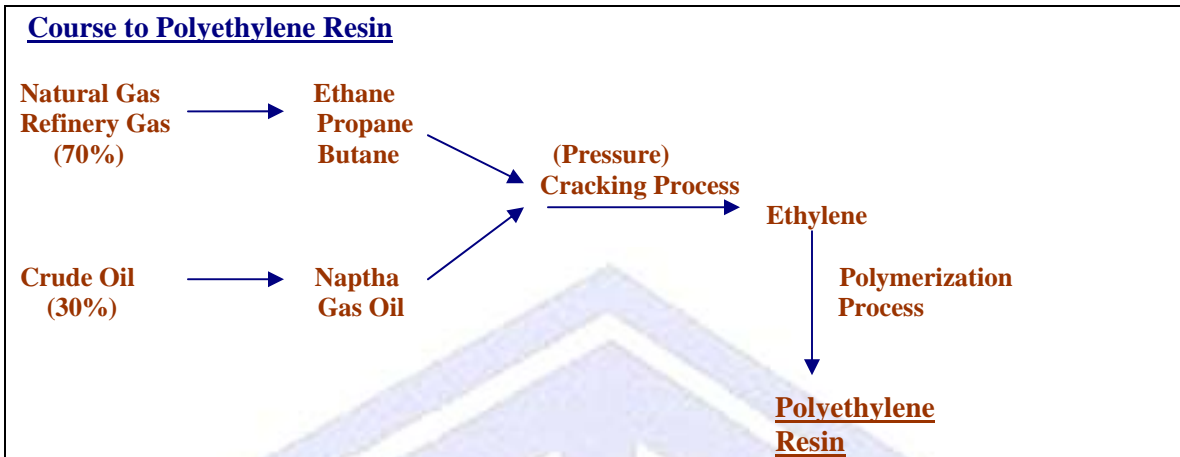


Stretch Film (Wrap) Concept

Stretch film (wrap) is a high elongation, polyethylene based film that is used to unitize and protect products during storage and shipments.

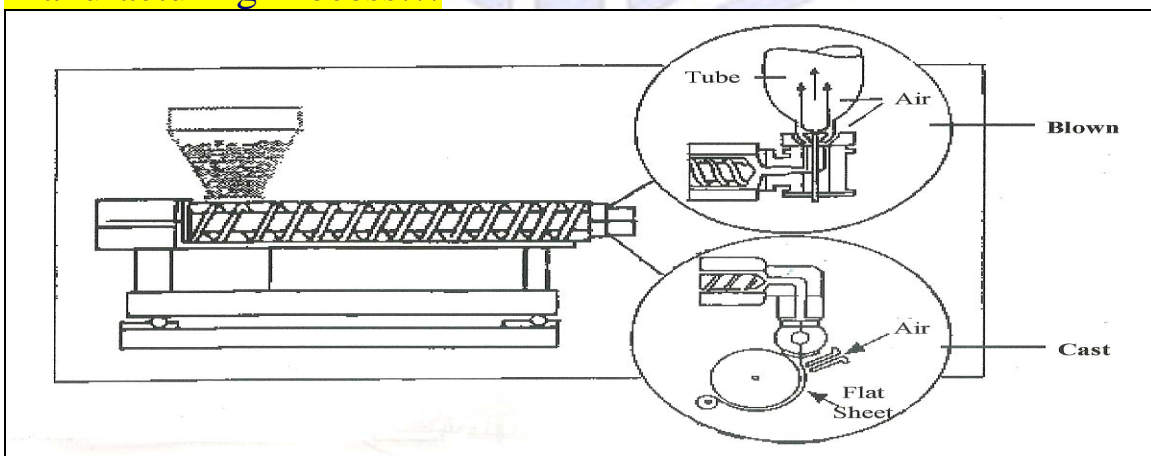


Stretch film is used as a primary packaging material for protecting a number of small, individual items into larger unit loads (normally on a pallet), and usually in combination with other packaging materials like foam, cushioning, Hexacomb, etc.

Stretch Film (Wrap) Benefits...

- Labor productivity
- Low supply cost
- Excellent product protection
- Visible performance
- Versatility of sizes – load types
- Unequaled load holding force
- Will not damage or adhere to product
- Can reduce cost of secondary packaging
- Compliments automated handling systems
- Improve warehouse and inventory control
- Reduce freight cost
- Keeps products clean

Manufacturing Process...



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Cast Film vs. Blown Film ...

Cast Film Properties	Blown Film Properties	Metallocene Film Properties
Consistent Cling	Tougher – Greater puncture resistance	Cast Film Properties
Clear	High force on load – Stiff	Higher force
Gloss	Hazy	Greater puncture resistance
More resistance to tearing	Dull	
Excellent optics	Noisy unwind	
Quiet unwind		
Consistent film thickness		

Stretch film Characteristics....

Force to Load

- High Force stretch film is designed to provide high load containment values
- Soft stretch film is designed to offer high secondary stretch values

Gauge

- Commonly available gauges range from .6 mil to 3.0 mil

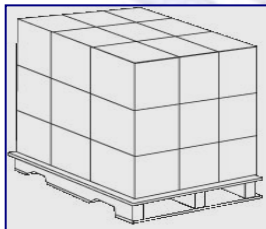
Width

- Machine film width ranges from 10-70 inches
- Hand film width ranges from 10-20 inches
- Convenience film width ranges from 2-20 inches

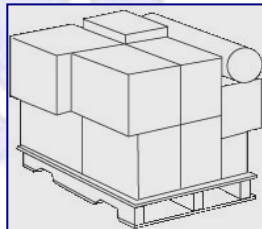
Load Profiles....

Type of Loads

- There are two factors which determine load type – weight of the load and uniformity of its surface. In stretch film phraseology, load types are distinguished by the first three letters of the alphabet.



A- Profile
Have no irregularities



B – Profile
Have protrusions up to 3 inches



C- Profile
Have protrusions over 3 inches

Load Weight

- Fragile loads less than 1,000 lbs may require a thinner film to avoid crushing
- Extra heavy loads greater than 2,000 lbs may need a thicker gauge film to provide added strength and holding force.

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