



PACKAGING...SIMPLIFIED.

ROLLSTOCK

Technical Fact Sheet

Rollstock is laminated film on a roll. The film is wound on a cylindrical cardboard core. It is commonly used with form, fill and seal machines (i.e. FFS). A form, fill and seal machine forms the bag shape, fills it with product, and seals the bag. Rollstock is used to form stand-up pouches, side gusseted bags, flat pouches, and other package formats. As a company's volume grows, there is a natural progression from pre-made stock bags, to custom bags, and then to rollstock. When companies use ~ 1 million bags per year, confined to a handful of SKUs/varieties, rollstock can dramatically increase production speeds and reduce labor and packaging material costs. Rollstock can reduce the cost of the packaging by about 25% or more because the FFS machine makes the bag in line. Rollstock is used in several markets including specialty food, pet food and coffee.

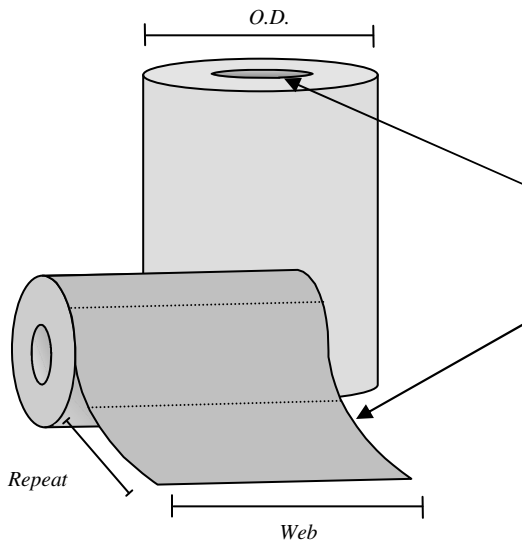
Modifications:

- Need to lease/purchase a form, fill, seal machine
- Higher capital investment compared to manual filling
- Higher skill level required to run form, fill, seal machine
- Longer size/product change-overs

Advantages:

- Higher package per minute output
- Lower packaging material costs
- Lower labor costs
- Requires less storage space

FEATURES



O.D. (Outside Diameter) – the diameter of the rollstock and the core. It is important to make sure that the rollstock fits on the form, fill and seal machine. If the O.D. is too large, then the rollstock is too heavy and will be difficult to maneuver or it may not fit on the machine.

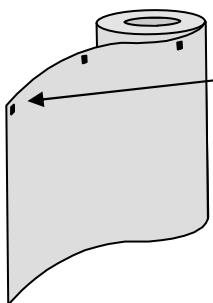
Core – a cylindrical, hollow tube made of pressed cardboard. Most form, fill and seal machines require rollstock with either a 3 or 6 inch core.

Rewind – the orientation of the material coming off the roll. The design of the form, fill and seal machine dictates the rewind needed. This is important to know; be sure to ask the FFS manufacturer.

Web – the width of the rollstock film.

Repeat – the length of one printed package on the roll

OPTIONAL CUSTOM FEATURES

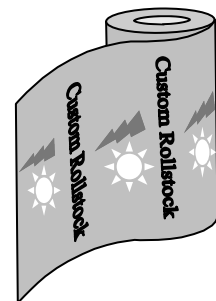


Eyepots

Eyepots are repeated visual cues that tell the form, fill and seal machine via an electronic "eye" when to perform certain actions, such as sealing, cutting, folding, inserting a valve, etc.

Custom Printing Options:

- Matte
- Easy-Open Film
- 2, 3 & 4 ply Structures
- Random Print

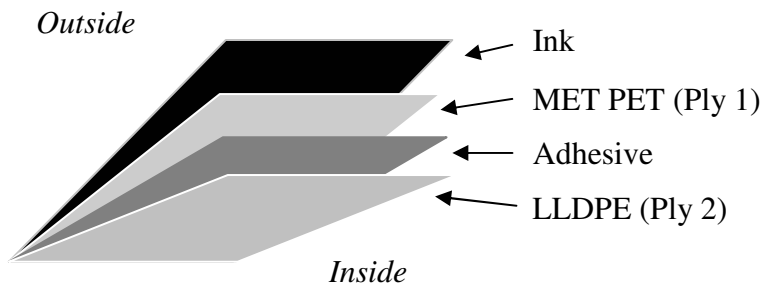


Rollstock: PBI Stock Structures

Packaging must preserve and protect the product. Products need protection from the effects of oxygen, moisture, light, infestation, odor, etc. Products can be sensitive to one or a combination of these, and therefore products require packaging that is designed to resist a specific combination of these factors.

PBI offers two different structures of rollstock: (1) Institutional and (2) Retail. Form, fill and seal machines have very specific requirements for rollstock. Rollstock must have the exact core size, web, rewind, etc. that is necessary to run properly on that particular machine. If the institutional and retail rollstock do not work with your form, fill and seal machine, call PBI for a custom rollstock quote.

INSTITUTIONAL ROLLSTOCK



Structure Key

Foil - Aluminum Foil
PET - Polyester
PE - Polyethylene
MET PET - Metalized Polyester
LLDPE - Liner Low Density Polyethylene

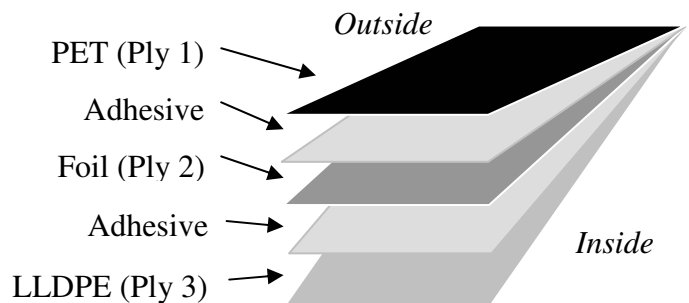
Institutional rollstock is commonly used for distribution into O.C.S. (Office Coffee Service) and H.R.I (Hotel, Restaurant and Institution) channels. The structure offers medium barrier and good economics for single use fractional packs (1-3oz) that do not require a long shelf life.

Institutional rollstock is a surface printed, metalized barrier, 2-ply construction. The layer of Metalized Polyester (MET PET; ply 1) provides oxygen barrier, tear and puncture resistance for the package. The MET PET and Linear Low Density Polyethylene (LLDPE; ply 2) layers provide barrier to moisture. The Linear Low Density Polyethylene (LLDPE) provides heat-sealability and strength.

RETAIL ROLLSTOCK

Retail rollstock is a 3-ply, adhesive laminated material which has high oxygen and moisture barrier properties. The layer of Polyester (PET; ply 1) provides good abrasion, tear, and puncture resistance for the package and protection from scuffing for the ink systems which can be reverse printed on it.

The Aluminum Foil (ply 2) provides excellent oxygen and moisture barrier. The PET and Linear Low Density Polyethylene (LLDPE; ply 3) layers provide additional barrier to moisture, give structural integrity and good tactile properties. The Linear Low Density Polyethylene (LLDPE) also provides strength, bulk, and heat-sealability.



Typical uses include packaging of products which require a high level of protection from oxygen and moisture to achieve relatively long shelf life. Products include coffee, nuts, pet foods, seeds, sugars, and those with inherent oils requiring protection from oxidation.