GE Enters the Container Ship Industry, Equipping Maersk Line’s 2nd Generation Triple-E Vessels with Technology, Improving Fuel Efficiency and Operational Flexibility

- The Contract Marks GE’s Marine Solutions’ Entry into the Container Ship Industry
- GE Will Provide Maersk Line with Its New Power Take Off/Power Take In (PTO/PTI) Technology, Increasing Fuel Efficiency and Operational Flexibility
- GE’s Marine Solutions Provides Solutions across a Wide Range of Marine Sectors and Has Some of the Broadest Capabilities of Any Marine Systems Provider

PARIS—May 09, 2016—Today, GE’s Marine Solutions (NYSE: GE) announces the expansion of its offering with the signing of a key contract to provide the latest in auxiliary electric systems to Maersk Line, the world’s leading container ship operator. GE’s Power Take Off/Power Take In (PTO/PTI) technology consists of two drives, two induction motors and a power management system. It is a smart solution that provides excess power on demand while reducing fuel consumption. When not being used to propel the vessel, the PTO/PTI technology uses the surplus energy to power onboard systems and equipment.

GE’s Marine Solutions’ entry into the container ship industry also marks its intention of contributing to the technological advancement of the industry at large. The global container ship industry continues to grow at a steady rate, as around 90 percent of the world’s trade is carried across the sea. International shipping connects countries, markets, businesses and people, allowing them to buy and sell goods on a scale not previously possible. As consumers, we have become used to seeing goods from all parts of the globe readily available in the stores we visit.

The PTO/PTI solution provided to Maersk Line for 11, 2nd generation Triple-E container vessels with a capacity of 19,630 TEU, is comprised of a shaft generator motor installed between the main engine and the propeller. It acts as either a generator or a booster to generate electricity from slow streaming speeds all the way up to the design speed of the vessel. The PTO/PTI technology will be installed onboard vessels built by the DSME shipyard in Korea, with which GE has had a long-standing relationship.

Commenting on GE’s role in the project, a spokesperson from DSME said: “Our relationship with GE has been enduring and fruitful. We admire GE’s professionalism and ingenuity and are once again delighted to partner with them on this key project.”

The PTO/PTI technology harnesses the mechanical energy of the vessel’s drive shaft to convert it into electrical energy. This excess energy is then directed to onboard systems when it is required, which diminishes the need to burn fuel to power these systems. The result in fuel savings is significant, especially when coupled with improved operational flexibility. Unlike its competitors, the electric machine is equipped with induction motors instead of synchronous motors. By removing transformers, it offers a simpler design and therefore reduces the complexity of the system, making it more reliable and requiring less CAPEX. The arrangement of induction motors reduces the frequency and extent of

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1 International Maritime Organization (IMO)
maintenance, and combined with the system’s fuel saving characteristics, bringing down the operational expenses for customers.

Commenting on GE’s partnership with Maersk Line, Tim Schweikert, president & CEO, GE’s Marine Solutions said: “Based on our long legacy of engineering expertise and innovation, GE’s Marine Solutions continues to offer world-class capabilities in solutions that serve a wide range of marine segments. Having Maersk as a partner, our entry into the container ship industry could not be more impactful. GE is continuously investing and developing solutions for the marine industry, and with our PTO/PTI technology, we are reinforcing our intention of driving the industry forward.”

About GE

GE (NYSE: GE) is the world’s Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the “GE Store,” through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry. www.ge.com

About GE’s Marine Solutions

GE’s Marine Solutions is dedicated to power and propulsion systems for customers in the workboat, merchant, offshore and naval industries. Smart engineering coupled with software analytics, we provide customers with data-driven efficiency. Connecting the physical and digital worlds, GE helps power, propel, position and predict the marine industry for operational excellence. www.gemarinesolutions.com

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For more information, please contact:

Paul Floren, GE  
Power Conversion, Global Communication Leader  
+33 1 53 59 28 44  
+33 6 20 71 14 21  
paul.floren@ge.com

Wenlin Jin, GE  
Power Conversion, External Affairs  
+33 1 53 59 28 45  
+33 6 10 13 02 53  
wenlin.jin@ge.com