

Packaging — Small Load Carrier Systems —

Part 2: Column Stackable System (CSS)

The European Standard EN 13199-2:2000 has the status of a
British Standard

ICS 55.160; 55.180.40

National foreword

This British Standard is the official English language version of EN 13199-2:2000.
The UK participation in its preparation was entrusted by Technical Committee PKW/3, Distribution packaging, transport packaging and unit loads, to Subcommittee PKW/3/5, Rigid plastic packaging, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 26, an inside back cover and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

This British Standard, having been prepared under the direction of the Consumer Products and Services Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 September 2000

© BSI 11-2000

ISBN 0 580 36207 8

Amendments issued since publication

Amd. No.	Date	Comments
12063 Corrigendum No. 1	November 2000	Part number on front cover corrected

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.



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

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 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)

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.

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, 1 000 mm and 1 200 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			