr>
<tr>
<td>Suction pipe inner diameter</td>
<td>750 mm</td>
</tr>
<tr>
<td>Discharge pipe inner dia.</td>
<td>750 mm</td>
</tr>
<tr>
<td>Total weight</td>
<td>1955 ton</td>
</tr>
<tr>
<td>Total installed power</td>
<td>9300 kW</td>
</tr>
</tbody>
</table>

**Dredging Components**

- **Cutter head**: VOSTA T2
- **Cutter power**: 1000 kW
- **Under Water dredge pump**: VOSTA LMG750-1627
- **U.W. Dredge pump power**: 1830 kW
- **Inboard dredge pump**: 2xVOSTALMG 750-1627
- **I.B. Dredge pump power**: 2350 kW
- **Side winch**: 2 pcs
- **Pulling force max.**: 400 kN
- **Ladder hoisting winch**: 1 pcs
- **Pulling force max.**: 400 kN

**Deck Equipment**

- **Deck crane**: 2 x 8 ton

**Electrical System**

- **Main generator**: (PF0,8) 300 ekW
- **Ship’s main voltage**: 3x400 V
- **Ship’s main frequency**: 50 Hz

**Main Drives**

- **Diesel engines**
  - U.W. Dredge pump engine: 2100 kW
  - I.B. 1 Dredge pump engine: 2350 kW
  - I.B. 1 Dredge pump engine: 2350 kW
  - Auxiliary engine: 1800 kW
  - Harbour generator: 700 kW

**Options**

- Spud tilting system
- Anchor Booms
- Swivel bend
- Dredge monitoring system
- Production measuring system
- Harbor set
- Mooring equipment
- Additional gland pump
- Additional flushing pump
- Barge loading system
- Accommodation, 14 crew
- Towing hook
- HFO 380STC
- Cutter platform
- Anti corrosion system I.C.S.
- Container pods
- Double walled dredge pump inboard
- Jet water for cutter cleaning
- Propulsion system

**Dedicated functions**:  
- Lowest price per cubic meter at a wide range of jobs
- Optimization of shallow water operation
- Minimization of vibration level
- Maximum of allover operation efficiency due to:
  - Optimization of anchor/spud maneuver
  - Operation with high efficient cutter head with special patented cutter teeth of highest wear resistance
  - Operation with high efficiency dredge pump with optimized suction performance
  - Operation with approved dredge control/monitoring system, automation of dredging process

*) to get all functions optional equipment required
Production Diagram CSD 750

Estimated dredge pump production diagram

- Dredge pump type: 2 x VL 750-1627
- uw pump shaft power: 1830 kW
- uw pump nominal speed: 365 rpm
- ib pump shaft power: 2350 kW
- ib pump nominal speed: 415 rpm
- Suction pipe diameter: 750 mm
- Discharge pipe diameter: 750 mm
- Pipe elevation: 4 m
- Dredging depth: 22 m
- Water density: 1025 kg/m³
- Density solids: 2650 kg/m³

Remarks:
- production curves for reference only
- free flowing sand conditions considered
- production limitation due to soil/cutterhead not considered