

## Transverse Zipper Technology & Licensing

### Pre-Zippered Film

In 1997 The Hudson-Sharp Machine Company introduced **INNO-LOK®** and literally changed the way zippers are applied to packaging.

**INNO-LOK®** Pre-Zippered Film can be used for barrier and non-barrier packaging applications.

What is **INNO-LOK®** Pre-Zippered Film? It is a patented product and method for attaching reclosable fasteners transversely to packaging films, thereby producing a roll of pre-zippered film.

### INNO-LOK® Technology

The Innoflex Transverse Zipper Technology is covered by multiple United States of America and foreign patent pending applications, the rights to which have been granted to the companies listed on our website for the specific use of the Innoflex Transverse Zipper Technology.

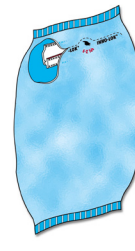
License categories are:

- **INNO-LOK®** Pre-Zippered Film
- Front Panel In-Line with VFFS machine
- Pre-made Pouches Front Panel
- Pre-made Pouches Bag Top

The Licensees to this technology are located around the globe producing a variety of packaging styles for applications including: Shredded Cheese, Confectionery, Coffee, Baking Mixes, Frozen Vegetables, Cookies, Salty Snacks, Pasta, Rice, Frozen Poultry, Cereal, Pet Food, Granulated Products, Crackers, Sliced Meats, Fresh Cut Produce, Frozen Seafood, Sugar, Fresh Frozen Fruit, Frozen Pastry ...

For more information on **INNO-LOK®** technology go to our website – [www.hudsonsharp.com](http://www.hudsonsharp.com)

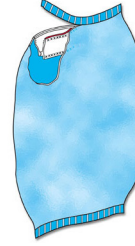
## New Product Application Possibilities



### E-Z TAB NON-BARRIER

- Basic Inno-Lok® Application
- Vented — Torturous Path
- Non-Barrier Applications

Typically used in frozen foods and bulk packaging for food and non-food products



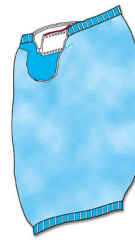
### BAG TOP

- Creates a traditional opposing wall opening feature
- Identical to packages created on in-line systems
- Bag access would require cut-top or perforation
- Does require seal jaw modification



### E-Z TAB BARRIER

- Moisture Barrier Applications — PE flange with peel seal
- Gas Barrier Applications — Barrier flange with peel seal



### BAG TOP PEEL SEAL

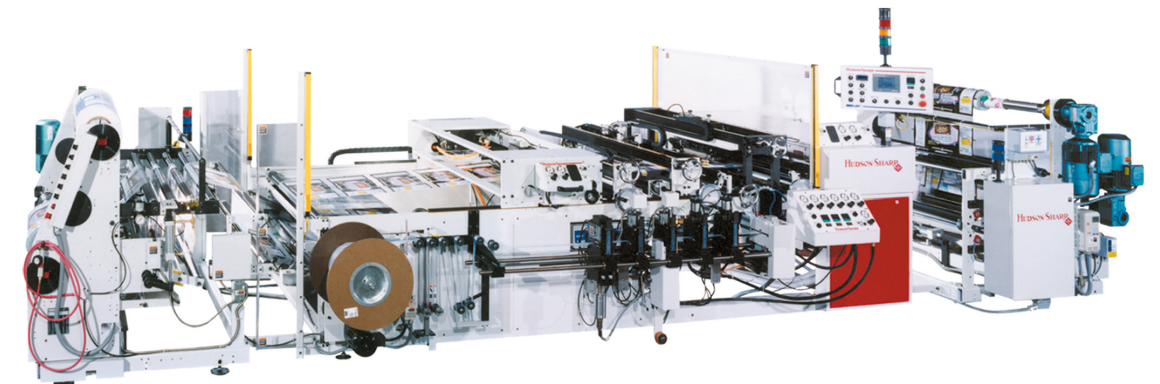
- Traditional opposing wall opening feature
- Ideally suited on OPP and other films that cannot be perforated
- Barrier or non-barrier
- Requires no modification of seal jaws on FFS machinery

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A Thiele Technologies Company

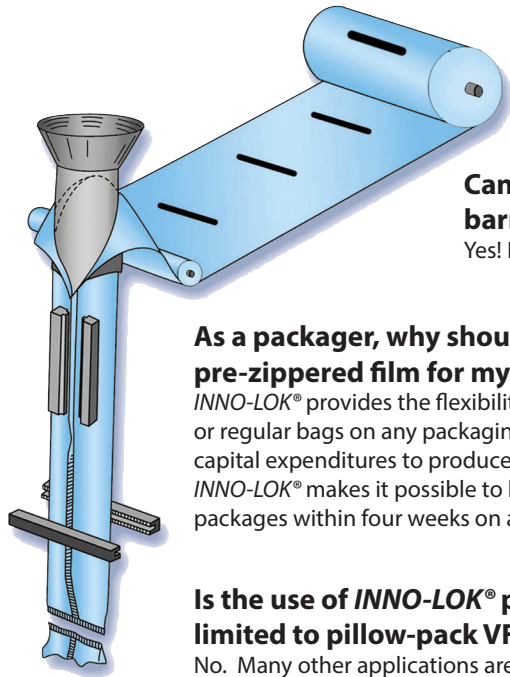
**INNO-LOK®** PRE-ZIPPERED FILM

## Successful Commercial Applications





# INNO-LOK® PRE-ZIPPERED FILM



### What is INNO-LOK® pre-zipped film?

A patented product and method for attaching reclosable fasteners transversely to packaging films, thereby producing a roll of pre-zipped film.

### Can INNO-LOK® pre-zipped film be used for barrier and non-barrier packaging applications?

Yes! Both barrier and non-barrier package applications are possible.

### As a packager, why should I use INNO-LOK® pre-zipped film for my reclosable packages?

INNO-LOK® provides the flexibility to run both reclosable or regular bags on any packaging lines without additional capital expenditures to produce reclosable packages. INNO-LOK® makes it possible to begin producing reclosable packages within four weeks on any existing VFFS equipment.

### Is the use of INNO-LOK® pre-zipped film limited to pillow-pack VFFS applications?

- No. Many other applications are possible such as:
- VFFS gusseted and flat bottom applications
  - Horizontal Form, Fill, Seal (HFFS) applications
  - Lidding applications
  - Pre-made pouches

### What changes are required on a packager's Form, Fill, Seal (FFS) machine to run INNO-LOK® pre-zipped film?

Very few! In fact, only minor clearance modifications to the FFS fill tube may be required.

### What are some successful INNO-LOK® pre-zipped film applications?

- Sliced meats
- Pasta
- Frozen poultry
- Cereal
- Pet food
- Rice
- Crackers
- Shredded cheese
- Confectionery
- Coffee
- Baking mixes
- Frozen vegetables
- Cookies
- Salty snacks
- Fresh cut produce
- Granulated
- Frozen seafood
- Sugar
- Fresh frozen fruit
- Frozen pastry

### What will be the estimated per package cost for INNO-LOK® pre-zipped film?

It depends upon the end-use application and package design.

- Barrier or non-barrier package?
- Package and zipper size?
- E-Z Tab or Bag Top zipper?
- Film structure and thickness?
- Quantities required?

### How long can an INNO-LOK® zipper be?

Any length you desire. As short as practical or as long as the face width of the package or gusset panel.

### How does INNO-LOK® pre-zipped film run on conventional FFS packaging equipment?

Comparable to conventional non-zipped films.

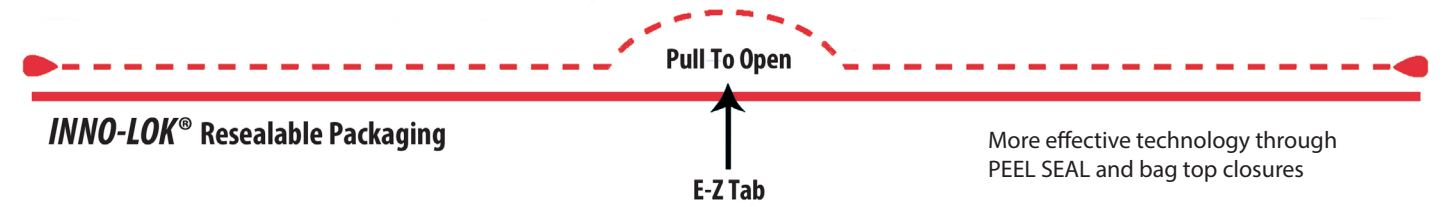
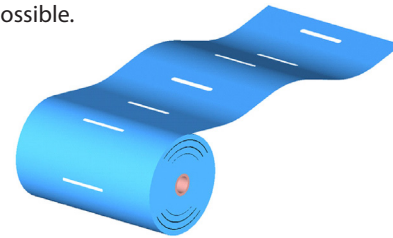
- No reduction in processing speeds
- No increase in scrap or waste
- No increase in set-up time

### Who puts the zipper on the packaging film?

Typically the zipper fasteners will be pre-applied to the packaging film by the converter, not the packager.

### As a converter, why should I purchase an INNO-LOK® machine from Hudson-Sharp?

To supply your packaging customers with VALUE ADDED, CONVENIENT, reclosable packaging solutions.



## FEATURE COMPARISONS OF INNO-LOK® TO IN-LINE ZIPPER SYSTEMS

### Features

INNO-LOK® IN-LINE SYSTEMS

Form, Fill, and Seal Modifications	No	Yes	
Reduced Cycle Rate	No	Yes	
Opportunities for Total Package Cost Reduction	1-Packaging Films 2-Zipped Closure	Yes	No
Scheduling Flexibility on Lines for Zipped/Non-Zipped Production	Yes	No	
Additional Start-up Time Required When Running Zipped Product	No	Yes	
Additional Start-up Waste when Running Zipped Product	No	Yes	
Increased Packaging/Product Waste from Zipped Packaging System	No	Yes	
Increased Maintenance Cost of FFS Packaging Film	No	Yes	
Capable of Various Length Zipper Closures	Yes	No	
Gusseted Package Applications	Yes	No	
Proven Most Cost Efficient Method for Applying Zippers on FFS Packages	Yes	No	

**INNO-LOK® pre-zipped film, when compared to In-Line applicators, has proven to be the more efficient and low cost method to produce reclosable packaging. Contact Hudson-Sharp for a cost model comparison for your application before investing capital for In-Line applicators that are guaranteed to reduce pack speed and increase scrap and product loss!**

**Inno**flex  
INCORPORATED

