

# SVENSK STANDARD

## SS-ISO 11170:2013

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### **Hydraulvätskor – Metod för verifikation av filters prestanda (ISO 11170:2013, IDT)**

### **Hydraulic fluid power – Sequence of tests for verifying performance characteristics of filter elements (ISO 11170:2013, IDT)**

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Den internationella standarden ISO 11170:2013 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 11170:2013.

Denna standard ersätter SS-ISO 11170, utgåva 1.

The International Standard ISO 11170:2013 has the status of a Swedish Standard. This document contains the official version of ISO 11170:2013.

This standard supersedes the Swedish Standard SS-ISO 11170, edition 1.

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Denna standard är framtagen av kommittén för Renhetsteknik, SIS/TK 108.

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## 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 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 11170 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 6, *Contamination control*.

This third edition cancels and replaces the second edition (ISO 11170:2003), which has been technically revised.

## Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within a closed circuit. The liquid is both a lubricant and power-transmitting medium. The presence of solid contaminant particles in the liquid interferes with the ability of the hydraulic fluid to lubricate and causes wear to the components. The extent of contamination in the fluid has a direct bearing on the performance and reliability of the system, and needs to be controlled to levels that are considered appropriate for the system concerned. Filters are used to control the contamination level of the fluid by removing solid contaminant particles.

Different principles are used for this purpose; one of these uses a filter element enclosed in a filter housing. The filter element is the porous device that performs the actual process of filtration. The complete assembly is designated as a filter.

The performance of filter elements is measured by testing, and a series of International Standards has been developed to determine performance under specified conditions (see [Clause 2](#)). To give a greater level of assurance for a filter element's fitness for duty, most if not all of these tests should be used in a verification programme.

This International Standard provides an approval or verification protocol that features all of the current International Standards for filter testing.

