## UNLOCKING SMARTER ROUTES FOR HEAVY CARGO

B0000-0-0

6

MAMMOET TERMINAL CRANE (MTC 15)



1



# MAMMOET TERMINAL CRANE (MTC 15)

The Mammoet Terminal Crane, MTC 15, quickly and simply turns any quay into a heavy lifting terminal, unlocking faster and more efficient routes for heavy cargo.



Easily mobilized, assembled and disassembled, the MTC 15 provides a simple yet effective way to lift heavy loads in remote locations without the need for ground reinforcement works.

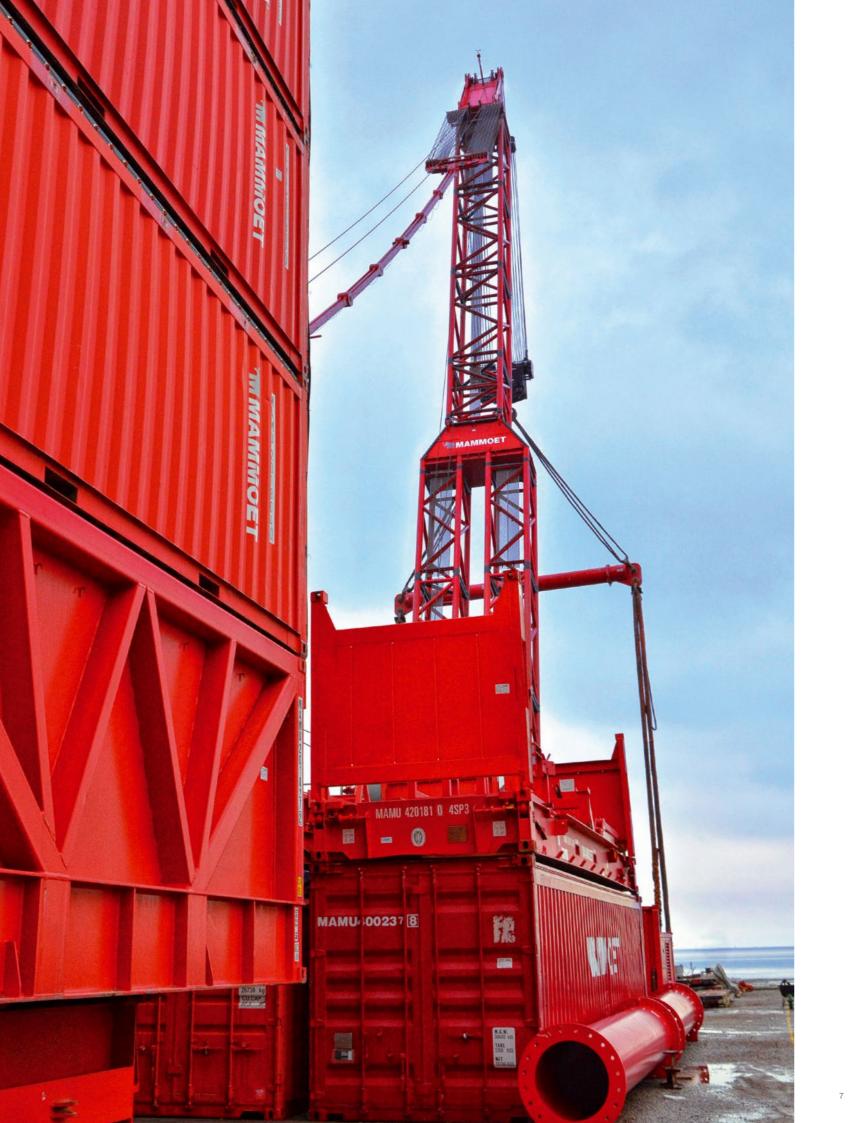
> Heavy industries are crossing new frontiers every day to satisfy the demand for more energy, materials and infrastructure across the planet. Opening up opportunities in new markets and supporting the development of new communities mean more remote locations need to be accessed. This adds to

the logistical challenges when constructing new power plants, mining facilities and developing oil and gas facilities. These can be particularly difficult in places where the infrastructure for mobilizing heavy loads and materials may be limited or non-existent.

For many construction and turnaround projects the most suitable way to deliver heavy components is to transport them by water. However, often those ports or watersides that are logistically optimal are not suited for heavy lifting activities, leading

to longer and more expensive delivery routes. Mammoet has used its expertise in the logistics of oversized and heavy objects to develop a new type of crane that overcomes this bottleneck: the Mammoet Terminal Crane, MTC 15.

## The MTC 15 can quickly and simply turn any quay into a heavy lifting terminal.



The MTC 15 can quickly and simply turn any quay into a heavy lifting terminal providing a new way for the transfer of

### **ADVANTAGES**

- 1 Lifting capacity up to 600t
- 2 Low ground bearing pressure
- 3 Ease of operation
- 4 Fast mobilization and demobilization
- 5 Simple ballasting
- 6 Remotely operated
- 7 Safe and reliable

Easily shipped and erected in just seven days, the MTC 15 is ideal for temporary use.

heavy components at waterside locations. This may give any port a leading edge in an increasingly demanding market.



## The MTC 15's key benefits

#### LIFTING CAPACITY UP TO 600 METRIC TONS

In addition to its maximum lifting capacity up to 600 metric tons, it has a maximum load moment of 15,000 ton meter at a radius of up to 41 meters, comparable to a 1,250 metric ton crawler crane. No other heavy lifting device on the market combines the MTC 15's features with such high lifting capacity. It also provides quick lifting and boom movements, with a lifting speed of up to 1.6m/min delivered by four 22 metric ton winches.

#### SAFE AND RELIABLE

All the vehicles in Mammoet's fleet meet stringent international safety standards and are subject to strict maintenance programs for maximum safety and reliability. The MTC 15 features typical crane control systems such as angle sensors, boom stops and a ballast indication system all of which contribute to a safety system which warns the operator if there are problems detected and will stop the operation before safety limits are exceeded.

#### LOW GROUND BEARING PRESSURE

The specially designed combination of features makes it ideal for small quays and other waterside locations where traditional heavy lifting equipment cannot operate. It has a low ground-bearing pressure of 10 metric tons per m<sup>2</sup> which can be further reduced with additional load spreaders. Loading and offloading heavy project cargo becomes possible without the need to reinforce the quay.

#### REMOTELY OPERATED

The MTC 15 is very easy to operate; its control console is operated remotely, allowing the operator to maneuver the crane from the best possible viewing position. Once assembled, the crane requires only one operator.

## 5 SIMPLE BALLASTING

The MTC 15's design solves another potential logistics problem; there is no need for the costly transport of ballast to the site. Using water as ballast, readily available at the type of site where it will be deployed, up to twenty containers can be filled to provide 520 metric tons of ballast material. The containers are filled with bags, just like those used to ship wine in bulk. These are filled with water at the site and use a simple counterweight system to signal if ballast levels need to be checked.

#### 3 EASE OF OPERATION

Easily shipped to any port capable of receiving containers, then assembled and erected in just seven days, the MTC 15 is ideal for temporary use. There is no need for complicated transport solutions and assembly requires only one 80 metric ton crane. Once it is in place, cargo can be offloaded quickly without a requirement for large crawler cranes or a heavy-lift ship. This makes the logistics simpler, safer and more sustainable, saving clients' time and money.

#### 4 FAST MOBILIZATION AND DEMOBILIZATION

The containerization of the MTC 15 means it can be easily delivered to both sea ports and up river locations. This allows for fast mobilization and eliminates many problems, such as the need for reinforced roads or bridges, encountered when delivering other heavy lifting equipment, e.g. a crawler crane, to a remote site.



## MTC 15 CONFIGURATIONS

Working in places only accessible via 'the path less travelled', throws up many challenges for transporting heavy cargo and Mammoet loves a challenge. With the MTC 15, we have created a unique piece of heavy lifting equipment which can open up better routes for moving heavy loads by offering the perfect temporary solution for occasional or one-off activities.

> The MTC 15 offers 600t of off-loading capacity at 25m and has a load moment of 15,000tm. The four 22t winches can raise objects with a lifting speed up to 1.6 m/ min, while the ground bearing pressure is relatively low at 10t/m2. Assembly can be done in just seven days and only requires an 80t mobile crane. Once it has been assembled, it only requires a single operator.

Using the MTC 15 limits the environmental impacts of a project by using materials on site, such as water or sand for ballast. The MTC 15 has also been constructed reusing steel from previous cranes, reducing its environmental footprint. MTC 15 40-28-600

Max. lifting capacity	600 t
Radius (R)	6.3–36 m
Back mast length (LBM)	27.8 m
Main boom length (LMB)	40.5 m
Main boom angle (α)	27.1–82.5 °
Max. hoisting height (HH)	
@ minimum radius	34.5 m
@ maximum radius	12.5 m
Max. hoisting depth (HD)	
@ minimum radius	0 m
@ maximum radius	–23 m
Max. ground bearing pressure <sup>1</sup>	
@ counterweight arrangement	8 t/m <sup>2</sup>
@ base frame arrangement	17 t/m <sup>2</sup>
No. of ballast containers	20
Max. weight of the ballast containers	520 t
Ballast material	Water or sand
Operational wind	≤ 12 m/s
Auxiliary crane	80 t mobile crane

<sup>1</sup> Ground bearing pressure can be reduced with more load spreaders. The content in this document is mentioned for reference use only. Values may differ from current data. Always contact Mammoet for current project calculations.

MTC 15 46-38-600	MTC 15 45-29-600	MTC 15 45-39-600
600 t	600 t	600 t
7.1–41.1 m	6.8–41 m	6.8–41 m
38.6 m	28.6 m	39.4 m
46.2 m	45.2 m	45.2 m
27–82.5 °	26.1–82.6 °	26.1–82.6 °
40 m	41.5 m	41.5 m
15 m	16 m	16 m
4,5 m	0 m	0 m
–20 m	–26 m	–26 m
8 t/m²	13 t/m²	13 t/m <sup>2</sup>
17 t/m <sup>2</sup>	18 t/m²	18 t/m <sup>2</sup>
20	20	20
520 t	502 t	502 t
Water or sand	Water or sand	Water or sand
≤ 12 m/s	≤ 12 m/s	≤ 12 m/s
80 t mobile crane	80 t mobile crane	80 t mobile crane
		t = metric tons



## THE BIGGEST THING WE MOVE IS TIME



At Mammoet, we provide solutions for lifting, transporting, installing and decommissioning large and heavy structures.

We could talk for hours about the equipment we use, and about how sophisticated and powerful it is. But all that power means nothing without a plan. In fact, we believe our business isn't about size. It's about: time.

Uptime. Turnaround time. Time to market. To our customers, time is the currency that matters most. That's why we strive to bring their deadlines forward. It's an integrated, daily effort shared by everyone at Mammoet.

That's how we move time for our customers. So time isn't set in concrete. Or forged in steel. It's not even all that heavy. And yet, it's the biggest thing we can move for you.

Discover more on www.mammoet.com



#### Would you like to get in touch? Please find your nearest Mammoet regional head office here.



