



JY-800S

General Purpose Y-Type Strainer

Installation, Operation, & Maintenance Manual

for y type strainer



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Chapter I:

Introduction

This manual is provided to ensure proper installation, operation, and maintenance for the strainer manufactured and supplied by Die Erste Industry Co., Ltd. The valves are identified by marking on the body or on a name plate or both.

1.1 Contact Information

For information concerning warranties, or for questions pertaining to installation, operation or maintenance of DIE ERSTE products, contact:

DIE ERSTE INDUSTRY CO., LTD.
5F-1, No.936, Wen-Sin Road, Sec 4,
Taichung City, Taiwan 406

Phone: +886 4 22310059

Fax: +886 4 22360236

Email: sales@die-erste.com

To order replacement parts, contact DIE ERSTE sales at the address listed above.

1.2 General Notes

The following instructions refer to DIE ERSTE Y Type Piston Strainer (Series JY-800S) as described in the DIE ERSTE current catalog.

Keep the protective covers in place until the strainer is ready for installation. The product performance depends upon prevention of damage of inner parts. After removing the cover make sure that the strainer is completely open and free of obstructions, dirt, particles or any materials that may cause seat or seal damage.

During transportation, strainer may contain a silicon- based lubricant, which aids in the assembly of the strainer. Lubricant may be removed with a solvent if found objectionable. Alternatively the strainers can be ordered free of lubricants upon request.

Certain ferrous strainer contain phosphate material, and are oil dipped during the course of manufacture. However, the processes used are completely non-toxic.

1.3 Precautions and Warnings

Choose the correct material of strainer for different applications before obtaining the strainer. The user should be aware of the operating situation, fluid properties, and the possible outcomes when implementing valves into the pipeline system. DIE ERSTE suggests that the user should make estimation beforehand.

Fluid undergoes property changes with respect to outside factors, particularly fluid left inside the sealed cavity. When temperature and pressure exceed allowable value, failure may occur. However, DIE ERSTE offers pressure-relief function upon request, to prevent pressure buildups. Also, user should be noted that excessive pressure and temperature at nearby pipeline system can also cause valve failure as well.

Do not touch the strainer surface when high temperature fluid is flowing through the strainer.

Do not attempt to open the cap during operation, especially with the presence of high pressure in the pipeline system. For safety concern, unstable fluid should not be used in the pipeline system, unless otherwise specified with the category III in Declaration of conformity.

 **CAUTION**

Before removing strainer from pipeline please note: Media flowing through the pipeline may be corrosive, toxic, flammable, or of a contaminant nature. Where there is evidence of harmful fluids having flowed through the valve, the utmost care must be taken. It is suggested that the following safety precautions must be strictly executed when handling valves.

- 1) Always wear eye shields.
- 2) Always wear gloves and footwear.
- 3) Wear protective headgear.
- 4) Ensure that running water is readily accessible.
- 5) Fire extinguisher must be obtainable if media is flammable.

Check the line gauges to ensure that no pressure is present at the strainer. These strainer, when installed, have body connectors which form an integral part of the pipeline and the valve cannot be removed from the pipeline without being dismantled.

Chapter II:

Installation

2.1 General Notes

- 1) **Direction**
Most strainers has a direction arrow specified on the body. The user should read the sign before installation to configure the correct direction. This is due to the shape of the strainer.
- 2) **Position**
Always install the strainer with the straining part in the lowest position. For vertical installation, flow must be downward into the inlet to operate. Make sure to leave sufficient room to open the cap after installation. The bear weight ability and gradient are very important to the pipe installation. Do not make the pressure from the pipeline and stress to concentrate on the connecting area of body and cap. Deformation and leakage may occur.
- 3) **Systems hydrostatic test**
Before delivery, the product is tested 1.5 times the allowable pressure at ambient temperature in open position. After installation, the piping system may subject to system tests, as condition not to exceed the above mentioned pressure.
- 4) After installation is complete, a pre-operation test should be conducted. User should consider the following action. Flush the whole system completely to wash away all the unnecessary particles. Then run the pipeline system through. Upon completion of the above tests, cleanse the valve thoroughly with water.
- 5) For gauge installation, it is important to install two pressure gauges on both ends of the strainer to detect the differential pressure. This is due to safety concerns.

Chapter III: Operation

3.1 To Start

To start the system, open the control gradually. This is crucial in flow control.

3.2 To Shut Down

Gradually close the fluid on both sides. To relieve the pressure, the user should open the drain. The strainer must be drained and pressure must be relieved before any further actions.

Chapter IV: Maintenance

4.1 General Notes

DIE ERSTE strainers have a long, trouble free life, and maintenance is seldom required. However, when necessary, strainers may be refurbished, using a minimal number of components, none of which require machining. DIE ERSTE strainers are designed for easy service and assembly in the field.

Before maintenance, user should check availability of the service kit for JY-800S. DIE ERSTE strongly recommends using the genuine service kit produced directly from the DIE ERSTE. For more information, please contact our representatives.

4.2 Maintenance Frequency

The maintenance frequency is determined based upon the application of the strainer. User should consider the following factors when determining the maintenance time interval: fluid type, flow velocity, operation frequency, pressure, and temperature.

One indication of maintenance that can be easily identified is to check the differential pressure from both sides. If the difference is up to 5 ~ 10psi or above, the strainer should be clogged and should be cleaned or replaced.

4.3 Maintenance Work

First the user should close the system according to the shut down section to relieve the pressure. After removing the cover cap, the screen can be taken out and clean. The screen can be cleaned by water and steam. If the screen has been damaged, replace the screen to ensure the proper filtering effect.

4.4 Disassembly and Reassembly

- 1) Disassembly
 - a) Depressurized and empty the seal up fluid

before disassembly. Be cautious of the fluid inside the strainer as they can be poisonous and flammable.

- b) Drain the fluid and remove the cover
- c) Wash the screen thoroughly from both sides.
- d) Inspect the screen holes to see if there is any damage.
- e) If the damage is substantial that leads to malfunctions of the strainer, the screen should be replaced.
- f) Inspect the sealing surface and cover gasket.
- g) All the components should be stored in a clean place.

2) Reassembly

Before reassembly, inspect the strainer for any damage on all internals. Damaged internals can be replaced by genuine DIE ERSTE strainer part from the service kit. It is recommended to keep the service kit stock.

- a) Place the new screen or cleansed screen back into the strainer.
- b) Place a new PTFE gasket if it is deformed or damaged. Place the bonnet cap back on.
- c) Finally place the smaller gasket and the blow-off top back on and tighten it up.

4.5 Troubleshooting

The following table lists the possible malfunctions that might occur after prolonged use.

Symptom	Possible fault	Actions
Leakage through strainer	Bad connection	Tighten the end connections or re-weld.
Fluid going in fast, but coming out slow, or high differential pressure	Clogged, or too many particles inside the screen	Clean the screen Replace a new screen part.
Large particle coming out from the outlet	Damaged screen	Replace the screen.

4.6 Technical Data and Product Information

NO	PART NAME	MATERIAL
1	Body	ASTMA351 CF8M
2	Screen	SS316
3	Gasket	PTFE
4	Bonnet	ASTMA351 CF8M
5	Gasket	PTFE
6	Blow Off	ASTMA351 CF8M

