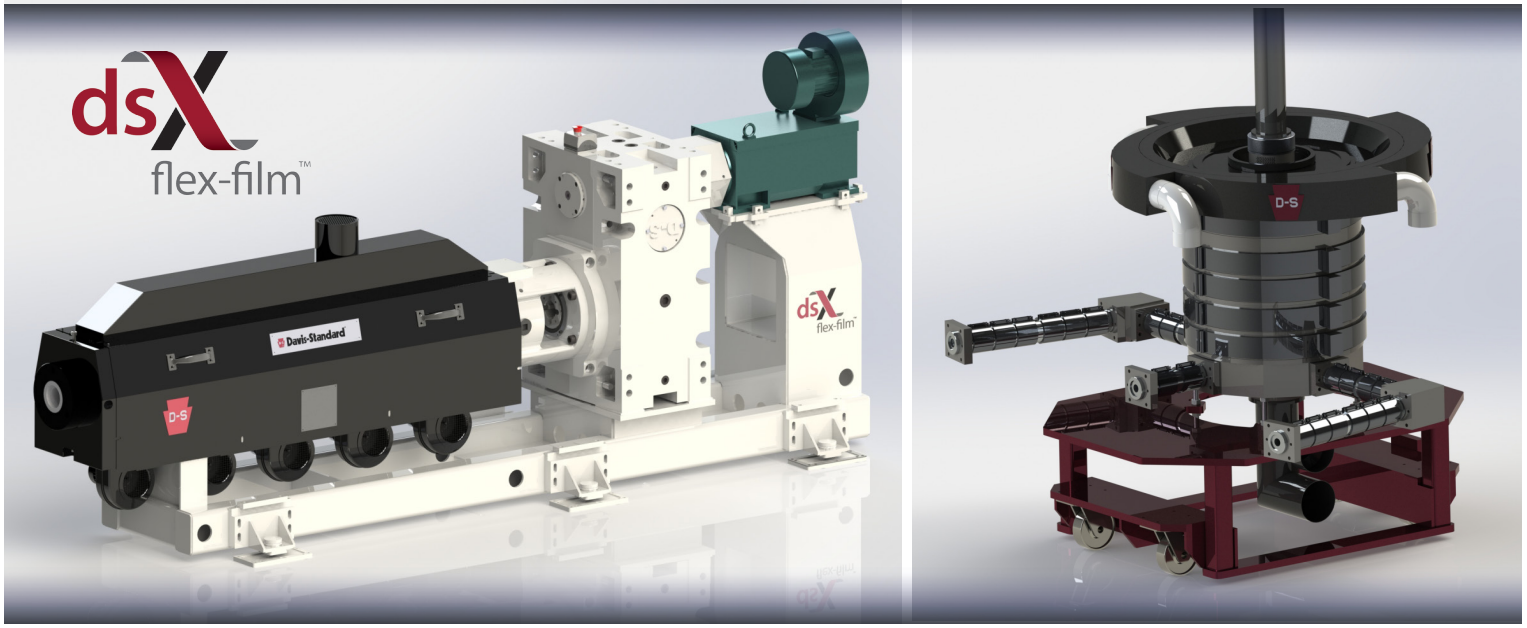
BLOWN FILM



dsX flex-film™ THREE-LAYER BLOWN FILM EXTRUSION LINE

OVERVIEW

The dsX flex-film™ blown film lines exemplify Davis-Standards trademark commitment to quality and high performance. This pre-engineered system is designed to provide world class performance and quality. The fully integrated system is made up of US and European components for robust, reliable performance with operator safety and easy-of-use in mind. Unlike other pre-engineered lines, the dsX flex film system is offered with upgrades to balance productivity against your capital investment budget.

dsX™ Product Line for a Competitive Advantage

Davis-Standard has taken great care to merge the best of it's technologies into a cost effective, high quality machine that can be supported around the world with Davis-Standard's regional engineering and service teams. The dsX™ product line is built to provide a strategic competitive advantage on what customer's need the most - quality, productivity, and reliability.

- Unsurpassed melt quality with DSB® screw designs
- Consistent high quality engineering and assembly
- Optimized die design for high output rates and greater uptime
- Features to maximize film quality and gauge control
- Reliable extruder and gearbox design

APPLICATIONS

- Converting films for printing, laminating, slitting and bag-making
- Industrial, medical, and food packaging applications
- Collation and POP shrink films
- Stretch hood films
- Can Liners

KEY FEATURES

- Available in 1800mm (72-inch), 2100mm (86.5-inch), and 2400mm (94.5 inch) web widths only
- Respected D-S extruders, proven die and air ring designs
- Pre-engineered for delivery and installation in as little as six months
- IBC
- Optional upgrades:
  - Elevated UpJet™ air ring for maximum output rates
  - Autoprofile control - TPC
  - Film flattener
  - Surface only or upgrade to center assist gap, reversing winders
  - Variety of extruder and die size packages for almost any end use

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dsX flex-film™ 3-LAYER BLOWN FILM EXTRUSION LINE

TYPICAL LINE CAPABILITIES

EXTRUDERS

- Five different 3-layer extruder packages to support different die sizes from 170 to 600mm
- Bimetallic barrel liner:
  - DS X100 standard
  - DS X800 upgrade option is available
- Bimetallic screw flights:
  - Colmonoy 56 standard
  - Colmonoy 83 upgrade option is available
- D-S gearbox performance and quality

T-BOX SYSTEM

- Temperature control box is mounted on each extruder base and die cart
- Local temperature control units are pre-wired and tested prior to shipping

VERTEX DIE

- Designed with vertical flows via a binary divider network within a nested mandrel configuration
- Fully circular flow channels for improved purging
- Large central IBC hole for superior cooling and output rates
- Compact design:
  - Low height provides easy operator access
  - Minimized melt volume
- Polished to a high surface smoothness
- Nickel plated flow paths and hard chromed die lips.
- Fast color changes
- Excellent total and individual layer thickness control

AIR RINGS

- WesJet™ dual lip air ring
- UpJet™ elevated dual lip air ring for increased output rate
- Option:
  - TPC (thermal profile control) to automatically reduce overall gauge variation

HORIZONTAL OSCILLATING NIP

- Carbon fiber rollers, side guides and a centering guide prior to collapsing
- Oscillating nip options:
  - S-wrap cooling
  - MDO flattening feature option to reduce bag and sag
  - Gusseting

LSW SURFACE WINDER

- Secondary nip overhead
- Back to back winder arrangement
  - Single winder option is option for customers producing layflat or gusseted tubing
- Maximum potential diameter up to 1200mm (47 inch)
- Maximum winding speed of 200 meters (660 feet) per minute
- Automatic roll change at preset roll length
- Surface winder option:
  - Center assist, gap and/or reversible winding direction package

DOTECO INTEGRATED CENTRAL VACUUM SYSTEM CONVEYING SYSTEM

- SmartConvey fully automated resin handling technology

DOTECO MANAGER SUPERVISORY CONTROL SYSTEM

- Grado Adroit gravimetric batch blenders with 4 components
  - Option: 1 to 6 components
- Total line management –
  - All temperature controls
  - Extruder speed / output rate control
  - Winder conditions
  - IBC control
  - Auto profile control for TPC equipped air ring systems
  - Recipe recall
  - Material usage report
  - Historical trending

DRIVES AND POWER DISTRIBUTION

- Extruder drives for US and CE drives for European customers to 40°C (120°F), up to 1000 meter (3300 feet) elevation
- Options:
  - Line power distribution
  - UL uprade

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