Transportation loads - Measurement and analysis of dynamic-mechanical loads - Part 3: Data validity check and data editing for evaluation

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15433-3:2008 sisaldab Euroopa standardi EN 15433-3:2007 ingliskeelset teksti.	This Estonian standard EVS-EN 15433-3:2008 consists of the English text of the European standard EN 15433-3:2007.
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Transportbelastungen - Messen und Auswerten von mechanisch-dynamischen Belastungen - Teil 3: Datengültigkeitsüberprüfung und Datenaufbereitung für die Auswertung

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN 15433-3:2007) has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by June 2008, and conflicting national standards shall be withdrawn at the latest by June 2008.

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

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Introduction

This standard was originally prepared by working group NAVp-1.4, Requirements and Testing, of the German Standardization Institute (DIN). It is part of a complete normative concept to acquire and describe the loads acting on goods and influencing them during transport, handling and storage.

This standard becomes significant when related to the realisation of the European Directive on Packaging and Packaging Waste (Directive 94/62 EC, 20 December 1994). This directive specifies requirements on the avoidance or reduction of packaging waste, and requires that the amount of packaging material is adjusted to the expected transportation load, in order to protect the transportation item adequately. However, this presumes some knowledge of the transportation loads occurring during shipment.

At present, basic standards, based on scientifically confirmed values, which can adequately describe and characterize the magnitudes of transportation loads, especially in the domain of dynamic mechanical loads do not exist nationally or internationally. Reasons for this are mainly the absence of published data and insufficient description of the measurements or restrictions on the dissemination of this information.

This standard will enable measurement and evaluation of dynamic mechanical transportation loads, thus enabling the achievement of standardized and adequately documented load values.

This series of standards consists of the following parts:

— Part 1: General requirements

— Part 2: Data acquisition and general requirements for measuring equipment

— Part 3: Data validity check and data editing for evaluation

— Part 4: Data evaluation

— Part 5: Derivation of test specifications

— Part 6: Automatic recording systems for measuring randomly occurring shock during monitoring of transports.

1 Scope

This standard defines procedures for assessing the validity of results acquired in accordance with EN 15433-2, and for evaluating these results.

NOTE   When measuring and analysing dynamic processes, quite often unnoticed or difficult to recognize disturbances or erroneous measurements occur, which impair the application of these values. These procedures are necessary in order to detect possible errors before any actual analysis occurs.

Figure 1 provides an overview of the data validation and editing processes in this standard.