








**There's a Marine Terminal Facility in a port half way around the globe that just solved their issues with conventional piers, marine loading arms, mooring equipment, and fendering.**

***We're on board.***

## **Marine Terminals**













### **Where Carmagen Engineering Can Help**

Carmagen Engineering, Inc. can provide assistance with Marine Terminal Facilities:

-  Conventional piers and sea islands
-  Multi-buoy vessel moorings (MBM)
-  Single point/buoy moorings (SPM/SBM)
-  Marine loading arms
-  Marine cargo hoses (rubber and composite)
-  Mooring equipment
-  Berth fendering systems

### **Areas/Activities Which May Assist Your Operations**

Work activities related to the above facilities where our assistance would support your planning of new/upgraded facilities or operations of existing marine terminals:

-  Siting of new berths and selection of environmental design parameters
-  Defining requirements for new or upgraded berth facilities
-  Definition of berth facilities and layout
-  Development of bid specification for berth and/or top-side equipment
-  Evaluation of contractor bid proposals and designs
-  Inspection and maintenance evaluations for existing facilities
-  Review of berth suitability and upgrading options
-  Mooring assessments and equipment evaluations
-  Cargo transfer equipment (loading arms, hoses) reviews
-  Safety and Risk Assessment evaluation assistance
-  Technical support in application of OCIMF\* guides
-  Assistance with applying ISGOTT\*\* guidelines for operations

\* OCIMF – Oil Companies International Marine Forum

\*\* ISGOTT – International Safety Guide for Oil Tankers & Terminals

*All the right people in all the right places.<sup>SM</sup>*

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