RAM PUMP

MOHD SHAHIR BIN AZALI
(98554941)

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Faculty of Mechanical Engineering
Universiti Teknologi MARA (UiTM)

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In the name of ALLAH, the Most Beneficent And Merciful

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ABSTRACT

Hydraulic ram pumps are water-lifting devices that are powered by filling water. Such pumps work by using the energy of water falling a small height to lift a small part of that amount of water to a much greater height. In this way, water from a spring or stream in a valley can be pumped to a village or irrigation scheme on the hillside. The main and unique advantage of hydraulic ram pumps is that with a continuous flow of water, a hydram pump operates automatically and continuously with no other external energy source - be it electricity or hydrocarbon fuel. It uses a renewable energy source (stream of water) mid hence ensures low running cost. It imparts absolutely no harm to the environment Hydraulic ram pumps are simple, reliable and require minimal maintenance. All these advantages make hydraulic ram pumps suitable to rural community water supply mud backyard irrigation in developing countries

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CHAPTER I

INTRODUCTION

1.1 Project Background

There are a few things that were invited by man, which had totally changed their way of life. Among the invention that look simple but had given the great impact to human life are wheel, lever, wedge and pumps. It was stated in the history of Chinese had use the water wheel pumps in 1000 BC. It running in moving streams, picking up water in buckets at the bottom of the rotation, tripping the buckets at the top and dropping the water in troughs angled to carry it to their destination. Early Egyptians, Persians & Romans all had their own variations.

As everybody knows, water is important for a living. We need water for drink, bath, watering our plant, livestock and many more. We need pump to help us supply and distribute the water supply. But in developing countries, particularly, the choices for pumping water are often limited because reliable or affordable sources of power are not available. The solution to this problem is the pump that can operate by itself without any power supply – the Ram Pump.

A hydraulic ram (or water ram) pump is a simple, motorless device for pumping water at low flow rates. It uses the energy of flowing water to lift water from a stream, pond, or spring to an elevated storage tank or to a discharge point. It is suitable for use where small quantities of water are required and power supplies