



American
Gear Manufacturers
Association

Technical Resources

Revision of ANSI/AGMA 9001-A86
Reaffirmed May 2014

American National Standard

Flexible Couplings - Lubrication

American National Standard

Flexible Couplings - Lubrication

ANSI/AGMA 9001-B97

[Revision of ANSI/AGMA 9001-A86]

Approval of an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretation of this standard should be addressed to the American Gear Manufacturers Association.

CAUTION NOTICE: AGMA technical publications are subject to constant improvement, revision, or withdrawal as dictated by experience. Any person who refers to any AGMA Technical Publication should be sure that the publication is the latest available from the Association on the subject matter.

[Tables or other self-supporting sections may be quoted or extracted. Credit lines should read: Extracted from ANSI/AGMA 9001-B97, *Flexible Couplings - Lubrication*, with the permission of the publisher, the American Gear Manufacturers Association, 1500 King Street, Suite 201, Alexandria, Virginia 22314.]

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.

Published by

American Gear Manufacturers Association
1500 King Street, Suite 201, Alexandria, Virginia 22314

Copyright © 1997 by American Gear Manufacturers Association
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without prior written permission of the publisher.

Printed in the United States of America

ISBN: 1-55589-686-3

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Grease lubrication	2
4 Oil lubrication - external	4
5 Oil lubrication - self contained	5
6 Lubricant selection guide	5

Tables

1 Grease lubricated coupling operating classifications	2
2 AGMA coupling grease specifications	3

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.

PERSONNEL of the AGMA Flexible Couplings Committee

Chairman: Donald B. Cutler Rexnord Corporation
Vice Chairman: Glenn Pokrandt The Falk Corporation

ACTIVE MEMBERS

T.G. Fromknecht Zurn Industries, Inc.
J.W. Mahan Lovejoy, Inc.
J.R. Mancuso Kop-Flex, Inc.
R.E. Munyon Kop-Flex, Inc.
J.O. Tennies Renold, Inc.
R.G. Thompson Deck Manufacturing Corporation

ASSOCIATE MEMBERS

P. Dixon Metal Improvement Company
T. Hewitt Rexnord Corporation
D.W. Hindman Rexnord Corporation
V. Ivers Xtek, Inc.
E.C. Kus Deck Manufacturing Corporation
D. Lindsay Emerson Power Transmission
J.O. Mays Rexnord Corporation
J. Paluh Zurn Industries, Inc.
S. Levi Pearson Mobil Oil Corporation
A. E. Phillips Rockwell Automation/Dodge
W. Pizzichil Philadelphia Gear Corporation
R. Post Renold, Inc.
D. Reynolds Rockwell Automation/Dodge
E.I. Rivin Wayne State University
T.M. Schatzka Lovejoy, Inc.
J.F. Slusarick Huffman Corporation
R. Whitney Emerson Power Transmission

(This page is intentionally blank)

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 applica-

tions 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)*