

## Making Your Equipment “Schroeder Clean” and the Diagnostics to Prove It

### Background

An engineering company had cylinders manufactured for international shipping purposes. The cylinders needed to be tested for function and pressure. The test bench oil ISO level needed to be documented during testing, and the oil cleanliness level needed to be kept at 16/14/11 during testing (ISO code of 16/14/11).

### Problem

The test bench operating pressure and pressure test requirements were 6000 psi, the test bench did not include pressure filters and the customer did not want single-pass filtration.

### Solution

To solve the problem, Schroeder products that were provided by R.L. Miller, included the following:

- A directional control valve capable of handling tank pressure of 500 psi
- A flow control in the tank line to induce 500 psi to deliver to a TCM (with Flumos software for data acquisition)
- RT1KZ3 return filter
- KLS kidney loop system to clean tank oil during set up mode and testing

### Summary

Overall, the cylinders were tested to the system pressure as required. The return flow was filtered and directed to the TCM at 500 psi, as indicated in the return line pressure gauge. When the ISO code was too high for the test requirements, quick disconnects were used to circulate clean fluid through the test hoses and valve. The contaminated fluid from the initial cylinder testing was flushed away and filtered back to the 100 gallon tank. The finished cylinder ISO oil cleanliness levels were reached at 13/11/7, 11/10/7, 10/8/7, 13/12/10 and 10/8/7.



TCM



RT



KLS

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## Specifications

Customer Name: Anonymous

Type of Machinery: Cylinder Test Bench

Reservoir Capacity: 100 Gallons

Operating Fluid: AW46

Schroeder Product: TCM, RT1 and KLS

Customer Problem: Control ISO Levels in Test Fluid

