

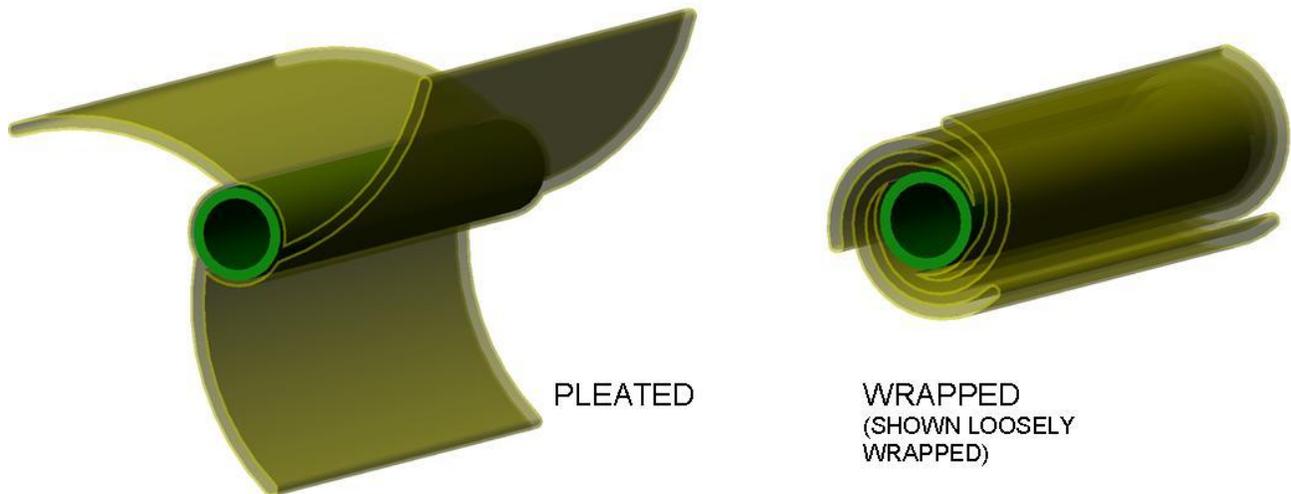
# Balloon Wrapper Model VC



Blockwise Engineering, LLC  
<http://www.blockwise.com>

The **Blockwise balloon wrapper model VC** is a tabletop machine that wraps catheter balloons tightly around a catheter shaft. The machine processes balloons in two steps: pleating and compression.

In the **pleating step**, performed by the Alpha-Pleat™ or TwinCam™ pleating station, a set of heated dies moves inward toward a low-pressure air-inflated balloon to form the balloon into a number of equal “pleats” or “wings”.



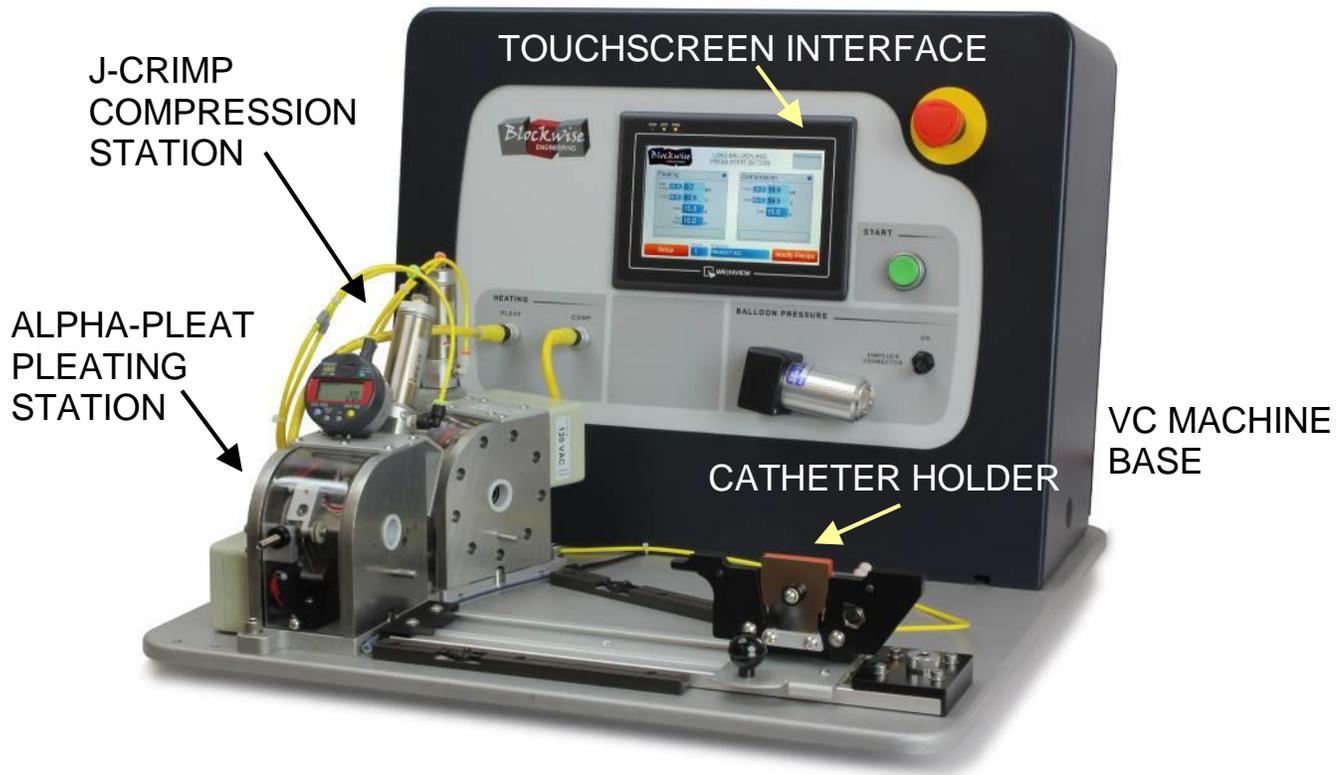
In the **compression step**, performed by a J-Crimp™ or Twin-Cam™ compression station, a set of heated dies forms an adjustable cylinder-shaped opening that radially compresses the evacuated, pleated balloon, forming it so that the pleats are tightly wrapped around the catheter shaft. After the compression step, the “wrapped” balloon is typically placed in a sheath.

A **complete balloon wrapping machine** consists of a base / compression station combination onto which pleating station modules for various balloon geometries can be easily removed and replaced. Pleat stations are customized to match the length and other geometry of the balloon, and each station will cover a range of balloon geometries in the customer's product line.

The **Alpha-Pleat™** pleating stations are available in standard working lengths (maximum balloon lengths) of 62 mm (3 wings only) and 124 mm (3, 4, 5, and 6 wings). The **J-Crimp™** compression stations are available in two standard working lengths of 62 and 124 mm.

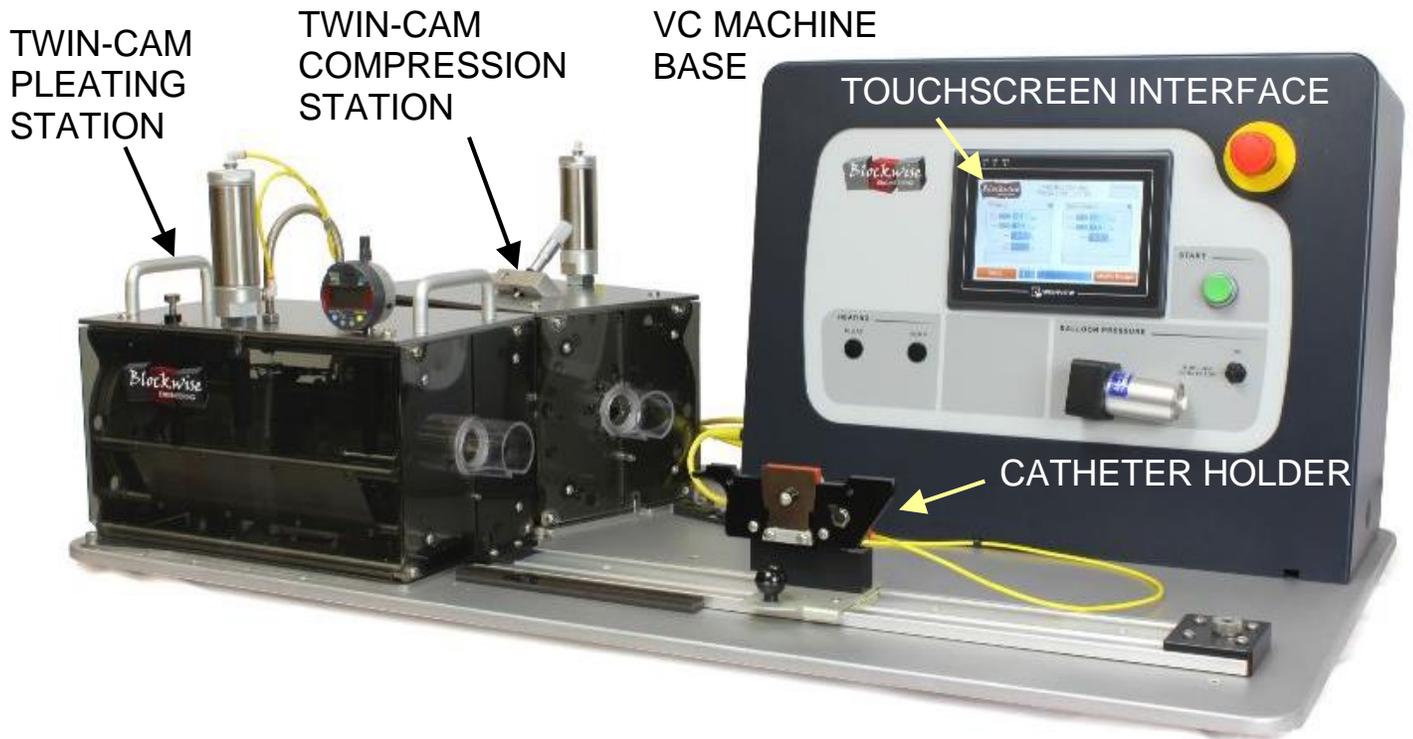
The **Twin-Cam™** pleating stations are available in standard working lengths (maximum balloon lengths) of 62, 124, 186, 248, and 310 mm. The **Twin-Cam™** compression stations are available in two standard working lengths: 124 mm and 310 mm.

The machine is controlled by a custom board that is programmed through the operator interface screen by entering parameters in “recipes”. The recipes contain most of the user controllable settings like: pleating balloon pressure, pleating and compression dwell times, compression station actuation pressure, pleating and compression temperature set-points etc.



**VC Machine Base with Alpha-Pleat / J-Crimp Specifications:**

Die Lengths Available:	62, 124 mm
Number of Balloon Wings:	3, 4, 5, 6
Inflated Balloon Diameter Range (with pleat station changouts)	1.5 mm to 15 mm
Compression Station Opening Diameter Range:	0.5 to 16 mm
Pleat and Compression Die Controlled Temperature Ranges:	Room Temp to 100°C
Pleat and Compression Actuation:	Pneumatic
Die Material:	Hardened, Electropolished, Certified Stainless Steel
Machine Dimensions:	61 cm deep x 61 cm high x 61 cm width (Width is longer for long length stations)
Sequence Control:	Resistive touchscreen interface with 100 recipe memory and custom board for control
Service Connections:	AC Power: 120 v or 240 v, 3A   Air: 70 to 110 psi
Catheter Connection:	Standard Luer Fitting, Using Simpluer Connector



**VC Machine Base with Twin-Cam / Twin-Cam Specifications:**

Die Lengths Available:	62, 124, 186, 248, 310 mm
Number of Balloon Wings:	2, 3, 5, 6, 8
Inflated Balloon Diameter Range (with pleat station changouts)	2.0 mm to 30.0 mm
Compression Station Opening Diameter Range:	0.5 to 30.0 mm
Pleat and Compression Die Controlled Temperature Ranges:	Room Temp to 100°C
Pleat and Compression Actuation:	Pneumatic
Die Material:	Hardened, Electropolished, Certified Stainless Steel
Machine Dimensions:	61 cm deep x 61 cm high x 90 cm width (Width is longer for long length stations)
Sequence Control:	Resistive touchscreen interface with 100 recipe memory and custom board for control
Service Connections:	AC Power: 120 v or 240 v, 3A   Air: 70 to 110 psi
Catheter Connection:	Standard Luer Fitting, Using Simpluer Connector