

## **BRAKE HOSE TESTING**

#### **Market Driver:**

Safety is high on the list of concerns for today's manufacturers especially those who manufacture brake components for commercial vehicles. Hose failure under pressure and fluid leaks are among their top concerns. At pressures of 2000 psig and greater it is important to have the right test to find the smallest possible leak to insure the highest of quality standards are met.

Testing multiple designs of brake hose, with minimal change out time by the operator was a requirement. Positive control of "rejected" parts to eliminate the possibility of a "rejected" part being

mishandled was a design requirement.

### **Test Requirement:**

The assemblies were to be leak tested to a standard of "no leaks of brake fluid" at maximum operating pressure, followed by a flow blockage test. The stand needed to process a hose assembly every 60 seconds.



#### **CTS Solution:**

This test stand was designed as a dual station, manually loaded, and automatically unloaded leak test machine. Quick change tooling sub-plates were used to permit testing multiple part designs with minimal changeover time. The assemblies were tested with compressed air as the test media instead of hydraulic fluid for both leak and flow tests to improve test sensitivity and part cleanliness. Due to the high pressure of the test the test area was completely enclosed with Plexiglas for operator safety. To minimize noise, all test exhaust was directed thru mufflers.

Tested parts are offloaded by a pick and place in the stand enclosure into "Accept "bins or a locked "reject" bin. The reject chute was monitored to insure that all "rejects" were properly handled.

#### The Result:

Phone: (513) 367-6699

The customer was able to improve part cleanliness, shipped product quality and personnel safety. The versatility of the quick change tooling design allowed design changeover by the operator, significantly reducing down time.

Fax: (513) 367-5426



# **Custom Engineered Solutions:**

Phone: (513) 367-6699

CTS reacts to customer requests to develop modern test systems to meet demanding production test requirements. CTS maintains a worldwide network of sales representative to assist you before and after the sale. Contact us today and talk to one of our experienced application engineers to develop a custom engineered solution for your testing requirements.