

**Instruction Manual**

Products
VVP**PVDF

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## 1. Preface

Thank you for purchasing CERJET® Spray Nozzles from H. Ikeuchi & Co., Ltd. This manual gives detailed instructions for the basic handling, maintenance and cautions of CERJET® Spray Nozzles.

Prior to use, read this manual to familiarize yourself with the proper use of CERJET® Spray Nozzles for best performance.

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

After reading, keep this manual in a safe, handy place for quick reference.

Please take note that due to our continuous efforts to improve our products, the details in this manual may differ slightly from the actual product. Thank you for your understanding.

## 2. Suggestions & Cautions

The nozzle is made of PVDF (Polyvinylidene fluoride). It is fragile and must be handled carefully.

### (1) Cautions for nozzle material (PVDF)

- Temperature of liquid to be sprayed and/or ambient temperature must be below 80 (176°F).
- Avoid the use under frozen environment where temperature can be below zero.

### (2) Precautions for installation

- Be sure to flush the pipes to remove any foreign particles before installing the nozzle.
- Apply sealing tape to the thread of the nozzle before installation.
- Screw in the nozzle by hand first (making sure it is screwed in properly), then tighten with a torque wrench. (Recommended tightening torque: 3.0–3.5 N m)
- Do not install the nozzle on or after a bent pipe or an elbow. Turbulence may affect the nozzle performance.
- Pay attention to the spray direction when installing the nozzle.

### (3) Operational precautions

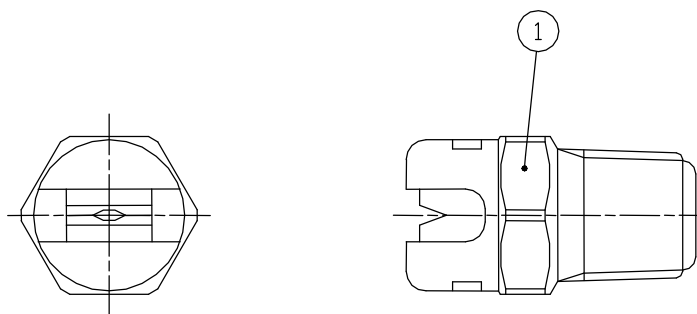
- After spraying chemical solution, spray clean water for a while to clean the nozzle orifice and inside of the nozzle.
- To prevent the nozzles from clogging, install strainers or use a water treatment system, depending on water quality.

### (4) Precautions for use

- Do not damage or scratch the nozzle.
- Do not use nails, pins or other hard objects to touch or clean the nozzle orifices, which may damage the nozzle.
- Do not apply strong force to the nozzles or expose them to physical shock and/or vibration.
- Use the nozzles at a liquid pressure between 0.1 MPa to 2.0 MPa.  
The maximum pressure limit is 3.5 MPa, but not allowable for a long time use or repetitive spray operation. (Be careful of water hammer.)
- Store the nozzle in a clean, dust-free place.

### 3. Component of nozzle

#### (1) Component and material



No.	Component	Material	Remark
	Nozzle	PVDF	

Appearance and dimensions may be slightly changed depending on the nozzle codes.

### 4. Troubleshooting

Check the following points in case of trouble.

If the following solutions do not work, please replace the nozzle with a new one.

No.	Trouble	Probable cause	Solution
1	No spray is being created, or spray pattern is irregular.	Liquid pressure is too low.	Check the pressure in the pipe and apply the proper pressure.
		Nozzle orifice and/or strainer are clogged.	Clean them and blow off with compressed air. (Ultrasonic cleaning, air blowing, etc.)
2	Liquid leaks.	Deterioration of sealing tape.	Replace or change the sealing tape.
		Nozzles are not firmly screwed in.	Tighten the nozzles properly with a torque wrench.