



# OTTer®

## Compact, modular dredger using the OTTer®-Pump

Royal IHC's OTTer® is a compact, modular dredger that is easy to deploy and operate. It combines the advantages of the OTTer®-Pump into a single dredging solution. This provides a cost-effective solution to dredge slurry for smaller dredging projects. Examples are ponds, tailings, dams, rivers, canals and small harbours.

The OTTer®'s design is based on the principles of safety, reliability and production maximisation. Its cost-effective design reduces the need for specialised maintenance tools and personnel.

### Advantages

- ✓ low capital cost layout
- ✓ compact size
- ✓ modular and easy to transport and deploy
- ✓ rugged and robust.

Cost-effective design, based on the principles of production maximisation and reliability

## Two types for different applications

The OTTer® comes in two versions for different applications:

### *Vertical deployment type*

Is used for dredging loosely compacted soil. In this vertical deployment configuration, the OTTer®-Pump is fitted with a sand production head and jetting water nozzles and is suspended from an A-frame and lowered under gravity to the dredge surface up to 50m deep.



Vertical deployment type – for dredging loosely compacted soil



### Horizontal (ladder) deployment type

This version is suitable for more compacted soil conditions and for standard dredging depths of 10m deep.



### Horizontal (ladder) deployment type – for more compact soil conditions

### Project applications: mining or maintenance dredging

Royal IHC's OTTer® is mainly used to dredge silt, medium sand and gravel. The OTTer® is applicable to many small scale dredging activities due to its compact size and easy transportability. The size and manoeuvrability allows easy access in confined waterways and alongside quay walls.

### Main applications

#### Mining

- construction or heavy mineral sand mining
- alluvial gold or diamond mining
- oil sands mining
- tailings.

#### Maintenance dredging

- environmental dredging
- inland waterways (rivers, canals, ports)
- reservoir dredging or power plant maintenance.

### Monitor, analyse and improve on the operation: production measurement package

Royal IHC's production measurement package provides operators of the OTTer® with live operational information based on the flow rate and material density, thus ensuring maximum production efficiency and allowing for improvement of the operation.

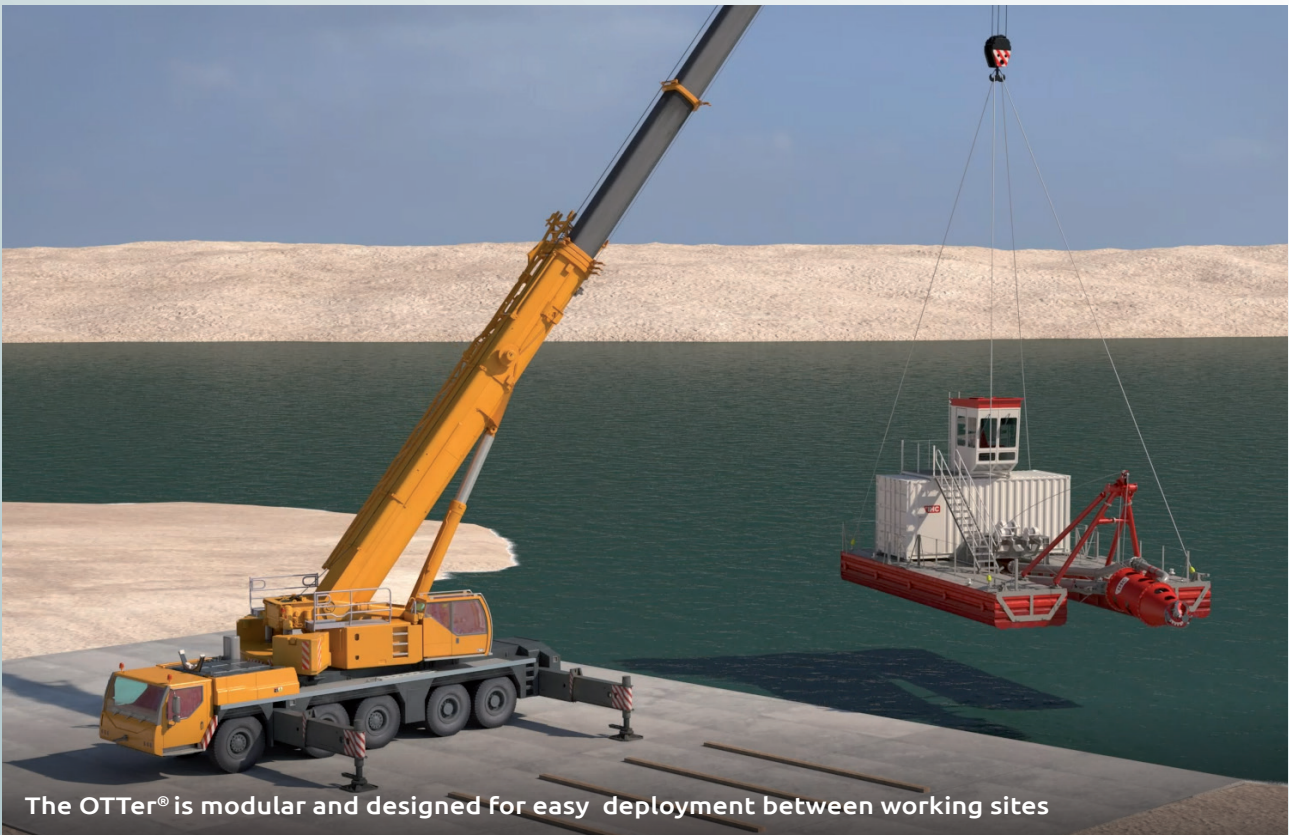
The system consists of electronic equipment that monitors, displays and logs (dredging) information such as:

- mixture density
- volumetric flow rate
- suction and discharge pressure
- dredging depth
- pump speed.

Resulting in less downtime and easier fault finding. All data can be stored and monitored remotely, allowing for remote off-site support.

### Main specifications OTTer®, vertical deployment type

	20V	24V	30V	35V
<b>Dredge installation</b>				
IHC OTTer®-Pump	200-95	240-150	300-250	350-375
Discharge pipe diameter	200mm (8")	250mm (10")	300mm (12")	350mm (14")
Max. flow rate	900m <sup>3</sup> /hr	1300m <sup>3</sup> /hr	2000m <sup>3</sup> /hr	2700m <sup>3</sup> /hr
Max. pump power	95kW	150kW	250kW	375kW
Max. working pressure	5 bar	5 bar	5 bar	5 bar
<b>Dimensions</b>				
Length overall (OTTer®-Pump raised)	14.5m	14.5m	17.4m	17.6m
Length over pontoons	11.4m	11.4m	14.4m	14.4
Beam overall	7.4m	7.4m	7.4m	7.4m
Pontoon depth	1.06m	1.06m	1.06m	1.06m
Dry mass	17.6 ton	19.7 ton	27.1 ton	31 ton
Draught	0.31m	0.34m	0.32m	0.36m
Total installed power	205kW	295kW	490kW	680kW
Max. dredging depth	50m	50m	50m	50m
<b>Rigging</b>				
<i>Hoisting winch (hydraulic)</i>				
Line pull, first layer	55kN	55kN	110kN	110kN
Max. line speed	16m/min	16m/min	7m/min	7m/min
<i>Mooring winches</i>				
Line pull, first layer	30kN	30kN	30kN	30kN
Max. line speed	12m/min	12m/min	12m/min	12m/min



The OTTer® is modular and designed for easy deployment between working sites

Main specifications OTTer®, vertical deployment type	20H	24H
<b>Dredge installation</b>		
IHC OTTer®-Pump	200-95	240-150
Discharge pipe diameter	200mm (8")	250mm (10")
Max. pump power	95kW	150kW
Max. working pressure	5 bar	5 bar
Max. cutter power	21kW	25kW
<b>Dimensions</b>		
Length overall (OTTer®-Pump raised)	16m	16.3m
Length over pontoons	11.4m	11.4m
Beam overall	7.4m	7.4m
Pontoon depth	1.06m	1.06m
Dry mass	18.4 ton	19.8 ton
Draught	0.33m	0.34m
Total installed power	205kW	295kW
Max. dredging depth	10m	10.5m
<b>Rigging</b>		
<i>Hoisting winch (hydraulic)</i>		
Line pull, first layer	55kN	55kN
Max. line speed	16m/min	16m/min
<i>Mooring winches</i>		
Line pull, first layer	30kN	30kN
Max. line speed	12m/min	12m/min

Want to know what the opportunities are for your operation? Please get in touch with IHC Mining