New HIAC PODS+ ...Have internal pump, will travel!

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The NEW HIAC PODS+ **now** includes an integrated internal pump that replaces the need for CO2 cartridges and optimizes the **portability** and **degassing** capability of this instrument! This new feature enables virtually unlimited "in the field" sampling and improved functionality due to optimizing the bubble degassing process.

Figure 1. New HIAC PODS+

Introduction

The new integrated air pump included in the HIAC PODS+ is a step function improvement in reliability, convenience, and function. It has been thoroughly run through its paces and provides capability with fluid viscosities up to and including ISO 100 as shown per the Table 1 below. As the viscosity increases, the flow rate may need to be reduced but this is a simple instrument setup option and requires a couple button clicks to achieve.

1. Lifetime specifications and accelerated life testing

The air pump has a published expected lifetime 32,500 cycles. Our Engineering team performed some in house testing where 6 different pumps were set up to cycle on for 1 minute and then off for 1 minute continually. Every one of these 6 pumps ran without fail for approximately 250,000 cycles which far exceeded the specification requirement.

2. Viscosity performance

Table 1 shows the viscosity performance using only the new pump and the recommend flow rates for the given viscosities. To optimize the PODS+ for running the fluids from 275 cSt up to the maximum viscosity specification of 425cSt, simply connect the instrument to shop air set to 100 PSI using the universal ¼" tube quick disconnect fitting.

Fluid type	Sample Flow rate (ml/min)	Viscosity (cSt) at Ambient temperature
MIL-H-5606	50	20.6
ISO 32	50	73.8
ISO 46	15	112.5
ISO 68	15	177.6
ISO 100	15	275.1

Table 1 . New HIAC PODS+

3. Portability

No more CO2 bottles! No limited sampling, no refilling the bottles! With the new integrated pump, this instrument is 100% self-contained for off the grid performance with that same HIAC quality and reliability that you've come to expect!

What sets the HIAC PODS+ apart?

- New integrated pump for complete portability and reliability.
- Fastest Sample to Answer instrument in the business!
- Fluid capability – Fuels, Water, Glycols, and of course all petroleum based fluids.
- Longer battery life with a new Lithium Ion battery pack.
- 3 Operating modes – Bottle Mode, Online Mode, and *Filter Cart Mode.

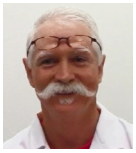
* The Filter Cart Mode option gives the operator walk away capability using the built in I/O relay hardware and software controls to manage an external device when a pre-programmed contamination condition is met. I.e. A filter cart pump, an Andon light, or an audible alarm.

- Data output capability (USB and Ethernet), flexibility, and storage.

Conclusion ...another Home Run!

HIAC is the industry leader in Liquid Particle Counting and the HIAC PODS+ clearly illustrates the reasons why. Building on the HIAC legacy of accuracy and reliability, they have added versatility and innovation to the equation which is a rare combination that serves our customer's technical needs and cost targets.

Author



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Bill F. Bars is a Sr. Applications Scientist for Beckman Coulter Life Sciences in Grants Pass, Oregon, USA. He has created and developed many of the liquid systems production processes and procedural tools for the BEC Particle products. These products include but are not limited to the following HIAC branded products: 8011+, PODS, GlyCount, 9703+, ROC, and HRLD Sensors. He has worked for Beckman Coulter Life Sciences for 20 years in a multitude of engineering capacities ranging from Metrology to Service Training and Application Support. He is a member of the NFPA U.S. TAG to ISO/TC 131/SC 6 - Contamination control group.

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