

Royal IHC trail units from barge to TSHD

With Royal IHC's trail units, dredging and construction companies can easily transform a simple barge into a trailing suction hopper dredger (TSHD) or stationary (hopper) dredger. It is a straightforward and cost-effective way to create additional dredging capacity, but with a lower investment, compared to a newly built TSHD.

The vessels can then be used for harbour construction, channel maintenance, coastal protection, land reclamation and other dredging projects.

Benefits

- Short conversion/modification time
- Relatively low investment costs (compared to hopper dredger)
- Low transport/mobilisation costs.

A flexible solution

With its vast experience in designing and building dredging vessels and equipment, IHC is a reliable partner for the conversion of barges or cargo vessels into TSHDs. Such an installation delivers a range of benefits that enable owners to execute full-scale dredging projects, even at short notice and with a limited project duration.

- Excellent performance and high efficiency, owing to the state-of-the-art submerged dredge pump.
- Suitable for various soil types, from silt to (compact) sand and gravel.
- Removable/dismountable, ensuring a flexible project application.
- Can be transported by standard containers or by road providing fast mobilisation, even in remote locations.
- Future-proof design, with separate power generation unit and high-efficiency components for a low carbon footprint.
- Components subjected to wear are easily replaceable and made from highly wear-resistant materials. This ensures a long lifetime and reduced environmental impact.
- Reduced risk of breakdown by separation of wear and load bearing parts in the upper pipe.
- Suction pipe diameters: 400, 500 and 600mm.
- Dredging depth: up to 22m.

Conversions

Due to the standardised modular design of IHC's trail units, they can easily be installed on existing barges.

- Limited vessel modifications necessary (no inboard pump or sliding piece).
- No docking required.
- Applicable to various ship types, for example split and flat barges, and cargo vessels.
- Plug-and-play installation at generic yards and quaysides. No specific knowledge of dredging installation required.

Technical specifications

The installation consists of:

- complete suction pipe, with submerged dredge pump and draghead
- suction pipe deck connection
- trunnion gantry with winch
- pump gantry with winch

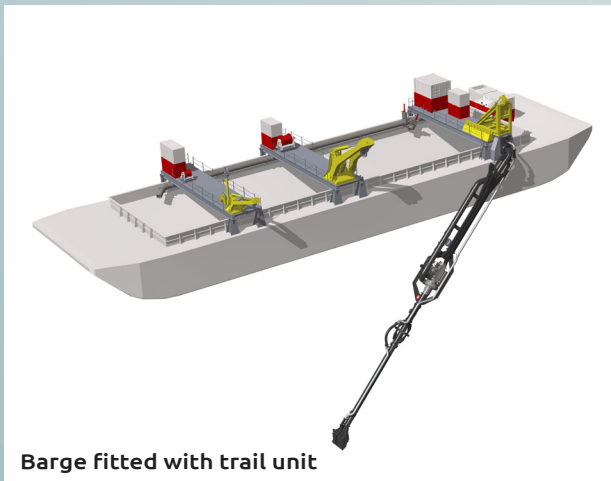
- draghead gantry with winch
- power generation and control units for winches, cylinders and the pump.

Optional components:

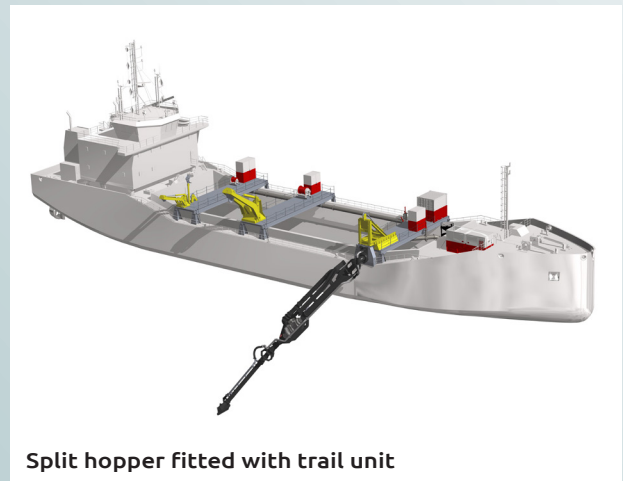
- loading pipe with various loading points and low mixture overboard discharge
- swell compensator
- overflow
- jet water pumps
- Jet water monitors.

The dredging process is controlled from the wheelhouse by the:

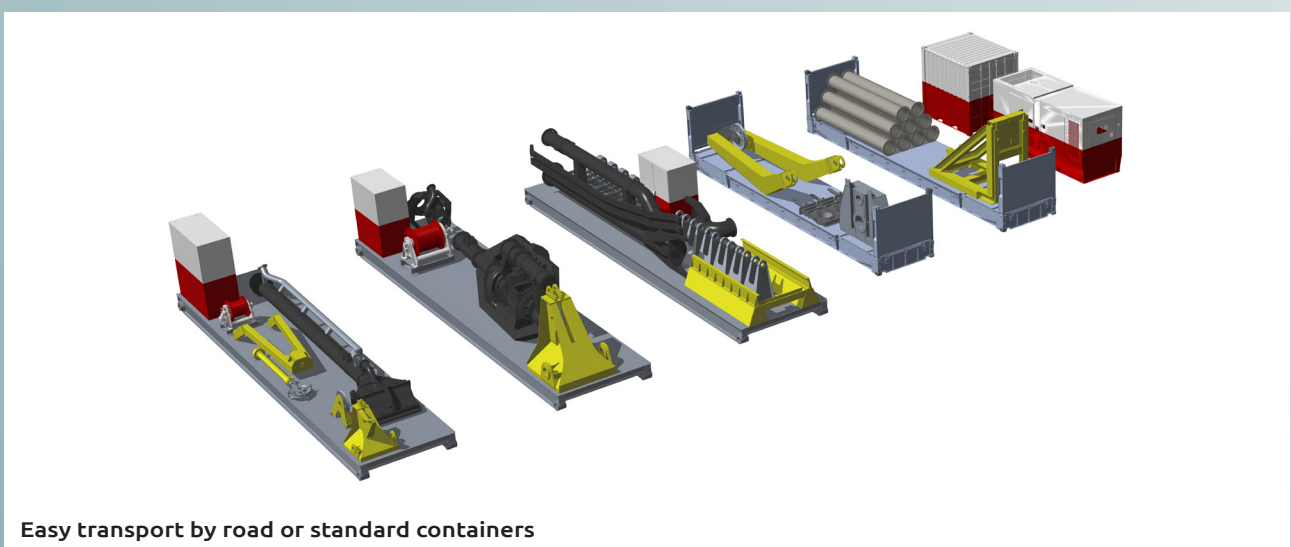
- dredge pump control
- movement of the suction pipe and gantries
- suction pipe position indicator
- dredge pump vacuum indicator.



Barge fitted with trail unit



Split hopper fitted with trail unit



Easy transport by road or standard containers