Offshore Pedestal-mounted Cranes

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Suggested revisions are invited and should be submitted to the Standards Department, API, 200 Massachusetts Avenue, Suite 1100, Washington, DC 20001, standards@api.org.

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Introduction

The API crane standards provide the design basis and construction, operations and maintenance, and training guidelines and requirements for pedestal-mounted cranes intended for use in offshore oil and gas applications on fixed and floating structures or vessels. They are intended to be used together, as appropriate, in order to better serve the product manufacturers and users—these include:

— Specification 2C, *Offshore Pedestal-Mounted Cranes*

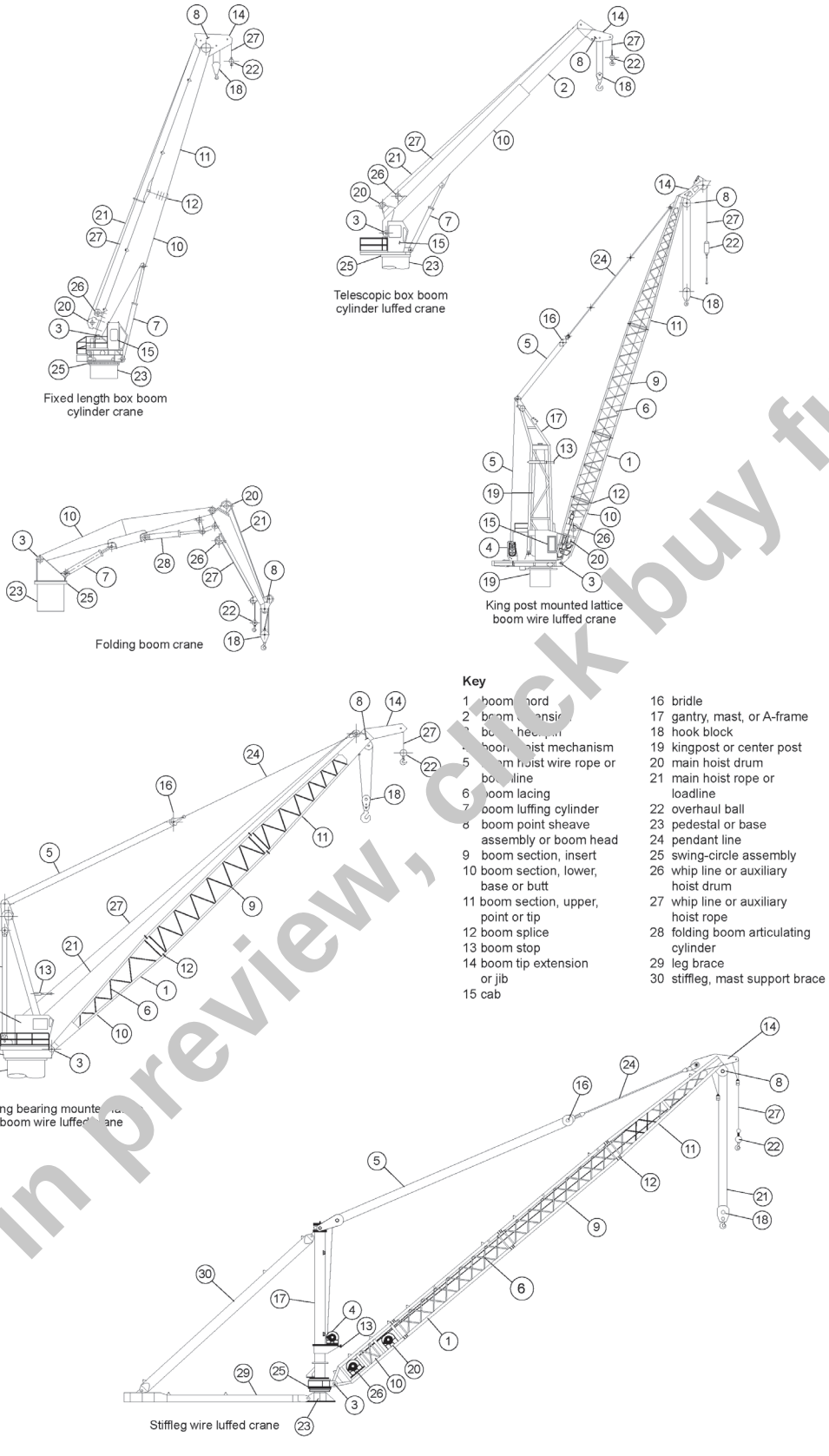
— Recommended Practice 2D, *Operation and Maintenance of Offshore Cranes*

— Recommended Practice 2D-2, *Training for Offshore Pedestal-Mounted Crane Riggers, Operators, and Inspectors*

The requirements, procedures and guidance provided are based on internationally recognized industry standards and global best practices, as well as the collective knowledge and experiences of those that participated in developing these standards. As such, the material in these standards represent the contribution from industry representatives of crane users, crane manufacturers, wire rope manufacturers, and ancillary crane device or component manufacturers. Conformance to the intent of the practices herein is intended to result in cranes that operate safely and efficiently between inspection periods and in accordance with a company's safety and environmental management system (see API 75).

It should be understood that the crane operating, and maintenance practices cover a wide range of crane types and configurations. Not all practices are applicable to all cranes. When applying this standard, care should be taken to review each item as stated and use those items specifically applicable to the crane's type, usage, and duty-cycle. It may be necessary to modify a procedure due to a particular crane requirement. This modification would be wholly acceptable as long as the original intent of the practice or procedure is met.

See Figure 1 below for general illustrations of the various types of cranes.



NOTE Stiffleg designs differ depending on application. All components shown are not required for all designs.

Figure 1—General Crane Illustrations

Offshore Pedestal-mounted Cranes

1 Scope

This standard provides requirements for design, construction, and testing of new offshore pedestal-mounted cranes. For the purposes of this standard, offshore cranes are defined as pedestal-mounted elevating and rotating lift devices for transfer of materials and personnel to or from marine vessels, barges, and structures or for transfer of materials to or from the sea or the seabed.

Typical applications can include:

a) offshore oil exploration and production applications; these cranes are typically mounted on a fixed (bottom-supported) structure, floating structure, or vessel used in drilling and production operations;

b) shipboard applications; these cranes are mounted on surface-type vessels and are used to move cargo, containers, and other materials while the crane is within a harbor or sheltered area; and

c) crane vessel applications; these cranes are typically mounted on ship-shaped vessels, semi-submersibles, barge, or self-elevating type marine vessels specialized in lifting heavy and/or unique loads for construction, pipe lay, renewable energy, salvage, and subsea applications in both harbor and offshore waters.

Figure 1 illustrates some (but not all) of the types of cranes covered under this standard (see Introduction). While there are many configurations of pedestal-mounted cranes covered in the scope of this standard, it is not intended to be used for the design, fabrication, and testing of davits or emergency escape devices. This standard does not cover the use of cranes for life-saving applications or for the launch and recovery of manned underwater units such as diving bells or submersibles.

2 Normative References

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda) applies.

API Recommended Practice 2A-WSD, *Planning, Designing, and Constructing Fixed Offshore Platforms—Working Stress Design*

API Recommended Practice 2D, *Operation and Maintenance of Offshore Cranes*

API Specification 2H, *Carbon Manganese Steel Plate for Offshore Structures*

API Recommended Practice 2X, *Ultrasonic and Magnetic Examination of Offshore Structural Fabrication and Guidelines for Qualification of Technicians*

API Specification 9A, *Wire Rope*

API Recommended Practice 500, *Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2*

API Recommended Practice 505, *Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1, and Zone 2*

API Specification Q1, *Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry*