American
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Association

Technical Resources

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American National Standard

Flexible Couplings - Lubrication

ANSI/AGMA 9001-B97

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ANSI/AGMA 9001–B97
[Revision of ANSI/AGMA 9001–A86]

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Approved March 25, 1997

ABSTRACT

This standard provides information on lubrication of gear couplings, chain couplings and metallic grid couplings. Types of lubricants and lubrication methods and practices are included. In addition, selection guides for grease and oil lubrication are provided.

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Foreword

[The foreword, footnotes, and annexes, if any, in this document are provided for informational purposes only and are not to be construed as a part of ANSI/AGMA Standard 9001–B97, *Flexible Couplings – Lubrication*.]

Coupling lubrication requirements are unique. Proper lubrication is an essential element for the satisfactory performance and long life of lubricated flexible couplings. Requisites for proper lubrication are: selection of proper lubricant, a well designed lubrication system, and an adequate maintenance program. This requires the cooperation of the manufacturer, the user, and the lubricant supplier.

Work was begun on the standard by AGMA Flexible Product Group 5, Technical Committee in January, 1973. To insure representation of the manufacturer, the user, and the lubricant supplier, a group from ASTM Technical Division G on Lubricating Greases was asked to participate. This standard was prepared as a joint effort of both groups. It was approved by the AGMA membership in March 1986 and approved as an American National Standard on February 18, 1987.

This revised version of the standard was approved by the AGMA membership in March 1997, and as an American National Standard on March 25, 1997.

Suggestions for improvement of this standard will be welcome. They should be sent to the American Gear Manufacturers Association, 1500 King Street, Suite 201, Alexandria, Virginia 22314.

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American National Standard –

Flexible Couplings – Lubrication

1 Scope

1.1 Types of flexible couplings

This standard covers the lubrication of the following types of flexible couplings and generally applies to other types of lubricated couplings.

- gear couplings;
- chain couplings;
- metallic grid couplings.

Some types of flexible couplings do not require lubrication.

1.2 Types of lubricants

The types of lubricants for flexible couplings covered in this standard are:

- oils;
- greases.

NOTE: Correct lubrication can minimize wear, but it is not a substitute for correct alignment.

1.3 Lubrication methods and practices

The flexible coupling lubrication methods and practices covered in this standard are:

- Self-contained lubricant. In this category lubricants can be oils or greases.
- Externally supplied lubricant. In this category, the couplings can be continuously supplied with oil at a specified flow rate, be dip lubricated, submerged in oil, or intermittently lubricated with oil that is replenished periodically.

1.4 Application limitations

1.4.1 Food and drug industry

The lubricants covered by this standard are not recommended for food and drug industry applications where contact with the product being manufactured may occur. The user must assume the responsibility for selecting the proper lubricant for all food and drug industry applications.

1.4.2 Experience

Coupling manufacturer's recommendations may vary for a specific application based on experience.

1.4.3 Cooling

This standard does not apply to couplings where an oil flow is provided solely for cooling purposes.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ANSI/ASTM D128-89d, *Methods of Analysis of Lubricating Grease*

ANSI/ASTM D217-88, *Method of Test for Cone Penetration of Lubricating Grease*

ANSI/ASTM D445-88, *Method of Test for Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)*

ANSI/ASTM D566-87, *Test Method for Dropping Point of Lubricating Grease*

ANSI/ASTM D942-90, *Test Method for Oxidation Stability of Lubricating Greases by the Oxygen Bomb Method*

ANSI/ASTM D1743-87, *Method of Test for Corrosion Prevention Properties of Lubricating Greases*

ANSI/ASTM D2265-88, *Method of Test for Dropping Point of Lubricating Grease of Wide Temperature Range*

ANSI/ASTM D2509-91, *Test Method for Measurement of Load-Carrying Capacity of Lubricating Grease (Timken Method)*

ANSI/ASTM D2596-87, *Method for Measurement of Extreme-Pressure Properties of Lubricating Greases (Four-Ball Method)*