The world’s largest ship

The Triple-E is a giant. At 400 metres in length and with a capacity for 18,000 twenty-foot containers (TEU), it is the new benchmark for size in the shipping industry.

Why is Maersk Line building the biggest vessel, again?

Its enormous capacity enables Maersk Line to move the greatest number of containers possible for its customers in the most energy efficient way and with the smallest CO₂ footprint. And combined with an energy saving propulsion system, its size is a major factor in its industry best efficiency and performance.

But the Triple-E isn’t just the largest vessel of any kind in operation today; it is actually the longest and widest container vessel possible based on port restrictions. And the reality is that the visible dimensions of the ship—only four metres longer and three metres wider than Emma Mærsk, the world’s largest vessel in operation—do not fully convey its size.

The Triple-E’s enormity is actually in its bulk. Through feats of engineering, the Triple-E’s vastly expanded inside cavity gives it a capacity 16 percent greater than Emma (equivalent to 2,500 containers), despite relatively little change in the length and width.

How? Unlike Emma Maersk’s more typical V-shaped hull which limits container capacity towards the bottom of the ‘V’ in the cargo holds, the hull of the Triple-E is more like a U-shape. An additional row of containers was added to the Triple-E as well, giving it 23 rows across its width, compared to Emma’s 22. The more spacious hull and extra row provides additional capacity for 1,500 containers.

Additional container space has been created in the vessel by moving the navigation bridge and accommodation 5 bays forward and the engine room and chimney 6 bays back in what is called a ‘two-island’ design. With the more forward navigation bridge, containers can be stacked higher in front of the bridge (approximately 250 more) without losing visibility. And approximately 750 more containers fill the space behind the bridge above deck and below deck using the space created by the engine room’s position further to the back of the vessel.

FACTS: Triple-E – the world’s largest ship

• At 400 metres long the Triple-E ships on order by Maersk Line are larger than any vessel of any kind currently on the water. It’s capacity of 18,000 TEU is a significant increase of the current 15,500 TEU capacity record held by the Emma Maersk class

• The largest ships currently sailing the world’s oceans are the Emma Maersk class vessels which are 396 metres long and also owned by Maersk Line

• Other known large ships include the super tanker Berge Emperor (380 metres), the cruise ship Allure of the Seas (361 metres), and the war ship USS Enterprise (341 metres)

• The largest ship ever built was the super tanker Knock Nevis (458 metres). The ship is no longer in service and is being scrapped

• The height (above baseline) of Triple-E is 73 metres which is slightly higher than Allure of the Seas (72 metres), which currently is considered the highest

• Other principal measures of the Triple-E include:
  • Beam (breadth): 59 metres
  • Draught: 14.5 metres
  • Deadweight: 165,000 metric tonnes
  • Reefer container capacity: 600
  • Top speed: 23 knots

• The normal operation of the vessel will be with a crew of 19 seafarers. It is, however, possible to operate the giant with a crew of 13. If needed, the vessel can accommodate 34 persons in total.