Doc No.: PGD 36 (23662)
IS 13571 : 2024
ISO 11171 : 2022

भारतीय मानक मसौदा

द्रवचालित तरल शक्ति — तरल पदार्थ के लिए स्वचालित कण काउंटर का अंशांकन
(*दुसरा पुनरीक्षण*)

Draft Indian Standard

Hydraulic Fluid Power — Calibration of Automatic Particle Counters for Liquids

(*Second Revision*)

ICS 23.100.60

Fluid Power Systems Sectional Committee, PGD 36

NATIONAL FOREWORD

This Indian Standard (Second Revision) which is identical with ISO 11171 : 2022 'Hydraulic fluid power — Calibration of automatic particle counters for liquids' issued by the International Organization for Standardization (ISO) will be adopted by the Bureau of Indian Standards on the recommendation of the Fluid Power Systems Sectional Committee and approval of the Production and General Engineering Division Council.

This standard was originally published in 1992 and subsequently revised in 2020. The second revision of this standard has been undertaken to align with the latest version of ISO 11171.

The major changes in this revision are as follows:

a) In term 3.8, particle size distribution, Note 1 to entry has been revised;
b) In clause 6.12 and D.3, the threshold voltage settings for the second and fourth channels have been revised to 0.56 times and 1.56 times, respectively, of the threshold voltage setting of the third channel.;
c) Clause B.8 has been amended to read, "calculate the theoretical number concentration of particles for each mass concentration, X_t.";
d) In Table B.1, the units for "X_t (particles/L)" have been corrected to "X_t (particles/mL)";

e) In clause D.7, the threshold voltage settings for the first and fifth channels have been revised to 0.56 times and 1.56 times, respectively, of the threshold voltage setting of the third channel.;
f) In clause G.6, the subscript in the denominator of formula G.3 has been corrected from "V_0" to "V_S".

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated

International Standard	*Corresponding Indian Standard*	*Degree of Equivalence*
ISO 3722 Hydraulic fluid power — Fluid sample containers — Qualifying and controlling cleaning methods	IS 13569 : 1993/ISO 3722 : 1976 Hydraulic fluid power — Fluid sample containers — Qualifying and controlling cleaning methods	Identical
ISO 5598 Fluid power systems and components — Vocabulary	IS 10416 : 2024/ISO 5598 : 2020 Fluid power systems and components — Vocabulary (*third revision*)	Identical
ISO 16889 Hydraulic fluid power — Filters — Multi-pass method for evaluating filtration performance of a filter element	IS 13535 : 2017/ISO 16889 : 2008 Hydraulic fluid power — Filters — Filter multi-pass method for evaluation filtration performance of filter element (*second revision*)	Identical
ISO 4787 Laboratory glass and plastic ware — Volumetric instruments — Methods for testing of capacity and for use	IS/ISO 4787 : 2010 Laboratory glass and plastic ware — Volumetric instruments — Methods for testing of capacity and for use	Identical

The technical committee has reviewed the provisions of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard:

International Standard	*Title*
ISO 12103-1	Road vehicles — Test contaminants for filter evaluation — Part 1: Arizona test dust

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

NOTE: The technical content of draft standard is not available on website. For details, please refer to ISO 11171 : 2022 or contact:

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