



# FLINTSTONE

Tideway's brand-new fallpipe rockdumping vessel for the next generation

**O**n April 28th the new fallpipe rockdumping vessel 'Flintstone' was launched in Singapore. The Flintstone is built for Tideway, a Dutch offshore specialist in the oil and gas industry. Tideway is a subsidiary of Belgium's Dredging, Environmental and Marine Engineering (DEME) Group.

The activities of Tideway consist of dredging and construction of landfalls for oil and gas pipelines, protecting and stabilising oil and gas pipelines by very accurate rock placement at very large water depths. Reaching new water depth records becomes more and more important for oil and gas companies in their search of other new locations with more and alternative energy sources.

## Fallpipe vessels

A fallpipe vessel is a very specialized ship consisting of a hold in which graded rock is stocked. The rock material is placed at an exact location on pipelines or the sea bottom through a fallpipe. At the lower end of the fallpipe a Remote

Operated Vehicle (ROV) is fixed. This ROV is operated from the deck and controls the rock placement in three dimensions. Offshore rock placement is applied mostly to stabilize and protect pipelines, flowlines and (power) cables.

## Flintstone, a unique vessel

The Flintstone is a unique vessel because it is able to place rocks up to a water depth of 2,000 meter, thanks to highly sophisticated state-of-the-art equipment. Before the existence of the





The Flintstone is built under Lloyds Environmental Protection Code, which means amongst others the full implementation of energy-saving measures and the limitation of NOx to the absolute minimum.

### The shipyard

The builder of the Flintstone is Sembawang Shipyard in Singapore, which was chosen for her quality, delivery time and competitive pricing. The construction costs amount

115 million Euro and so far there are no injuries amongst the workers, who worked 2.5 million hours in total on the vessel.

### Subcontractors

The main subcontractors of the Flintstone are Huisman, Seatools, Imtech, Rolls Royce, IHC Mining and Kongsberg.

### Future

According to DEME CEO, Alain Bernard, the recent trends in the market (including the increased price of crude oil) have made deep sea pipe laying better affordable. The search for deeper offshore oilfields in Brazil, Gulf of Mexico, West Africa and the arctic regions is offering new unseen opportunities for Tideway's fleet. The final delivery and the christening ceremony of the Flintstone

are expected for the first quarter of 2011. Her first assignment has already been secured with the Russian company Sevmash for the installation of scour protection around the Prirazlomnaya Platform in the Barents Sea southwest of Novaya Zemlya.

I: [www.tideway.nl](http://www.tideway.nl)

Flintstone the water depth record was 987 meter, which was achieved by Tideway's Rollingstone.

Besides this new exceptional depth that the Flintstone can reach, this vessel also has an Ice Class notation, which makes it employable under the most extreme conditions.

### Other features of the Flintstone

The vessel is equipped with Dynamic Positioning (DP 2) and can be used as a multi-purpose vessel (MPV), like for cable laying and deepsea mining. With this third fallpipe rockdumping vessel Tideway is more flexible at her future projects, there the Flintstone can be employed besides their current fleet of fallpipe rockdumping vessels: carrying capacity of 11,500 tons Rollingstone and 17,500 tons Seahorse.

#### Builder

Sembawang Shipyard, Singapore

#### Owner

Tideway

#### Principal particulars

Length overall .....154.6 m  
 Breadth moulded .....32.2 m  
 Draught loaded .....7.74 m  
 Loading capacity .....approx. 20,000 tons  
 Working depth .....max. 2,000 m

#### Propulsion

Propulsion thruster .....2 x 4,600 kW  
 Swing up thruster .....2 x 1,800 kW  
 Bow thruster .....2 x 900 kW  
 Cruising speed .....15 kts  
 Dynamic Positioning .....DP 2 with Auto Track, Auto Heading and Follow ROV Mode

#### Fallpipe, ROV & SDU

Fallpipe .....manufactured from high graded aluminum with innovative patented couplings, diameter: 650 mm  
 Remotely Operated Vehicle: .....active heave compensated ROV with state of the art survey equipment and 200 kW Mass Flow Excavation tool for removal of various seabed materials  
 Stone Dumping Unit (SDU): .....new design for safe and high workability

#### Environment & classification

Environment protection: .....Lloyd's Register issued Environment Protection notation for minimizing effect on environment, covering emissions from engines exhausts and discharges to sea and air  
 Classification: .....LR +100A1, DP(AA), +LMC, UMS, NAV-1 CAC3, EP (A,B,G,N,O,R,P) ICE CLASS 1C

