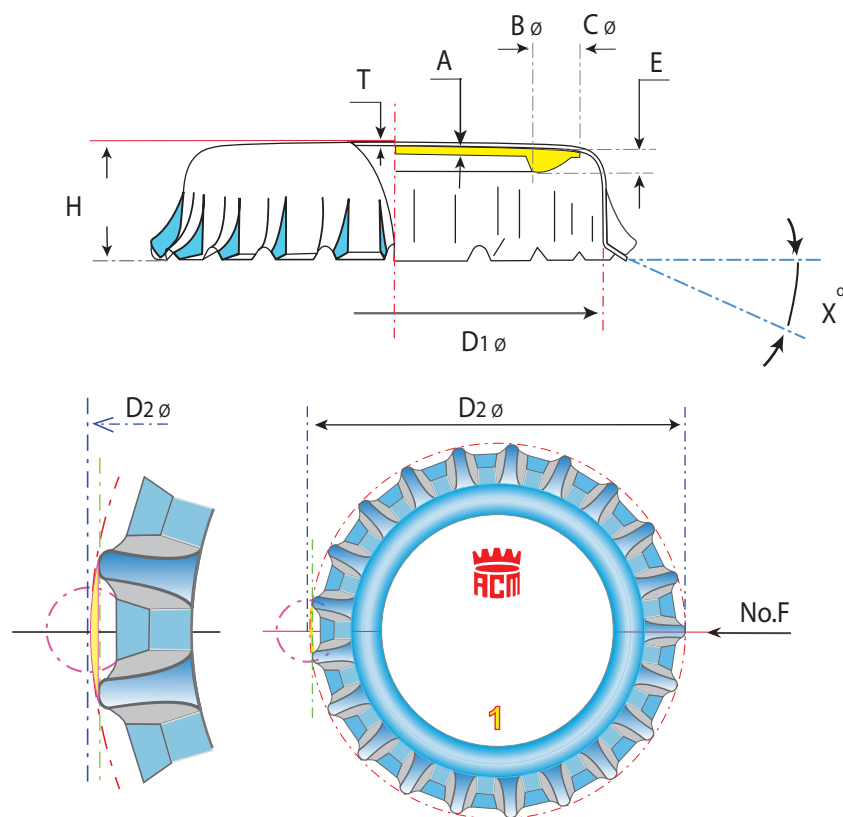


CROWN Specification



Item	Feature	Specification	Tolerance
-	Shell Material Type	TFS	
-	Crown Partial Weight	1.90 g.	± 0.05 g.
T	Thickness of Sheet	0.22 - 0.24 mm.	± 0.005 mm.
D 1	Inside (Brim) Diameter $\emptyset$.	26.78 mm.	± 0.02 mm.
D 2	Overall Diameter $\emptyset$.	32.10 mm.	± 0.20 mm.
H	Overall Height .	6.00 mm.	± 0.15 mm.
F	Number Of Corrugations .	21	
X°	Press Shell Skirt Angle .	15°	$\pm 3^\circ$
-	Liner Type .	PVC & PVC Free	
A	Liner Disc Thickness .	0.20 mm.	± 0.01 mm.
E	Liner Sealing Ring Height (912 - 917).	1.20 & 1.38 mm.	± 0.01 mm.
B	Liner Sealing Ring Inside Diameter .	19.50 & 19.05 mm.	00 mm.
C	Liner Sealing Ring Outside Diameter .	24.76 mm.	00 mm.
-	Liner Weight (PVC - PVC Free) .	260 & 210 mg.	± 10 mg.
-	Liner Profile Code:	912 & 917	
-	Crimp Ring Inside Diameter . $\emptyset$	28.35 mm.	± 0.05 mm.
-	Top Load With 1 Spring .	200 kg.	
-	Top Load With 2 Spring .	Ejector . 160 kg.	
		Compensation Load min. 350 kg. max. 400 kg.	

TORQUE : Reference Guide Data Sheet Packaging Glass General Application Torque (DT 29.00) .

PRESSURE TEST : Reference (ACM) Data sheet, (CE.T.I.E. Standard Guide & PEPSICO INT. Data Sheet).

DRAWING BY
ACM

CHECKED BY
Ali.S.A

UPDATED BY
Ali sayed

APPROVED BY
Engr.M.AL-AMOUDI

DATE
Year 1989

UPDATE
7 / 8 / 2023



شركة المودي لصناعة السدادات
AL-AMOUDI CLOSURES MFG. CO.

TITLE : CROWN SPECIFICATION

PROJECT

CROWN CAP

REV.

SACMI &
CE.T.I.E

CODE REF. NO.

1567T/004
EC 1-021

DRAWING NO.

DS-CS.2002.02

for more details please contact us at our e-mail : acm@al-amoudi.net



Technical Data Sheet - **Crown**

Product Name: **Crown Cap Pry Off & Twist Off / RB & NRB.**

Specification

Use for:

- Use at Beverage factory sealing glass bottle Neck Finish type(Pry Off or Twist Off / RB or NRB).
- It Used to seal the bottle Neck Finish to Protect the Internal Soft Drinks or Juices application.

A - **Material :**

- **Shall** Material Type: Tin Free Steel - TFS. / Electrolytic Tin Plat - ETP.
- **Liner** Material Type: PVC or PVC Free. - Germany
- Overprint Varnish Type: Acrylic. - AkzoNobel. - UK.
- Adhesive Lacquer Type: Epoxy Phenolic. - AkzoNobel. - UK.
- Size Coat Type: Polyester. - AkzoNobel. - UK.
- Printed Ink Type: Alkyed Ink. - AkzoNobel. - UK.
- Caps Color According to Customer Flavor.

B - **Dimensions:**

- Overall Diameter Ø : 32.10 mm. ± 0.20 mm.
- Overall Height: 6.00 mm. ± 0.15 mm.
- Number of Corrugations: 21

C - **Information:**

- Crimp Ring Inside Diameter Ø : 28.35 mm. ± 0.05 mm.
- Capping head Top Load: 200 kg.
- Capping head Ejector: 160 kg.
- Compensation Load min.: 350 kg.
- Opening Torque: 4 : 12 lbs. for NRB.
- Pressure Test: 120 : 150 Psi. - RB / NRB.

D - **Storage :**

- The products should be used before 12 Months from crown boxes production date (Best Before Date: **BBD**).
- Storage at Temp. 25 °C, Avoid storage of crown boxes in direct sunlight. / Protect from excessive humidity.

Prepared by:
Food Safety Time

Approved by :
Plant Manager



Product Description - Crown

Product Full Description

Crown Cap :-

- A - It is used for capping seal glass bottle Neck Finish type **Pry off** or **Twist Off** - **RB & NRB** application
- B - It is made from Tin Free Steel (**TFS**) or Electrolytic Tin Plate sheet (**ETP**). and coated with:
(**Adhesive Lacquer, Size Coat, Ink Color, Varnish, Liner PVC or PVC Free**).

C - How to Produce.

Printing Procedure :

First after receive row materiel and finish test. Run on the Plain **TFS** or **ETP** at coating line for the lacquering of the first side.

- 1- The back side of the sheets coated with **Adhesive lacquer** for the liner sticking. - First Pass.
- 2- The front side is coated with **Size coat** to make the printed ink becomes stronger sticking.
- 3- Back again to front side for Printing **Logo**, it depend upon how many color of logo to be printed (e.g. Red , Blue , white ,orange ,Green act.).
- 4- After that is the applying of overprint **Varnish** for final process and to be transfer to Crown production line for punching.

Production Procedure :

- 1- Operator makes the press machine ready for punching
- 2- Re-check the sheets one by one before feeding if there is no lacquered sheets or logo ink defects.
- 3- Adjusting the press machine for logo centering before punching.
- 4- After that we make ready for start punching.

Plastic Lining Procedure :

- 1- The machine has 2 hoppers **PM1** & **PM2**, the crown is stocked here for liner application.
- 2- Both machine code **PM1** & **PM2** has Two operators to watch carefully the crown if it is good or not taking out liner cut , liner bubbles and other crown error .
- 3- Crown will fell down to machine code **CTE** for counting and check as non conformance crown will not pass into the counter outlet channel.
- 4- Packing , Carton print tag includes Customer name, Flavor, Batch number, Production Date, box number, and QC. Approval.

Storage :

- The products should be used before 12 Months from crown boxes production date (Best Before Date: **BBD**).
- Storage at Temp. 25 °C, Avoid storage of crown boxes in direct sunlight. / Protect from excessive humidity.

Prepared by:
Food Safety Time

Approved by :
Plant Manager



Packaging Specification - Crown

General Description

Product Type : **26 mm. Crown** (PRY Off - **RB** & Twist Off - **NRB**)

Property	Value			
Material	Tin Free Steel (TFS) .			
Weight , g	2.16 g.			
Tamper Indicating	No			
Liner Forming Process	Die cut			
Diameter. Mm	26 mm.			
Shell Molding Process	Metal			
Vendor	Crown			
Finish Type	Crown			
Closure type	Crown			
Market	KSA & Middle East.			
Approved Usage- closure	CSD			
Liner	Yes			

Materials

Property	Value			
Shell Material Type	TFS.			
Shell Hardness	53 - 64 - at HR 30T Scale.			
Shell Base Color	Silver.			
Internal coating	Epoxy Phenolic			
External coating Base coat	Modf. Polyster			
Print color	As request			
Varnish Type	Acrylic			
Ink Type	Alkyd ink - for Metal Decoration.			
Liner Type	PVC or PVC Free			
Liner Color	Transparent			
Liner Supplier	Dr.Grossman Germany.			

Dimensional Analysis

Property	Target	Min.	Max.	Test method
Shell external dimension	32.10 mm.	31.90 mm.	32.30 mm.	PEPSICO Global Guide
Shell Internal dimension	26.78 mm.	26.76 mm.	26.80 mm.	"
Shell Height Dimension	6.00 mm.	5.85 mm.	6.15 mm.	"
Shell Weight	1.90 g.	-	-	"
Liner External Diameter	24.76 mm.	-	-	"
Liner Thickness	0.20 mm.	-	-	"
Liner Profile	912 - 917	-	-	"
Liner Weight	260 - 210 mg.	245 - 200 mg.	275 - 220 mg.	"
Liner Hardness, Shore A	67	64	70	"

Performance Requirements

Property	Target	Min.	Max.	Test method
Pressure Test (SST) .	130 psi. RB / 120 psi. NRB	120 psi.	150 psi.	100 : 150 / Twist Off
Removal Torque. (Cold).for Twist Off	8 lbs.	4 lbs.	15 lbs.	PEPSICO Global Guide

A

Pallet Configurations

Property	Target	Remark
Pallet Material	Wood	
Pallet Size	L -1.035 x W - 895 X H - 90 mm.	
No. of layers each pallet	5 - layers	
No. of Boxes each Layer	5 - Boxes	
Total Boxes each Pallet	25 - boxes x 10, 000 pcs .	
Total Packaging Height	1,760 mm.	
Use for Packaging cover	Shrink film and Cardboard on top & Bar code Ticket. at 2 side	
Use for Boxes closing	Masking Tape on Top & Bottom	

B

Property	Target	Remark
Pallet Material	Wood	
Pallet Size	L -1.200 x W - 1.000X H - 130 mm.	
No. of layers each pallet	5 - layers	
No. of Boxes each Layer	7 - Boxes	
Total Boxes each Pallet	35 - boxes x 10, 000 pcs .	
Total Packaging Height	1,800 mm.	
Use for Packaging cover	Shrink film and Cardboard on top & Bar code Ticket. at 2 side	
Use for Boxes closing	Staple on Top & Bottom W/ Masking Tape	

Reference Document

Drawing Type	Document Description
Crown Specification Drawing	Crown specification Intermediate size 26 mm. Code (DS-CS.2002.01 & DS-CP.2003.01) .
Packaging Specification	Packaging Specification Code (PD-PS.C.G.02) .
Packaging Pallet Drawing	Drawing of Load Packaging Pallet 25 & 35 boxes. Code (PD-BCPP.G.03 (PD-BCPW.G.03) .
Packaging Packer's note Drawing	Packer's note for carton Production Details. Code (PD.PN.C.G.03) .

Prepared by :
Production ManagerApproved by :
Plant Manager



Al - Amoudi Closures Manufacturing Co.

Ref. : ACM System

ISO 22000 - 2018

Code : PD-PPBC.G.02

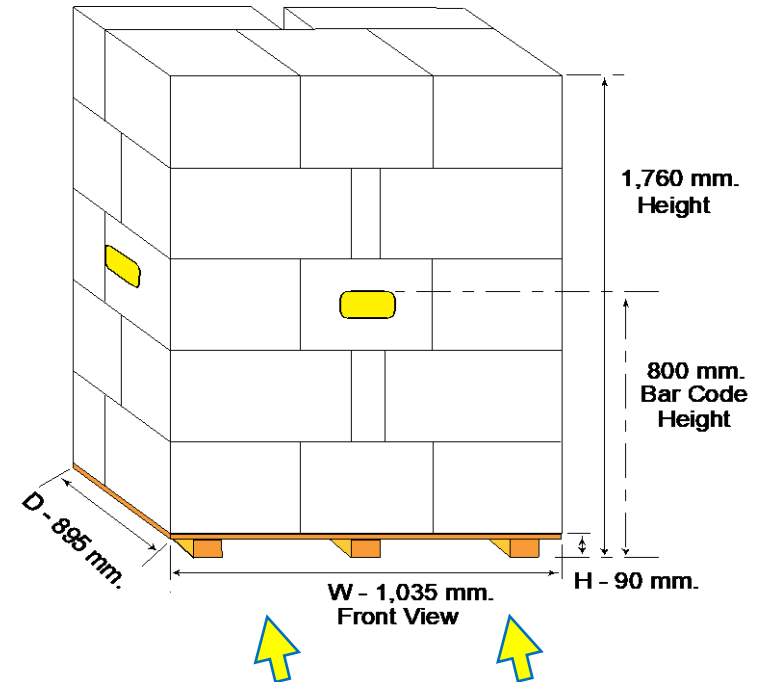
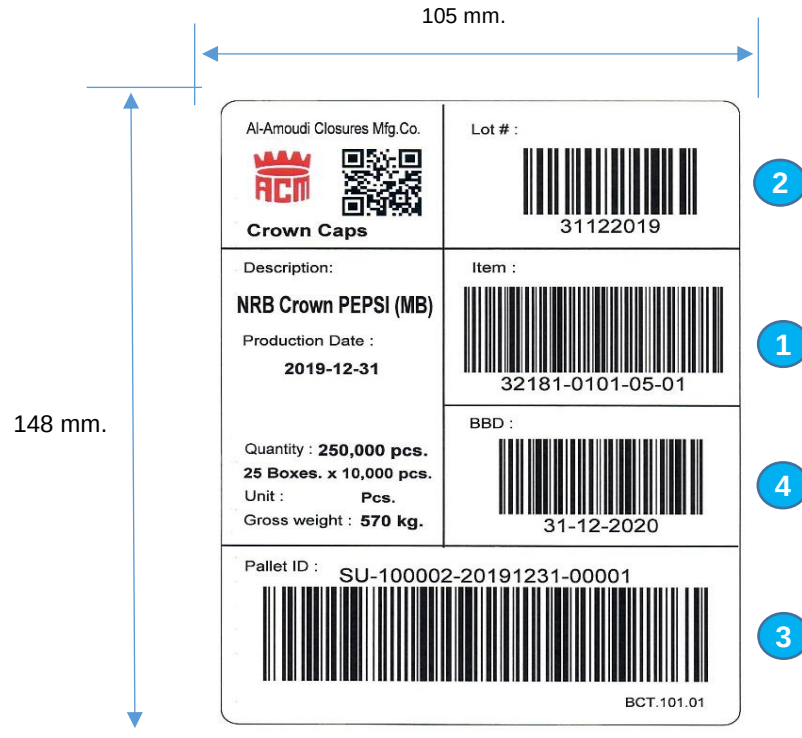
Issue date : 04-01-2023

Packaging Pallet & Bar Code - 25 Boxes .

Prepared by : Production manager

Approved by : Plant manager

Issue #. : 5



Packaging Details

1 -	Pallet type :	Wooden	A - Bar code type :	128
2 -	Pallet size :	W 1,035 X D 895 X H 90 mm.	B - Bar code size :	148 mm. X 105 mm.
3 -	No.of layers each pallet :	5 - Layers	C - Bar code position :	In (800 max. Height) 2 pcs 1 - in center front - second in center left side.
4 -	No.of boxes each layer :	5 - Boxes	D - Bar code contain :	1 - Item. 2 - Batch #. 3 - Pallet ID. 4 - BBD.
5 -	Total boxes each pallet :	25 Boxes X 10,000 pcs.= 250,000 pcs.		
6 -	Total boxes net weight.	25 X 22.5 = 562.5 kg.		- The box is multi layers strong enough to support the load with internal plastic bag for crown protection .
7 -	Total pallet weight .	572 kg. max		- The box with rider (QR) at side also packer's note for carton production details.code (PD.PN.C.G.02) .
8 -	Total packaging height :	1,760 mm.		- The wood pallet is strong enough to support the load for plant storage .
9 -	Use for packaging cover :	Shrink film & Cardboard on top		- Stretching shrink film wrapping is applied to the exterior of each pallet to help unitize the load and to safeguard
10 -	Use for boxes closing :	Packaging Tape on Top & Bottom		against the dust and the rain water also with cardboard on top for dust protection .

for more details please contact us at our e-mail : acm@al-amoudi.net.

Attachment the packer note of boxes - Code : (PD-PN.C.G.02).