



ADMET Testing Machine Satisfies Compression Bend Test Needs of Endoscope Tubing Provider Karl Storz

Challenge

Karl Storz is an international company known for its production of medical instruments and devices. Its product range varies from neuro-endoscopy and cardiovascular surgery to veterinary medicine, gynecology and spine surgery. In particular, Karl Storz has developed meter-long endoscope tubing, which are instruments useful for studying the inside of the human body. With this technology, surgeons can more clearly see into the organs they are performing surgery on and therefore obtain better results.

In order to develop such products for the medical sector, it is a necessity to ensure the strength, safety, quality, and structural properties of endoscope tubing. The ultimate challenge that Karl Storz encountered is the ability to track endoscope flexibility and have better control of their analysis. The company was looking for an easy to use machine capable of measuring deflection rates and conducting compression bend testing on their meter-long endoscope tubing.

Solution

Karl Storz considered building their own compression bend testing machine. However, the cost and time benefits provided at ADMET were viewed as a worthier solution. It would be a longer process to develop a machine on-site and complete, standardized systems from ADMET provided a better opportunity.

The eXpert 5601 1kN single column universal testing machine equipped with the eP2 Digital Controller and GaugeSafe Live Data Exchange Program was purchased along with a custom bend fixture. ADMET also provided the company with on-site installation and training. After receiving the machine, no major issues were encountered and on-site training was helpful for learning quickly how to use the system.

Results

After acquiring and using the eXpert 5601 1kN testing machine, a visible improvement in Karl Storz's materials testing occurred. The company was able to gain more control and information over the quality of their product. This improved their line and ability to assess structural and mechanical properties of their endoscopes. Ultimately, it results in fewer defects for their customers down the line.

Joseph Labenski, a manufacturing engineer for Karl Storz Endovision, stated that his team was "very happy with the system. The ADMET eXpert 5601 testing machine is a great product from a self-established company. The testing system performed as expected and met all of our expectations. It was delivered on time and did not require months of training."

