

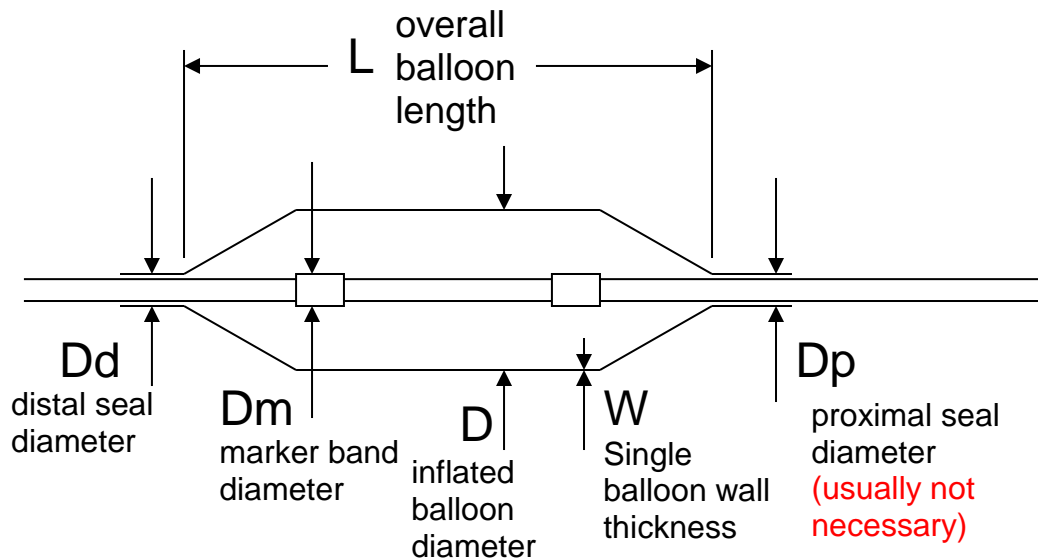


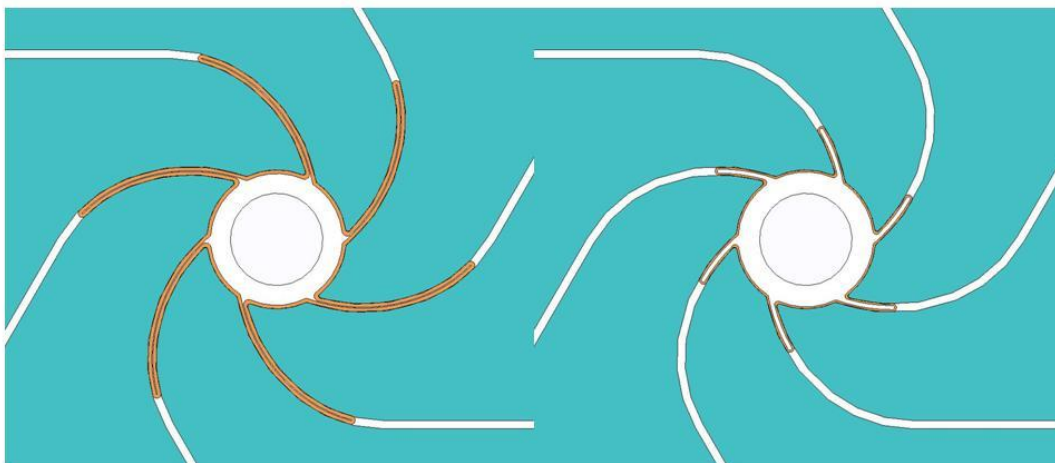
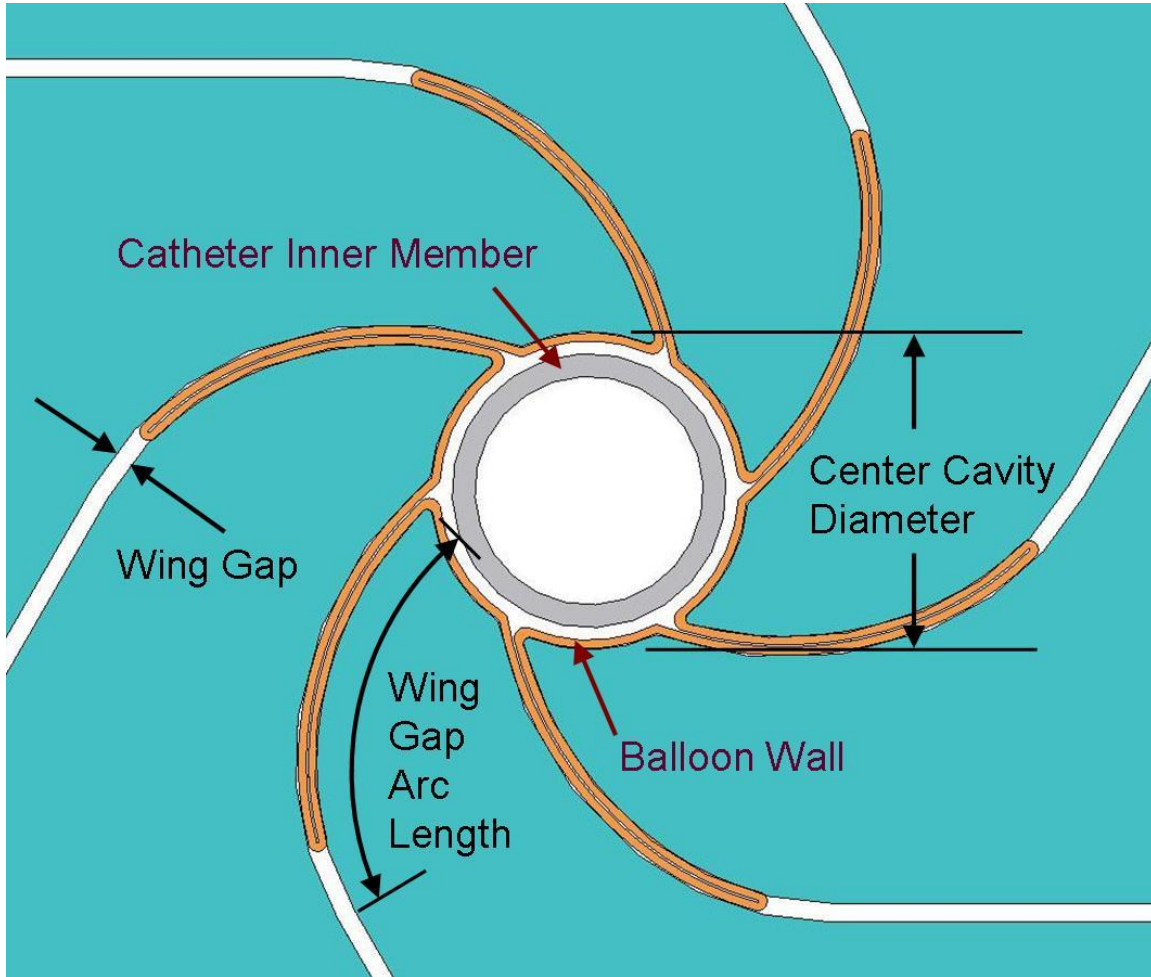
Blockwise pleating die tips are designed specifically to match the customer's balloon designs. The customer provides the following information for each balloon to be processed:

- Marker band diameter **Dm**
 - Single balloon wall thickness **W**
 - Longest overall balloon length **L**
 - Distal seal diameter **Dd**
 - Range of inflated balloon diameters **D**
 - Required number of wings **N**
1. The **Center Cavity Diameter** is designed to accommodate whichever is larger:
 - a. The largest value of: marker band diameter plus 2 times the balloon wall ($D_m + 2 \cdot W$), plus margin.
 - b. The largest distal seal diameter D_d , plus margin.
 2. The **Wing Gap** is designed to accommodate: 2 times the thickest balloon wall ($2 \cdot W$), plus margin.
 3. The **arc length of the curved wing gap** is designed to accommodate the circumference of the largest inflated balloon, plus margin.
 4. The **working length** of the pleating dies is selected to accommodate the longest overall balloon length, plus margin.

For each pleating station, we recommend the range of inflated balloon diameters less than about 2-to-1. However, many customers achieve good results with ranges up to 3-to-1. If larger ranges are processed, then the smallest balloons will have very little curvature in the wings, increasing the risk of unintended folds.

For the Center Cavity Diameter, we define a parameter C : $C = \max(D_d, D_m + 2W)$, where C is the distal seal diameter or the marker band plus 2 times wall, whichever is larger. We recommend the range of C less than about 1.5-to-1 for each pleating station. If the inner member is much smaller than the Center Cavity diameter, then the balloon will not wrap tightly or predictably around the inner member.





Large-Diameter Balloon and Small-Diameter Balloon In the Same Pleating Dies

Pleating Die Customization



Blockwise Engineering LLC
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Please enter data as completely as possible for every type of balloon. Add rows as needed.

Balloon	No. of Wings	D (mm)	L (mm)	Dd (in)	Dm (in)	W (in)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
...(add rows)						