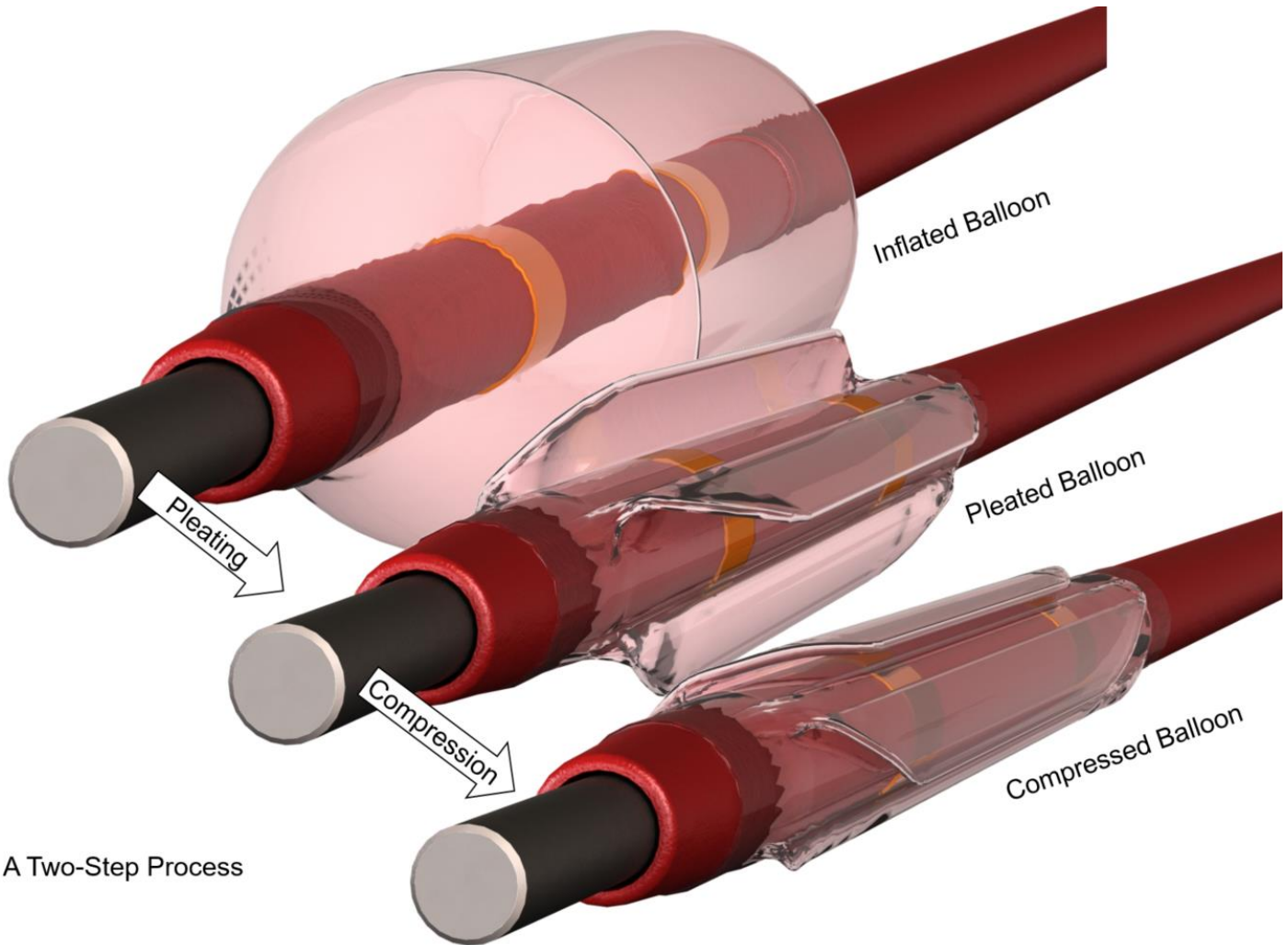
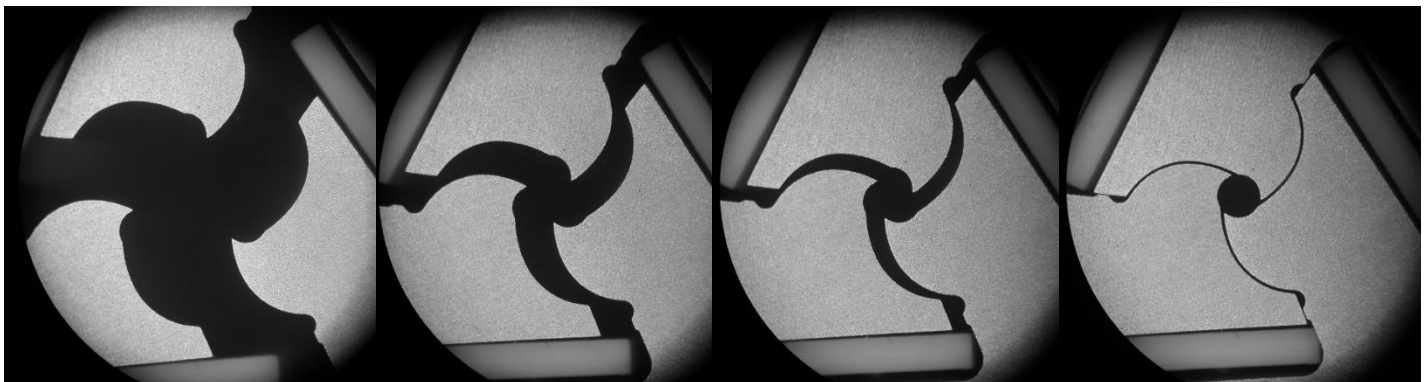


Balloon wrapping is a **two-step process** to that wraps a balloon tightly around a catheter shaft.



A Two-Step Process

The **first step** of balloon wrapping is the **pleating** step. In this step, the inflated balloon is inserted into the **pleating station**. The pleating dies close around the balloon, **forming pleats** while the balloon is still inflated. In most applications, the pleating dies are **heated**. When the **vacuum delay** time is reached, a **vacuum is applied** in the balloon. This vacuum ensures that the pleated **shape will be retained** for the next step, compression.

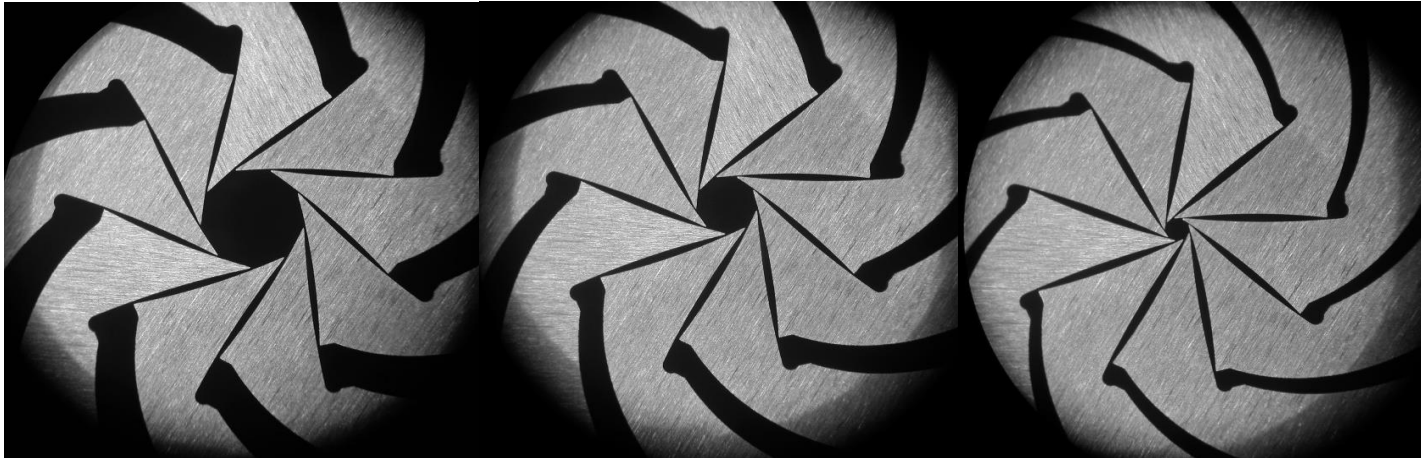


# Balloon Wrapping Basics

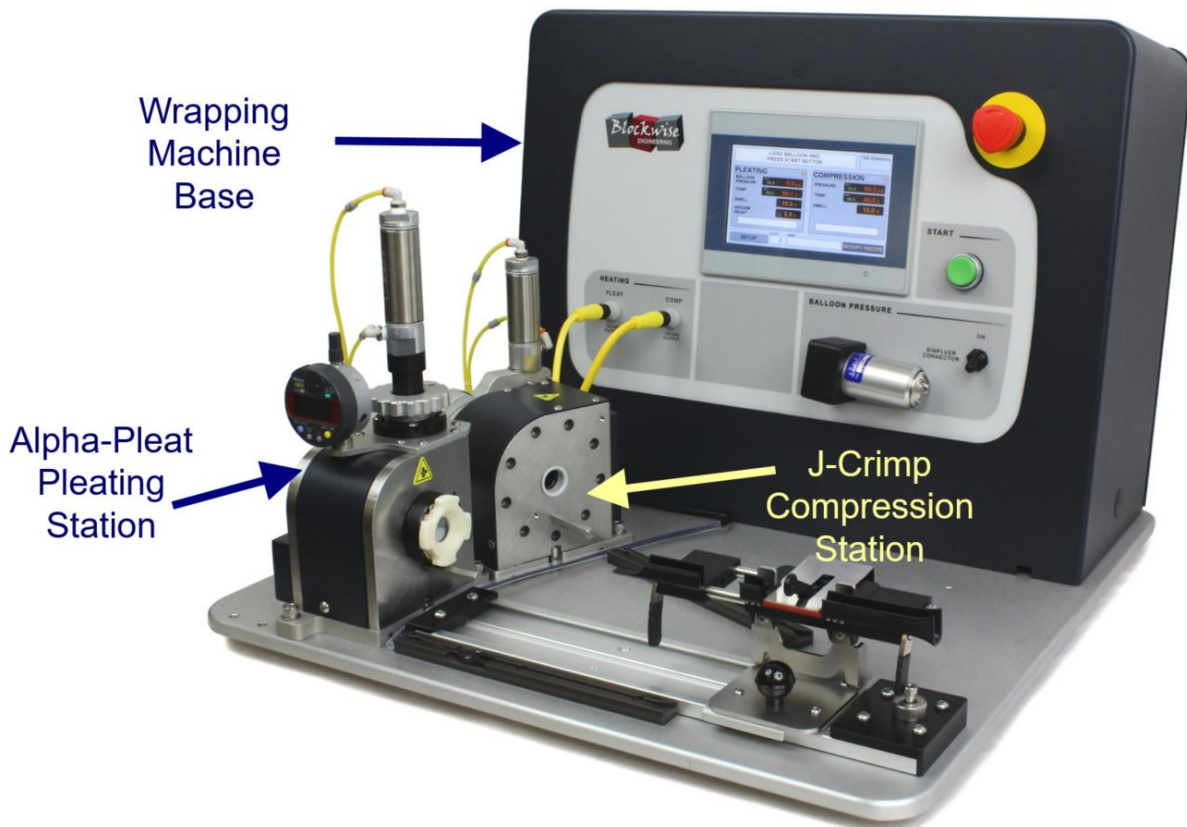


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The **second step** of balloon wrapping is the **compression** step. In this step, the evacuated balloon is inserted into the compression station. The compression dies close around the pleated balloon while **vacuum is still applied**. In most applications, the compression dies are **heated**. The compression dies can be closed to reach **either a force or diameter**. When the compression dwell time is complete, the station will open and the operator can now put a **sheath** on the balloon **while vacuum is still applied**.



A balloon wrapping machine comprises three parts, each of which is sold separately by Blockwise. The dies in the pleating station are custom designed to cover a range of balloons specified by the customer. See document number V426 "Pleat Die Customization".



# Balloon Wrapping Basics

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Most commercially-available balloon wrapping equipment employs a similar two-step process. The **terminology** varies between the American equipment makers.

Blockwise: WRAPPING = PLEATING + COMPRESSION

Machine Solutions: FOLDING = PLEATING + FOLDING

Confluent Medical: WRAPPING = FLUTING + WRAPPING