

MERIBAH RAM PUMP®

Sniffling Valve Explanation

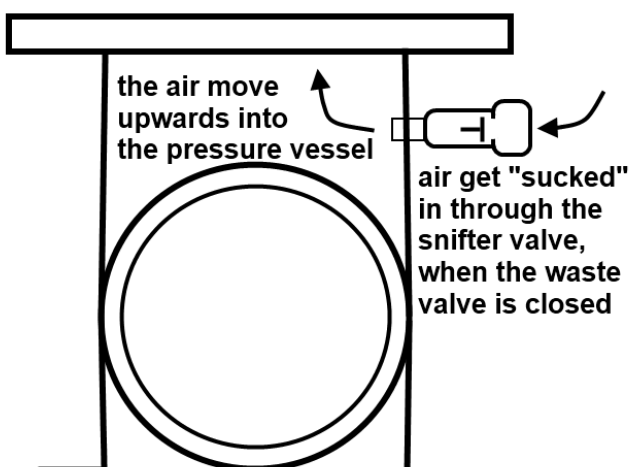
The pressure vessel is really important for improving the efficiency of the process by allowing delivery water flow to continue after the delivery valve has closed, it is also essential to cushion the shocks of the water hammer (over pressure).

If the air chamber fills with water completely the efficiency decrease but what is even more dangerous, the ram pump body, the drive pipe or the pressure vessel itself can be damaged by the resulting water hammer. Since water can dissolve air, especially under pressure, there is a tendency for the air in the pressure vessel to be depleted by being carried away with the delivery flow.

Different ram pump designs overcome this problem in different ways. The simplest solution requires the user to stop the ram pump occasionally and drain the pressure vessel by opening two taps, one to admit air and the other to release water.

To avoiding such damages and to make it more simple is, to include a so-called sniffling valve which automatically allows air to be drawn into the base of the pressure vessel when the water pressure momentarily drops below atmospheric pressure. Its position is usually on the side of the t-junction towards the pressure vessel. It is **important** to make an occasional check to see that the sniffling valve has **not become clogged** with dirt and is working properly.

Suction momentum



Pressure momentum

