

SVENSK STANDARD

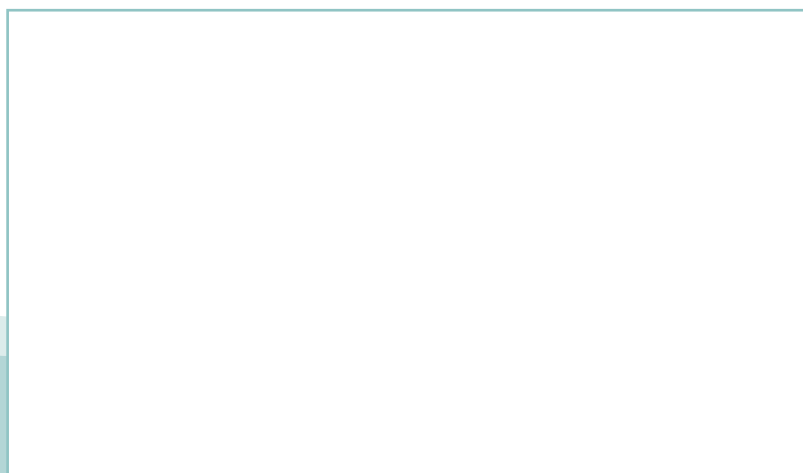
SS-ISO 7919-3:2009/Amd 1:2018



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**Vibration och stöt – Bedömning av vibrationer genom mätning
på roterande axlar –
Del 3: Kopplade industrimaskiner (ISO 7919-3:2009/
Amd 1:2017, IDT)**

**Mechanical vibration – Evaluation of machine vibration by
measurements on rotating shafts –
Part 3: Coupled industrial machines (ISO 7919-3:2009/
Amd 1:2017, IDT)**



Standarder får världen att fungera

SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.

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Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

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Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

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Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

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Standards make the world go round

SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.

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Den internationella standarden ISO 7919-3:2009/Amd 1:2017 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 7919-3:2009/Amd 1:2017.

The International Standard ISO 7919-3:2009/Amd 1:2017 has the status of a Swedish Standard. This document contains the official English version of ISO 7919-3:2009/Amd 1:2017.

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Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Maskiners påverkan av vibrationer, SIS/TK 111/AG 02.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 108, *Mechanical vibration, shock and condition monitoring*, Subcommittee SC 2, *Measurement and evaluation of mechanical vibration and shock as applied to machines, vehicles and structures*.

A list of all parts in the ISO 7919 series can be found on the ISO website.

Mechanical vibration — Evaluation of machine vibration by measurements on rotating shafts —

Part 3: Coupled industrial machines AMENDMENT 1

Foreword

Replace the complete text of the Foreword by the following:

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.

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This document was prepared by Technical Committee ISO/TC 108, *Mechanical vibration, shock and condition monitoring*, Subcommittee SC 2, *Measurement and evaluation of mechanical vibration and shock as applied to machines, vehicles and structures*.

This second edition cancels and replaces the first edition (ISO 7919-3:1996), of which it constitutes a minor revision.

A list of all parts in the ISO 7919 series can be found on the ISO website.

Introduction, second paragraph

Replace the reference to "ISO 7919-1" with "ISO 20816-1".

Clause 1, second paragraph

Replace the paragraph with the following:

SS-ISO 7919-3:2009/Amd 1:2018 (E)

This part of ISO 7919 applies to coupled industrial machines with fluid-film bearings, having maximum continuous rated speeds in the range 1 000 r/min to 30 000 r/min and not being limited by size and power (with certain restrictions), comprising

- steam turbines and generators with outputs less than or equal to 40 MW;
- steam turbines and generators with outputs greater than 40 MW and speeds other than 1 500 r/min, 1 800 r/min, 3 000 r/min or 3 600 r/min (although generators seldom fall into this category);
- rotary compressors;
- industrial gas turbines with outputs less than or equal to 3 MW;
- turbofans;
- electric drives and associated gears, where relevant;
- rotodynamic pumps (turbo pumps).

The information relating to pumps provided in this part of ISO 7919 complements that given in ISO 10816-7. In particular, the conditions for *in-situ* operation, performing acceptance tests and the influence of bearing clearance given in ISO 10816-7 shall be taken into account when evaluating the shaft vibration of pumps.

Third paragraph

Replace the paragraph with the following:

The following are excluded from this part of ISO 7919:

- steam turbines and/or generators with outputs greater than 40 MW and speeds of 1 500 r/min, 1 800 r/min, 3 000 r/min or 3 600 r/min (see ISO 20816-2);
- gas turbine sets with outputs greater than 3 MW (see ISO 7919-4 and ISO 20816-2);
- machine sets in hydraulic power generating and pump-storage plants (see ISO 20816-5);
- rotodynamic pumps including integrated electric motors, i.e. where the impeller is mounted directly on the motor shaft or is rigidly attached to it (see ISO 10816-7);
- submerged motor-pumps;
- reciprocating pumps;
- rotary positive displacement compressors (e.g. screw compressors);
- reciprocating compressors;
- wind turbines.