

**De-airing Tank
SL635**

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User Guide
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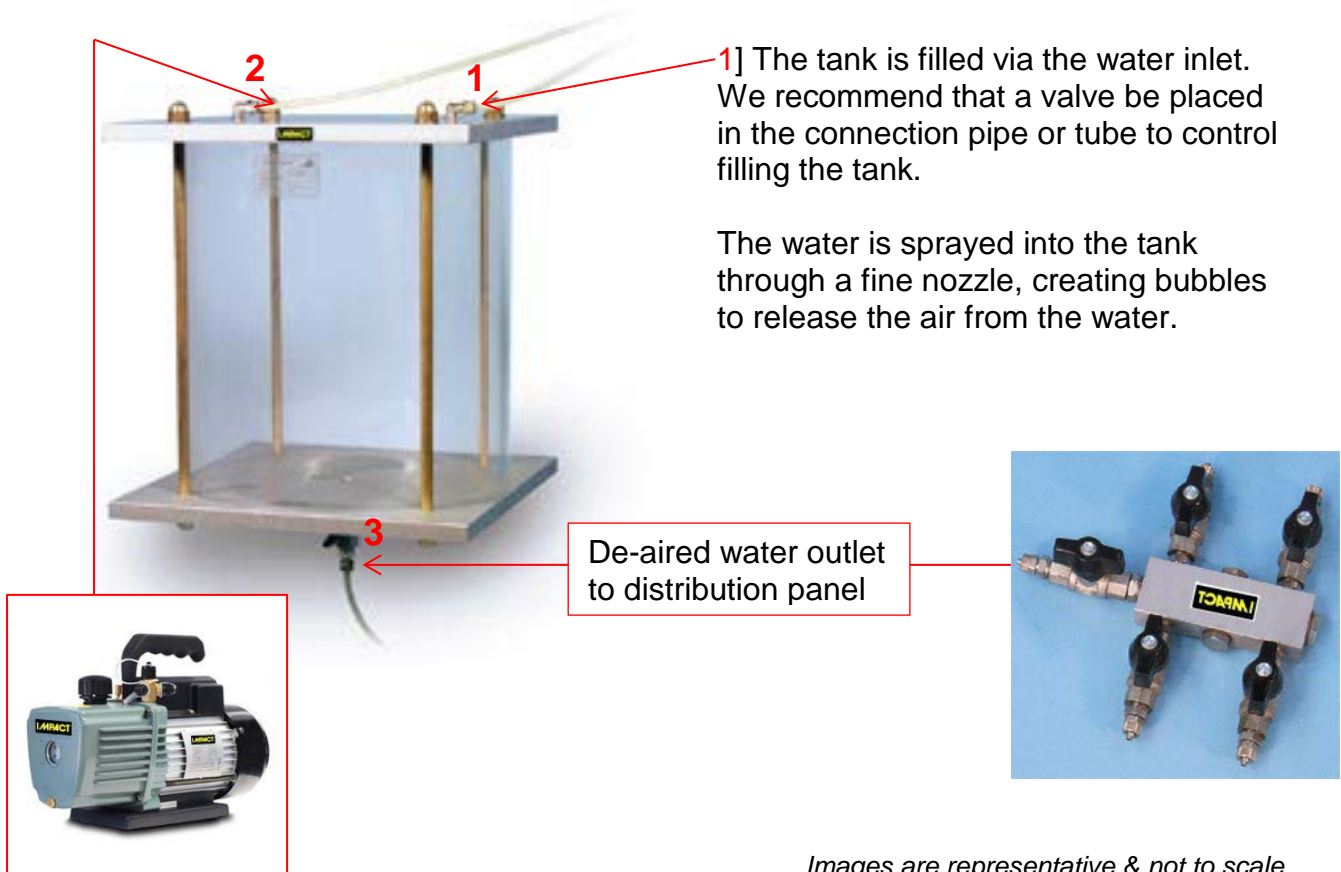
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De-Airing Tank – SL635

The SL635 de-airing tank is simple to use & should be mounted as high as possible on a wall or shelf in the laboratory.

Tank Connections



1] The tank is filled via the water inlet. We recommend that a valve be placed in the connection pipe or tube to control filling the tank.

The water is sprayed into the tank through a fine nozzle, creating bubbles to release the air from the water.

De-aired water outlet to distribution panel

Images are representative & not to scale

2] The vacuum pump is connected to the vacuum inlet by flexible hose & this sucks the air bubbles out of the water.

3] The de-aired water is released to the distribution panel via the 6mm push fitting in the base plate.

We recommend that a valve is fitted in line in the pipe from the vacuum pump to the de-airing tank so that the vacuum can be released from the tank after de-airing.

Using the Tank

Before filling the de-airing tank, ensure that the tank is isolated from the triaxial system distribution panels. Close the valve at the entry point into the distribution panel.

Turn on the main water supply to fill the tank with water via the spray nozzle to a maximum level of $\frac{3}{4}$. DO NOT overfill the tank. Turn the water off and then turn on the vacuum pump to remove the air from the water.

As the air is being sucked out of the tank air bubbles will rise up the side of the water in the tank.

When air bubbles are no longer visible on the side of the de-airing tank, switch off the vacuum pump.

Before using the de-aired water release the vacuum from the tank. Failure to release the vacuum will stop water running freely to your triaxial system and could damage components of the system.

When additional water is introduced into the tank the vacuum pump must be switched on to de-air the new water.

- Do not fill the tank with tap water while de-aerated water is being used, as this would allow tap water to mix with the de-aerated water in the sample.
- Do not fill the tank while using the vacuum as accidental overfilling of the tank would allow water to be drawn into the vacuum lines and possibly the vacuum pump.
- Do not open the connection to the distribution panel whilst the vacuum is being applied to the water. If a sudden vacuum is applied to a triaxial system pressure controllers and transducers could be damaged.
- The tank itself must never be pressurised.

Maintenance

The tank may be periodically disassembled and cleaned. Unscrew and carefully remove the top plate then clean the tank cylinder with a mild detergent.

When replacing the cylinder ensure that it is securely located on the O-ring (using a lubricant if necessary).