



RETORT WITH VALVES IN PARALLEL

Retorts are vessels in which jars, bottles, or cans are sterilized. Both vertical and horizontal retorts are common. Precise temperature control is critical so that the fragile containers in the retort do not rupture, yet still thoroughly heat the product. Bubble-tight shutoff on steam is important in preventing overheating and to keep steam from entering the retort between cycles. A globe-style control valve with 3-15 psi signal controls the flow of steam sent to the equipment to sterilize canned or bottled products.

There also are time when two valves are used in this application. In this case, the valves operate at different pressures. An example is when the system requires fast start-up and then tight temperature control. The first valve would complete the entire span within a 3-9 psi range. Once the retort is up to temperature, the valve begins to throttle back and a 9-15 psi valve will open and complete its span withing that range. Once the retort is up to temperature, the 9-15 psi valve will throttle back and perhaps shut entirely, leaving the 3-9 psi valve operating to handle the flow.