

BLOWN FILM



PROCONE BLOWN FILM DIES

OVERVIEW

Davis-Standard ProCone Series of Blown Film Dies are designed for versatility, gauge uniformity and high rates. The stackable design uses spiral channels fed from a binary network that results in a unique, versatile arrangement with the ability to change structures. The spirals are designed to provide a balance between minimum residence time, pressure, reduced sensitivity to resin changes and uniform polymer flow.

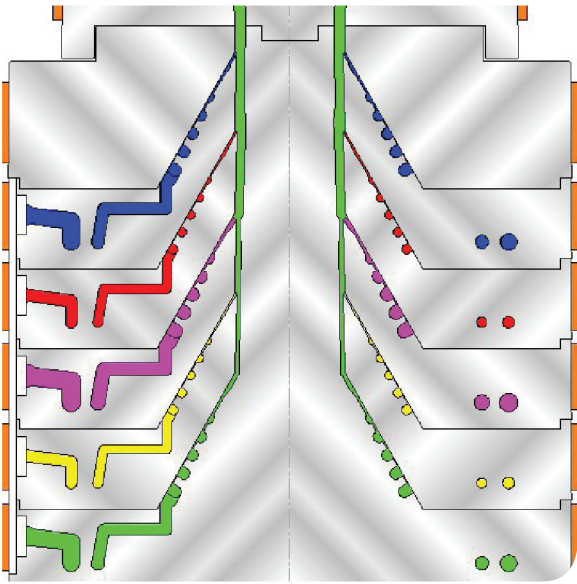
KEY FEATURES

- Conical mandrel flow surfaces for all polymer distribution in a stacked mandrel configuration.
- Two-piece mandrel and binary plate gives full angular and vertical position arrangement options. The layers are totally independent and can be moved.
- Fully round distribution network from binary network to spiral start reduces traditional flow issues and associated feedport inserts.
- Round flow passages are specifically designed to eliminate traditional degradation areas promoting fast purge and quick product change over.
- High shear rates and low surface energy keep die surfaces clean.
- Open center through die for high volume IBC or liquid insertion in water quench arrangement.
- Excellent thermal isolation from IBC, preventing “cold” spots in die.
- Die components to be fabricated from AISI 4140 steel, stress relieved, pre hardened forgings.
- Minimum number of components offering uniform thermal expansion and symmetrical heat transfer, ensuring even properties for tightest possible gauge distribution and control.
- All flow surfaces to be polished with the lips chrome plated, body and mandrel electroless nickel plated.
- Additional mandrels can be supplied for specific polymers and rates for increased versatility.

PROCONE BLOWN FILM DIES

SPECIFICATIONS

Typical Die Gap Range	0.030" (0.76mm) - 0.100" (2.54mm)
Die Type	5-layer, 7-layer and 9-layer
Material Construction	4140 Stress Relieved and Pre-Hardened
Flow Surface Treatment	Electroless Nickel for mandrels and hard Chrome for lipsets



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

WHERE TO APPLY THE PROCONE

- Buy a 5-Layer now and expand to a 9-Layer in the future
- 300 mm size can be used for 1200 mm to 1400 mm Barrier Film lines
- Downward blown water-quench lines

OPTIONS

- AutoDie heaters for profile control
- Die lip heaters
- Die gap inserts for fast gap change
- High performance plating's for different applications
- 4340 forgings
- Low surface energy lip treatment; wear resistant
- Add a Triple Lip Air Ring to achieve higher rates