

## TUGDOCK

The world's first road-transportable floating dry dock



Buoyancy & Ballast

www.uniquegroup.com

### WHAT IS TUGDOCK? The Creation of Tugdock

### Tugdock is a new, patented modular floating drydock. It is less cost to buy, less cost to operate and far simpler to use than any present drydock system.



Tugdock's 'inventive step' is the installation of airbags into roadtransportable steel frames.

The frames are connected to provide a variety of deck sizes.

Outrigger pontoons or spud jacking units provide stability during the lift or launch.

Inflation and deflation of the airbags alters the buoyancy of the frames to submerge the deck and enable lifting and launching of vessels or floating structures.





E. buoyancyballast@uniquegroup.com W. www.uniquegroup.com



## WHY TUGDOCK? The Creation of Tugdock

"A while ago I overheard someone discussing the high cost of having to take a 700 tonne tug over 1500 kilometres for an essential drydocking. I thought, wouldn't it be great to find a way to lift the tug out of the water where it was?"



- Shane Carr, Inventor of Tugdock

"We take the dry dock to the vessel or floating structure, rather than the other way round."



"We have invented a product which will do just that, a world's first road-transportable floating dry dock." TUGDOCK COM FLOATING DRY DOCKS



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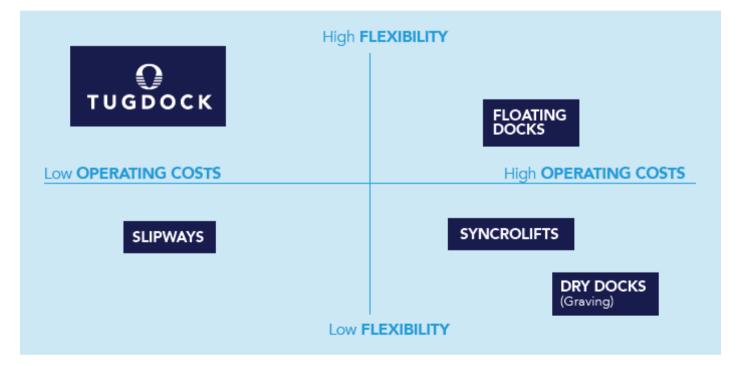
## WHAT ARE THE PRESENT ALTERNATIVES?

The Creation of Tugdock

All of the alternatives below are expensive to use, are few and far between, and costly to build and maintain. In almost all cases the vessels have to travel hundreds, and sometimes thousands, of miles to get to them, losing valuable working time and fuel.



Tugdock is a low cost, highly flexible drydocking solution which has none of the problems of the above.





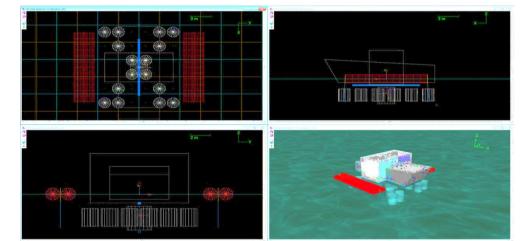
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# **DESIGN CODES**

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Tugdock is designed to DNV/GL Rules for Floating Drydocks.





Classification compliant with intact stability codes for dry docks and structures:

- DNV-OS-H101
- DNVGL-RU-FD





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## **TUGDOCK FEATURES**

The Creation of Tugdock

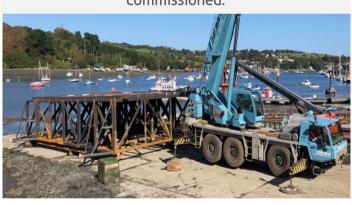
Transportable as shipping containers for cost effective global delivery.



Frames are connected together to provide a variety of deck sizes.



Quickly and easily assembled and commissioned.



Lifts out of the water with optional jacking spud legs for service and maintenance.



Stability during the lift is provided with pontoons or jack up system.

Uses high volume, low pressure air. No need for water ballasting or pump systems.







E. buoyancyballast@uniquegroup.com W. www.uniquegroup.com



## **GLOBAL PARTNERSHIP AGREEMENT**

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Tugdock has signed a partnership agreement with Unique Seaflex, a global leader in Buoyancy and Ballasting equipment and part of the Unique Group, one of the world's leading integrated subsea and offshore solution providers



Shane Carr, Managing Director Tugdock (L) & Graham Brading, Director Unique Group (R) shake hands on the partnership in front of a 110t Water Weights bag at the Cowes, UK plant where Tugdock's integrated Seaflex buoyancy modules have been designed and will be manufactured.

Exclusive global distribution agreement across four continents.

Tugdock's modular floating dry docks is offered for rental or purchase via Unique Group's global network





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### **TUGDOCK vs TRADITIONAL FLOATING DRYDOCKS**

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# What advantage does the Tugdock have over existing sea water ballasted floating drydocks?

For the same deck area, Tugdock:

- Is less than half the weight;
- Is half the cost;
- Is ISO shipping container transportable;
- No need for electrical systems as it operates by air compressor alone;
- Is easily expandable to give a greater deck width or length or both;
- Increase lift capacity by simply adding more air bags;
- No siltation, confined tank entry, pump maintenance or other water ballast issues
- Has **interchangeable decks** to accept a variety of different point load requirements, e.g. from foot traffic to a heavy cranage;
- Has a **longer and far less costly design life** due to dramatically less maintenance requirements;
- Air bags can be hired or purchased locally wherever needed through our partnership with the world's largest buoyancy bag hire company, Unique Seaflex;
- Is far simpler to use than existing dry docks.



### STANDARD FLOATING DRY DOCK

TUGDOCK



E. buoyancyballast@uniquegroup.com W. www.uniquegroup.com



## **EXAMPLES OF TUGDOCK VERSATILITY**

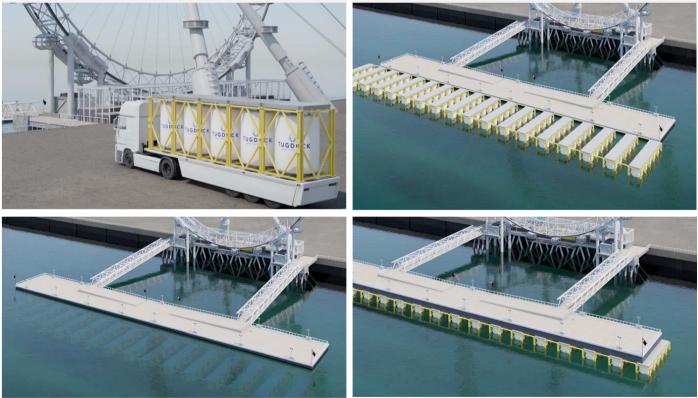
The Creation of Tugdock



This is the London Eye Riverbus pontoon.

This and many other similar floating structures worldwide are difficult to dry dock for inspection and maintenance. TUGDOCK can be used to lift these pontoons out of the water in situ, alleviating the need for long tows to distant (and now mostly closed down) dry docks.

TUGDOCK frames arrive by road TUGDOCK frames are assembled alongside the pontoon.



Airbag bouyancy is adjusted and TUGDOCK is manouevered under the pontoon.

TUGDOCK's airbag bouyancy is increased and the pontoon is lifted up.



E. buoyancyballast@uniquegroup.com W. www.uniquegroup.com







#### UNIQUE GROUP OFFICES

MIDDLE EAST Unique Group FZC Sharjah T. +971 6 5130333 E. info@uniquegroup.com

#### Unique System Tr & Eng WLL Doha T. +974 44147079 E. qatarsales@uniquegroup.com

Muraba Alsahra Trading LLC Riyadh and Al Khobar T. +966 13 802 0614

E. ksasales@uniquegroup.com

ASIA PACIFIC Unique System (SEA) Pte Ltd Singapore T. +65 9712 7732 E. fareastsales@uniquegroup.com

Unique Hydrographic Systems Pvt Ltd Navi Mumbai and Vadodara T. +91 22 27619939/40/41/75 E. indiasales@uniquegroup.com

AFRICA Unique Hydra (Pty) Ltd T. +27 21 835 7900 E. sasales@uniquegroup.com

USA Unique System Inc Houston, Texas T. +1 713 937 6193 E. usasales@uniquegroup.com

Water Weights Inc Suwanee GA 30024 T. +1 678 730 4180 E. marketing@waterweights.com

Water Weights Inc Montclair CA 91763 T. +1 909 626 8316 E. marketing@waterweights.com EUROPE

Unique Seaflex Ltd Cowes, Isle of Wight T. +44 1983 290 525 E. buoyancyballast@uniquegroup.com

Unique System (UK) Ltd Water Weights Ltd Aberdeen, Scotland T. +44 1224 723 742 E. uksales@uniquegroup.com

Unique System BV T. +31 850 513 700 Water Weights BV T. +31 850 513 750 Werkendam E. info.wwnl@uniquegroup.com

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buoyancyballast@uniquegroup.com

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