



Product Code . LSK-FM-10434

Hydraulic Ram Pump

Description

The ram pump is not a normal mechanically-operated pump. A column of water in the supply (drive) pipe from a header tank, moving at low velocity, is similar to a 'plunger'. The energy in the plunger forces water from the supply into a delivery pipe. This exchanges the momentum of a large amount of water into energy that pumps a smaller amount of water up a hill or gradient.

The Hydraulic Ram Pump uses the water hammer effect, where the momentum of a column of moving water in a pipe causes the water hammer.

The apparatus has three main parts: the header tank, the pump and the interconnecting pipe work. The header tank mounts to a suitable wall.

The Hydraulic Ram Pump fits onto and works with Digital Hydraulic Bench. The pump also includes a textbook that introduces the reader to all aspects of ram pumps.

The pump has:

An air vessel to reduce hydraulic shock, and

A delivery section.

A supply pipe fitted with an inner and outer valve,

The outer valve has a weight platform, for loading with the weights provided. This changes the pump's cycle times.
