Centralizer Placement and Stop-collar Testing

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1 Scope

This standard provides calculations for determining centralizer spacing, based on centralizer performance and desired standoff, in deviated and dogleg holes in wells for the petroleum and natural gas industries. It also provides a procedure for testing stop-collars and reporting test results.

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 Specification 5CT*, Casing and Tubing*

ISO 11960 [1], *Petroleum and natural gas industries—Steel pipes for use as casing or tubing for wells*

3 Terms and Definitions, Symbols and Abbreviations

3.1 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1
bow-spring centralizer
An apparatus comprised of a plurality of bow-shaped springs biased outwardly from a tubular body, the outside diameter (OD) of which can vary under a change in applied load, and connected by two end collars, which is placed on the outside of a tubular (e.g. casing or tubing) and used to centralize the tubular in a wellbore.

3.1.2
bow-spring centralizer sub
A bow-spring centralizer installed on a tubular body having an integral holding method where the tubular body becomes its own section of the casing string.

3.1.3
holding device
Device employed to limit the axial movement of the stop-collar or bow-spring centralizer on the casing.

EXAMPLE Set screws, nails, machined tubular, mechanical dogs, epoxy resins, or machined features (integral).

[1] International Organization for Standardization, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, www.iso.org.