

# Hydraulic fluid power — Fluids — Method for coding the level of contamination by solid particles

ICS 75.120

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# National foreword

This British Standard reproduces verbatim ISO 4406:2000 and implements it as the UK national standard. It supersedes BS 5540-4:1988 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee MCE/18, Fluid power systems and components, to Subcommittee MCE/18-/6, Contamination control, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

## Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 February 2000

## Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to iv, pages 1 to 7 and a back cover.

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## Amendments issued since publication

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for coding the level of contamination by  
solid particles**

*Transmissions hydrauliques — Fluides — Méthode de codification du  
niveau de pollution particulaire solide*



Reference number  
ISO 4406:1999(E)



## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 4406 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 6, *Contamination control and hydraulic fluids*.

This second edition cancels and replaces the first edition (ISO 4406:1987), which has been technically revised. The new edition introduces a three-part code for contamination levels measured with automatic particle counters calibrated in accordance with ISO 11171. 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 ISO 4406:1987.

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 ISO 4406:1987.

Annex A forms a normative part of this International Standard.