SLOVENSKI STANDARD
oSIST prEN ISO 9902-6:2018

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Tekstilni stroji - Preskusni postopki za merjenje hrupa - 6. del: Stroji za izdelavo tkanin (ISO/DIS 9902-6:2018)

Textile machinery - Noise test code - Part 6: Fabric manufacturing machinery (ISO/DIS 9902-6:2018)

Matériel pour l'industrie textile - Code d'essai acoustique - Partie 6: Machines de production des étoffes (ISO/DIS 9902-6:2018)

Ta slovenski standard je istoveten z: **prEN ISO 9902-6**

ICS:

17.140.20	Emisija hrupa naprav in opreme	Noise emitted by machines and equipment
59.120.30	Statve. Tkalni stroji	Looms. Weaving machines

oSIST prEN ISO 9902-6:2018 **en,fr,de**

DRAFT INTERNATIONAL STANDARD

ISO/DIS 9902-6

ISO/TC **72**/SC **8** Secretariat: **DIN**

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Textile machinery — Noise test code —

Part 6: Fabric manufacturing machinery

Matériel pour l'industrie textile — Code d'essai acoustique —

Partie 6: Machines de production des étoffes

ICS: 17.140.20; 59.120.30

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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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 *72*, *Textile machinery and accessories*, Subcommittee SC 8, *Safety requirements for textile machinery*.

This second edition cancels and replaces the first edition (ISO 9902-6:2001, ISO 9902-6 AMD 1:2009, ISO 9902-6 AMD 1:2014), which has been technically revised.

The main changes compared to the previous edition are as follows:

— updated normative references;

— revised Table 1 of clause 12;

— editorial changes.

A list of all parts in the ISO 9902- series can be found on the ISO website.

Textile machinery — Noise test code —

Part 6: Fabric manufacturing machinery

1 Scope

This part of ISO 9902, taken together with ISO 9902-1, specifies the mounting, operating and measuring conditions required for the measurement, declaration and verification of noise emitted by fabric manufacturing machinery. It is applicable to engineering (grade 2) and survey (grade 3) methods, in accordance with the International Standards to which it makes normative reference.

This part of ISO 9902 covers the different types of weaving and knitting machines defined in ISO 5247 and ISO 7839, respectively. It is applicable to full-width weaving machines with shuttles, with rigid, telescopic or flexible rapiers, with projectiles, and to those with weft insertion by hydraulic (waterjet) or by pneumatic (airjet) nozzle. It is also applicable to narrow fabric weaving machines with weft insertion by shuttles or needles, to other weaving machines of the multi-phase and circular weaving types, and to Jacquard machines. This part of ISO 9902 is applicable to knitting machinery including circular knitting, flat bed knitting, warp knitting, Raschel, cotton (flat weft weaving) and stitch bonding machines.

NOTE Because of the high requirements on measurement conditions, grade 1 methods are normally not feasible for textile machinery.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3743-1, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for small movable sources in reverberant fields — Part 1: Comparison method for a hard-walled test room*

ISO 3744, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane*

ISO 3746, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane*

ISO 3747, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering/survey methods for use in situ in a reverberant environment*

ISO 5247 (all parts), *Textile machinery and accessories — Weaving machines*

ISO 7839, *Textile machinery and accessories — Knitting machines — Vocabulary and classification*

ISO 8188:1986, *Textile machinery and accessories — Pitches of knitting machine needles*

ISO 9614-1, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 1: Measurement at discrete points*

ISO 9614-2, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 2: Measurement by scanning*

ISO 9902-1:2001, *Textile machinery — Noise test code — Part 1: Common requirements*

ISO 9902-1:2001/Amd.1:2009, *Textile machinery — Noise test code — Part 1: Common requirements / Amendment 1*

ISO 9902-1:2001/Amd.2:2014, *Textile machinery — Noise test code — Part 1: Common requirements / Amendment 2*

ISO 11201, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections*

ISO 11202, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections*

ISO 11203:1995, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions from the sound power level*

ISO 11204, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9902-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

4 Defining the test object

See Tables 1 to 3 of this part of ISO 9902 and ISO 9902-1:2001, Clause 4, as amended by ISO 9902-1:2001/Amd.1:2009, as amended by ISO 9902-1:2001/Amd.2:2014.

5 Sound power level determination

5.1 International Standards required for basic measurements

5.1.1 General

See ISO 9902-1:2001, 5.1, as amended by ISO 9902-1:2001/Amd.1:2009, as amended by ISO 9902-1:2001/Amd.2:2014.

5.1.2 Determination of sound power level by measuring sound intensity

Determination of the A-weighted sound power level, L_{WA}, using sound intensity measurements shall be in accordance with ISO 9614-1 (discrete points) or ISO 9614-2 (scanning).

5.1.3 Determination of sound power level using emission sound pressure levels on a measurement surface

Determination of the A-weighted sound power level, L_{WA}, by measurement of A-weighted emission sound pressure levels on a prescribed measurement surface shall be in accordance with one of the following:

— ISO 3744,

— ISO 3747, or

— ISO 3746, but only where use of ISO 3744 or ISO 3747 is not practicable.

Where its conditions are met (e.g. in the case of small narrow fabric weaving machines or knitting machines), ISO 3743-1 provides an alternative method which may be used.

5.2 Very large machines

See ISO 9902-1:2001, 5.2 as amended by ISO 9902-1:2001/Amd.1:2009, as amended by ISO 9902-1:2001/Amd.2:2014. Very large machines are designated by the letter "L" in Tables 1 to 3 of this part of ISO 9902.

6 Emission sound pressure level determination

6.1 International Standards required for basic measurements

See ISO 9902-1:2001, 5.2, as amended by ISO 9902-1:2001/Amd.1:2009, as amended by ISO 9902-1:2001/Amd.2:2014.

The A-weighted emission sound pressure level, L_{pA}, shall be determined in accordance with one of the following:

— ISO 11201,

— ISO 11204, or

— ISO 11202, but only where use of ISO 11201 or 11204 is not practicable.

Where its conditions are met (e.g. in the case of small, narrow fabric weaving machines or knitting machines with principally omnidirectional sound radiation) and the sound power level has already been determined, ISO 11203:1995, (6.2.3) gives an alternative method which may be used, providing the distance from the machine surface is 1 m.

6.2 Selection of work station and other specified positions

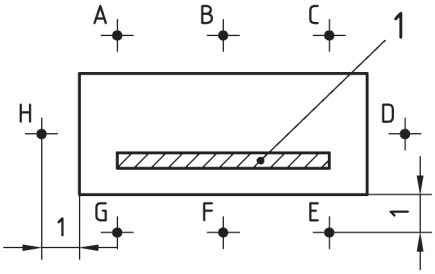
6.2.1 General

See ISO 9902-1:2001, 6.2, as amended by ISO 9902-1:2001/Amd.1:2009, as amended by ISO 9902-1:2001/Amd.2:2014, and Tables 1 to 3 of this part of ISO 9902.

6.2.2 Weaving machinery other than circular and narrow fabric machines

For weaving machines that are not of the circular or narrow fabric type, select eight measurement positions, as shown in Figure 1, at a distance of 1 m and a height of 1,6 m above the floor or working platform. In areas where space is restricted, the measurement distance from the machine surface may be reduced to 0,5 m or 0,25 m (this shall be reported and declared). Use the eight values measured at the defined positions to calculate L_{pA} (see ISO 9902-1:2001, 6.1, as amended by ISO 9902-1:2001/Amd.1:2009, as amended by ISO 9902-1:2001/Amd.2:2014). If the back of the machine is not accessible during operation with material, the first three positions may be excluded.

Dimensions in metres



Key

1 sley

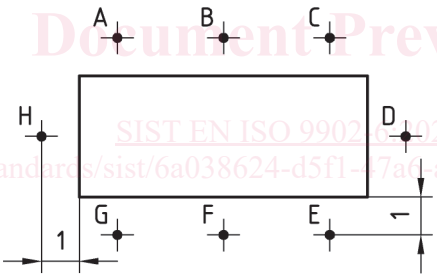
A to H measurement positions

Figure 1 — Weaving machines other than circular and narrow fabric machines

6.2.3 Flatbed knitting machine, straight-bar knitting machine and flat warping knitting machine

For flatbed knitting machines, warp knitting machines, Raschel machines and stitch-bonding machines (including particular warp knitting machines such as carpet warp knitting and cotton machines) with a maximum working width of 8 m, select eight measurement positions, as shown in Figure 2, at a distance of 1 m and a height of 1,6 m above the floor or working platform. For larger machines, increase the number of positions such that the distance between two adjacent positions does not exceed 3 m. Where access to the rear is prevented by the delivered yarn, omit the measurement positions on the rear. Use the eight values measured at the defined positions to calculate L_{pA} (see ISO 9902-1:2001, 6.1, as amended by ISO 9902-1:2001/Amd.1:2009, as amended by ISO 9902-1:2001/Amd.2:2014).

Dimensions in metres



Key

A to H measurement positions

Figure 2 — Knitting machines other than circular machines

6.2.4 Circular weaving and circular knitting machines

For circular weaving as well as circular knitting machines, select four measurement positions, as shown in Figure 3, at a distance of 1 m and a height of 1,6 m above the floor or working platform. Use the four values measured at the defined positions to calculate L_{pA} (see ISO 9902-1:2001, 6.1, as amended by ISO 9902-1:2001/Amd.1:2009, as amended by ISO 9902-1:2001/Amd.2:2014).