

OPTA-PERIPH

PROTO FUEL STORAGE TANK ULTRA-LOW SULFUR DIESEL VALIDATION

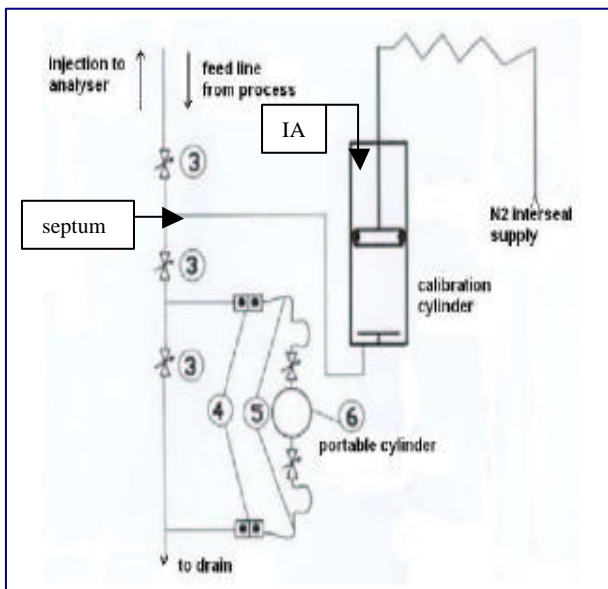
APPLICATION NOTE

This application note is a simplification of the method ASTM D 2885 describing in annexes preparation, storage and handling of proto fuels used to validate analysers reading.

This method is invaluable and applicable to certification of blends using analysers, mainly:

- Prototype fuel used on octane comparator or NIR chemometric
- Ultra-low sulfur diesel or gasoline validation

Both applications are involving volatile fuel or volatile sulfur compounds and the superiority of Piston Floating Cylinder for validation has been established by quantity of worldwide releases



This fluid diagram represents the calibration cylinder systems featuring:

-Inlet/outlet single line for filling from process and rejection to analyser

-The Nitrogen inter-seal supply with PTFE hose.

-The unopened grab fuel portable cylinder option: this is a polished to $0.2\mu\text{RA}$ receptacle for analyse and validation of the fuel stored candidate. This integrated system features hoses and quick connect couplings.

Under some circumstances an elastomer septum fitting for syringe is used to add a known amount of component of interest in the candidate validation fluid.



MATERIAL SELECTION

- 1- Piston Cylinder SPC: 10 or 25 or 50 dm³-
- 2- Unopened sample standard cylinder SR :2L ; electropolished Ra : 0.2 μm ;fast coupling, hoses.
- 3- Low-level alarm C1
- 4- Pneumatic stirrer- C3
- 5- Compliance PED- C6
- 6- PTFE hose- C7

Unopened Electropolished StANDARD Portable Cylinder