

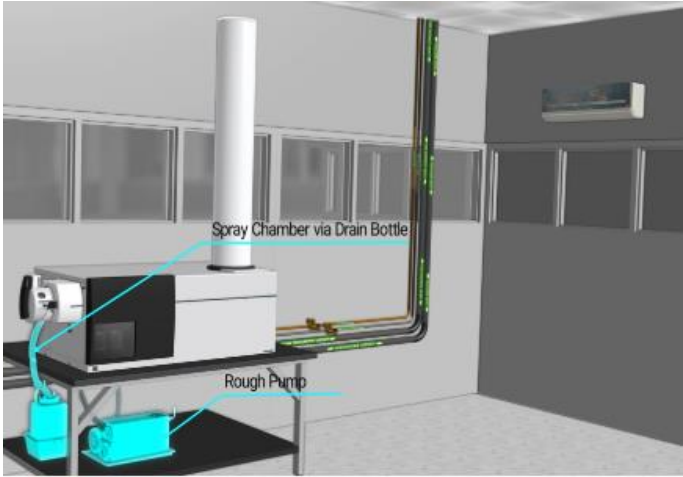
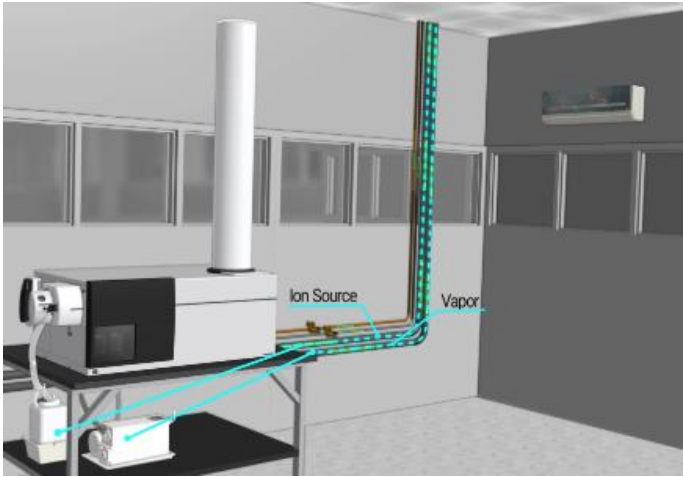
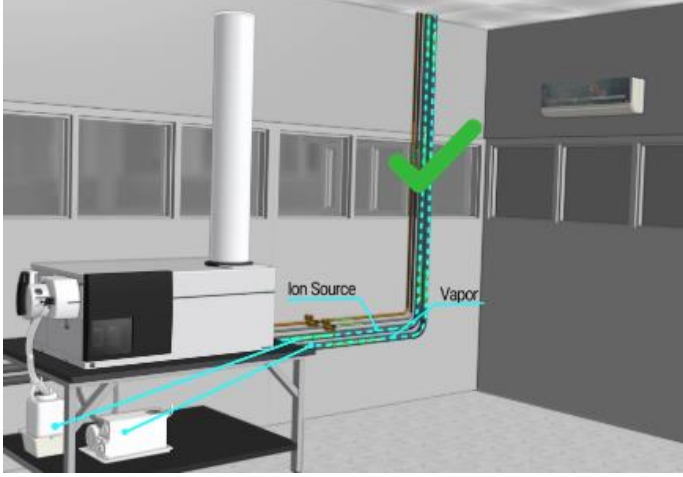


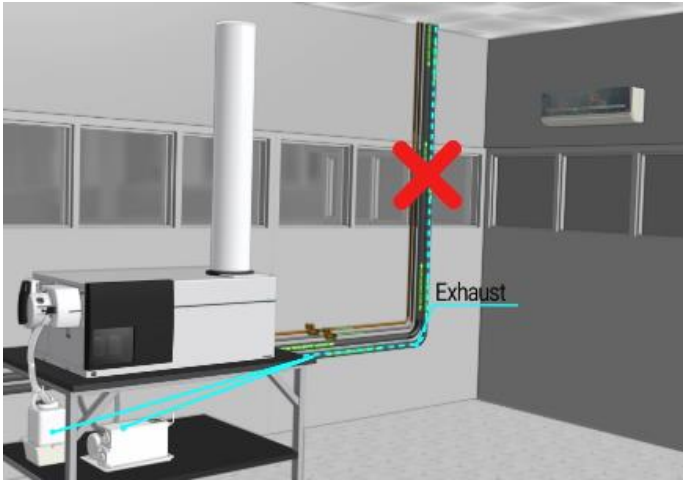
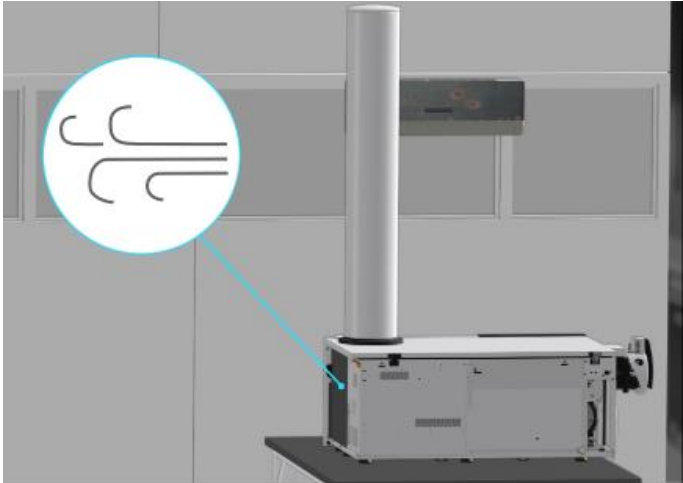

# **Agilent 6500 Series Q-TOF LC/MS**

## Site Preparation Guide

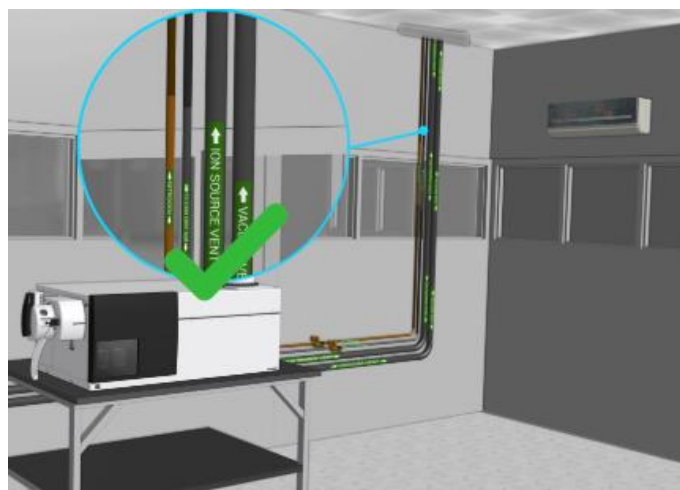


## **Exhaust venting**

1	Two sources of exhaust on the Agilent 6500 Series Q-TOF LC/MS: the spray chamber and the rough pump.	
2	The drain hose routes both nitrogen gas and vapor from the spray chamber to the drain bottle. The vapor is made up of mobile phase and sample.	
3	The drain hose routes both nitrogen gas and vapor from the spray chamber to the drain bottle. The vapor is made up of mobile phase and sample.	

4	<p>The rough pump exhaust contains traces of solvent, sample, and hydrocarbon pump fluid. For rough pumps with mist filters, the mist filter on the rough pump traps the majority of the pump oil vapor. It does not trap the traces of solvent and sample that may be present in the exhaust gases.</p>	 <p>A 3D rendering of a laboratory instrument on a table. A white vertical exhaust pipe rises from the instrument. A red 'X' is placed over the exhaust pipe near the ceiling, indicating a problem with the exhaust system. A label 'Exhaust' points to the pipe. A blue line traces the path of the exhaust gas from the instrument to the pipe.</p>
5	<p>Air needs to flow away from the instrument.</p>	 <p>A 3D rendering of the same laboratory instrument. A circular callout shows a diagram of air flow: three horizontal lines entering from the left and three exiting to the right, indicating that air should flow away from the instrument. A blue line points from the callout to the instrument.</p>
6	<p><b>WARNING</b> User safety requires that the spray chamber exhaust and the rough pump exhaust are vented externally to the building and not re-circulated by the environmental control system. Exhaust gas venting must comply with all local environmental codes. Health hazards include chemical toxicity of solvents, samples, buffers, pump fluid vapor, and aerosolized biological samples.</p>	 <p>A 3D rendering of the laboratory instrument with its exhaust system. A circular callout shows a diagram of the exhaust system: a horizontal pipe with a green arrow pointing right, labeled 'ION SOURCE VENT', and a vertical pipe leading up to the ceiling. A blue line points from the callout to the instrument's exhaust pipe.</p>

- 7 **WARNING** User safety requires that the spray chamber exhaust and the rough pump exhaust are vented externally to the building and not re-circulated by the environmental control system. Exhaust gas venting must comply with all local environmental codes. Health hazards include chemical toxicity of solvents, samples, buffers, pump fluid vapor, and aerosolized biological samples.



**WARNING** Failure to vent the rough pump and spray chamber separately will void the warranty for the 6500 Series Q-TOF LC/MS. Agilent service representatives will not install an Agilent 6500 Series Q-TOF LC/MS until an adequate exhaust system is present and functioning. See the caution statement below for further details.

**CAUTION** The spray chamber exhaust and rough pump exhaust must be vented using separate lengths of exhaust tubing. These may be connected into a common exhaust manifold. This is to minimize the chances of rough pump fluid vapor entering the spray chamber when drying gas is not flowing. If connecting to a common exhaust manifold, the source should be plumbed in upstream of where the rough pump exhaust is plumbed into the manifold.

**CAUTION** The combined exhaust flow from the spray chamber and rough pump can reach:

- 20 L/min for Q-TOF with ESI source
- 30 L/min for Q-TOF with AJS source
- 60 L/min for iFunnel Q-TOF

**CAUTION** Flow is continuous as long as the instrument is on. Both exhaust vents must be at or slightly below atmospheric pressure (negative pressure) with an exhaust flow of 20-60 l/min depending on model. If a negative pressure vent is not available, the length of the tubing from the rough pump and the drain bottle to the vent should each not exceed 460 cm (15 ft).

**CAUTION** Positive pressure in the spray chamber exhaust tubing and drain bottle can affect instrument performance and may contribute to excessive background contaminant levels.