

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 13199-2:2001

<https://standards.iteh.ai/catalog/standards/sist/8062de32-081f-4c7e-ba37-aadb0286e1e4/sist-en-13199-2-2001>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13199-2

July 2000

ICS 55.160

English version

Packaging - Small Load Carrier Systems - Part 2: Column Stackable System (CSS)

Emballage - Systèmes de transport de petites charges -
Partie 2: Système gerbable en colonnes (SGP)

Verpackung - Kleinladungsträgersysteme - Teil 2:
Säulenstapelsystem (SSS)

This European Standard was approved by CEN on 30 June 2000.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

[SIST EN 13199-2:2001](https://standards.iteh.ai/catalog/standards/sist/8062de32-081f-4c7e-ba37-aadb0286e1e4/sist-en-13199-2-2001)

<https://standards.iteh.ai/catalog/standards/sist/8062de32-081f-4c7e-ba37-aadb0286e1e4/sist-en-13199-2-2001>



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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Contents

	Page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Characteristics	5
4 Dimensions, weights and applied loads	5
5 Designation of SLC system elements	18
6 Material	18
7 Marking and labelling	18
8 Safety	18
Annex A (normative)	
Test methods	19
Annex B (normative)	
Palletized loads	21
Annex C (informative)	
Examples of palletized loads	22
Annex D (informative)	
Functional features	24

SIST EN 13199-2:2001

<https://standards.iteh.ai/catalog/standards/sist/8062de32-081f-4c7e-ba37-aadb02861e4/sist-en-13199-2-2001>

APPROVED AND AUTHORIZED
FOR PUBLICATION BY THE
COMMISSION OF STANDARDS AND TECHNICAL
REGULATIONS

STANDARDIZATION INSTITUTE OF VIETNAM

Foreword

This European Standard 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 January 2001, and conflicting national standards shall be withdrawn at the latest by January 2001.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

No existing European standard is superseded by this standard.

This draft standard is part of a series of standards for Small Load Carrier systems (SLC systems).

The other parts are entitled as follows:

- Part 1: Common requirements and test methods
- Part 3: Bond stackable system (BSS)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 13199-2:2001

<https://standards.iteh.ai/catalog/standards/sist/8062de32-081f-4c7e-ba37-aadb0286e1e4/sist-en-13199-2-2001>

Introduction

The Small Load Carrier (SLC) system specified in this Part of EN 13199 consists of re-usable elements, designed for manual and mechanical handling. It was first conceived for handling, storage and transport of goods and designed to meet the needs of automotives manufacturers and their suppliers.

As this system may be used for similar purposes in other fields of application, this Part of EN 13199 only contains the main requirements necessary to define a non-restrictive common base. These universal characteristics allow the requirements of manual, mechanical and automatic handling to be met, and thus enhance the efficiency of the logistic chain. It is likely that this system of SLCs and accessories will frequently be used in a pool.

The use of SLC systems with palletized loads is discussed in Annexes B and C.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 13199-2:2001

<https://standards.iteh.ai/catalog/standards/sist/8062de32-081f-4c7e-ba37-aadb0286e1e4/sist-en-13199-2-2001>

1 Scope

This standard specifies the main characteristics and the testing of reusable durable parallelepipedic SLCs and their accessories which form a column stackable system designed to contain bulk or precisely located component loads up to maximum load of 20 kg.

Illustrations of functional features are given in Annex D (informative).

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 13199 -1:2000

Packaging – Small Load Carrier Systems – Part 1: Common requirements and test methods

3 Characteristics

The column stackable system is characterized by the following features:

- a) maximum load: 20 kg;
- b) nominal height of standard palletized load: 800 mm, 1000 mm and 1200 mm (including pallet);
- c) functional features: handles for manual pick-up, horizontal axis holes and ribs for mechanical pick-up;
- d) labelling areas: four, one on each side or end;
- e) label holder (if necessary);
- f) available label holder locations:
 - for 600 mm × 400 mm and 400 mm × 300 mm SLCs: two, one each on an adjacent side and end;
 - for 300 mm × 200 mm SLC: one, on a side.

4 Dimensions, weights and applied loads

4.1 Small Load Carriers

The main dimensions shall be as given in table 1 and as illustrated in figures 1 to 5. Surfaces shall be free from warp exceeding the limits given in table 2. The permitted base warping is 2 mm maximum (difference between one corner and the plane defined with other 3 corners).

Table 1 - Main dimensions of Small Load Carries

Dimensions	SLC reference				
	6432	6422	4322	4312	3212
Nominal dimensions (mm)	600 × 400 × 320	600 × 400 × 220	400 × 300 × 220	400 × 300 × 120	300 × 200 × 120
Outer dimensions and tolerances (mm)					
length	594 ± 2	594 ± 2	396 ± 1,5	396 ± 1,5	297 ± 1
width	396 ± 1,5	396 ± 1,5	297 ± 1	297 ± 1	197 ± 1
height	314 ± 1	214 ± 1	214 ± 1	114 ± 1	114 ± 1
Inner dimensions and tolerances (mm)					
length	560 ± 2	560 ± 2	362 ± 1,5	362 ± 1,5	263 ± 1
width	362 ± 1,5	362 ± 1,5	263 ± 1	263 ± 1	163 ± 1
total height	311 ± 1	211 ± 1	211 ± 1	111 ± 1	111 ± 1
useful height	294 ± 1	194 ± 1	194 ± 1	94 ± 1	94 ± 1
Centre distances of handling holes (mm)					
diameter	13	13	13	13	13
spacing on length	480 ± 1,5	480 ± 1,5	282 ± 1	282 ± 1	220 ± 1
spacing on width	282 ± 1	282 ± 1	220 ± 1	220 ± 1	130 ± 1
Stacking height (mm)	299	199	199	99	99
Capacity/outer volume (m ³)	0,596 / 0,754	0,393 / 0,514	0,185 / 0,257	0,089 / 0,137	0,040 / 0,068
Capacity/outer volume (%)	79	76	72	65	59
Tare without label holder (kg)	2,93 ± 0,040	2,35 ± 0,040	1,41 ± 0,025	0,9 ± 0,020	0,54 ± 0,020
Nominal load (kg)	20	20	20	20	20
Nominal stacking load (kg)	400	400	300	300	150

Table 2 - Warp Limits

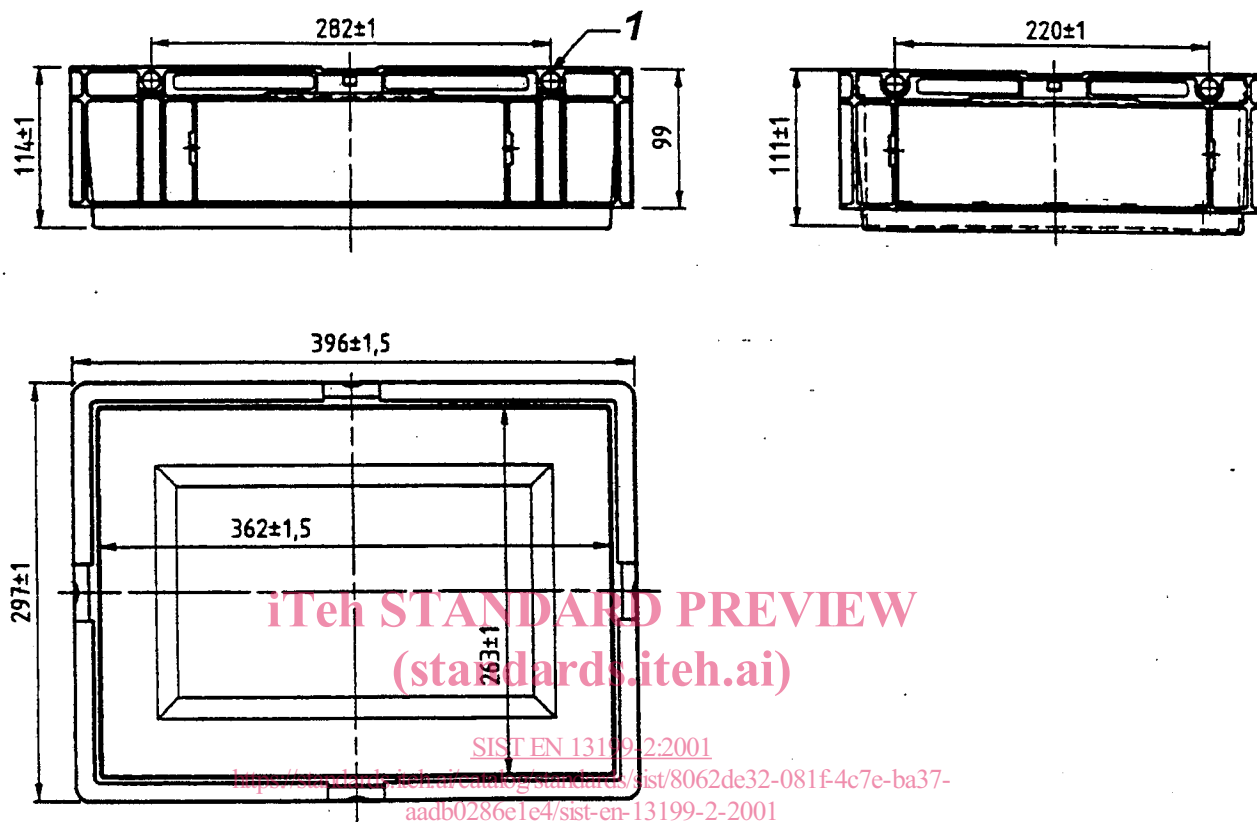
SLC reference	Sides ¹⁾	Ends ¹⁾	Bottom ²⁾
6432 & 6422	3 mm	2 mm	0 + 3 mm
4322 & 4312	2 mm	1,5 mm	0 + 2 mm
3212	1,5 mm	1 mm	0 + 1 mm
¹⁾ either outer or inner ²⁾ inner only			

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 13199-2:2001

<https://standards.iteh.ai/catalog/standards/sist/8062de32-081f-4c7e-ba37-aadb0286e1e4/sist-en-13199-2-2001>

Dimensions in millimetres

**Key**

- 1) 4 holes $\varnothing 13$

Figure 2 - SLC type 4312