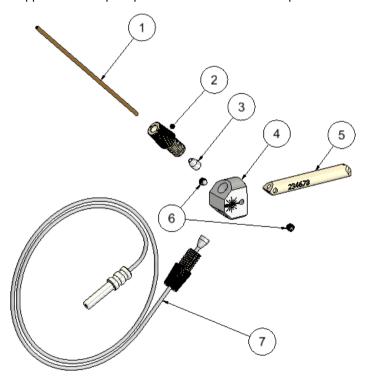
BEFORE YOU START

Congratulations on the purchase of your VeeSpray nebulizer. The VeeSpray ceramic 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 nut | 1 |
| 3 | 70-803-0780 | Ferrule | 1 ** |
| 4 | 01-801-0666 | VeeSpray nebulizer housing | 1 |
| 5 | 01-801-0747 | VeeSpray nebulizer body | 1 |
| 6 | 70-803-0914 | Titanium set screws | 2 ** |
| 7 | 70-803-1485 | Ratchet Ezylok Assembly | 1 |

Table 1

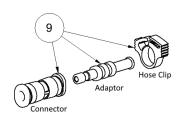
^{**} The VeeSpray Nebulizer is supplied with the part quantities shown - Ordered replacements are supplied in packs of ten.



Accessory items for VeeSpray nebulizer

| Item No. | Part Number | Description | Qty |
|----------|-------------|-----------------|-----|
| 8 | 2376 | Hex Key 1/16"AF | 1 |
| 9 | EL-1 | EzyLok Kit | 1 |



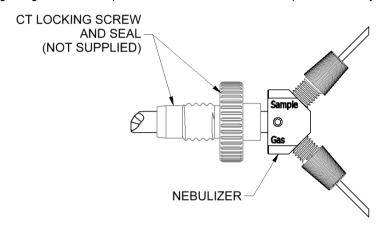


^{*} The sample tubing STT-16-75 is supplied in 10m long rolls when re-ordered.

Nebulizer operation

Nebulizer position

With revision of the VeeSpray Nebulizer, the position spacer that was previously used is no longer required. If you have any questions, or concerns regarding the Nebulizer position or, other Nebulizer details, please contact your supplier for support.



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)

Argon Connection

Item 9, 'EL-1' consists of a connector (QSM-4), adaptor (70-808-0735), and hose clip (SNP-1).

With your instrument nebulizer gas tubing-

4mm hard tubing: Push directly into Ezylok connector.

6mm soft tubing: Push onto hose adaptor and clamp with hose clip. Push hose adaptor into EzyLok connector.

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

1. Slide VeeSpray Body into Housing.

Note! Body must be positioned as shown - Refer Figure 1

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

2. Using the Hex Key provided, lightly tighten Set screw on each side of Housing.

Note! Do not use excessive force when tightening screws

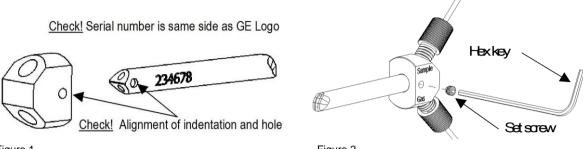


Figure 1 Figure 2

To remove the VeeSpray Body, ensure all fittings are removed then repeat steps 1 and 2 in reverse order.

Connecting the Gas Line ('G' Port)

- Fit (Push on) EzyLok connector to adaptor end of Adaptor.
 Cut the opposite (free) end of the tube to the desired length Refer figure 1
 Note! Ensure tube cut is clean and square
- 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
 – Refer figure 2
 Hint! PTFE Tube is slippery wearing rubber or similar type gloves will help complete this task.



3. 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 3

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

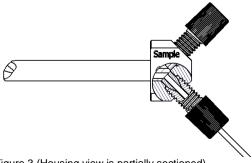


Figure 3 (Housing view is partially sectioned)

Nebulizer maintenance continued

Connecting Sample Line

- 1. Pass the PTFE tube through the ratchet nut Refer figure A
- 2. Push the PTFE tube through the ferrule. The tube <u>must</u> finish flush with ferrule face Refer figure B <u>Hint!</u> PTFE Tube is slippery wearing rubber or similar type gloves will help complete this task.



3. 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 – Refer figure C

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

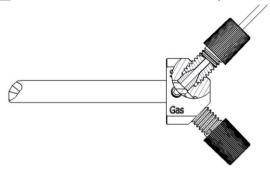


Figure C (Housing view is partially sectioned)

Replacement Parts

The following spare parts can be purchased: -

| Part Number | Description | Pack Qty |
|-------------|---|----------|
| STT-16-75 | Sample tubing 0.75mm ID x 1/16" OD x 10 metres long | 1 |
| 70-803-0914 | Titanium set screw pack | 10 |
| 70-803-0780 | Ferrule pack 1.6mm Ferrule | 10 |