

## Instruction Manual

Products: Spray Nozzles

### **Shower Ball SWB Series**

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## Preface

Thank you for purchasing the spray nozzle product from H. Ikeuchi & Co., Ltd.

This manual gives detailed instructions for the basic handling, maintenance and cautions of the product.

Please take note that due to our continuous efforts to improve our products, some details in this manual may differ from the actual product.

After reading, keep this manual handy for quick reference.

## Safety Precautions

Prior to use, read this manual carefully and familiarize yourself with the proper operation of the product for best performance.

H. Ikeuchi & Co., Ltd. takes no responsibility for any accidents and/or injuries resulting from improper handling, installation and/or operation.



CAUTION

**Wear safety gloves.**

Screw threads, edges and corners may be sharp and could cause injury.



CAUTION

**Ensure that the product is firmly installed.**

Loose screws may cause the product to come off during operation and lead to serious accidents.



CAUTION

**Be aware of the product temperature and do not perform**

**maintenance until it has cooled down enough to avoid burns.**

## 1. Features

- SWB Series can be installed in various locations, including tanks, ducts, tank lorries, and pipes.
- Driven by liquid pressure, SWB Series sprays cleaning liquid radially from the multiple nozzle orifices to clean inner walls.

## 2. Cautions

### (1) Installation Instructions

- Thoroughly flush the pipe system before installing the SWB Series to remove any debris.
- Use a new cleaning liquid.
- Use a pump that meets the nozzle specifications for pressure and flow rate.
- Use piping of appropriate size and material according to the nozzle specifications and cleaning liquid.
- For connections, use screws and other connecting parts that meet our nozzle specifications, following the JIS Standard unless specified otherwise.
- DO NOT drop or expose the SWB Series to physical shocks; tighten the screws and bolts securely.
- Be careful not to damage or scratch the nozzle orifices during installation.

### (2) Operation

- To start spraying, gradually open the liquid valve to prevent a water hammer.
- Operate within the specified pressure range of 0.1 to 0.5 MPa.

### 3. Troubleshooting

Problems	Probable Causes		Solutions
No spray is being created	Control	<ul style="list-style-type: none"> <li>• Controller is not switched on.</li> <li>• Valves are not opened.</li> </ul>	<ul style="list-style-type: none"> <li>• Switch it on.</li> <li>• Open the valves.</li> </ul>
	Nozzle (SWB)	<ul style="list-style-type: none"> <li>• Nozzle or pipe is clogged.</li> <li>• Nozzle or pipe is clogged due to damage.</li> </ul>	<ul style="list-style-type: none"> <li>• Clean the clogged part.</li> <li>• Replace the damaged part.</li> </ul>
Liquid leaks	<ul style="list-style-type: none"> <li>• Some parts are loose or not tightened.</li> </ul>		<ul style="list-style-type: none"> <li>• Tighten the connections.</li> </ul>
	<ul style="list-style-type: none"> <li>• Nozzle or pipe is cracked.</li> <li>• Nozzle or pipe is corroded.</li> </ul>		<ul style="list-style-type: none"> <li>• Replace the cracked part.</li> <li>• Replace the corroded part.</li> </ul>
Irregular spray pattern	<ul style="list-style-type: none"> <li>• Nozzle or pipe is clogged.</li> <li>• Nozzle or pipe is clogged due to damage.</li> </ul>		<ul style="list-style-type: none"> <li>• Clean the clogged part.</li> <li>• Clean the clogged part.</li> </ul>

### 4. Disposal

Disposal should be practiced according to the regulations and codes of local authorities, or ask a disposal professional.

### 5. Inquiries

For orders or any trouble, contact your supplier or the following:

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 Daiichi Kyogyo Bldg., 1-15-15, Awaza, Nishi-ku,  
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<https://www.kirinoikeuchi.co.jp/eng/>