



Emissions : Diesel Injectors

As injection pressures in today’s modern diesel engines increase up to 35,000psi, so the need for needle and seat tolerances becomes finer with the average tolerance being 3 microns.

This has made the need to deliver clean fuel to these injectors critical in maintaining injector life and more importantly maintaining the injector’s performance, which in turn results in the engine’s emission standards being maintained.

Emission testing at Parsons Australia Pty Ltd’s facility at Auburn, New South Wales, Australia produced the fuel analysis test results shown in the table below.

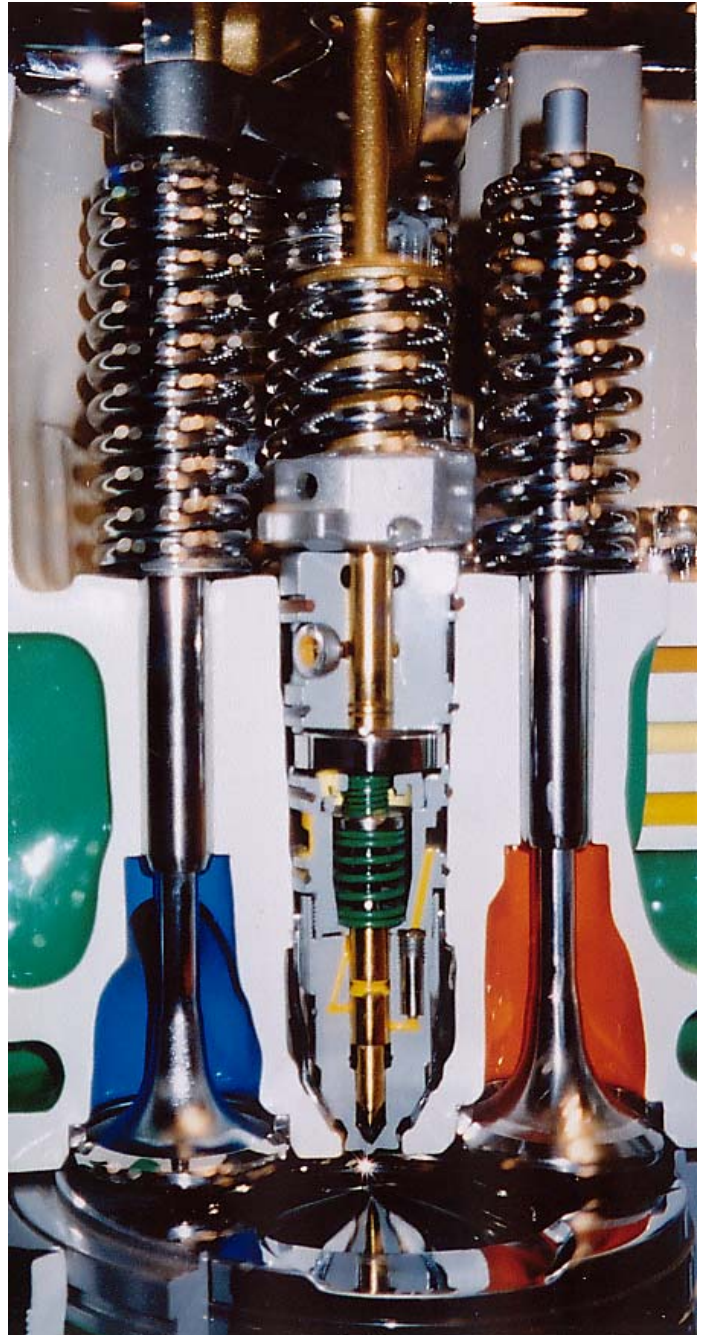
Sample 27780, the certified fuel used in testing, indicated an ISO 19/16.

Sample 25126, taken after CAT’s 2-micron secondary filter, indicated an ISO 18/14, a reduction of 67% in particles greater than 2 microns.

Sample 25129, taken after the FTA FMF2 fuel filter, indicated an ISO 15/12, a reduction of 95% in particulates greater than 2 microns on the certified fuel and a further 86% reduction in particles greater than 2 micron on the CAT’s secondary filter.

Because injector tolerance is 3 microns, the use of FTA filter systems can prolong injector life by at least three times when compared to OEM filter performance and will maintain your engine’s performance and efficiency in both fuel economy and emissions, two important issues confronting engine operation today.

While continuing to lower exhaust gas emissions FTA filter systems considerably reduce or eliminate in-field fuel related breakdowns giving significant cost savings and increased machinery up-time.



Sample Number	25129	25126	27780
Date	09/02/2001	08/02/2001	07/02/2001
ISO4406	15/12	18/14	19/16
Gravi-Metric			
>2 micron	544	3966	12102
>5 micron	201	1466	4473
>15 micron	21	156	477
Contamination	Low	Moderate	Elevated