

Types of Paperboards

By Awadhoot Shendye

PAPERBOARDS

- INTRODUCTION

- Cellulose derived substrate , with thickness greater than 200 microns
 - virgin and/or recycled fibre
 - specially processed
 - For better appeal and printability
 - For imparting barrier properties
 - For rigidity and protection
 - For meeting Legal & Health demands
- Made from renewable source
- Primary application : Packaging

BOARD DIFFERENT TYPES

WLC

70 to 100 %
recycled fibre
with Coating
Both W B and
G B

Medium density,
Economy,
Availability

Personal care,
Toiletries,
Food, Garments,
Health care

UNCOATED

70 to 100 %
recycled fibre
with out coating

Medium density

Set up boxes,
dividers, book
binding,
matches

SBS

100 %
Bleached
chemical pulp

High density,
print appeal,
hygiene, taint
and odour free

Cigarettes,
pharma,
Cultural

FBB

Outer layers of
Chemical pulp
sandwiching
Mech. Pulp

Low density,
rigidity,
hygiene, Print
appeal

Cigarette,
soaps, Pharma

BOARD DIFFERENT TYPES



CUK

Chemically bleached fibre with Kraft Back

Low density, Economy, cheaper alternative to SBS

Beverage carrier Board for bottles and cans

LIQ. PKG. BOARDS

Virgin grade (SBS, FBB, CUK)

Asceptic, Edge wick and stretch

Milk, juice etc

CUP STOCK

100 % Bleached chemical pulp with Poly coatings

High density, hygiene, taint and odour free

Cups for soft drinks, milk shakes, Hot beverages

CAST COATED

Mirror like coated surface

High gloss Print appeal, smoothness

Perfumes, premium brand wines and spirits, Labels

White Lined Chip Board

- Recycled Fibre - based grades
 - White Lined Chip Board
 - Multi layer boards consisting of 60 to 100 % of recycled fibre
 - Top layer produced either with high grade white preprint waste paper or bleached chemical pulp.
 - The middle layer and the back layer are made from waste paper
 - The basis weight ranges from 200 to 600 GSM

White Lined Chip Board

- Surface Brightness is 80 to 85 % ISO
- Coating grammages range from 0 to 25gsm.
- Extremely good smoothness of less than 2 Microns PPS possible
- Hunter Gloss more than 35 %
- Cost effective substrate for gravure and offset printing process
- Used extensively in developing world, in developed countries use confined to non food sectors

White Lined Chip Board

Uncoated recycled board

- made of 20% virgin fibre on top or 100 % waste paper without any coating.
- Generally laminated with other boards/ papers and basis weight of final boards will be over 1000 GSM
- Solid packaging boards for set up boxes and other packaging applications
- As packing dividers in corrugated boxes, luggage manufacturing, book binding etc.

Virgin fibre-based Board

Solid bleached board

- produced entirely of bleached chemical pulp.
- The number of solid homogeneous fibre layers varies from two to four
- Both long and short fibre are used
- surface is double coated and back is either uncoated or lightly coated.
- The surface brightness is 90 % ISO
- top surface roughness is less than 1.2 microns PPS
- Hunter Gloss of top surface more than 75 %

Virgin fibre-based Board

Solid bleached board

- Available in 200 to 600 GSM
- Suitable for all types of Printing Process
- Considered as premium grades for packaging and graphical purposes
- Suitable for packing aroma and flavor sensitive products
- In general SBS are superior when purity good appearance and runnability of the packaging material are required.

Virgin fibre-based Board

Folding box board (FBB)

- Folding box board consists of three layers
- The top layer is of bleached chemical pulp.
- The middle layer consist of mechanical pulps: stone ground wood pulp, pressurised ground wood , thermomechanical pulp or chemi thermo mechanical pulp. This layer gives stiffness and bulk.
- The back of FBB is either manilla or white in colour

Virgin fibre-based Board

Folding box board (FBB)

- The top is coated with two layer of coating and coat weight is in the range of 22 - 25 GSM
- A good substitute for SBS in applications where runnability and a virgin fibre base are required
- Visual properties slightly inferior to SBS
- Suitable for all printing process- infact the most converter friendly board
- The basis weight ranges from 200 to 450
- Ideal for Food packaging, cigarettes cosmetics, pharmaceuticals and graphical applications.

PAPER BOARDS - Different Types

Coated unbleached kraftboard (CUK)

- made from unbleached sulphate pulp (245 - 520 GSM) with a coating of 22- 25 g/sq..m
- The top layer under the coating may consist of bleached chemical pulp.
- Also some recycled fibre can be used to replace part of the unbleached sulphate pulp

PAPER BOARDS - Different Types

Coated unbleached kraftboard (CUK)

- Has very strength properties
- Used as a lower cost alternative to SBS board
- Mainly used as a beverage carrier board for both glass bottles and cans and also in folding cartons.
- Generally suitable for all printing process.

PAPER BOARDS - Different Types

Cast coated boards and papers

- The base board can be uncoated SBS, FBB or recycled boards
- The roughness is less than 1 microns PPS and hunter gloss is more than 90 %
- suitable for premium packaging of cosmetics, liquor pharmaceuticals, greeting cards, labels and others
- generally available in 220 - 450 GSM
- cast coated papers in 85/90 gsm used extensively for labels with higher grammage papers popular in greeting cards

PAPER BOARDS - Different Types

Liquid packaging board

- Base board is either coated or uncoated SBS, CUK or FBB with CTMP in middle layers
- These boards are laminated with aluminium foil and special plastic barriers.
- Requires special properties like edge wick with lactic acid and Hydrogen peroxide and stretch.
- Mainly used for packing milk, juice and other liquids
- generally available in the range of 170 - 340 GSM

PAPER BOARDS - Different Types



Cup stock board

- Base board is normally uncoated SBS
- These boards are laminated with PE for soft drinks and hot beverages
- generally available in the range of 170 - 340 GSM