



# VRP Series Varnish Removal Oil Purifier

### Application

Used in gas and steam turbine, compressor, to remove dissolved and suspended soft pollutants in oil products, sludge and other harmful substances. Avoid turbine failures and expensive oil changes due to paint film problems. When the film is formed, the loss of production is very high. The initial formation of the film is known as a soft pollutant, caused by hot spots in the system, such as bearings, pumps, and high flow on-line filtration. Recent studies have found that the existence of soft pollutants can be divided into dissolved state and suspended state, by removing these soft oxides can avoid the production of paint film.

Once the film forms, it will clog valves, filters and other small links, and the life of the oil will be significantly reduced.

The formation of cleaning film will cause the following adverse consequences: valve adhesion, loss of control, resulting in unit failure or startup failure; Filter plugging, limiting oil flow, resulting in oil temperature rise and wear increase; Heat exchange failure, oil temperature rise; Sandpaper surface, increase component wear; Forming paint on the bearing, limiting flow, increasing wear and temperature; Frequent oil changes and system flushes. When the soft pollutants are dissolved in the oil, typically when the oil temperature is above 40°C, they cannot be removed by ordinary mechanical filtration or electrostatic filtration, and these soft pollutants show natural magnetism. For polar absorption, the cooler metal surface "cold spot", i.e. the valve and cooler. When the temperature of the oil is lowered, the thermal stability of the soft pollutants is less than that of the oil, so they are more likely to bake hard on hot surfaces, such as axial shafts.

VRP paint film cleaner. It achieves revolutionary and efficient removal of soft pollutants (dissolved and suspended) from oil products, including gas and steam turbines and compressors under high temperature operation. The warm oil is pumped from the lowest point at

the bottom of the tank to the VRP paint film purifier by the equipment's own transfer pump. After cooling treatment (using the thermal stability of the paint film is worse than that of oil), the paint film, particulate matter and moisture are removed by the filter element with wood fiber as the raw material (no need to use ion-exchange resin filter material, greatly saving the cost of use).

#### Features:

- Increase system reliability and stability.
- No more shutdowns and startup failures caused by paint film.
- No longer need to clean the tank and system flushing.
- Increase jacking oil pressure, more stable bearing temperature.
- Improve the life of oil products, blood additives and system components, such as bearings, valves, seals, etc.
- Great savings can be achieved by avoiding turbine failure and extending the life of oil products. Features:
  - Increase system reliability and stability.
  - No more shutdowns and startup failures caused by paint film.
  - No longer need to clean the tank and system flushing.
  - Increase jacking oil pressure, more stable bearing temperature.
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#### Site Photo before Purify





## Site photo After purify





#### Technical Specification

Model	1000.10
Model	VRP-10
Flow	10L/min
Working Pressure	≤0.5MPa
Total Power	7Kw
Power Supply	AC380V/50Hz
Overall Dimension	190cm × 140cm × 190cm
Net Weight	500kg
Particle contamination degree(NAS1638)	≤6 grade
MPC data	< 15



