

Australian Standard™

Hydraulic fluid power—Particulate contamination of systems

Part 1: Method for coding the level of contamination

[ISO title: Hydraulic fluid power—Fluids—Method for coding the level of contamination by solid particles]



Standards Australia



Documents

Document Sharing Hub

This Australian Standard was prepared by Committee ME-035, Fluid Power Systems and Components. It was approved on behalf of the Council of Standards Australia on 30 September 2001 and published on 12 October 2001.

The following interests are represented on Committee ME-035:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Institute of Petroleum
Bureau of Steel Manufacturers Australia
Department of Defence (Australia)
Department of Mineral Resources, N.S.W.
Institution of Engineers Australia

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 01138.

Australian Standard™

Hydraulic fluid power—Particulate contamination of systems

Part 1: Method for coding the level of contamination

Originated as part of AS 4002.1—1992.
Revised and designated in part as AS 4002.1—2001.

COPYRIGHT

© Standards Australia International

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 4143 6

PREFACE

This Standard was prepared by the Standards Australia Committee ME-035, Fluid Power Systems and Components to supersede AS 4002.1—1992, *Fluid power systems and components—Cleanness levels in hydraulic systems*, Part 1: *Classification and determination of cleanness*, in part.

The objective of this Standard is to provide manufacturers and users of hydraulic fluid power systems with a code for defining the quantity of solid particles in the fluid in a given hydraulic fluid power system.

This edition introduces a three-part code for contamination levels measured with automatic particle calibrated in accordance with ISO 11171, *Hydraulic fluid power—Calibration of automatic particle counters for liquids*, and it also introduces equivalent particle sizes for such counters, based on calibration with NIST standard reference material SRM 2806.

The particle sizes to be reported for measurement by using a microscope, $\geq 5\mu\text{m}$ and $\geq 15\mu\text{m}$, are unchanged from those specified in AS 4002.1—1992.

Defining the automatic particle counter code sizes in this way validates direct comparison of measurements made in accordance with this Standard using either measurement method, or between such measurements and data records based on AS 499.1:1992.

This Standard is identical with and has been reproduced from ISO 4406:1999, *Hydraulic fluid power—Fluids—Method for coding the level of contamination by solid particles*.

Statements expressed in mandatory terms in notes to text, tables and figures are deemed to be requirements of this Standard.

The term ‘normative’ has been used in this Standard to define the application of the annex to which it applies. A ‘normative’ annex is an integral part of a Standard.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

None of the documents referenced in this Standard has been adopted as an Australian Standard.

CONTENTS

1	Scope.....	1
2	Normative references	1
3	Code definition	1
4	Identification statement	4
	Annex A Graphical presentation of the code number	5
	Bibliography	7