

Where your ideas take shape.



# **CENTREX BLOWN FILM DIES**

### **OVERVIEW**

Davis Standard Centrex Series of Blown Film Dies is designed for versatility and high rates. The concentric design with spiral channels fed from a nested block is 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**

- Nested spiral mandrel design featuring a central flow/ layer distributor from 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**

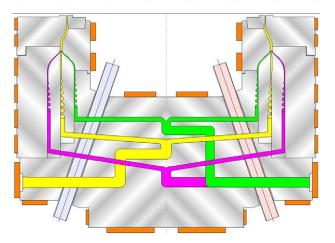
Typical Die Gap Range	0.030" (0.76mm) - 0.12" (3mm)
Die Type	Monolayer through to 7-layer
Material Construction	4140 Stress Relieved and Pre-Hardened
Flow Surface Treatment	Electroless Nickel for mandrels and hard Chrome for lipsets

### **TYPICAL DIE SIZES**

Monolayer	4" (100mm) - 86" (2185mm)
3-Layer	8" (150mm) - 86" (2185mm)
5-Layer	11" (180mm) - 48" (1220mm)
7-Layer	11" (180mm) - 24" (610mm)

### **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



2" (50 mm) to 12" (300 mm) 5, 7 and 9-Layer coex stationary dies





