# **Anthem** of the **Seas**<sup>sm</sup> conveyance facts

The river conveyance is a unique process for ships built at the Meyer Werft Shipyard in Papenburg, Germany. Unconventionally situated inland to avoid impact from storms in the North Seas, Meyer Werft has been sailing ships down the River Ems 32 kilometers to sea since 1795.



# CONVEYANCE TAKES **10 HOURS** to sail 32 KILOMETERS down the River Ems,

the same amount of time it takes to fly from New York to Athens, Greece The time will vary based on a variety of conditions leaving only an exact window of time for launch onto the River Ems

THE QUANTUM CLASS ARE ONE OF THE **LARGEST SHIPS** TO LEAVE MEYER WERFT AND TRAVEL THROUGH THE RIVER EMS AT 168,666 GROSS REGISTERED TONS



There are only a **few centimeters** of clearance on either side of the ship as it travels from the shipyard to the channel

## 4 BRIDGES ARE EITHER OPENED OR REMOVED,



AND POWER IS CUTOFF TO POWER LINES AT 3 LOCATIONS CAUSING THEM TO SHRINK AND RISE UP SO THE SHIP CAN PASS WITH AS LITTLE CLEARANCE AS **1.8 M** 

## THOUSANDS OF SPECTATORS

come out to watch the conveyances along the River Ems THE SHIP PASSES THROUGH

## AND RAILWAY BRIDGES

USING 3 GPS DEVICES AND 4 PILOTS TO ENSURE SAFE PASSAGE In order to have a successful CONVEYANCE

the following conditions must be met:

wind speed = 20 knots or less

FULL or new moon

#### TIDAL BARRIERS

must be closed in order to ensure enough depth remains under the ship's hull

#### THE SHIP MUST MANEUVER BACKWARDS DOWN THE RIVER IN ORDER TO OPTIMIZE CONTROL

This protects the azipods / propellers since the rear of the ship stays in the center of the river when maneuvering in reverse

TUGBOATS EACH WITH **9,000** HORSEPOWER ARE REQUIRED TO GUIDE THE SHIP

THE SHIP MOVES AT APPROXIMATELY **2-3 KNOTS** DOWN RIVER, THE SAME NORMAL WALKING PACE AS A 40-YEAR OLD MAN





## **Anthem** of the **Seas**<sup>M</sup> CONVEYANCE FACTS

The river conveyance is a unique process for ships built at the Meyer Werft Shipyard in Papenburg, Germany. Unconventionally situated inland to avoid impact from storms in the North Seas, Meyer Werft has been sailing ships down the River Ems 32 kilometers to sea since 1795.

**River Ems-barrier** 

Leer

Weener

**MEYER WERFT** 

RHEIDERLAND

THE QUANTUM CLASS ARE ONE OF THE LARGEST SHIPS TO LEAVE MEYER WERFT AND TRAVEL THROUGH THE RIVER EMS AT **168,666 GROSS REGISTERED TONS** 







of clearance on either side of the ship as it travels from the shipyard to the channel

#### **4 BRIDGES ARE EITHER** Papenburg **OPENED OR REMOVED,**



AND POWER IS CUTOFF TO POWER LINES **AT 3 LOCATIONS CAUSING THEM TO** SHRINK AND RISE UP SO THE SHIP **CAN PASS WITH AS LITTLE** CLEARANCE AS 1.8 M

## THOUSANDS **OF SPECTATORS**

come out to watch the conveyances along the River Ems

# **CONVEYANCE TAKES 10 HOURS** to sail 32 KILOMETERS down the River Ems,

the same amount of time it takes to fly from New York to Athens, Greece

The time will vary based on a variety of conditions leaving only an exact window of time for launch onto the River Ems



Emden

DOLLART

THE SHIP **PASSES THROUGH** 

**RAILWAY BRIDGES USING 3 GPS DEVICES AND** 

**4 PILOTS TO ENSURE** SAFE PASSAGE

## In order to have a successful CONVEYANCE

the following conditions must be met:

wind speed = knots or less

FULI

or new

moon

## THE SHIP MUST MANEUVER BACKWARDS **DOWN THE RIVER IN ORDER TO OPTIMIZE CONTROL**

This protects the azipods / propellers since the rear of the ship stays in the center of the river when maneuvering in reverse

### **TIDAL BARRIERS**

must be closed in order to ensure enough depth remains under the ship's hull

TUGBOATS EACH WITH 9,000 HORSEPOWER **ARE REQUIRED TO GUIDE THE SHIP** 

THE SHIP MOVES AT APPROXIMATELY 2-3 KNOTS DOWN RIVER. THE SAME NORMAL WALKING PACE AS A 40-YEAR OLD MAN