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PE BLOWN FILM DIES

OVERVIEW

Davis Standard PE Series of Blown Film Dies are proven designs for the production of LDPE and LLDPE blends offering versatility and high rates. The concentric design with spiral channels fed from either bottom or side entry and are computer modeled for optimum melt flow uniformity. The spirals are designed to provide a balance between minimum residence time, reduced sensitivity to resin changes and uniform polymer flow.

KEY FEATURES

- Spiral mandrel design featuring a central flow/layer distributor from bottom or side entry.
- Designed for high output rates, low wetted surface area and short residence times.
- Computer designed spirals to achieve optimum performance in melt homogenization, gauge control and film properties over a range of formulations utilizing empirical extrusion data.

- High shear rates and low surface energy keep die surfaces clean.
- Low residence times for reduced gel formation and faster purge times for quicker product changeovers.
- Die components to be fabricated from AISI 4140 steel, stress relieved, pre hardened forgings.
- Minimum number of components offering uniform thermal expansion, symmetrical heat transfer, ensuring even properties for tightest possible gauge distribution and control.
- Taper lock fit of components assures accurate self alignment and eliminates leaks
- Large IBC holes for high volume air exchange.
- All flow surfaces to be polished with the lips chrome plated, body and mandrel electroless nickel plated.
- Die exit recessed to reduce the potential for accidental damage.

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SPECIFICATIONS

Typical Die Gap Range:

0.030'' (0.76 mm) - 0.12'' (3 mm)

Die Type:

Monolayer for LD/LLD

Material Construction:

4140 Stress Relieved and Pre-Hardened

Flow Surface Treatment:

Electroless Nickel for mandrels and hard Chrome for lipsets

OPTIONS

- AutoDie heaters for profile control
- Die lip heaters
- High performance plating's for different applications
- 4340 forgings
- Low surface energy lip treatment; wear resistant

Die Body	Lip Diameter		Die Body	Lip Diameter	
Size	Min	Max	Size	Min	Max
6"	4"	8"	150 mm	100 mm	200 mm
10"	8"	12"	250 mm	200 mm	300 mm
12"	10"	14"	300 mm	250 mm	350 mm
16"	14"	18"	400 mm	350 mm	460 mm





