

  
**PROUD  
AMERICAN  
MANUFACTURER  
OF WOVEN  
POLYPROPYLENE  
BAGS**



## BOPP BAGS

Our woven **Biaxially Oriented Polypropylene (BOPP) Film** is produced by stretching a PP cast film both in the length and width directions.

### Advantages

- High tensile strength that facilitates high-speed conversion
- Good puncture and flex-crack resistance over a wide range of temperatures
- Slip resistant properties
- Resistant to oils and greases
- Does not wrinkle or shrink with environmental changes
- Premium print quality
- Retail quality appearance
- High gloss and clarity
- Good barrier to water vapour

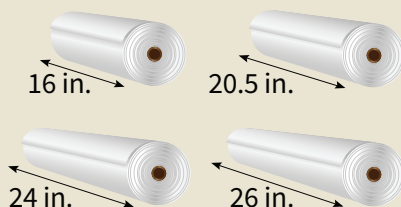
## JOHN PAC FABRIC OFFERINGS

Fabric options by weight, width, and color.

### 4 stock widths of BOPP Film

Film is slit down as needed.

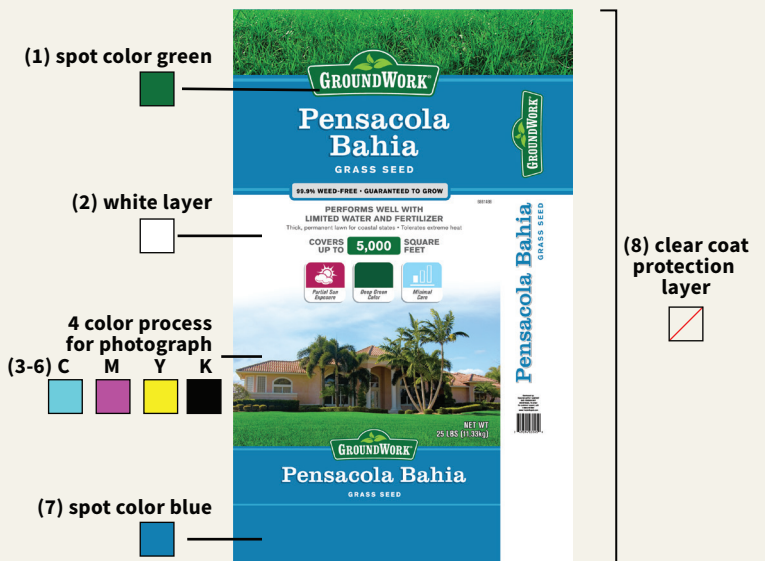
**Film Gauge: 70  
(17.8 microns)**



## ROTOGRAVURE PRINTING (8 & 6 COLOR)

Our BOPP bags feature photographic quality reproduction to help our customers' products jump off the shelves. We operate two Rotogravure Print Presses.

### Example: 8 Color Cylinder Breakdown

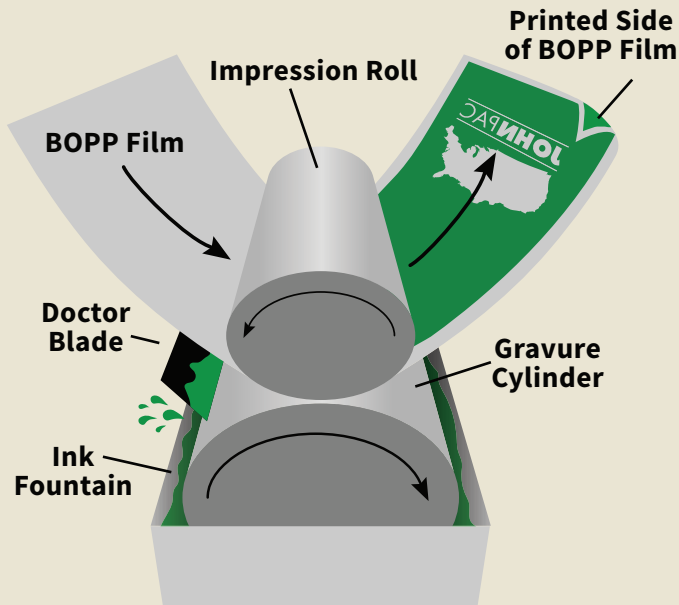


**fabric  
coefficient of friction  
0.50 or 27° on slide angle**



## ROTOGRAVURE PRINTING (8 & 6 COLOR)

Gravure transfers ink from small wells or cells that are engraved into the surface of the cylinder. The cylinder rotates through a fountain of ink. The ink is wiped from the surface by a doctor blade. The cup-like shape of each cell holds the ink in place as the cylinder turns past the doctor blade.



## IMPRESSION ROLLERS

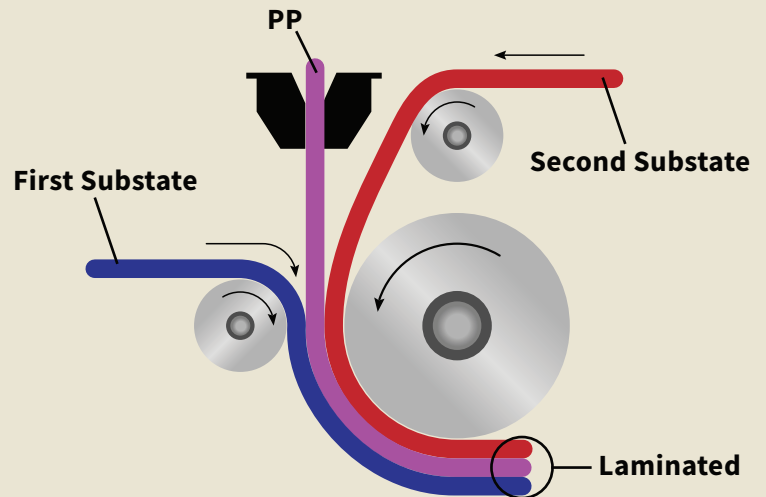
The gravure impression roller is a friction driven, rubber covered metal cylinder that squeezes the substrate against the printing cylinder.

The functions of the impression roller are:

1. To obtain proper ink transfer
2. To set the web tension pattern between printing units
3. To propel the web through the press. The contact between the impression roller, web and printing cylinder is called the nip. The impression rollers are not geared to the press, but are instead driven by friction.

## EXTRUSION LAMINATION

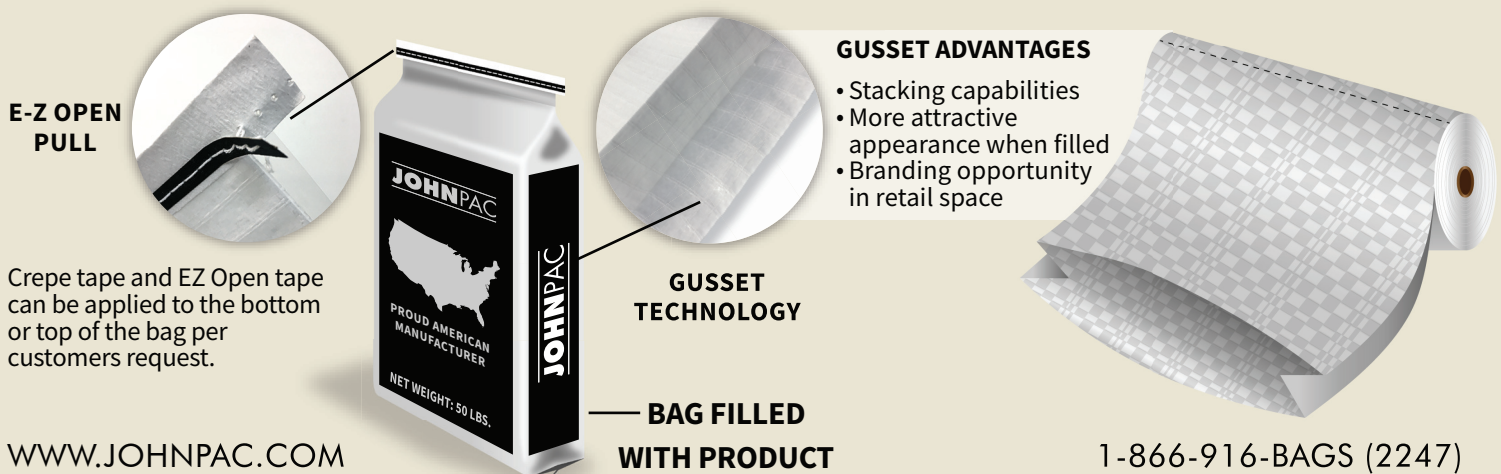
Extrusion coating is the process that lays a molten layer of **polypropylene (PP)** onto a substrate. Extrusion laminating in a converting operation is the combination of two substrates using a molten polymer. In this case, the PP enters the nip formed by two rolls. Two substrates also enter the nip by traveling over each roll. The PP is therefore the center part of a sandwich material.



## CUT & SEW PROCESS

Our cut & sew machines are responsible for cutting and sewing the bags to the proper size.

1. Bags are inspected coming off of each cut & sew machine.
2. Bags are then packaged for shipment.
3. Bags that do not receive Crepe and E-Z Open Pull tape are simply hemmed and sewn.



### GUSSET ADVANTAGES

- Stacking capabilities
- More attractive appearance when filled
- Branding opportunity in retail space