The Interventional Device Testing Equipment (IDTE) from MSI comparatively and quantitatively tests and records the performance features of interventional devices including: catheters, guidewires, stent delivery systems, colonoscopes, endoscopes and scope tools. IDTE's PC controls and versatile test configurations allow for simple and repeatable test setups and instantaneous feedback on device design changes, thereby reducing design timelines. Test results can be used for regulatory submissions, competitive product testing and R&D device evaluation.

The IDTE was designed with several international testing standards in mind. These include: ASTM F2394-07 for preconditioning of the stent on the deployment system prior to retention testing, ISO Standard 25539-1:2003(E) Titled "Cardiovascular Implants – Endovascular Devices" and ISO/TS15539:2000(E) Titled "Cardiovascular Implants Endovascular Prostheses". While still adhering to published guidance standards, the IDTE allows users to distinguish their products from competitors by creating and testing in extremely challenging conditions.

- **Track force** – Measures the force needed to advance a catheter, guidewire or other interventional device through a tortuous path using the recommended accessories.
- **Push efficiency** – Uses the proximal and distal load cells to measure the amount of force on the distal tip of the product when a known force is being applied to the proximal end of the product.
- **Flexibility** – Measure of a catheter tip's ability to track over a specified bend in a guidewire, such as a 90 degree bend.
- **Torqueability** – In a tortuous path, measure of the rotational response at the distal end of a device while imparting a rotation at the proximal end.
- **Retractability** – Measure of the force needed to withdraw the device from a torturous path.
- **Crossability** – Measure of the force needed to advance an endovascular system through a simulated stenosis/lesion within a tracking model.

The HV500™ Transcatheter Heart Valve Disposable Crimping Tool from Machine Solutions Inc. (MSI) utilizes a proprietary segmental compression mechanism in a disposable design. Intended for crimping live tissue products, this tool is suitable for cutting edge, minimally invasive procedures such as percutaneous heart valve replacement or repair.

The HV500 crimping tool is designed to precisely reduce the diameter of balloon expandable or self expanding transcatheter heart valves. This tool can withstand multiple crimp cycles during one procedure and then be easily disposed. The HV500 crimping tool can be injection molded with custom logo and color requirements. MSI will ship in small or large lots.

**Even, repeatable radial compression.**
**Single person operation.**
**Small foot print for lab/bedside applications**
**Low cost, disposable, single procedure tool.**

**HV500 Features**

**HV500 Tool Specifications**

- Injection molded and machined designs.
- Nine or ten element design.
- Diameter range 2mm-45mm, and custom ranges.
- Element length 90mm, 50mm, 25mm and custom.
- Designed for single use.
- Equipment supplied bulk, non-sterile.
- Machined prototypes for multi-use product development.

**HV500 Standard Tool Dimensions**

(Off-the-self 2-45mm, 90mm length design)
- Shipping Weight: 9.0lbs (4.1kg)
- Machine Weight: 4.3lbs (2.0kg)
- Height: 7.6" (193mm)
- Width: 12" (305mm)
- Depth: 5.25" (133mm)