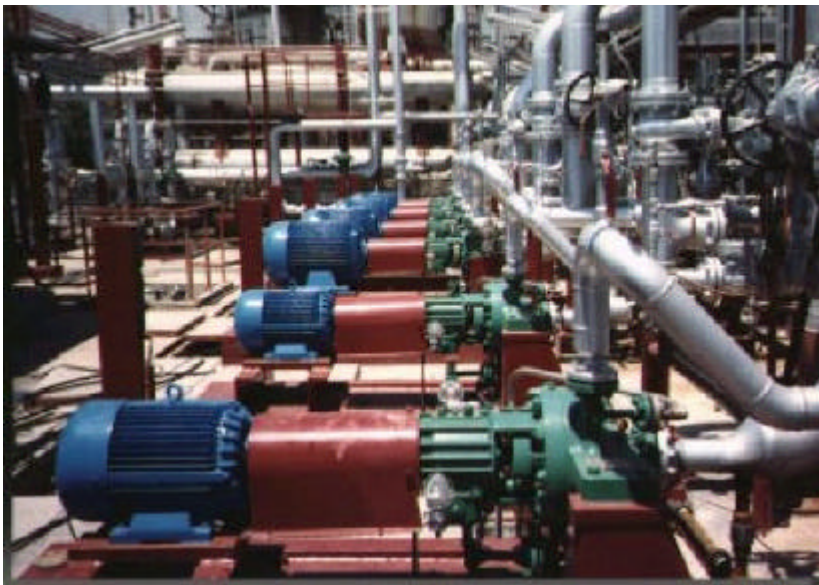


OPTA-PERIPH PROTO FUEL STORAGE TANK

FEATURES

- . Simplifies the Prototype Fuel Calibration Procedure of ASTM D 2885 Octane Comparator
- . Proto fuel chamber is a piston-floating cylinder designed for up to 1.000-dm³ capacity
- . Patented double piston barrier prevents weathering even with volatile fuels
- . No vapor loss / bubble / flash / Nitrogen blanket off-gassing / contamination
- . No chilling procedure required before filling or during storage
- . Continuous mixing device to keep proto fuel homogeneity and reduce last fuel discard
- . Accepts oxygenates or other octane enhancers, prevents from any source of O.N. change
- . Features a patented anti-oxidant Nitrogen inter-seal
- . Cylinder wall autocleaning by piston scraper
- . Closed level indicator preventing fuel for light exposure
- . All wetted parts in 316L S. S. polished to 0.2 μm Ra and PTFE, no wetted soldered seams .



OPTIONS

- . Unopened standard fuel portable cylinder system for Prototype Fuel calibration
- . Additive injection special fitting
- . Level transmitter ATEX II 2G for remote monitoring of Proto Fuel contained
- . Low level alarm ATEX II 2G
- . Water traces detector activated during fuel collection operation from bulk storage vessel.

- **DESCRIPTIVE:**

- Piston floating cylinder with patented double barrier and inter-seals separation chamber: this chamber is to be filled with separation neutral fluid such as Nitrogen through the drilled piston shaft for anti-oxidant seal.

This arrangement prevents any source of weathering with deterioration of standard sample as well as Nitrogen bubbles off-gassing as Nitrogen is not in contact.

Chilling procedure before filling or during storage is not required as Proto Fuel is kept under pressure.

- Parts in contact with standard sample: 316L stainless steel body and PTFE seals.
- Cylinder / Piston internal assembly is seamless with polishing operation (RA < 0.2 µm)
- Piston between the two PTFE seals features a scraper intermediate seal for walls autocleaning before feeding.

- Graduated closed level indicator preventing fuel for light exposure

OPTIONS:

Compliance with European Pressure Equipment Directive PED 97/23/CE:

- Procedure complying with PED Annex III-Module A. Integrated relief valves LLOYD'S REGISTER certified on gas chamber. Maximum allowable pressure depends on vapor pressure of sample at maximum temperature.
- Declaration of conformity and CE mark.

Stirring devices:

- Motorised stirrer for standard fluid homogeneity and to reduce the last fuel discard bottom (ex-proof motor ATEX II 2 G EExdIICT4, single phase 115/230 V- 50/60 Hz-200 W)

Level transmitter:

- For remote monitoring of sample contained inside of calibration standard contained, the position of the floating piston in the cylinder is monitored by a resistive displacement level transmitter (0 to 10 Kohms) tied to the piston shaft. No calibration is required within the life of this component.
- Associated to the Intrinsically Safe Barrier KFD2-PT2-Ex1 from Pepperl + Fuchs for a 4 - 20 MA or 0-10 V DC output, the transmitter loop is certified ATEX II 2 G EExi IICT6 for hazardous area.

Low level trip alarm:

- Pre-alarm and / or low level alarm by electrical contact ATEX IIG EEx ed IIC T6 is available as option.

Additive injection fitting:

Special fitting consisting of elastomer septum for syringe can be used for additive injection into the Proto Fuel candidate or to add a known amount of component of interest (C4 addition).

