# LETHE

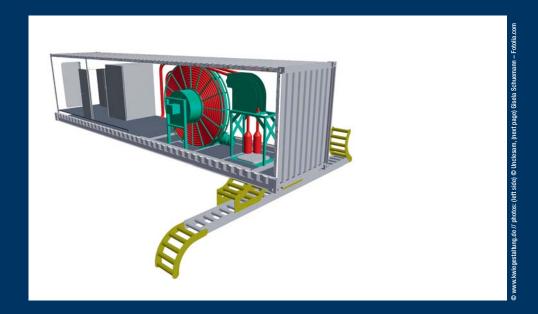
## shore power solutions



**Your Connection to the Future** 

### **AMPCon40-MS**

containerized system for HVSC shore power connection



### System benefits — AMPCon40-MS

- Variable positioning on board in midship, port or starboard positions
- ► Equipped for use in all climate zones thanks to complete insulation and air drying
- ► Robust cable guiding with low maintenance requirements
- ► Minimum cable length of 55m
- ► Easy and secure handling
- ► Manufactured according to international standards (IEC/ISO/IEEE/80005-1)
- Possibility of overall system responsibility by cooperation with ABB

**LETHE** shore power solutions is a product of:

### **LETHE GmbH**

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# AMPCon40-MS

The on-shore power supply container for the entire width of the vessel



>> Amended and new regulations and requirements valid both today and in the future call for reduced emissions by vessels while docked at the berth. A simple and cost-efficient possibility to comply with the guidelines is the use of shore connection systems. These require a failsafe flexible solution to bridge the vessel/shore interface. With the aim of addressing this issue we developed the AMPCon40-MS containerized on-shore power supply system, drawing on over ten years of experience that we have in this field to provide a variable and economically viable 6,6 kV (HVSC) system.

The AMPCon40-MS on-shore power supply system that is now available is the result of the consistent development and improvement as well as the optimization of all individual components. In this context, increased attention was paid to requirements from the market and to their systematic implementation. One example of this is the option to position the unit in the midship area as well as on port or starboard side. This variability provides for compatibility with majority of the vessels in a fleet. In addition, these features are supported by a robust

cable guiding system with low maintenance requirements which can be used by the crew members to securely route a minimum of 55m of cable over the side of the vessel to the shore.

The optimized control system, which also ensures the tensioning function, in combination with the entirety of the components, allows for a "HV Shore Connection System (HVSC)" produced in accordance with international standards.

By gaining the company ABB as a system partner, who has overall responsibility for the system, if requested by the customer, we are able to offer a complete package of container units and any necessary adaptations to the vessel. <<

Extract from the new regulations by the State of California FINAL REGULATION ORDER AIRBORNE TOXIC CONTROL MEASURE FOR AUXILIARY DIESEL ENGINES OPERATED ON OCEAN-GOING VESSELS AT-BERTH IN A CALIFORNIA PORT Section 93118.3, title 17, chapter 1, subchapter 7.5, California Code of Regulations (CCR: Within the scope of CARB 93118.3 (T17/ C1/ SC7.5) requirements:

#### (A) January, 2014 Requirements

- 1. At least 50 percent of the fleet's visits to the port shall meet the onboard auxiliary diesel engine operational time limits in subsection (d)(1)(D); and
- 2. The fleet's onboard auxiliary-diesel-engine power generation while docked at the berth shall be reduced by at least 50 percent from the fleet's baseline power generation.
- (B) 2017 Requirements is 70%
- (C) 2020 Requirements is 80%