Hydraulic Ram Pump

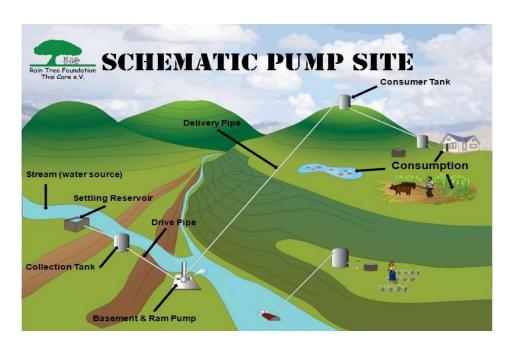
What is a Hydraulic Ram Pump?

A Hydraulic Ram Pump uses downhill water pressure to pump water much higher than its origin. Ram Pumps have proven their reliability for more than 200 years. They are often the only solution when there is no access to electricity or gasoline. They are extremely simple, have just two moving parts and no external source of power is needed.

Uses of Hydraulic Ram Pumps:

- Lifting water from springs, wells, streams, rivers to settlements on higher ground.
- Pumping water from springs, wells, streams, rivers that have a significant slope.
- Lifting irrigation water from streams or raised irrigation channels

Whenever a water source is available and the area is not completely flat, there is always a possibility to install a Hydraulic Ram Pump.



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Parts & function of a ram pump



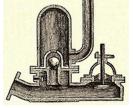
Delivery Pipe - pipe from the ram pump to a collection tank



Pressure Vessel serves as a buffer and catches the over pressure up

Waste Water Valve stops the inrushing water and is mainly responsible for the over pressure





Pressure Valve - catches the over pressured water up



Drive Pipe - supplies the ram pump with water for a proper operation



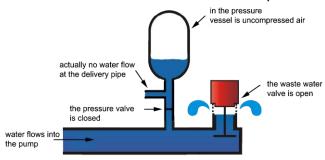
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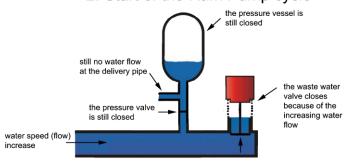
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How does a Hydraulic Ram Pump work?

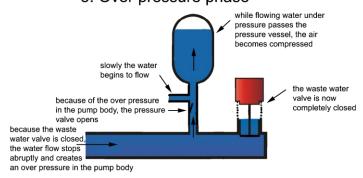
1. Initial Position of the Ram Pump



2. Start of the Ram Pump cycle



3. Over pressure phase



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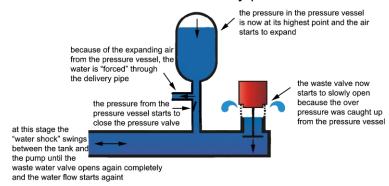


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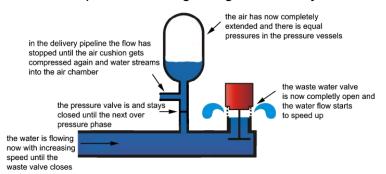
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4. Start of the delivery phase



5. Delivery phase the compressed air expands completely until the pressure equalizes between the pressure vessel and the amount of water in the delivery pipe now the water through the delivery pipe the pressure valve is now completely closed now the waste water valve is fully

6. End phase and beginning of a new cycle



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open and the flow starts again



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What does the Rain Tree Foundation do?

The Rain Tree Foundation aims to provide the villagers with access to a sufficient amount of water for their daily needs and to make it possible to conduct successful farming. Especially in the seasons with no or little rain, as then the villagers spend most of their time carrying water and therefore they are not able to irrigate and grow their own vegetables and fruits in their village or community. The Rain Tree Foundation uses Hydraulic Ram Pumps from their competent partner Meribah Ram Pump, for their projects. We deliver and install the pumps with the villagers.

What can you do?

Installing the Hydraulic Ram Pump costs money. With your donation you can give a whole village access to water. Please contact us if you are interested in making a donation.



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