

## DRAGA 4500 JET SUCTION DREDGER



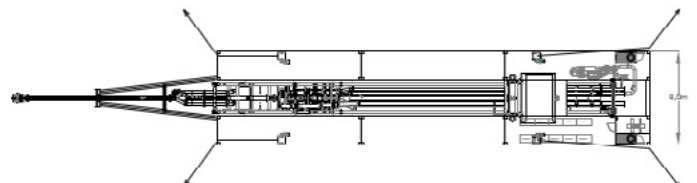
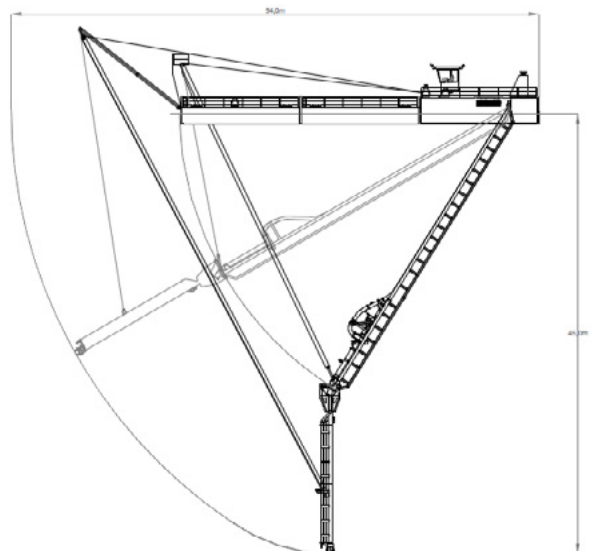
### INNOVATIVE – SUSTAINABLE – ROBUST

—— **Electric-driven:** lowest cost per cubic meter. No emission, minimal noise pollution.

—— In-house **iPump®** line: developed through sixty years of experience in sand- and gravel extraction. Wear resistant for increased life span, optimal suction characteristics, adaptable for a wide range of tasks.

—— In-house **iDredge® control- and automation system:** ensuring increased efficiency and reduced power consumption. Optional: remote controlled dredge systems and data collection for automated analyses on performance.

—— **Containerized** for low-cost transportation worldwide and inland delivery to remote locations. Relocation facilitated through the iPlug-and-Dredge Concept. **Modular** design for industry-leading delivery times and continuous **availability of spare parts.**



# DRAGA 4500 JET SUCTION DREDGER

## TECHNICAL SPECIFICATIONS

### FEATURES

- Transportable by ten shipping containers
- Efficient Electric Drive System
- Small Environmental Footprint
- Low Noise & Vibration Level
- One-man Operation

### DREDGING FEATURES

<b>Max. Dredging Depth:</b>	40	[m]
<b>Nominal Mixture Flow:</b>	2000 – 4000	[m <sup>3</sup> /h]
<b>Available Suction Diameter:</b>	400 – 500	[mm]
<b>Available Discharge Diameter:</b>	350 – 450	[mm]
<b>Available Dredge Pump Sizes:</b>	350 / 400 / 450	[mm]
<b>Min. Spherical Pump Passage:</b>	180	[mm]

### DREDGE PUMP DRIVE

<b>Power Source:</b>	Electric feed cable
<b>Reduction drive:</b>	Submersible Motor
<b>Available Dredge Pump Power:</b>	500 / 600 / 750 [kW]

### JET PUMP

<b>Jet Pump Flow:</b>	400 / 600	[m <sup>3</sup> /h]
<b>Jet Pump Pressure:</b>	9 / 16	[bar]
<b>No. Jet Nozzles:</b>	8	[pcs]

### PRINCIPLE DIMENSIONS

<b>Length o.a. with raised ladder:</b>	54	[m]
<b>Length over pontoons:</b>	36	[m]
<b>Width:</b>	8	[m]
<b>Depth:</b>	2.8 / 1.8	[m]
<b>Draught:</b>	1	[m]
<b>Main Pontoon LxWxH:</b>	(2x) 12 x 2.5 x 2.8	[m]
<b>Side Pontoons LxWxH:</b>	(4x) 12 x 2.5 x 1.8	[m]
<b>Total dry weight:</b>	135	[ton]
<b>Air draught:</b>	8.8	[m]

### ELECTRIC INSTALLATION

<b>Primary Voltage:</b>	6 / 10	[kV]
<b>Secondary Voltage (3-Phase):</b>	400 / 480	[Vac]
<b>Dredge Pump Power Source:</b>	VFD	
<b>Jet Pump Power Source:</b>	VFD	
<b>Mooring Winches:</b>	DOL starter / VFD	

### DECK INSTALLATION

<b>Ladder Hoisting Winch (Electric):</b>	100	[kN]
<b>Suction Tube Hoisting (Electric):</b>	40	[kN]
<b>Mooring Winches (Electric):</b>	50	[kN]
<b>Mooring Winch Wire Capacity:</b>	200	[m]

### DECK CRANE

<b>Lifting Capacity:</b>	30 / 40	[kN]
<b>Outreach:</b>	2.5	[m]

### TOOLS

- Special tools are supplied for maintenance of dredge pump

### INSTRUMENTATION

- **iDredge®** Dredger Control System
- Dredging Depth indication
- Vacuum and Pressure Indication of Dredge Pump

### OPTIONAL EQUIPMENT

- DGPS Dredge Mining Control System
- Production Measurement
- Discharge Velocity Measurement
- Additional Hydraulic Excavation Head
- Second jet pump for high pressure jetting
- Floating discharge pipe line
- Floating high voltage supply cable
- Remote dredge monitoring