



providing world-class leak test and assembly verification solutions

## DIESEL INJECTOR HYDRAULIC LEAK TESTING

### Market driver:

Diesel engines deliver higher performance, needed for larger trucks and SUV's using high pressure direct injection.

### Test requirement:

Injectors are tested for a hydraulic leak utilizing a calibration fluid that simulates diesel fuel. The test fluid is maintained at temperature and circulated through the part fixture and the part seal head to normalize the part temperature.



### CTS Solution:

The custom designed functional test system first purges the air from the part by circulating the fluid through the part and actuating the injectors plunger. The part pressure is increased to a preset value and then isolated. The system detects the leakage as a part pressure loss. Depending on the type of part, a two cavity loss test and a gain test could be performed. The system is calibrated utilizing a built in volume displacement device.

