

BELGIAN PACKAGING INSTITUTE

Non profit making association

B.P.I.

DATE: Brussels, 5th of October 1994.

REPORT Nr.: SVD/as/G-94.210/1395

SUBJECT: Tests on wooden boxes (4D) intended to be used for the transport of dangerous goods of the packaging group III.

BY ORDER OF: **CLIP-LOK FORESCO N.V.** *ForeSCO*
Diksmuidestraat 64
2300 TURNHOUT

The use of the boxes is submitted to the autorisation of the competent authority.
(ADR-RID, IMDG, ICAO)


ing. M. WITTEBOLLE
Technical Director


Sabine VAN DAEL
Dangerous Goods Department

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REPORT G-94.210**I. Presented packages**

Typ of box : Multiplex wooden box conform the description (4D) as mentioned in the different regulations.

Description of the samples :

Multiplex wooden boxes (dimensions : 725 x 499 x 569 mm), manufactured following the plan nr. TRA 4001A Type 147.

The boxes are foreseen of an inner ring made of double-wall corrugated board and 5 plates with partitions, in which 24 airbags for cars are packed. (see plan)

Each box is closed by means of 24 clips of the type "Clip-Lok" (see specifications) and marked with the logo.

Total weight : 130 kg

Total weight of the sample : 130 kg

Number of received samples :

8 packagings ready for shipment

II. Test programme

Performance tests for wooden boxes (4D) prescribed by :

- UN - Part 9
- IMDG - Annex I - paragraph 8
- ICAO - Part 7 - chapter 4
- ADR-RID - Appendix V (A5)

1. Drop test

Filling material : see point I (inner packaging)

Number of tested packagings : 5

Drop height : 0.8 m

Drop orientation :

first drop :	flat on the top
second drop :	flat on the bottom
third drop :	flat on the longest side
fourth drop :	flat on the shortest side
fifth drop :	on a corner

Criterion

No important deterioration of the box, no loss of the contents.

2. Stacking test

Filling material : see point I (inner packaging)

Number of tested samples : 3

Stacking height : 3 m

Duration of the test : 24 hours

Stacking load :

$$(3000/582) - 1) \times 130 = 550 \text{ kg}$$

* Criterion

No deteriorations which could adversely affect transport safety.

No distortion liable to reduce the strength of the box or to cause instability in a stack of packages.

III. Results of the tests

1. Drop test

No important deterioration of the box, no loss of the contents.

2. Stacking test

No test sample shows any deterioration which could adversely affect transport safety.

No distortion liable to reduce the strength of the box or to cause instability in a stack of packages.

V. Conclusions

The presented packagings have successfully met the performance tests prescribed for the transport of dangerous goods of the packaging group III and may be used in connection with the following conditions :

- maximal stacking height : 3 m
- maximal total weight : 130 kg

All other conditions of use are not covered by this report.

The packagings may only be used for the transport of dangerous goods by road, rail, sea or air with the agreement of the concerned competent authority.



Sabine VAN DAEL
Dangerous Goods Department

Brussels, the 5th of October 1994.

REPORT G-94.210

The use of the UN mark hereafter, is still submitted to the authorization of the competent authority.

The hereafter mentioned packagings :

- wooden boxes (4D)

that are the subject of report :

- G-94.210 of the 5th of October 1994

may obtain the hereafter mentioned UN mark :



4D/Z 130/S/*
B/CLIE - **

* :
**:

year of manufacture

registration number to be delivered by the authority

as far as the use of the above mentioned packagings in the IMDG, ICAO and ADR-RID prescriptions is provided for.

The stacking test was effectuated for a stacking height of 3 m.

Gross weight : 130 kg

Firm : **CLIP-LOK FORESCO N.V.**
Diksmuidestraat 64

2300 TURNHOUT



Sabine VAN DAEL
Dangerous Goods Department

Vertrieb: CLN
 Kunde: TRW, Alldorf
 Type: TRA4001A
 Ausgabe: 2/04.08.94
 Bezeichnung.: CL-Mehrweg
 Ausführung: Standard
 Material: Sperrholz
 Zusatzfräsg.: ja
 Ladeklappe: nein
 Vert. Bodenfräsg.: ja
 Kantenbesch.: nein
 Klotzhöhe: 78 mm
 Falzfräsung Höhe: Seite
 Stempel: Clip-Lok Neidhart
 Hinweise:

Stückliste

10.8.94
May

Bestellmenge:
 Eintrefftermin:
 Typ.Nr. Kunde: 147
 Kommission:

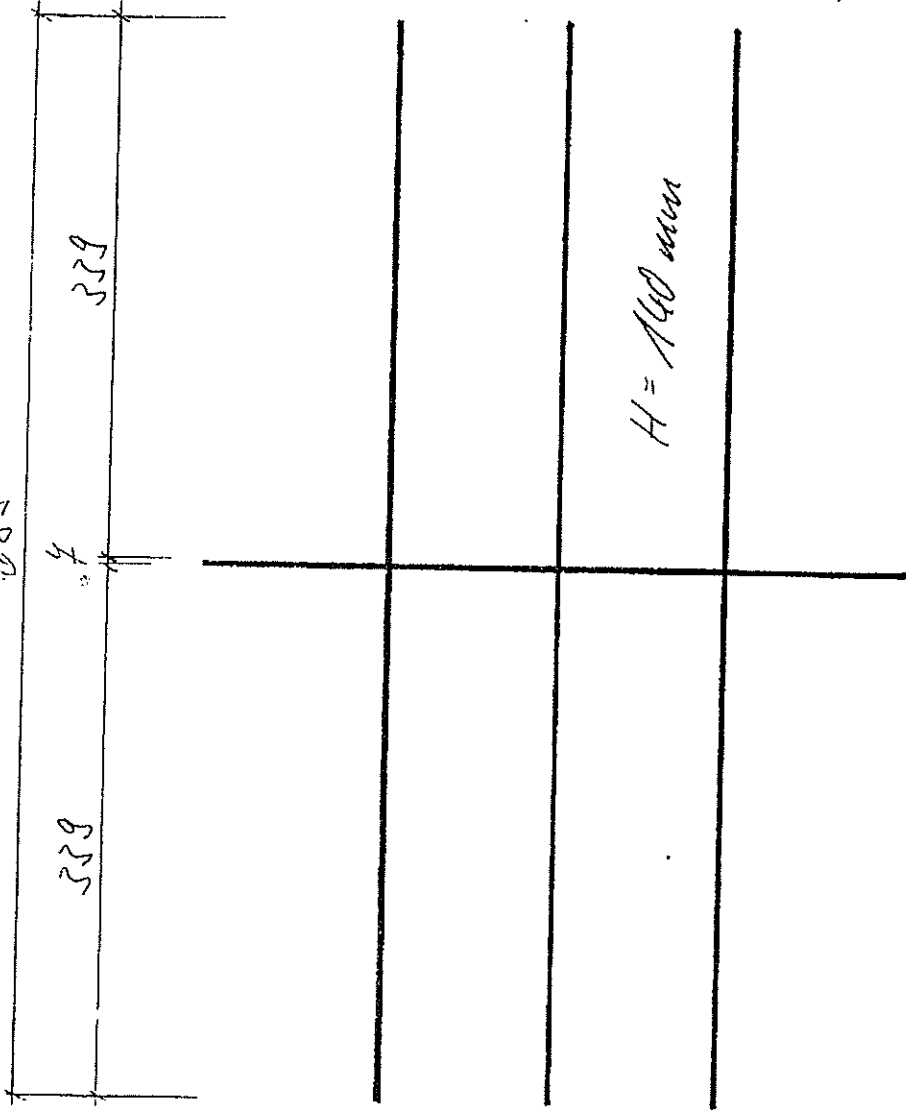
			Länge	Breite	Höhe
Bd	FU	Außenm. mm	725	499	569
De	FU	innenm. mm	701	475	449
Se	FU	Clips	2	2	2
St	FU	Außenfl. qm	2,116		
		Grundfl. qm	0,362		

Plattenformat für Schäftung: 2400 / 1500

Bezeichnung	St.	Fertigmaße mm				Zuschnittmaße mm			Rohmaße mm			Schäft fugen	
		Länge	Breite	D	m2/m3	Länge	Breite	m2/m3	Länge	Breite	D		m2/m3
Boden	1	725	499	12	0,362	741	515	0,382			12	0,399	0,111
Deckel	1	725	499	12	0,362	741	515	0,382			12	0,399	0,111
Seiten	2	725	457	12	0,663	741	473	0,701	480	750	12	0,720	
Stim	2	483	457	12	0,441	499	473	0,472	480	500	12	0,480	
Kufenbr. Sp.	3	499	80	18	0,120	499	80	0,120	557	88	18	0,147	
Kufenbr. Sp.													
Sp.-Klotz													
Sp.-Klotz													
Querbr.no.Fi.													
Querbr.no.Fi.													
Kufenbr.n. Fi.													
Hilfsstoffe					kg/St.	Gesamt-kg							
Formsp.Klotz	6	100	80	78	0,374	2,25							
dto.		133	80	78	0,498								
dto.		95	95	78	0,422								
dto.		138	95	78	0,614								
dto.		145	100	78	0,679								
dto.		145	145	78	0,984								
Klammern				32	0,003								
Streifennägel			3,8	80	0,007								
Nagelschr.b.?			4,6	50	0,007								
Nagelschr.b.	24		4,6	80	0,008	0,19							
6-kt.Schr.b.			M 8	110	0,044								
6-kt.Schr.b.			M 8	150	0,055								
Leim				kg									
Clip 12/Std.	24		35	1,4	0,050	1,20							
Clip 18/Std.			50	1,6	0,170								
Summen Spanplatte 12 mm				qm									
Summen Spanplatte 15 mm				qm									
Summen Spanplatte 18 mm				qm									
Summen Sperrholz 12 mm				qm	1,828			1,936				1,998	
Summen Sperrholz 15 mm				qm									
Summen Sperrholz 18 mm				qm	0,120			0,120				0,147	
Summen Massivholz				cbm									
Schäftfugen 12 mm					0,222								
Schäftfugen 15 mm													
Schäftfugen 18 mm													
Zuschnitt Gesamt 12 mm				lfm	4,372								
Zuschnitt Gesamt 15 mm				lfm									
Zuschnitt Gesamt 18 mm				lfm	1,737								
Platten-Kantenfräsung				lfm	3,962								
Schlitzfräsungen Kufenbrett				lfm									
Behältergewicht				kg	16,40								

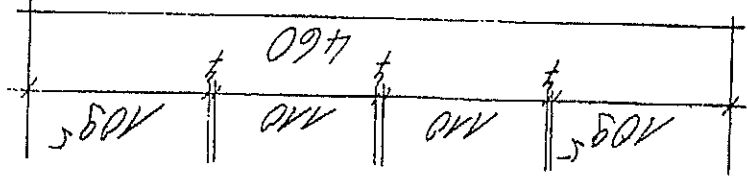
Versandart:
 Versandanschrift:

685



H = 1460 mm

- pro Baueinheit:
 3x Gefache
 4x Zerschnitt
 1x Mantel



- + Zerschnitt 460 x 685 mm mit Griffloch
- + Mantel Typ 0201
- 107: 684 x 461 x 448 mm

April 2.7



Fritz Neidhart Holzverarbeitung
 8120 Weilheim Oberbayern

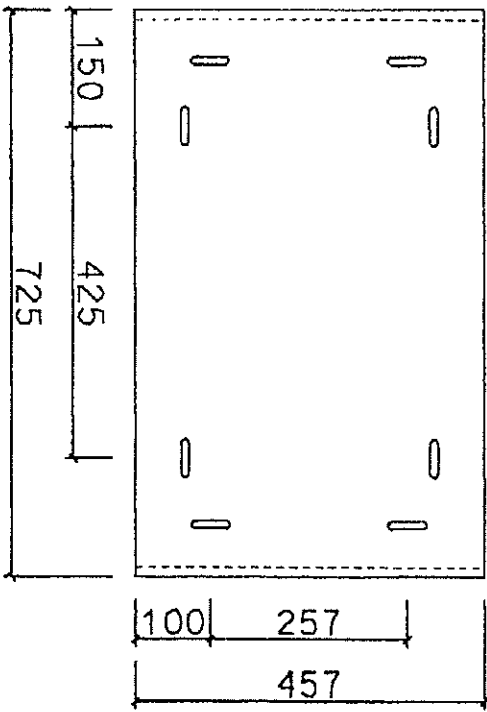
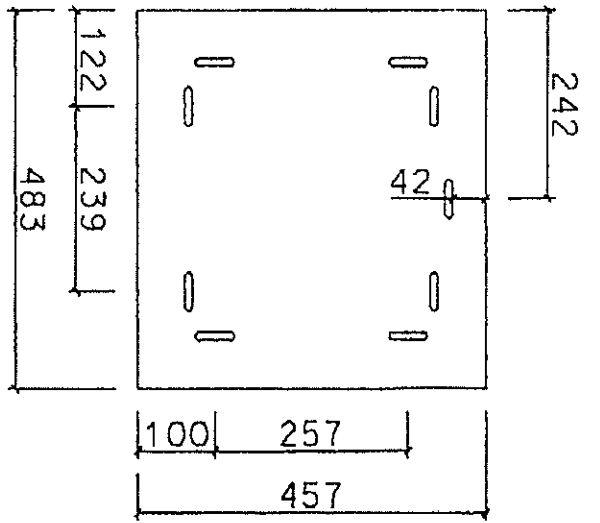
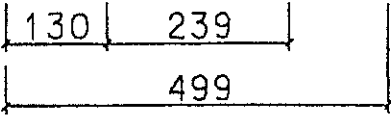
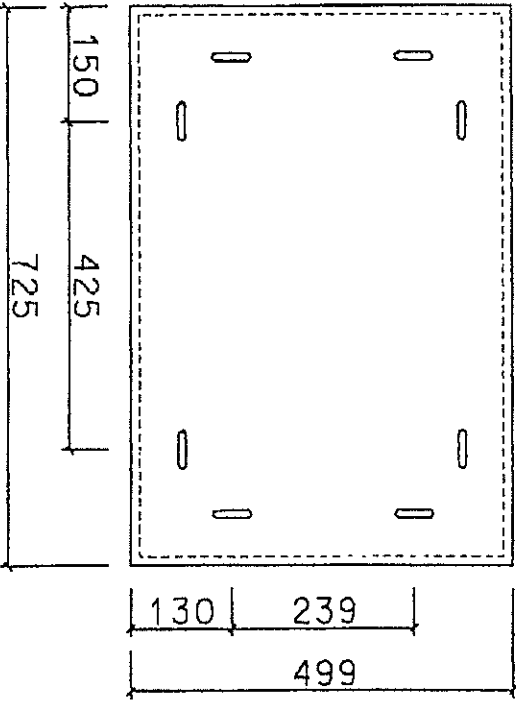
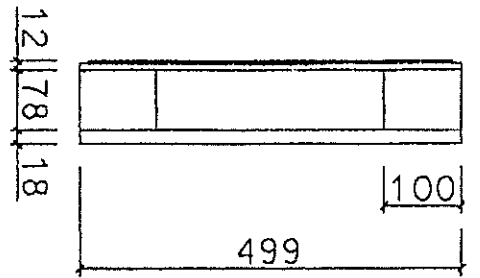
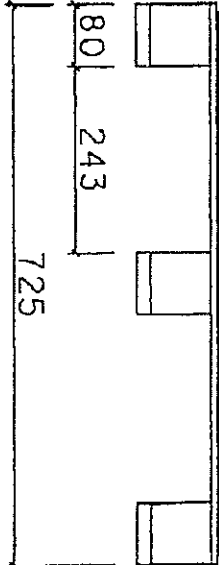
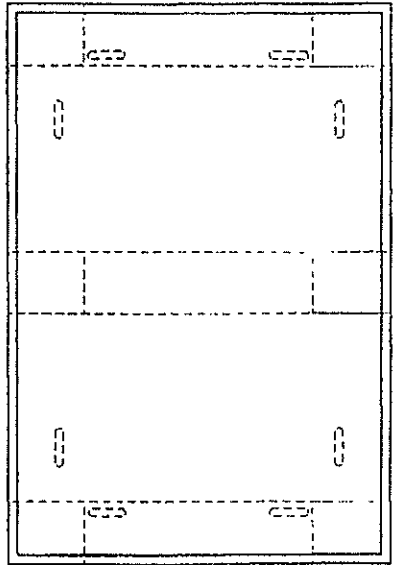
Zeichnungs-Nr.

Kennwort:

gez. Maßstab:

25.7.94

147



FRITZ NEIDHART GmbH & Co. KG - Holzwerke
 D-82354 Weilhahn
 D-26723 Ernden

Erstellungsort/um:
 10.08.94

Ausgabe/vorn:

Ausgabe/vorn:

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 Diese Zeichnung darf ohne unsere Genehmigung
 weder vervielfältigt, noch zu Zwecken des
 Weiterverkaufs verwendet oder dritten Personen
 zugänglich gemacht werden

Kunden

TRM, Alfordorf

Typen-Nr./Lunde / Kommission:

747

Typ:

TKA4001A

Abmessung:

725 X 499 X 569

Post- / Blattzahl:

1

1

Name:

Mayer

Kassiert:

gründ.

CL-Mehrweg Behälter

Pos. Nr.:

ANNEX

