

Using the Cavitation Chamber



The cavitation chamber feature of this instrument is used to simulate cavitation of xylem vessels in plants under stress. A plant stem, limb or root is introduced into the Cavitation Chamber and a head of water is connected to the sample to measure water conductivity. The chamber is then pressurized to “seed” air into the xylem. It can be used to establish vulnerability curves in plants or to continue [research](#) in the area of xylem cavitation.



The chamber is in the center and is 3.20 inches long.



The rubber gaskets slide down the sample and seat inside the chamber.

The metal “inserts” slide down behind the gaskets to help them seal.



The caps screw down to finish the seal and hold everything in place.



The final product looks like this.

The sample must be at least 4.25 inches to properly pass through the chamber.



Instrument comes complete with:

1/4 Inch Compression Gland Sealing System, 5 Extra 1/4 Compression Gland Gaskets, 6 foot Filling Hose, 1 – Solid Lab Stopper for instrument testing, O-Ring lubricant and Lithium Grease, 11/32 inch wrench and 3/32 inch Allen Key for Control Valve Adjustment, Safety Glasses and a color [Operating Instructions Manual](#).

In addition the following items are for the Cavitation Chamber: 3 foot hose connecting to Cavitation Chamber, Cavitation Chamber, 2 metal inserts of following sizes (5/8", 3/8", 3/16"), 5 rubber gaskets of each size (blank, 1/16", 1/8", 3/16").