BS EN ISO 23771:2015

BSI Standards Publication

Textile machinery — Guide to the design of textile machinery for reduction of the noise emissions

bsi.

...making excellence a habit.™

National foreword

This British Standard is the UK implementation of EN ISO 23771:2015.

The UK participation in its preparation was entrusted to Technical Committee TCI/33, Textile machinery.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Published by BSI Standards Limited 2015

ISBN 978 0 580 79595 4

ICS 17.140.20; 59.120.01

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2015.

Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 23771

March 2015

ICS 59.120.01; 17.140.20

English Version

Textile machinery - Guide to the design of textile machinery for reduction of the noise emissions (ISO 23771:2015)

Matériel pour l'industrie textile - Guide pour la réduction de l'émission sonore à la conception des machines textiles (ISO 23771:2015)

Textilmaschinen - Konstruktive Maßnahmen zur Reduzierung der Geräuschemissionen von Textilmaschinen (ISO 23771:2015)

This European Standard was approved by CEN on 3 January 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 23771:2015 E

Foreword

This document (EN ISO 23771:2015) has been prepared by Technical Committee ISO/TC 72 "Textile machinery and accessories" in collaboration with Technical Committee CEN/TC 214 “Textile machinery and accessories” the secretariat of which is held by SNV.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2015, and conflicting national standards shall be withdrawn at the latest by September 2015.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 23771:2015 has been approved by CEN as EN ISO 23771:2015 without any modification.

Annex ZA
(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

Contents

Page

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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 72, *Textile machinery and accessories*, Subcommittee SC 8, *Safety requirements for textile machinery*.

Introduction

This International Standard is a type C standard as stated in ISO 12100. The machinery concerned and the extent to which hazards are covered are indicated in the scope of this International Standard.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

INTERNATIONAL STANDARD **ISO 23771:2015(E)**

Textile machinery — Guide to the design of textile machinery for reduction of the noise emissions

1 Scope

This International Standard provides technical information on the design of textile machinery with reduced noise emissions. Textile machines with a significant noise hazard are defined in ISO 11111 (all parts).

This International Standard supports the technical designer with the development of low-noise textile machinery. For this purpose, the significant sources of noise of the individual types of textile machines and suitable noise control measures are described.

Elements needed for the operation of the textile machine, which are, however, not part of the textile machine, are not covered by this International Standard (e.g. elements for transportation of process material, elements for provision of media).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 9902 (all parts), *Textile machinery — Noise test code*

ISO/TR 11688-1, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning*

ISO/TR 11688-2, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 2: Introduction to the physics of low-noise design*

ISO 11689, *Acoustics — Procedure for the comparison of noise-emission data for machinery and equipment*

ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100, ISO 9902 (all parts), and the following apply.

3.1
significant noise hazard
noise hazard corresponding to an A-weighted emission sound pressure level at an operating position higher than 70 dB

Note 1 to entry: In this case, it is probable that for the machine user under real production conditions (environmental correction, environment noise, operation of several machines) an emission value of 80 dB(A) is attained or exceeded.

3.2
significant noise source
noise source which dominates the noise emission generated by a machine