



7 LAYER BARRIER FILM

OVERVIEW

Davis-Standard leads the industry in flexible packaging and knows the needs for blown film systems to serve high speed converting machinery lines. This is especially true in the area of barrier films where the roll geometry and uniformity of the thickness and especially each layer leads to fast conversion speeds on pouch lines, FFS machines and laminating lines. Consistency in output and low melt temperatures from the extruders are vital. The unique extrusion concept leads to the best and most consistent melt quality (temperature uniformity to 2 degrees F and pressure variation <1%) which is necessary to get uniformity across all layers. Uniform layers allow for thinner layers of expensive materials and DS lines produce the best economic coex structures. The die systems are stationary up to 1M diameter. Oscillating haul-offs and roller collapsing frames produce flat, smooth film and rolls. These systems produce symmetric and asymmetric films.

KEY FEATURES

- DSB screws for superior processing of resin mix providing excellent melt homogeneity
- MAC 30:1 smooth bore extruders for control of melt temperature
- Centrex die provides excellent gauge, thermal stability and low wetted surface area
- AutoProfile control is critical to ensure highest tolerances are achieved
- Collapsing system options include: Carbon fiber rolls and side guides
- Oscillating nip options: vertical, adhesive package
- PAC surface winders or Duplex turret winder

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SAMPLE PRODUCTS

	Pouch	High Barrier	Cereal
A (Outside)	LLD+White +Slip	LD	HDPE
В	LLD+White	Tie	HDPE
С	Tie	PA	Tie
D	EVOH	EVOH	EVOH
E	Tie	PA	Tie
F	LLD+Black	Tie	HDPE
G (Inside)	LLD+mLLD+Slip	LD	lonomer
Thickness	80 - 100µ	50 - 100µ	20 - 50µ

TECHNICAL DATA

Finished Product Examples	Barrier Films	
Machine Configuration	2380 mm 7 Layer / 94" 7 Layer	
Nominal Layer Structure	25 / 10 / 10 / 10 / 10 / 10 / 25	
Die Diameter	400 - 560 mm / 16 - 22"	
BuR	1.8 - 3.0:1	
Max Web Width	2300 mm / 90"	
Typical Output	350 - 575 kg/hr / 660 - 1265 lbs/hr	
Thickness Range	20 - 200µ / 0.8 - 8.0 mil	
Materials to be Pro- cessed	LD, LLD, EVA, EVOH, PA, PP, Ionomer, Tie	

LINE CONFIGURATION

- Material Handling Blending system including vacuum loading
- Extrusion MAC 30:1 smooth bore extruders DSB barrier screws
- Die & Air Ring Centrex multi layer stationary IBC die with Triple Lip Air Ring Auto profile package with oscillating gauge
- Tower Equipment Bubble sizing cage, carbon fiber roller collapsing, oscillating haul off
- Winding PAC 50 winder with taper tension and pressure control or Duplex winder
- Control System Davis-Standard fully integrated controls
- Optional Services Complete installation and commissioning Line upgrades and components available IR Gauge



