



Radial Force Test Machine Model TTR2

Leading-Edge Equipment for Catheter, Balloon, Stent, and Heart Valve Makers



www.blockwise.com

Blockwise Radial Force Testing Machine Model TTR2 A tabletop machine designed for use with Blockwise radial compression stations to measure the radially-outward force of a stent or similar device as a function of its diameter.

Compliant to ASTM-F3067 “Radial Loading of Balloon Expandable & Self Expanding Vascular Stents” which distinguishes standardized methods for testing radial loading of balloon expandable & Self-Expanding stents.

Extremely Low Friction radial compression mechanisms provide high sensitivity & repeatable results.

Many pre-defined test procedures manual settings of diameter or radial force, ramp, cycle, or arbitrary user-defined diameter sequences from a file.

Test Range up to 310 mm length and up to 60mm diameter compatible with a variety of Blockwise test fixtures which can be quickly installed.

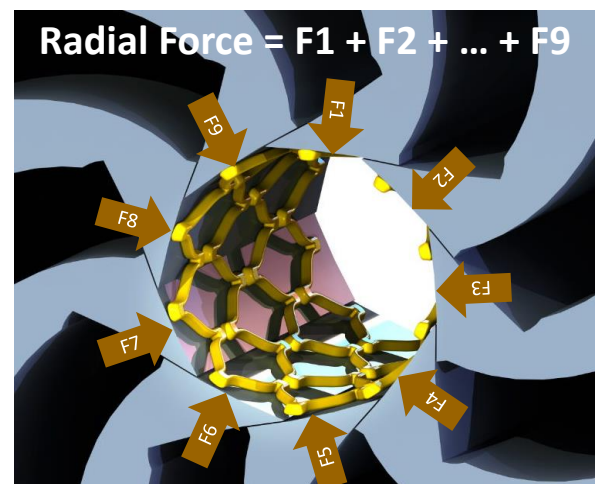
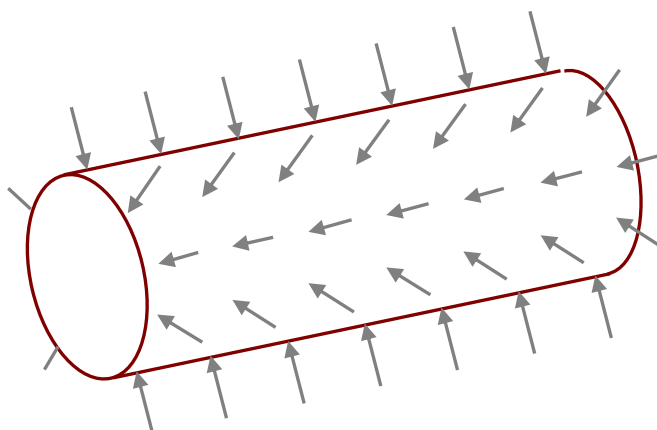
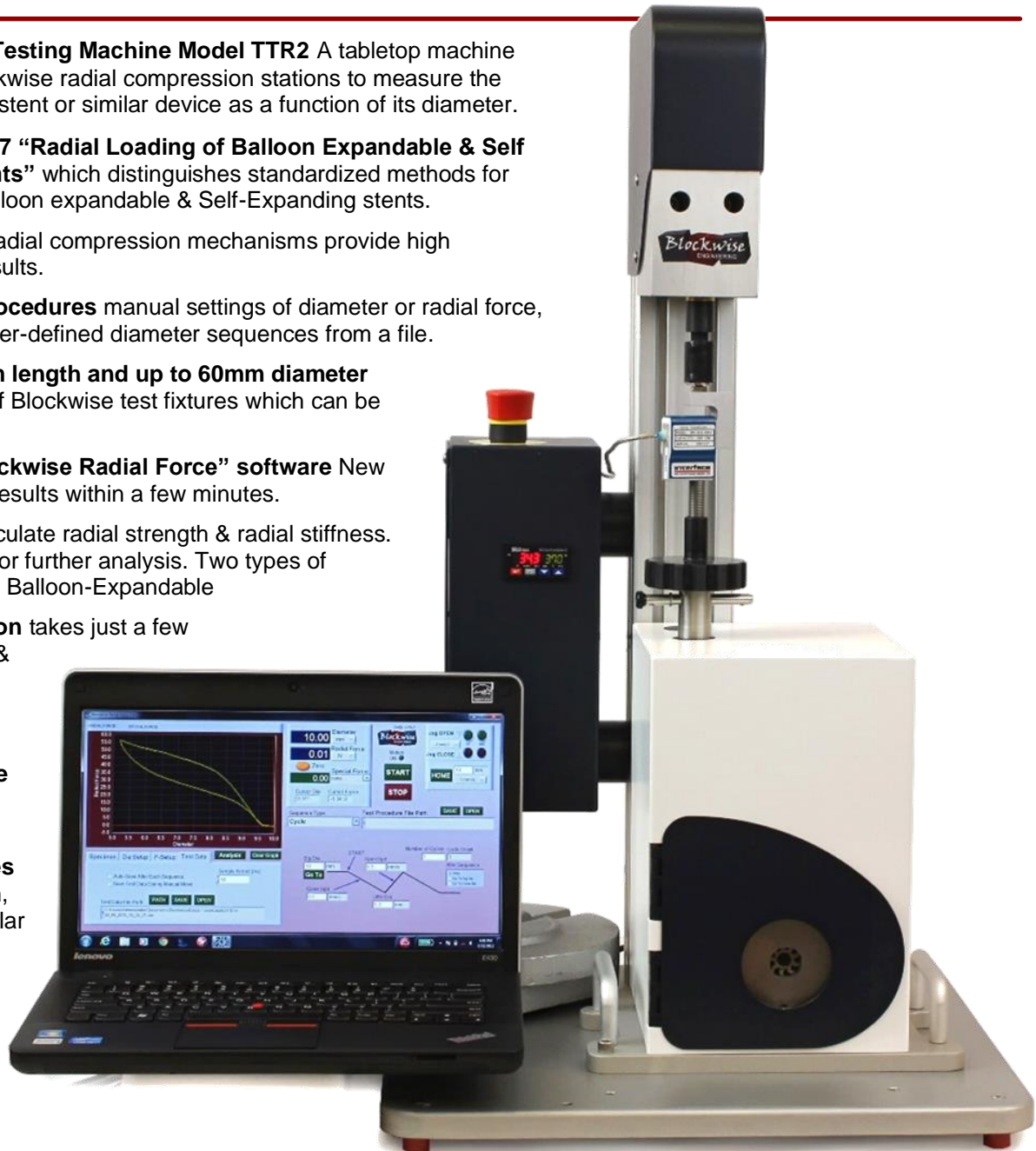
Intuitive & Powerful “Blockwise Radial Force” software New users can get meaningful results within a few minutes.

Analysis Tool Quickly calculate radial strength & radial stiffness. Data is saved in .csv files for further analysis. Two types of analysis: Self-Expanding & Balloon-Expandable

Quick & Simple Calibration takes just a few minutes for both diameter & force. Does not require removing the compression station.

Requires No Maintenance except to keep the mechanism clean.

Radial Force Test Fixtures are compatible with Instron, Admet, MTS, & other popular tensile test machines. Adapter hardware kits are available.



$$\text{Radial Force} = F1 + F2 + \dots + F9$$

Software Specifications:

Units of Diameter	mm, Inch
Units of Force	N, kg, Lbf, hoop force, force per unit length, pressure, & pressure per unit length
Diameter Display Resolution	0.01 mm
Radial Force Display Resolution	0.01 N
Temperature Control Range	Room Temp to 50 C \pm 3 °C



RJU J-Crimp™ Compression Station Specifications

Diameter	0 – 16 mm
Available Lengths	62 mm, 124 mm
Radial Force Maximum Rating	660 N
Radial Force Typical Friction Level	+/- 0.4 N
Basic Diameter Resolution When Used With TTR2	0.01 mm
Basic Radial Force Resolution When Used With TTR2	0.006 N



RTU Twin-Cam™ Compression Station Specifications

Diameter	0 – 30 mm
Available Lengths	124 mm, 310 mm
Radial Force Maximum Rating	980 N
Radial Force Typical Friction Level	+/- 0.8 N
Basic Diameter Resolution When Used With TTR2	0.01 mm
Basic Radial Force Resolution When Used With TTR2	0.005 N



RLU Large Twin-Cam™ Compression Station Specifications

Diameter	0 – 60 mm
Available Lengths	124 mm, 248 mm
Radial Force Maximum Rating	930 N
Radial Force Typical Friction Level	+/- 1.5 N
Basic Diameter Resolution When Used With TTR2	0.01 mm
Basic Radial Force Resolution When Used With TTR2	0.005 N



Base Specifications & Installation Requirements:

Service Connections	AC Power 240 v, 3A (air not required)
PC Requirements (PC is included)	Windows OS, 2 USB ports
Overall Dimensions (Including Compression Station, Not Including PC)	45 cm wide x 45 cm deep x 80 cm tall
Weight (base only, stations will vary)	35 kg
Ambient Environment	keep machine dry and free from dust
Relative Humidity	35% to 80% (non-condensing)
Ambient Temperature	0°C to 50°C

Load Cell Specifications

Load Cell	SM S-Type	
Capacity (lbf)	100 lbf (445 N)	Optional Capacities are Available
Non-Linearity	0.0003 %	+/- 0.133 N
Hysteresis	0.0002 %	+/- 0.089 N
Non-Repeatability	0.0001 %	+/- 0.044 N

