

IOP Intelligent Precision Oil Purifier

IOM Intelligent Monitoring Oil Purifier

Intelligent Oil Purifiers

The Intelligent Oil Purifier Series (IOP, IOM) are equipped with Japan 3R ultra-precision filters that remove solid contaminants, moisture, oil film, and air bubbles from lubricants. Filtration accuracy reaches $\beta_3=929$, achieving NAS 5–7 cleanliness in a single pass, with a maximum level of NAS 3.

The IOP series features filter saturation shutdown and phase sequence protection, while the IOM series adds real-time oil cleanliness (NAS or ISO) monitoring, ultrasonic de-bubbles, and oil temperature alarm functions.



01-1. Features and Advantages-IOP series >>>



3R filters

phosphate
ester

water
glycol

Features

- ◆ Intelligent control of automatic shutdown when the filter element is saturated and phase sequence protection function.
- ◆ Ultra-precision filtration, with standard filtration ratio of $\beta_3=929$.
- ◆ Removing various contaminants that general filters cannot remove.
- ◆ Removing micron-level solid impurities.
- ◆ Removing moisture (condensation water generated by temperature difference).
- ◆ Removing and inhibit the generation of oxides, degradation substances, and oil sludge paint film .

Advantages

- ◆ Preventing hydraulic machinery failures.
- ◆ Ensuring the reliability of the long life cycle of equipment operation.
- ◆ Reducing spare parts, labor, and management costs.
- ◆ Keeping oil clean for extended periods.
- ◆ Significantly reducing oil costs.

01-2. Features and Advantages-IOM series >>>



3R filters

$\beta_3=929$

NAS3

Features

- ◆ Ultra-precision filtration, with standard filtration ratio of $\beta_3=929$.
- ◆ Removing various contaminants that general filters cannot remove.
- ◆ Removing micron-level solid impurities.
- ◆ Removing moisture (condensation water generated by temperature difference).
- ◆ Removing and inhibit the generation of oxides, degradation substances, and oil sludge paint film .
- ◆ De-bubbling in the hydraulic circuit (optional configuration).

Advantages

- ◆ Preventing hydraulic machinery failures.
- ◆ Ensuring the reliability of the long life cycle of equipment operation.
- ◆ Reducing spare parts, labor, and management costs.
- ◆ Keeping oil clean for extended periods.
- ◆ Significantly reducing oil costs.

02-1.Pictures >>



● AITAI-IOP103



● AITAI-IOP105



●● AITAI-IOP107



● AITAI-IOP103(phosphate ester oil)
AITAI-IOP103(water glycol oil)



● AITAI-IOP105(phosphate ester oil)
AITAI-IOP105(water glycol oil)



●● AITAI-IOP107(phosphate ester oil)
AITAI-IOP107(water glycol oil)

02-2. Pictures >>>



• AITAI-IOM103-1RC



• AITAI-IOM103-2RC



• AITAI-IOM305-1RC

03-1. Accessories>>>



Debubbling
Device(Optional)



M100 Filter
Elements



M300 Filter
Elements

03-2. Accessories>>>



DWG100 Filter
Elements



WG100 Filter
Elements

04. Environmental



- ◆Altitude: ≤ 1000 meters;
- ◆Ambient temperature: $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$;
- ◆Ambient humidity: $\leq 95\% \text{RH}$;
- ◆Environment without explosive gases;
- ◆Installation inclination with vertical plane $\leq 5^{\circ}$;
- ◆In places without significant shaking and impact vibration;
- ◆In environments without gases or vapors that significantly damage insulation;
- ◆In places without dripping water or other liquid intrusion;
- ◆Installation category: Category II;
- ◆Outdoor category 2 anti-corrosion environment.

05. Applications >>>

IOP series and IOM series are suitable for online precision filtration of industrial oils such as equipment hydraulic systems and lubrication systems.

