Recommended Practice for Care and Use of Casing and Tubing

API RECOMMENDED PRACTICE 5C1
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FOREWORD

The bar motations identify parts of this standard that have been changed from the previous API edition.

This standard is under the jurisdiction of the API Committee on Standardization of Tubular Goods and includes items approved by the letter ballot through 1999.

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Recommended Practice for Care and Use of Casing and Tubing

1 Scope

Note: No provision of this recommended practice shall be cause for rejection of casing or tubing provided the threads are in accordance with the requirements of the latest edition of API Standard 5B.

1.1 The statements on corrosion of casing and tubing as given herein were developed with the cooperation of the Technical Practices Committee on Corrosion of Oil and Gas Well Equipment, NACE International (formerly the National Association of Corrosion Engineers).

1.2 It is suggested that the selection of a thread compound for casing and tubing be given careful consideration by the user, bearing in mind that a satisfactory compound should possess certain properties, the major of which are (a) to lubricate the thread surfaces to facilitate joint makeup and breakout without galling, and (b) to seal voids between the mating thread surfaces and effectively prevent leakage. Compounds that have given outstanding service for casing and tubing under both laboratory and field conditions are described in the latest edition of API Bulletin 5A2.

Note: Thread compounds described in the latest edition of API Bulletin 5A2 should not be used on rotary shouldered connections.

1.3 Some generalized suggestions on prevention of damage to casing and tubing by corrosive fluids are given in 4.8.16 and 5.5.15. It is not, however, within the scope of this recommended practice to provide detailed suggestions for corrosion control under specific conditions. Many variables may be involved in a specific corrosion problem and interrelated in such a complex fashion as to require detailed attention to the specific problem. For more complete technical information on specific corrosion problems, the user should consult the official publication of NACE International, *Corrosion*, or contact: Chairman, Technical Practices Committee on Corrosion of Oil and Gas Well Equipment, T-1, NACE Int'l, 1440 South Creek Drive, P.O. Box 218340, Houston, Texas 77218-8340.

2 References

2.1 GENERAL

This recommended practice includes by reference, either in total or in part, the most recent editions of the following standards:

API

Bul 5A2	*Bulletin on Thread Compounds for Casing, Tubing, and Line Pipe*
Bul 5C2	*Bulletin on Performance Properties of Casing, Tubing, and Drill Pipe*
Bul 5C3	*Bulletin on Formulas and Calculations for Casing, Tubing, Drill Pipe, and Line Pipe Properties*
RP 7G	*Recommended Practice for Drill Stem Design and Operating Limits*
Spec 5B	*Specification for Threading, Gauging, and Thread Inspection of Casing, Tubing, and Line Pipe Threads*
Spec 5CT	*Specification for Casing and Tubing*

AWS[1]

Spec A5.1	*Covered Carbon Steel Arc Welding Electrodes*

2.2 REQUIREMENTS

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

2.3 EQUIVALENT STANDARDS

Other nationally or internationally recognized standards shall be submitted to and approved by API for inclusion in this recommended practice prior to their use as equivalent standards.

3 Definitions

3.1 shall: is used to indicate that a provision is mandatory.

3.2 should: is used to indicate that a provision is not mandatory, but recommended as good practice.

3.3 may: is used to indicate that a provision is optional.

4 Running and Pulling Casing

4.1 PREPARATION AND INSPECTION BEFORE RUNNING

4.1.1 New casing is delivered free of injurious defects as defined in API Specification 5CT and within the practical limits of the inspection procedures therein prescribed. Some users have found that, for a limited number of critical well applications, these procedures do not result in casing sufficiently free of defects to meet their needs for such critical applications. Various nondestructive inspection services have been employed by users to ensure that the desired quality of

[1]American Welding Society, 550 N.W. LeJeune Road, P.O. Box 351040, Miami, Florida 33135.