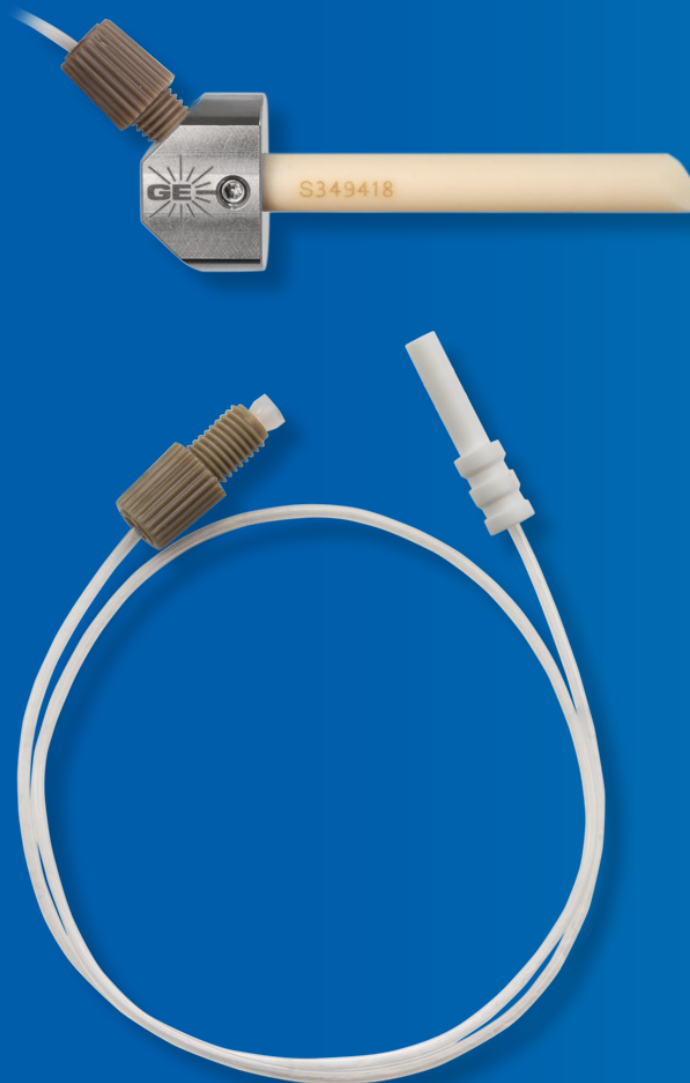




GLASS EXPANSION

Quality By Design

User Guide for VeeSpray Ceramic DC Nebulizer



Before you Start

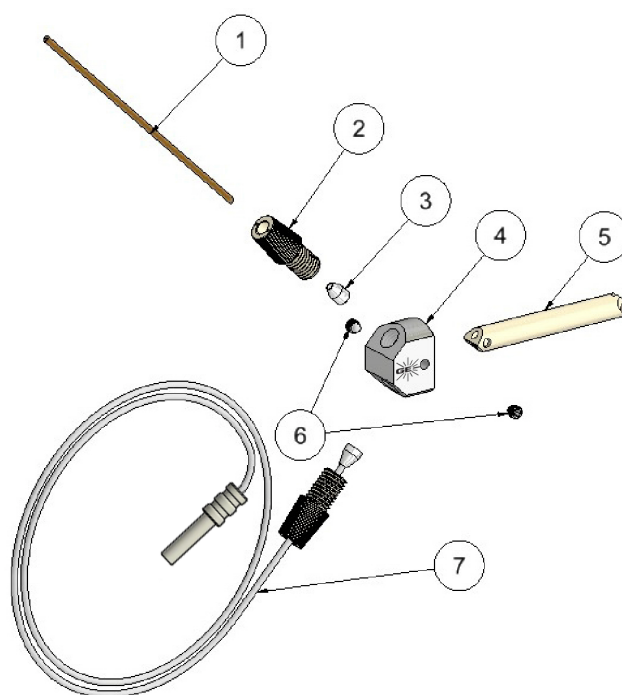
Congratulations on the purchase of your VeeSpray DC Nebulizer. The VeeSpray Ceramic DC Nebulizer is supplied assembled and ready for use. Table 1, lists the nebulizer components supplied.

Item no.	Part Number	Description	Qty
1	STT-16-75	Sample tubing 1/16" x 750mm	1**
2	70-803-1350	Ratchet Connector	1
3	70-803-0780	Ferrule 1/16"	1*
4	01-801-0666	Titanium VeeSpray Fitting	1
5	01-801-0747	Ceramic VeeSpray Body	1
6	70-803-0914	Titanium set screws	2*
7	70-803-1485	Rachet Ezylok Assembly	1

Notes:

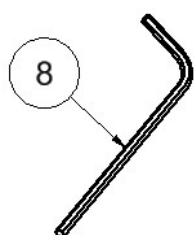
* The VeeSpray Nebulizer is supplied with the part quantities shown - Ordered replacements are supplied in packs of ten.

** Replacement sample tubing is supplied as 1/16 OD x 0.75mm ID x 10m long rolls.



Accessory items for VeeSpray nebulizer:

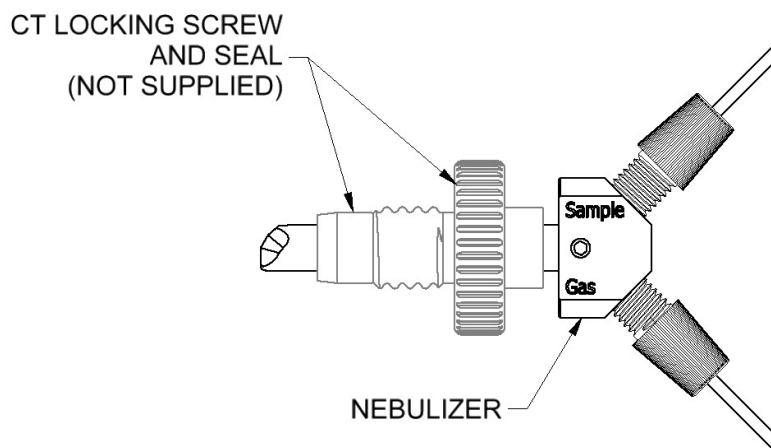
Item no.	Part Number	Description	Qty
8	2376	Hex Key 1/16" for VeeSpray	1



Disclaimer: Glass Expansion supplies products to customers with the assumption that only qualified individuals who are properly trained in the appropriate procedures will use our products. It is our customer's entire responsibility to safely store, handle and use the products ordered from Glass Expansion. We assume the requisitioner to be experienced, competent, safety conscious professionals. Glass Expansion assumes no liability for any damage or injuries -physical, emotional or mental, arising out of persons incorrectly or inappropriately using or handling our products. We also assume no liability for any damage to an instrument or product from incorrect installation, handling or use of the product by the user.

Nebulizer Operation

Nebulizer Position:



Position of the Nebulizer:

Ensure Nebulizer is positioned with the sample inlet (labelled 'Sample' on the housing) directly above the gas inlet (labelled 'Gas' on the housing).

Sample uptake:

The sample must be pumped as the VeeSpray nebulizer is not self aspirating. The operating range is 0.6 to 3.0mL/min. Best results are obtained with the sample uptake in the range 1.5 to 2.5mL/min.

Chemical resistance:

The VeeSpray nebulizer is made from alumina ceramic and is resistant to virtually all chemicals used with an ICP spectrometer. It can be used with strong acids, including HF, as well as organic solvents.

Nebulizer Maintenance

Connect VeeSpray body:

A. Slide VeeSpray Body into Housing.

Note! Body must be positioned as shown – Refer Figure A

Once fitted, VeeSpray body indentation must be aligned with threaded hole in VeeSpray housing.

B. Using the Hex Key provided, lightly tighten Set screw on each side of Housing – Refer Figure B Note! Do not use excessive force when tightening screws.

Check! Serial number is same side as GE Logo

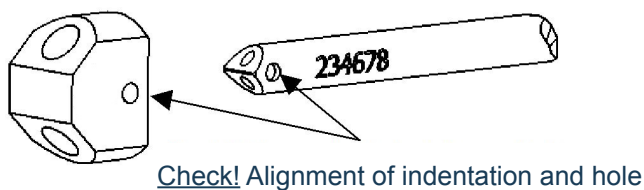


Figure A

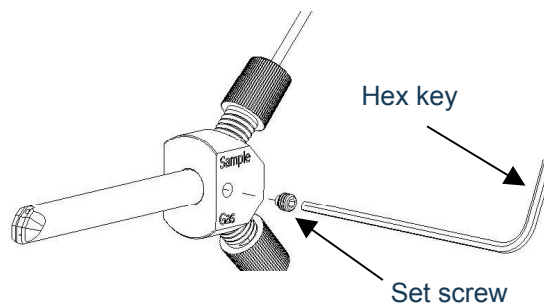


Figure B

To remove the VeeSpray Body, ensure all fittings are removed then repeat steps A and B in reverse order.

Connecting the Gas Line

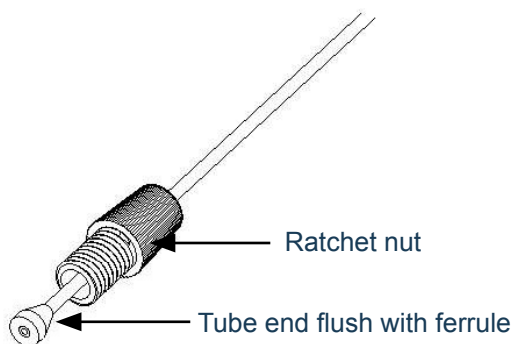
1. Pass the free end of the Adaptor tube through the Ratchet nut.

Then insert (push) the tube into the ferrule. The tube must finish flush with ferrule face.

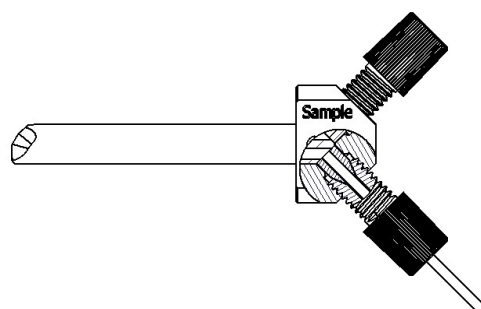
Hint! PTFE Tube is slippery – wearing rubber or similar type gloves will help complete this task.

2. Insert the ferrule-end of the Adaptor tube into the Housing port (Marked 'Gas') then tighten the Ratchet nut. The Ferrule is now sealed against the Nebulizer body – Refer figure 2

Note! Ratchet nut has an in-built ratchet to prevent over-tightening. Screw in the ratchet nut until you hear it click.



Step 1



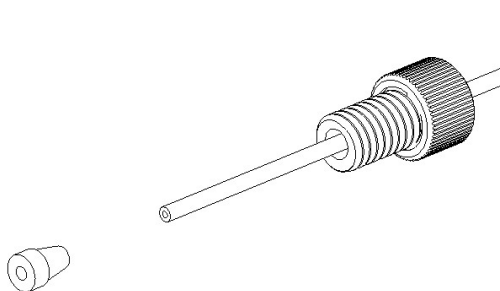
Step 2 (Housing view is partially sectioned)

3. Connect your DC Nebulizer gas line to your ICP as normal (not shown)

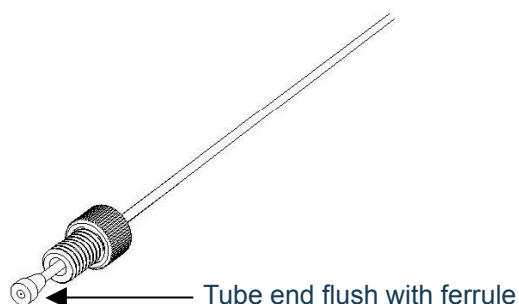
Connecting Sample Line

4. Pass the PTFE tube through the ratchet nut.
5. Push the PTFE tube through the ferrule. The tube must finish flush with ferrule face - Refer step 4

Hint! PTFE Tube is slippery – wearing rubber or similar type gloves will help complete this task.



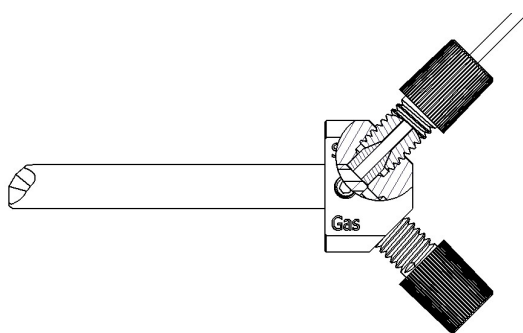
Step 4



Step 5

6. Insert the ferrule-end of the Adaptor tube into the Housing port (Marked 'Sample') and tighten the ratchet nut. The ferrule is now sealed against the Nebulizer body.

Note! Ratchet nut has an in-built ratchet to prevent over-tightening. Screw in ratchet nut until you hear it click.



Step 6 (Housing view is partially sectioned)

Finished! The VeeSpray ceramic Nebulizer is now complete and is ready for operation.

Consumables list:

Part Number	Description
70-803-1485	Ratchet Ezylok Assembly
STT-16-75	Standard Sample Tubing 1/16" OD x 0.75mm ID x 10m long
70-803-1350	Ratchet Connector
70-803-0780	Ferrule 1/16" for VeeSpray nebulizer (PKT 10)
70-803-0914	Titanium Screw for New VeeSpray (PKT 10)
2376	Hex Key 1/16" for VeeSpray
01-801-0666	Titanium VeeSpray Fitting
01-801-0747	Ceramic VeeSpray Body

For more information please visit www.geicp.com or contact one of our offices below.

Asia Pacific

6 Central Boulevard, Port Melbourne, VIC
3207, Australia

Telephone: +61 3 9320 1111
Email: enquiries@geicp.com

Americas

31 Jonathan Bourne Drive, Unit 7 Pocasset,
MA 02559, USA

Telephone: 508 563 1800
Email: geusa@geicp.com

Europe

Friedenbachstrasse 9, 35781 Weilburg,
Germany

Telephone: +49 6471 3778517
Email: gegmbh@geicp.com