

**Media Release**

**Port Equipment Manufacturers Association publishes information papers on automation, lighting technologies, and shore power**

**June 15, 2016 – In the latest additions to its growing body of published material, the** [**Port Equipment Manufacturers Association**](http://www.pema.org/)**, (PEMA) – the global industry body for port equipment and technology – has published three information papers that explore key issues for port and terminal operations: automation, lighting technologies, and shore power connection.**

The first of these three papers, entitled Container Terminal Automation, provides an overview of adoption trends and current technologies in the global container terminal automation sector. The paper, produced by PEMA’s Automation & Control Technologies Committee, describes the crucial equipment and technology components of automated container terminal operations, and outlines the various approaches that have already been adopted and those currently under consideration.

Details considered include Capex and Opex benchmarks, implementation guidelines and delivery lead times. The paper also features a detailed list of existing and planned automated installations. It is authored by leading figures in the automation field drawn from ABB, Konecranes, Kalmar, Siemens, Kuenz, ISL Applications, Moffat & Nichol, Navis, TBA, BTG and TMEIC, all of which are PEMA members.

The two remaining information papers have been prepared by the association’s Safety & Environment Committee. The shore power paper provides a summary of current regulatory developments, including the ISO/IEC/IEEE80005-1 standard that defines, (but does not regulate), shore side electrical connection for larger vessels, and which entered into effect in 2012.

The paper includes detail on best practice regarding electrical shore connection of ships in port, and presents a number of real-world examples of the introduction of shore power at container handling, RO/RO and RO/ROPAX ferry, and cruise ship applications around the world.

The report is written by Loréne Grandidier, Cavotec and vice chair of the PEMA Safety & Environment Committee; Diederik Lenssens, WCS Group; Jana Blechschmidt, Prysmian Group; Luciano Corbetta, Cavotec; M. Tiling, Igus; S. Caballero, Schneider Electric; G. Fischer, Siemens; and Knut Marquart, Siemens.

Finally, Lighting Technologies in Ports and Terminals presents an independent look at conventional and emerging lighting techniques used in ports and terminals. It covers the advantages and limitations of conventional lighting technologies, and highlights the advances made in contemporary lighting techniques such as Light Emitting Diodes, (LED), and briefly considers the future and the emergence of Light Emitting Plasma (LEP) alternatives.

The paper addresses a number of key areas that are relevant when considering the most effective lighting solutions for ports and terminals, such as warm-up periods, programming, dimming, rendering, (and how this is determined by the ‘warmth’ or otherwise of a given lamp type), return on investment, downtime, maintenance, service life, and disposal.

The paper was prepared by Melissa Stephany, Phoenix Products Company Inc., as its main author, together with Ryan Hertel, Phoenix Terminal Solutions. Phoenix is a Member of PEMA and the PEMA Safety & Environment Committee.

These latter two information papers are part of a series of information papers developed by the Safety & Environment Committee to inform readers about the design and use of equipment and technology to improve the safety of people, equipment and cargo, as well as enhance the environmental performance of port and terminal operations.

PEMA regularly publishes information papers, independent research reports, and technology briefings intended to inform decision makers in the ports and terminals sector about the design, manufacture and operation of port equipment and technologies worldwide. And while the association does not – and may not – advocate specific technologies, it does seek to contribute to industry awareness of issues and options that ports and terminals may wish to consider. Topics recently covered include container weighing, crane fatigue, container yard automation, and laser technologies. All publications are available for free download at [pema.org/publications/](http://www.pema.org/publications/).

Separately, PEMA is preparing for another active TOC Europe, (June 14-16, 2016 in Hamburg), which will include the announcement of the winner of the PEMA Student Challenge, as well as a fresh round of TECH TOC seminars, during which leading industry figures discuss the key challenges and issues facing the ports and terminals sector. For details of PEMA events at TOC Europe 2016, visit: [pema.org/pema-events](http://pema.org/pema-events).

PEMA will host a reception on stand d112 at 16:00 CET and the 4th student challenge at 12:00 CET tomorrow (Thursday 16th June 2016).

**ENDS**

**About PEMA**

Founded in 2004, PEMA provides a forum and public voice for the global port equipment and technology sectors. The Association has seen strong growth in recent years, and now has more than 100 member companies representing all facets of the industry, including crane, equipment and component manufacturers; automation, software and technology providers; consultants and other experts. Find out more at: [pema.org](http://www.pema.org/).

For more information on this media release, please contact Cassandra Kelly, PEMA Head of Administration at [cassandra.kelly@pema.org](mailto:cassandra.kelly@pema.org).