

### 1. Preface

Thank you for having purchased our CERJET  $\ \otimes$  Spray Nozzles. In order to use CERJET  $\ \otimes$  Spray Nozzles in good conditions, you are requested to read this handling manual and keep it always handy.

For improving the performance, dimensions and design may be changed without notice.

## CERJET®

## 2. Suggestion & Caution

Nozzle of PTFE (Polytetrafluororthylene) is fragile and must be carefully handled.

### (1) PTFE

- ①PTFE is highly resistant to most of chemicals except for the ones such as molten alkali metal, its solution, high-temperature fluorine and Chlorotrifluoride.
- ②Temperature of liquid to be sprayed and/or ambient temperature must be below 100 °C.
- ③Never use JJRP-PTFE under the conditions where environment temperature is below 0°C because the plastic body may be cracked due to freezing of water inside the nozzle.

#### (2) How to install nozzles

- ①Purge the inside of pipes for removal of foreign particles before installing the nozzle.
- ②Apply sealant on the thread of the nozzle (or of the pipe).
- ③Screw the nozzle by hand and make sure that the nozzle is securely screwed. Then further screw it a few times with an appropriate tool (Recommendable torque to fix the nozzle: 0.3∼0.5N.m).
- ④ Avoid installing the nozzle at immediate down-stream of a bent pipe or elbow. Turbulence may affect the nozzle performance.

#### (3) Caution on Operation

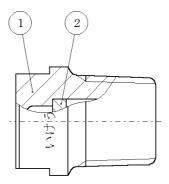
- ①After spraying chemicals, clean the nozzle by spraying clean water.
- ②If the liquid contains particles, use strainers to prevent the nozzles from clogging.

#### (4) How to maintain nozzles

- ①Be careful not to flaw the nozzle and never use hard brushes or nails to clean the nozzle orifice.
- The nozzle may yield mechanical shock and must be handled gently.
- ③Recommendable liquid pressure is 0.1-0.7MPa.
  The maximum liquid pressure recommendable for a short time is 1.2MPa, but repeated usage under 1.2MPa is not recommendable.
- ④Please store the nozzle in a clean storage room where is free from dust.
- ⑤Be careful not to detach or damage a whirler when spraying air or water from orifice for blowing off foreign particles in nozzle.

# CERJET®

- 3. Component part
- (1) Assembly



# (2) Component and Materials

No	. Component	Material	Remarks
1	Body	PTFE	
2	Whirler	PTFE	

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

## 4. Trouble – shooting

No.	Trouble	Probable cause	Solution
1	Not make spray.	Liquid pressure too low.	Raise liquid pressure.
		Nozzle orifice or strainer clogged.	Clean with a tooth pick and blow off with compressed air. (Ultrasonic cleaning, Air blowing, etc.)
			Replace the nozzle.
2	Not normally spray.	Liquid pressure too low.	Raise liquid pressure.
		Nozzle orifice or strainer clogged.	Clean with a tooth pick and blow off with compressed air. (Ultrasonic cleaning, Air blowing, etc.)
		Whirler is not installed.	
			Replace the nozzle.
3	Liquid leaking.	Deterioration of sealant.	Replace sealant.
		Nozzle or each part is not firmly screwed.	Screw it firmly.