

3.3 End of Stroke

As any user knows, hydraulic cylinders will encounter the end of stroke limitation many times during most system applications. In fact, the hydraulic system may incorporate several cylinders and some cylinders will encounter end of stroke while other cylinders are still moving. Therefore, it is very important that an analysis program be capable of simulating hydraulic system operation when one or more cylinders are at full stroke.

The example shown in the schematic illustrates the ability of HyPneu to simulate a hydraulic system with one out of two cylinders at full stroke and the second cylinder still moving. The curves show cylinder displacement and inlet pressure under end of stroke situation.

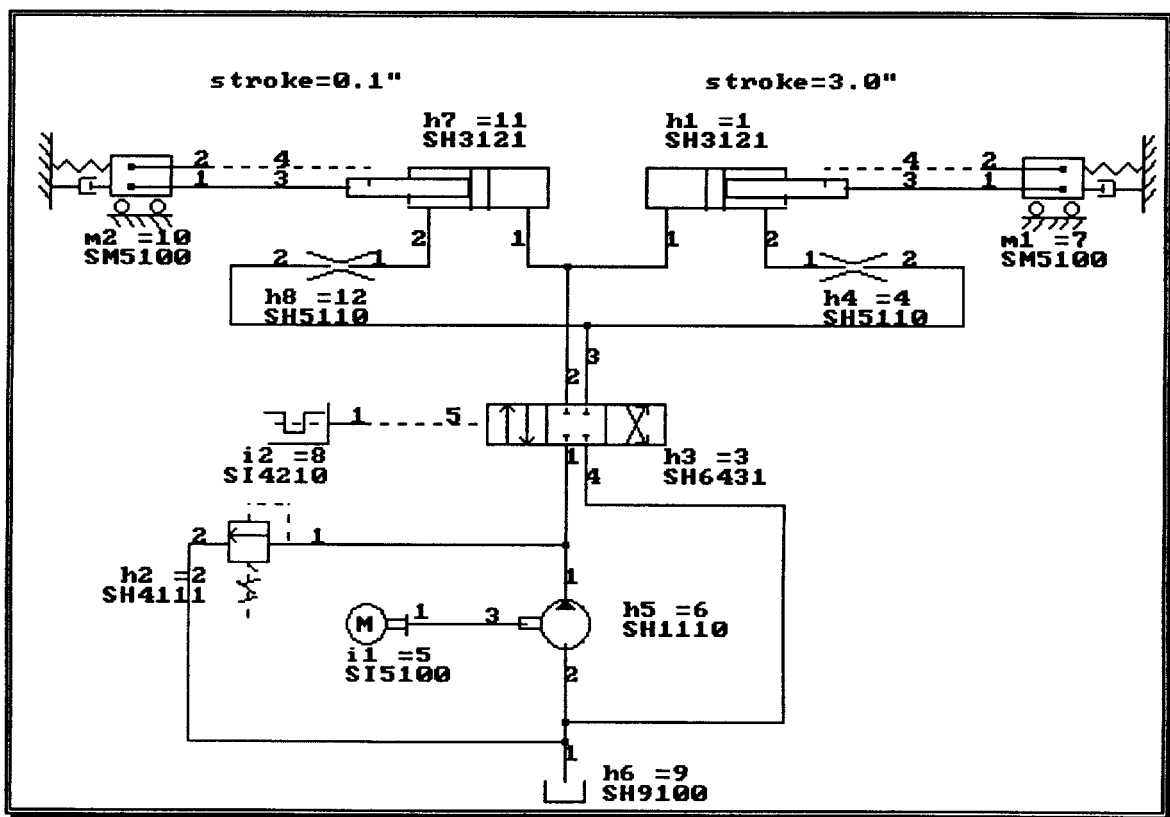


Figure 3.3a. End of Stroke Schematic.

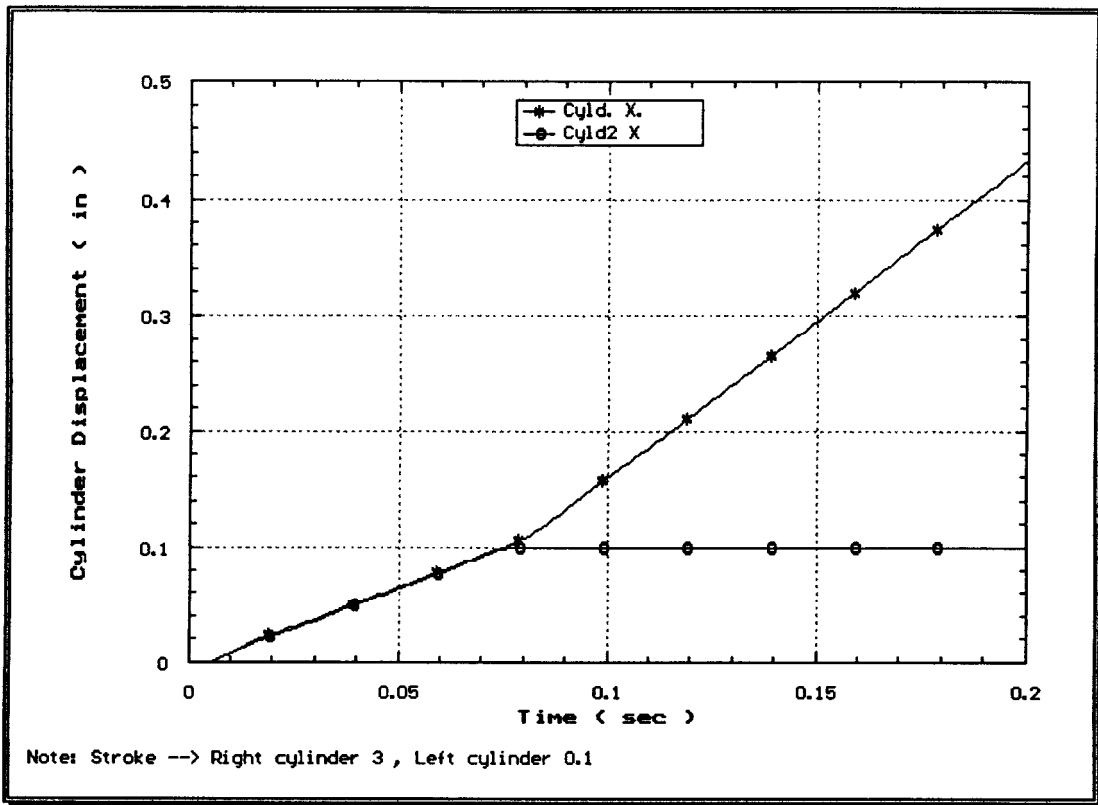


Figure 3.3b. Cylinder Displacement Curves.

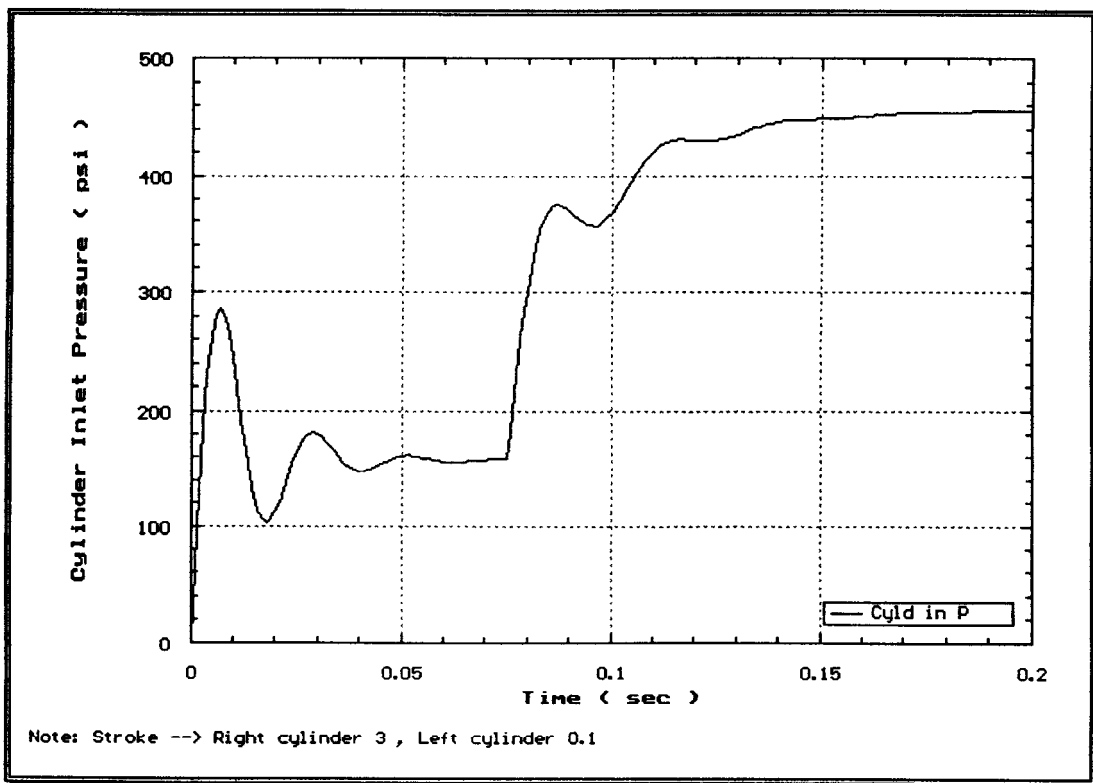


Figure 3.3c. Cylinder Inlet Pressure.