BALLOON CATHETER FUNCTIONAL TESTING

Market driver:

Balloon Catheters require rigorous functional validation to insure that they perform their intended task of inflating, without risk of leaking or burst since they typically utilize inflation pressures 75 to 500 times normal blood pressure. It is also important to insure that the device deflates completely after performing its intended function.

Test requirement:

The catheters require an initial gross leak test followed by deployment pressurization of the balloon inflation to its design rating, and then to burst. Measurement of the pressure and volume and recording and storing of the results.

CTS Solution:

CTS designed and built a custom test fixture with PC control to measure and graphically record the balloon deployment by plotting the pressure vs. volume slope. The software was designed to initiate the testing sequence, beginning with the gross leak test, followed by inflation to burst. Results are stored and formatted reports generated.