- The following is the relevant introduction about the Y-type filter:
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Product Introduction

Structural Composition: The Y-type filter is mainly composed of connecting pipes, a cylinder body, a filter screen, flanges, seals, etc. It has a Y-shaped appearance. The filter screen is usually made of stainless steel and installed inside the cylinder body, which is used to intercept impurities in the fluid.

Working Principle: When the fluid passes through the Y-type filter, the fluid enters the cylinder body from the inlet. After being filtered by the filter screen, the clean fluid flows out from the outlet. The impurities are retained inside the filter screen, thus achieving the purpose of filtration and protecting the downstream equipment from the damage of impurities.

Application Scenarios: It is widely applied in the pipeline systems of industries such as petroleum, chemical engineering, metallurgy, electric power, pharmaceuticals, food, and water treatment. It can be installed at the inlets of equipment such as pumps, valves, and flow meters to remove solid particles, rust, sand grains, and other impurities in the fluid, ensuring the normal operation of the equipment.

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Typical Installation Schematic Diagram

The installation of the Y-type filter is relatively simple. It is usually

installed horizontally on the pipeline, and it can also be installed vertically. However, it should be noted that the flow direction of the fluid should be consistent with the arrow direction marked on the filter. The following is a simple horizontal installation schematic diagram: plaintext



In actual installation, shut-off valves should be installed on the pipelines before and after the filter to facilitate the maintenance and replacement of the filter. At the same time, in order to facilitate the cleaning of the filter screen, a sewage discharge port can be set below the filter.

Maintenance and Troubleshooting

Maintenance

Regular Cleaning: Clean the filter regularly according to the cleanliness of the fluid and the frequency of use. It is generally recommended to clean it once every 1 to 2 months. If a significant increase in the pressure difference before and after the filter is found, it should be cleaned in a timely manner. When cleaning, first close the inlet and outlet valves, open the sewage discharge port, discharge the impurities inside the cylinder body, and then disassemble the filter, take out the filter screen, and rinse it with clean water or compressed air to remove the impurities on the filter screen.

Component Inspection: When cleaning the filter each time, check whether the filter screen is damaged, deformed, or severely blocked. If so, the filter screen should be replaced in a timely manner. At the same time, check whether the seals are in good condition. If they are aged or damaged, the seals need to be replaced to ensure the sealing performance of the filter.

Anti-corrosion Treatment: For filters installed outdoors or in corrosive environments, regular anti-corrosion treatment should be carried out. Methods such as spraying anti-corrosion paint can be adopted to prevent the filter body from rusting and corroding.

Troubleshooting

Poor Filtration Effect: It may be due to a damaged or blocked filter screen. If the filter screen is damaged, a new filter screen needs to be replaced; if the filter screen is blocked, the filter screen should be cleaned in a timely manner to remove the impurities.

Excessive Pressure Difference Before and After the Filter: It may be due to a severely blocked filter screen or the inlet and outlet valves not being fully opened. First, check whether the valves are fully open. If the valves are normal, clean or replace the filter screen.

Filter Leakage: It may be due to damaged seals or loose flange connection bolts. Check the seals. If they are damaged, replace the seals; if the bolts are loose, evenly tighten the flange connection bolts.

• Performance Characteristics

High Filtration Precision: Different mesh numbers of filter screens can be selected according to different usage requirements. Generally, it can effectively filter out impurities with a particle size between 0.05 and 5mm, meeting the filtration needs of most industrial applications.

Large Flow Capacity: The structural design of the Y-type filter makes the resistance of the fluid passing through it relatively small, which can ensure a large flow rate and will not significantly affect the flow rate of the pipeline system due to the installation of the filter.

Convenient Installation: It has a simple appearance and structure, and the installation method is flexible. It can be installed horizontally or

vertically according to the on-site pipeline layout. The connection mode with the pipeline is usually flange connection or threaded connection, and both installation and disassembly are relatively convenient.

Low Maintenance Cost: Regularly cleaning the filter screen and inspecting the components can ensure its normal operation. The replacement of vulnerable parts such as the filter screen and seals is convenient, and their prices are relatively low, so the maintenance cost is low.

Long Service Life: It is manufactured with high-quality materials, such as a stainless steel cylinder body and filter screen, which have strong corrosion resistance and wear resistance. Under normal usage conditions, it can be used for a long time.

