

Specification for Independent Wellhead Equipment

API SPECIFICATION 11IW
FIRST EDITION, JUNE 2000

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Upstream Segment

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FOREWORD

This specification for independent wellhead equipment was formulated by the API Exploration and Production Department Subcommittee on Standardization of Field Operating Equipment. This specification provides for a family of independent wellhead equipment for use at the wellhead in the production of oil and gas.

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Specification for Independent Wellhead Equipment

1 Scope

1.1 PURPOSE

This specification was formulated to provide for the availability of safe, dimensionally and functionally interchangeable independent wellhead equipment. The technical content provides requirements for performance, design, materials, testing, inspection, welding, marking, handling, storing and shipping.

1.2 APPLICATIONS

1.2.1 Coverage

This specification covers the independent wellhead equipment utilized for pressure control systems for the production of oil and gas. Specific equipment covered by this specification is listed as follows:

- a. Independent wellheads.
- b. Top connectors.
- c. Tubing and casing slip hangers.
- d. Tubing and casing mandrel hangers.
- e. Packoffs.
- f. Belled nipples.
- g. Connector flanges.
- h. Stripper adapters.

The typical equipment nomenclature used in this specification is shown in Figures 1, 2, 3, and 4.

1.2.2 Service Conditions

1.2.2.1 General

Service conditions refer to classifications for pressure, temperature, and the various well-bore fluid and operating conditions.

1.2.2.2 Pressure Ratings

Pressure ratings indicate rated working pressures expressed as gage pressure (psig).

1.2.2.3 Temperature Rating

Temperature rating indicates the temperature range, from minimum ambient to maximum flowing fluid temperature, expressed in degrees Fahrenheit (degrees F).

1.2.2.4 Materials Class Rating

Materials class rating indicates the material of the equipment components.

2 Referenced Publications

2.1 GENERAL

This specification includes by reference, either in total or in part, the latest edition of other API, industry and government standards listed in 2.5.

2.2 REQUIREMENTS

Requirements of other standards included by reference in this specification are essential to the safety and interchangeability of the equipment produced.

2.3 EQUIVALENT STANDARDS

Standards referenced in this specification may be replaced by other international or national standards that can be shown to meet or exceed the requirements of the referenced standards. Manufacturers who use other standards in lieu of standards referenced herein are responsible for documenting the equivalency of the standards.

2.4 APPENDICES

Appendices to this specification shall not be considered as requirements. They are included only as guidelines or information.

2.5 DOCUMENTS

API

Spec 5B *Specification for Threading, Gauging, and Thread Inspection of Casing, Tubing, and Line Pipe Threads*

Spec 6A *Specification for Wellhead and Christmas Tree Equipment*

ASME/ANSI¹

B16.5 *Pipe Flanges and Flanged Fittings*
ASME Boiler and Pressure Vessel Code, Section VIII: Rules for Construction of Pressure Vessels

ASME Boiler and Pressure Vessel Code, Section IX: Qualification Standard for Welding and Brazing Procedures, Welders, Brazers, and Welding and Brazing Operators

¹American Society of Mechanical Engineers, 3 Park Avenue, New York, New York 10016-5990.

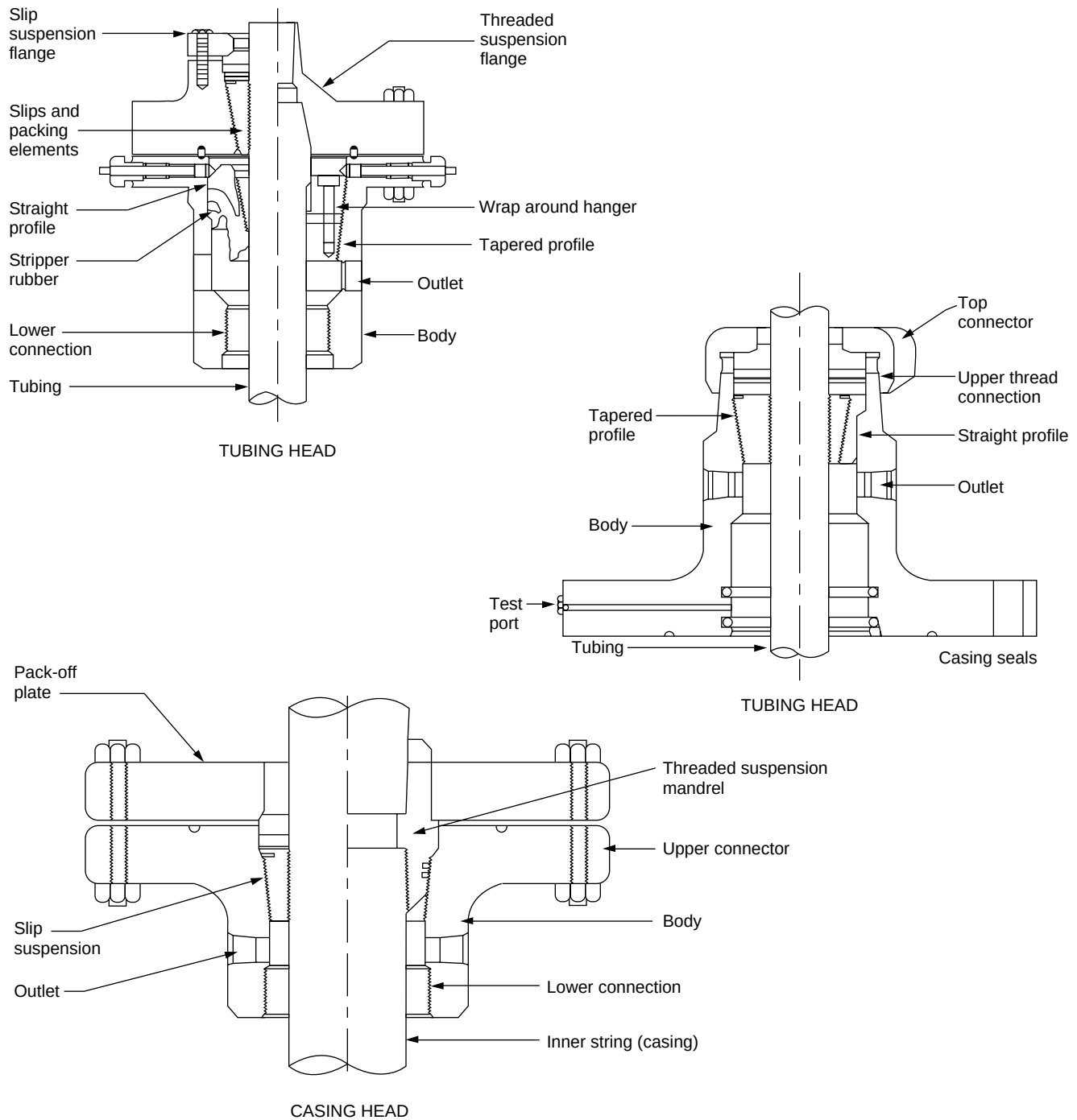


Figure 1—Independent Wellhead Designs Flanged Configurations Tubing and Casing Heads

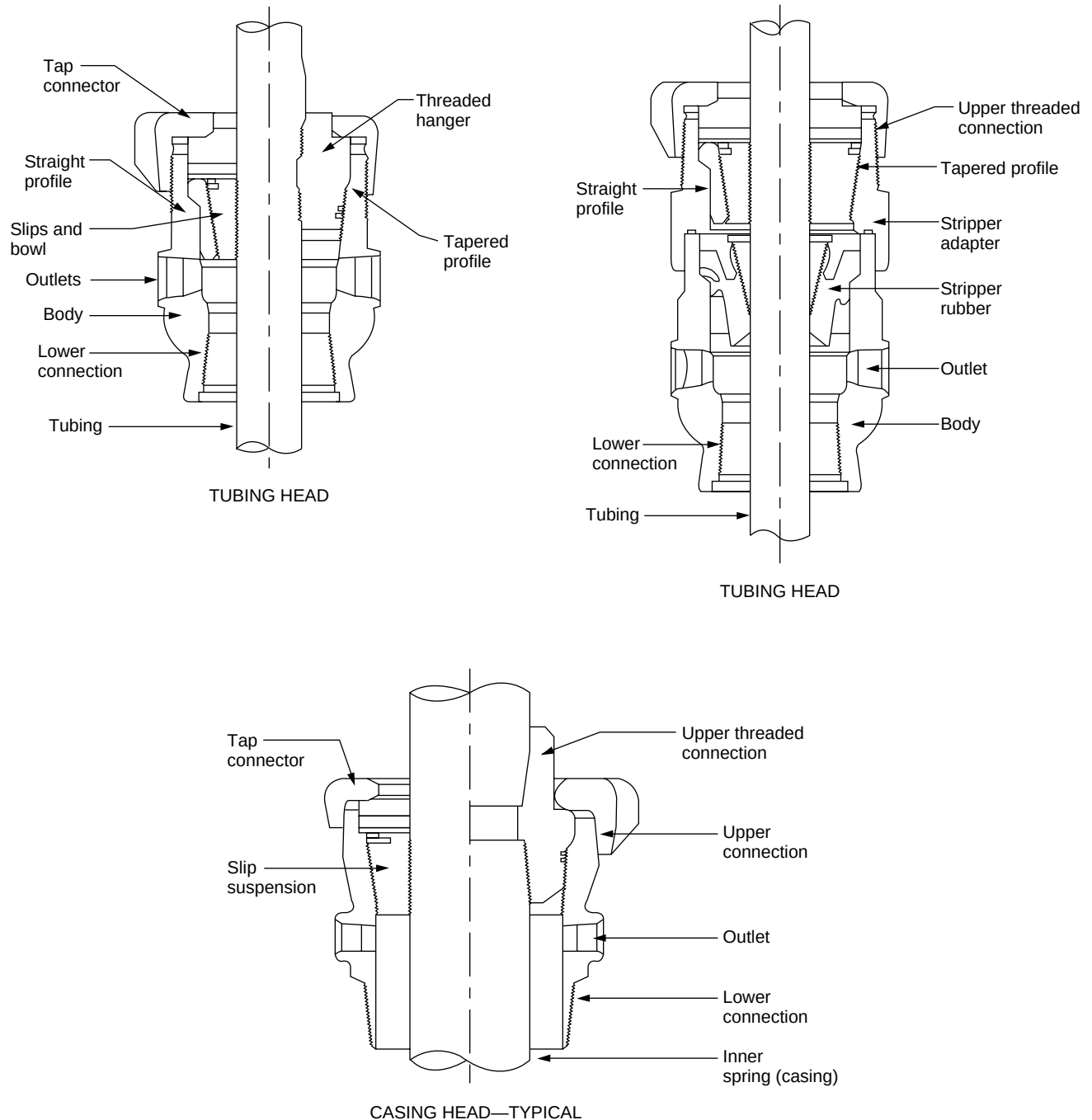


Figure 2—Independent Wellhead Designs Threaded Connectors