

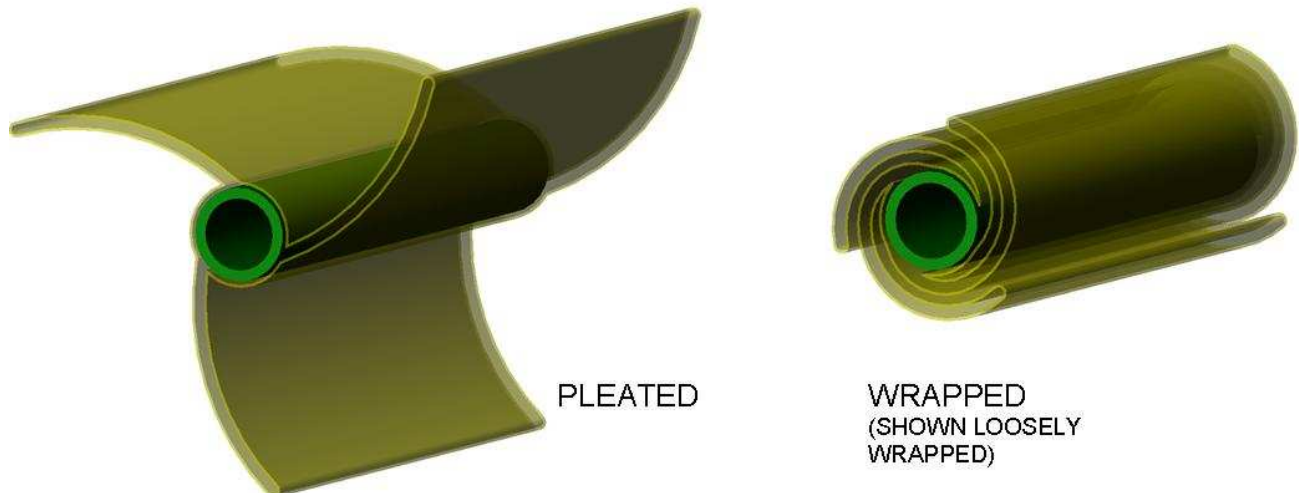
Balloon Wrapper Model VBT



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

The **Blockwise balloon wrapper model VBT** 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 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”.

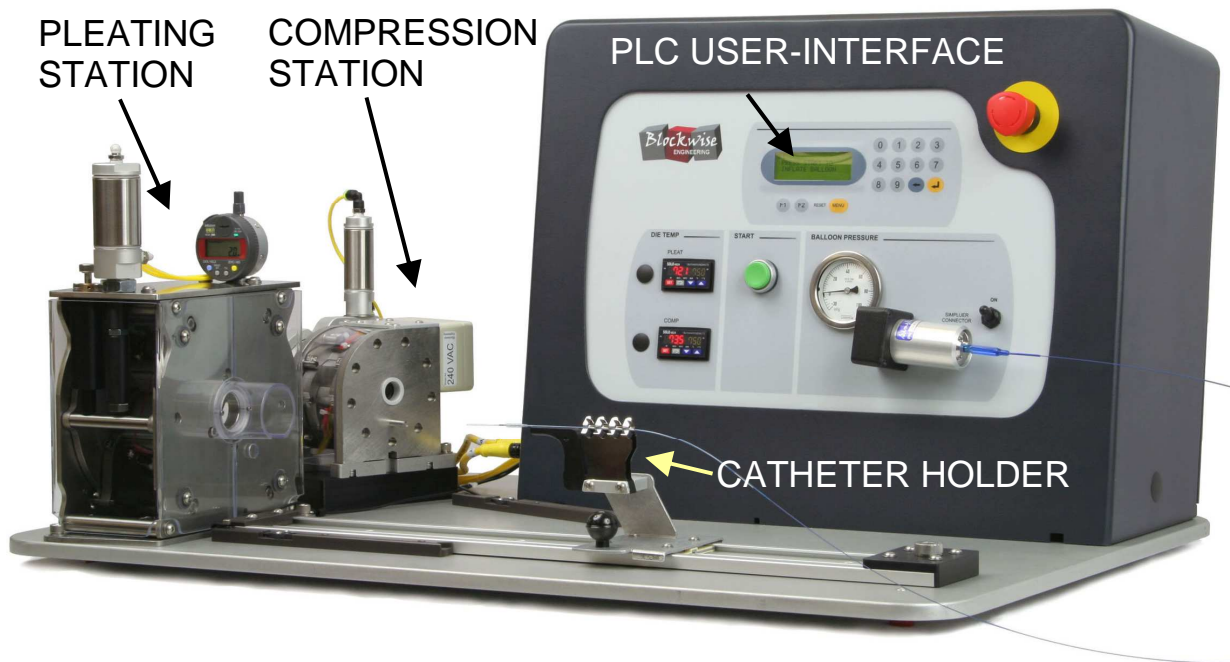


In the **compression step**, performed by a Twin-Cam™ or J-Crimp™ compression station, a set of heated dies forms an adjustable cylinder-shaped opening that radially compresses the evacuated, pleated balloon, forming it so that the pleats are tightly wrapped around the catheter shaft. After the compression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

A **Model VBT machine** consists of a base / compression station combination onto which pleating station modules for various balloon geometries can be easily removed and replaced. The base / compression station are available in standard maximum balloon lengths of 62 mm and 124 mm and can be used for any balloon within the length range. Pleat stations are customized to match other geometry of the balloon as well as the length. Only pleat stations of 62 mm length can be used with a 62 mm base / compression station, while a 62 mm or a 124 mm pleat station can be used with a 124mm base / compression station.

The machine is controlled by a PLC 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.

Pleat stations are custom-designed to cover a range of balloon geometries in the customer’s product line.



Specifications:

Die Lengths Available:	62 mm to 310 mm (in 62mm increments)
Number of Balloon Wings:	2-6
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:	PLC control with LCD operator interface panel and storage for recipes.
Service Connections:	AC Power: 120 v or 240 v, 3A Air: 70 to 110 psi
Catheter Connection:	Standard Luer Fitting, Using Simpluer Connector