

Statement of Work

Implementation of a test bed which will allow the necessary testing of each component of the system and testing the system as a whole. The system will consist of four parts; a linear actuator, a compliance chamber, a flow restriction, a fluid reservoir and the required tubing/connectors to bring the system altogether. Another aspect of our system will be sensors, measuring the flow and pressure at the input, output and inside the chamber. Also, while testing and as a result of our testing we will be able to spec out the exact parts necessary to meet all the customer needs and functional specs.

We will be implementing a fully instrumented test bed that will allow the testing and verification of the fundamental design you have devised consisting of the following four major subsystems

1 - a linear-actuator - piston based pump drive mechanism suitable for operating the Schwarz heart model

2 - a compliance chamber with manually adjustable and repeatable compliance values over a range of specified values

3 - a flow restriction system with manually adjustable and repeatable flow restriction over a range of specified values

4 - a fluid reservoir that will accommodate up to a total of 5 liters of overall system fluid volume that can be adjusted in a repeatable fashion over a specified range of values

The test bed will allow the modular interconnection of these components to enable their testing and validation. It will also provide the sensors, fittings, access points necessary to allow testing and validation of your design.