

**Steel static storage systems - Adjustable pallet
racking - Tolerances, deformations and clearances**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15620:2008 sisaldab Euroopa standardi EN 15620:2008 ingliskeelset teksti.

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English Version

Steel static storage systems - Adjustable pallet racking -
Tolerances, deformations and clearances

Systèmes de stockage statiques en acier - Rayonnages à
palettes réglables - Tolérances, déformations et jeux

Ortsfeste Regalsysteme aus Stahl - Verstellbare
Palettenregale - Grenzabweichungen, Verformungen und
Freiräume

This European Standard was approved by CEN on 13 September 2008.

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Contents

Page

Foreword.....	5
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	8
4 Racking classes	13
4.1 General.....	13
4.2 Class 100, Stacker crane.....	13
4.3 Class 200, Stacker crane.....	14
4.4 Class 300, Very narrow aisle	14
4.4.1 General.....	14
4.4.2 Class 300A, Very narrow aisle.....	15
4.4.3 Class 300B, Very narrow aisle.....	15
4.5 Class 400, Wide aisle and narrow aisle.....	15
4.5.1 Class 400, Wide aisle.....	15
4.5.2 Class 400, Narrow aisle.....	15
5 Wide aisle and narrow aisle - Class 400.....	17
5.1 Floor tolerances	17
5.1.1 Definition of E.....	17
5.1.2 Limiting values for E	18
5.2 Installation tolerances	19
5.3 Deformation limits	22
5.3.1 Floor deformations	22
5.3.2 Beam deformation limits in the Y direction	22
5.3.3 Frame deformations in the X and Z directions	22
5.4 Clearances for unit loads and truck handling equipment.....	22
5.4.1 Clearances relating to the placement of unit loads	22
5.4.2 Horizontal lateral and vertical clearances in a bay	23
5.4.3 Horizontal clearance in the depth	25
5.4.4 Aisle width dimensions	27
5.4.5 Clearances for gangways	28
6 Very narrow aisle - Class 300	29
6.1 Floor tolerances	29
6.1.1 Definition of E, Z and Z_{SLOPE}	29
6.1.2 Definition dZ and dX	29
6.1.3 Definition d^2Z and d^2X	30
6.1.4 Limiting values of properties.....	31
6.2 Installation tolerances	32
6.2.1 General.....	32
6.2.2 Tolerance field of frames in X direction	36
6.3 Deformation limits	36
6.3.1 Floor deformations	36
6.3.2 Beam deformation limits in the Y direction	36
6.3.3 Frame deformations	37
6.3.4 Guide rail deformation	37
6.4 Clearances for unit loads and truck handling equipment.....	37
6.4.1 Clearances relating to the placement of unit loads	37
6.4.2 Horizontal and vertical clearances in a bay	38

6.4.3	Horizontal clearance in the depth.....	39
6.5	Aisle width dimensions.....	42
6.5.1	Minimum aisle clearance for truck and load.....	42
6.5.2	Lowest unit load	42
6.6	Pick up and deposit stations.....	42
7	Stacker crane classes 100 and 200	42
7.1	Floor tolerances.....	42
7.1.1	Interdependence of rack and crane on local floor level variation	42
7.1.2	Floor Levelness for stacker crane floors	42
7.2	Installation tolerances.....	43
7.2.1	General	43
7.2.2	Tolerance field of frames in X direction	48
7.2.3	Rail fabrication and assembly tolerances.....	48
7.3	Deformation limits	49
7.3.1	Slab deformation due to settling and slab deflection.....	49
7.3.2	Beam deformation limitations in the Y direction.....	49
7.3.3	Top guide rail deformations	50
7.3.4	Frame deformations in the X and Z directions	51
7.3.5	Frame deformations in the X and Z directions for clad rack buildings and wind loads	52
7.3.6	Elastic shortening of uprights	54
7.4	Clearances for unit loads and crane handling equipment.....	54
7.5	Safety backstop deformations	54
7.5.1	Deformations	54
7.5.2	Clearances	54
8	Warehouse tolerances and deformations.....	54
Annex A	(informative) Adjustable pallet racking components.....	55
Annex B	(informative) General safety philosophy	57
B.1	General	57
B.2	Wide and narrow aisle width manoeuvring clearance.....	58
B.3	Intrusive stacking	58
B.4	Environments with additional risk.....	59
B.5	Truck requirements	59
B.6	Floor tolerances and deformations	60
B.6.1	General	60
B.6.2	Sloping floors	61
B.6.3	MHE lean.....	61
Annex C	(informative) Racking measurement surveys.....	63
C.1	General	63
C.2	Agreed grid lines and datum's	63
C.3	Principal grid lines and datum's	63
C.4	Measurement survey reports	63
C.4.1	General	63
C.4.2	Measuring conditions	63
Annex D	(informative) Effects of beam hogging and sagging deformations on clearances	64
D.1	Effects of beam hogging and sagging deformations on clearances X_3 , X_4 and Y_1 , Y_2 and Y_3 for non cantilevered beams.....	64
D.2	Effects of beam hogging and sagging deformations on X_3 , X_4 and Y_1 , Y_2 and Y_3 for cantilevered beams (P and D stations)	68
Annex E	(informative) Additional information for determining dimensions and clearances in the depth of the rack (Z direction).....	69
E.1	Placement tolerances in the depth of the rack.....	69
E.2	Larger values of Z_{2a} and Z_{2b}	70
Annex F	(informative) Additional information for very narrow aisle trucks in adjustable pallet racking	72
F.1	General	72

F.2 **Considerations for the Z direction**72

F.3 **Considerations in the Y direction**73

F.4 **Height selection device**.....73

F.5 **Pick up and deposit (P and D) stations**73

Annex G (informative) **Consideration of tolerances and deformations in determining clearances**74

G.1 **General**.....74

G.2 **Storage systems other than single deep adjustable pallet racking**74

Annex H (informative) **Top guide rail tolerance recommendations**75

Bibliography76

Foreword

This document (EN 15620:2008) has been prepared by Technical Committee CEN/TC 344 “Steel static storage systems”, the secretariat of which is held by UNI.

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 April 2009, and conflicting national standards shall be withdrawn at the latest by April 2009.

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.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The determination of the safe load bearing capacity of racking is a structural issue and therefore the Eurocodes are relevant, especially EN 1993. The most relevant parts for racking are EN 1993-1-1 and EN 1993-1-3.

In order to have reliable state of the art guidance for those involved in designing these products and due to the differences in the shape of the structural components, detailing and connection types, additional technical information to the Eurocodes is required.

The scope of CEN/TC 344 is to establish European Standards providing guidance for the specification, design, methods of installation, accuracy of build and also guidance for the user on the safe use of steel static storage systems.

This, together with the need for harmonised design rules, was the reason that the European Racking Federation (ERF) has taken the initiative for the CEN/TC 344. This TC is in the course of preparing a series of European Standards regarding Steel static storage systems as follows:

prEN 15512, *Steel static storage systems – Adjustable pallet racking systems – Principles for structural design*;

prEN 15629, *Steel static storage systems – The specification of storage equipment*;

prEN 15635, *Steel static storage systems – The application and maintenance of storage equipment*.

The intention is for these EN series to be published sequentially over a period of ten years.

1 Scope

This European Standard specifies tolerances, deformations and clearances that pertain to the production, assembly and erection of pallet racking including the interaction with floors. These tolerances, deformations and clearances are important in relation to the functional requirements and ensuring the proper interaction of the handling equipment used by personnel, trained and qualified as competent, in association with the specific type of racking system. The interaction conditions are also important in determining the reliability of the storage system to ensure that the chance of an industrial truck impact, pallet impact or a system breakdown is acceptably low. The design safety philosophy given in prEN 15512 is based upon compliance with this standard.

This European Standard gives guidance for a variety of issues including operating clearances, manufacturing, assembly and erection tolerance limitations, as well as deflection or strain deformation limitations under loads.

This European Standard is limited to single deep adjustable beam pallet racking operated with industrial trucks or stacker cranes. Drive-in, double deep and satellite systems will be considered for inclusion in the document in the future.

This European Standard specifically excludes the tolerances and deformation of the trucks and stacker cranes. It is the responsibility of the truck or stacker crane supplier and the client or user to ensure that the tolerances, deformations and clearances, as quoted in this European Standard for the racking systems, are acceptable for the safe operation of the overall system.

This European Standard gives guidance to be used in conjunction with the latest information from the truck and stacker crane suppliers regarding turning radii, tolerances and deformations of the truck and stacker cranes.

2 Normative references

The following referenced documents are indispensable for the application 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.

prEN 15512 *Steel static storage systems – Adjustable pallet racking systems – Principles for structural design*

prEN 15629 *Steel static storage systems – The specification of storage equipment*

prEN ISO 3691-3, *Industrial trucks – Safety requirements and verification – Part 3: Additional requirements for trucks with elevating operator position and trucks specifically designed to travel with elevated loads (ISO/DIS 3691-3:2007)*