Operation and Maintenance of Offshore Cranes

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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.

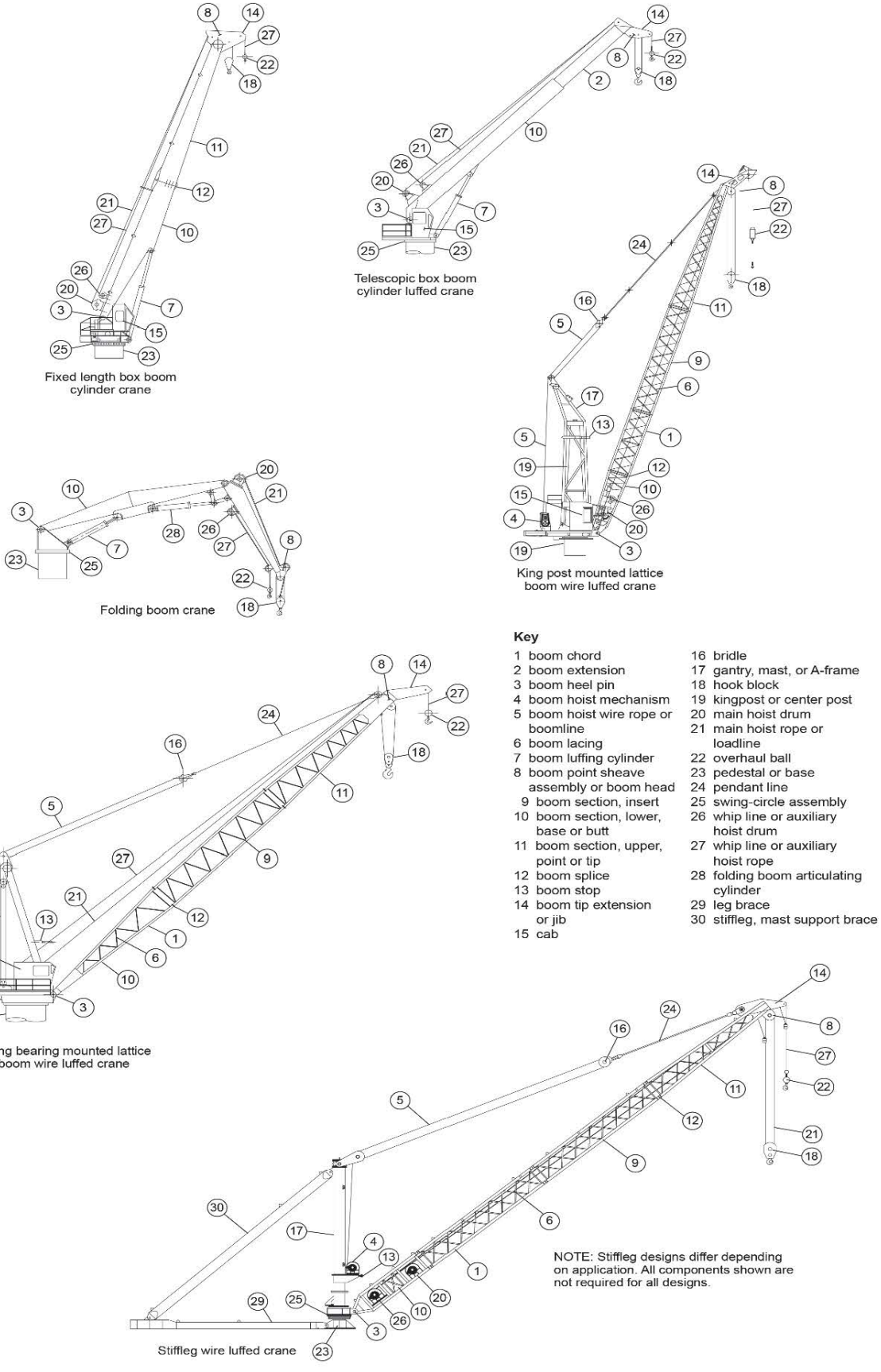


Figure 1—General Crane Illustrations

Operation and Maintenance of Offshore Cranes

1 Scope

1.1 This standard establishes general principles for the safe operation and maintenance of offshore pedestal-mounted revolving cranes on fixed or floating offshore platforms, offshore support vessels, jackup drilling rigs, semi-submersible drilling rigs and other types of mobile offshore drilling units (MODUs), as a companion to API 2C and API 2D-2. This standard also provides requirements and recommendations for lift planning, pre-use inspection, and testing of temporary cranes that are erected offshore.

1.2 Typical applications can include:

a) Offshore oil exploration and production applications: These cranes are typically mounted on a fixed (bottom-supported) structure, floating platform structure, or vessel used in drilling and production operations.

b) Shipboard applications: These lifting devices 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.

c) Crane vessel applications: These cranes are typically mounted on ship-shaped vessels, semi-submersibles, barges, 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.

1.3 Equipment (e.g. davits, launch frames) used only for launching life-saving appliances (life boats or life rafts) are not included in the scope of this standard.

1.4 Lifting devices not covered by this standard would be operated, inspected, and maintained in accordance with the manufacturer's recommendations.

2 Normative References

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

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

API Specification 2C, *Offshore Pedestal-mounted Cranes*

API Specification 2C, *Offshore Pedestal-mounted Cranes*, 3rd Edition

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

API Specification 9A, *Specification for Wire Rope*

API Recommended Practice 9B, *Application, Care and Use of Wire Rope for Oil Field Service*