

Fuel Filter Pressure Testing

Project Overview

Durability pressure pulse testing of truck and marine engine fuel filters.

Test fluid temperature is controlled whilst being pumped around the test circuit. When stable the test circuit is sealed and by controlling an intensifier via a hydraulic servo valve, the pressure is pulsed for a specified number of cycles or until any of the units under test fails. The system can test up to 4 parts at any one time.

Some typical pressure cycles are 0-3bar pressure at 2Hz cycle frequency or 0 to 9 bar at 1 Hz cycle frequency for 1 million cycles. Each cycle consist of ramp up , hold and ramp down.

The software monitors and displays all readings numerically and graphically. Due to the temperatures and pressures involved safety monitoring is of utmost important to avoid harm to operators and damage to the rig.

The software includes a multi-point calibration facility so that periodic referencing and checking of the acquisition channels may be carried out. A manual control screen allows actuation of all valves, pumps, intensifiers, heaters and coolers for system setup.

