

**Elektromagnetiline ühilduvus.
Tööpinkide tooteperekonna standard.
Osa 1: Emissioon**

Electromagnetic compatibility (EMC) - Product family
standard for machine tools - Part 1: Emission

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50370-1:2005 sisaldab Euroopa standardi EN 50370-1:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.05.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50370-1:2005 consists of the English text of the European standard EN 50370-1:2005.</p> <p>This document is endorsed on 27.05.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This standard deals with the electromagnetic emission (radio frequency protection) of machine tools, excluding electrodischarge machines (EDM), designed exclusively for industrial and similar purposes that use electricity, the rated voltage of the machine tool not exceeding 1 000 V AC or 1 500 V DC between lines. Machine tools may incorporate motors, heating elements or their combination, may contain electric or electronic circuitry, and may be powered by the mains, or any other electrical power source. This standard does not cover fixed installations as defined in the Guide to the Application of Directive 89/336/EEC, published by the European Commission. Emission requirements in the frequency range 9 kHz to 400 GHz are covered. No measurements need to be performed at frequencies where no requirements are specified.</p>	<p>Scope:</p> <p>This standard deals with the electromagnetic emission (radio frequency protection) of machine tools, excluding electrodischarge machines (EDM), designed exclusively for industrial and similar purposes that use electricity, the rated voltage of the machine tool not exceeding 1 000 V AC or 1 500 V DC between lines. Machine tools may incorporate motors, heating elements or their combination, may contain electric or electronic circuitry, and may be powered by the mains, or any other electrical power source. This standard does not cover fixed installations as defined in the Guide to the Application of Directive 89/336/EEC, published by the European Commission. Emission requirements in the frequency range 9 kHz to 400 GHz are covered. No measurements need to be performed at frequencies where no requirements are specified.</p>
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Võtmesõnad:

English version

**Electromagnetic compatibility (EMC) –
Product family standard for machine tools
Part 1: Emission**

Compatibilité électromagnétique (CEM) –
Norme de famille de produits pour les
machines-outils
Partie 1: Emission

Elektromagnetische Verträglichkeit (EMV) –
Produktfamiliennorm für
Werkzeugmaschinen
Teil 1: Störaussendung

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 210, Electromagnetic compatibility (EMC).

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50370-1 on 2005-02-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2006-02-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2008-02-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 89/336/EEC. See Annex ZZ.

The purpose of this product family standard is

- to establish uniform requirements for the electromagnetic emission of the machine tools contained in the scope,
 - to fix test specifications of emission,
 - to refer to Basic Standards for methods of testing,
 - to standardise conditions during the tests and test report format for the assessment of conformity.
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1 Scope

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2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 55011	Industrial, scientific and medical (ISM) radio-frequency equipment – Radio disturbance characteristics – Limits and methods of measurement (CISPR 11, mod.)
EN 55022	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement (CISPR 22, mod.)
EN 61800-3	Adjustable speed electrical power drive systems — Part 3: EMC product standard including specific test methods (IEC 61800-3)
CISPR 16-1	Specification for radio disturbance and immunity measuring apparatus and methods — Part 1: Radio disturbance and immunity measuring apparatus

3 Definitions

For the purposes of this document, the following terms and definitions apply.

3.1

machine tool (MT)

machine, not portable as a whole during its operation, driven by an external electrical energy source and intended to work typically metal products in the solid state, with material removal (cutting processes as turning, milling, grinding, drilling, machining...) or without material removal (forming processes as bending, forging, etc.)

The machine tool is normally equipped with a power supply, an electrical and electronic assembly for power and control and one or more power drive systems for the movement of mobile elements or parts