Instruction Manual

SAP series Nozzles



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 operation 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.

Parts of products may be changed without prior notice. Please take note that due to our continuous efforts to improve our products, the details in this manual may differ from the actual product. Thank you for your understanding.



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1. Safety Precautions

Prior to use, please read these "Safety Precautions" and use the nozzles properly.



Do not use nozzles beyond the maximum air pressure of 0.7 MPa. Do not increase pressure rapidly.



Do not increase pressure rapidly. Doing so may damage the nozzles and/or the nozzles may be blown off of the pipe, resulting in injuries.



Do not use nozzles beyond the operating temperature range of $5-400^{\circ}$ C. Doing so may damage the nozzles and/or the nozzles may be blown off of the pipe, resulting in injuries.



Do not use nozzles in temperatures below freezing. Doing so may damage the nozzles and/or the nozzles may be blown off of the pipe, resulting in injuries.



Connect the nozzles only with the taper pipe thread. Otherwise nozzles may be damaged and/or be blown off of the pipe, resulting in injuries.

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2. Before Use (Instructions & Cautions)



Flush the pipes to purge foreign particles before installing the nozzle.



Apply sealant or sealing tape on 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: R1/8 (Hex.12): 8 N m, R1/4 (Hex.14): 15 N m)

CAUTION

Be careful not to damage the nozzle opening when installing the nozzle. If the nozzle opening is held and screwed in forcibly, it may deform the nozzle.



Do not place the nozzle at the immediate rear of a bent pipe or elbow. Turbulence may affect the nozzle performance.



Do not scratch or score the nozzle.

Do not use nails, pins, flat-blade screwdriver 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.



Store the nozzle in a clean place free from dust.



When spraying liquid other than air and water, consider the chemical resistance of the nozzle material to the liquid (Refer to the table 2).

3. Troubleshooting

Check the following points in case of trouble. If the following solutions do not work, please replace the nozzle with a new one.

Table 1. Troubleshooting

No.	Trouble	Probable cause	Solution				
1	No spray is being created.	Liquid pressure is too low.	Check the pressure in the pipe and apply the proper pressure.				
		Nozzle orifice is clogged.	Clean them and blow off with compressed air. (Ultrasonic cleaning, Air blowing, etc.)				
2	Spray pattern is irregular.	Liquid pressure is too low.	Check the pressure in the pipe and apply the proper pressure.				
	Nozzle orifice is clogged.		Clean them and blow off with compressed air. (Ultrasonic cleaning, Air blowing, etc.)				

4. Material, Dimensions and Mass

Table 2. Material, Dimensions and Mass

	Material *	Pipe	Outer dimensions (mm)							Maga
Description		conn. size	L1	L2	L3	l 1	l 2	Н	Ν	(g)
1/8M SAP 13-15 S304	S304	R1/8	29	13	14.7	1.5	13	12	7	10
1/4M SAP 17-15 S304	S304	R1/4	37	17.5	18.9	1.5	17	14	10.5	16

* In our material code, "S" represents "stainless steel". (Example) S304 represents stainless steel 304.





Pipe conn. size

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