Rotary Drill Stem Elements

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Rotary Drill Stem Elements

1 Scope

This standard specifies the technical delivery conditions for rotary drill stem elements: upper and lower kelly valves, square and hexagonal kellys, drill stem subs, drill collars (steel and non-magnetic, round, and spiral), heavy-weight drill pipe (HWDP), drilling and coring bit connections, and stabilizers.

This standard is not applicable to drill pipe and drill pipe tool joints, rotary shouldered connection designs, thread gauging practices, or grand master, reference master and working gauges, and does not include or identify performance properties. A typical drill stem assembly applicable to this standard is provided (see 4.1, Figure 1).

2 Normative References

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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 7G, *Drill Stem Design and Operating Limits*

API Specification 7-2, *Threading and Gauging for Rotary Shouldered Connections*

ASME *Boiler and Pressure Vessel Code (BPVC), Section IX, Welding, Brazing, and Fusing Qualifications*

ASNT SNT-TC-1A, *Personnel Qualification and Certification in Non-Destructive Testing*

ASTM A262, *Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels*

ASTM A370, *Standard Test Methods and Definitions for Mechanical Testing of Steel Products*

ASTM A434, *Standard Specification for Steel Bars, Alloy, Hot-Wrought or Cold-Finished, Quenched and Tempered*

ASTM E10, *Standard Test Method for Brinell Hardness of Metallic Materials*

ASTM E18, *Standard Test Methods for Rockwell Hardness of Metallic Materials*

ASTM E23, *Standard Test Methods for Notched Bar Impact Testing of Metallic Materials*

ASTM E213, *Standard Practice for Ultrasonic Examination of Metal Pipe and Tubing*

ASTM E309, *Standard Practice for Eddy-Current Examination of Steel Tubular Products Using Magnetic Saturation*

ASTM E1209, *Standard Test Method for Fluorescent Liquid Penetrant Examination Using the Water-Washable Process*

ASTM E1219, *Standard Test Method for Fluorescent Liquid Penetrant Examination Using the Solvent-Removable Process*

ASTM E1220, *Standard Test Method for Visible Penetrant Examination Using the Solvent-Removable Process*

ASTM E1418, *Standard Test Method for Visible Penetrant Examination Using the Water-Washable Process*

ASTM E3024, *Standard Practice for Magnetic Particle Testing for General Industry*