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A NEW DESIGN OF WASHING MACHINE



INTRODUCTION

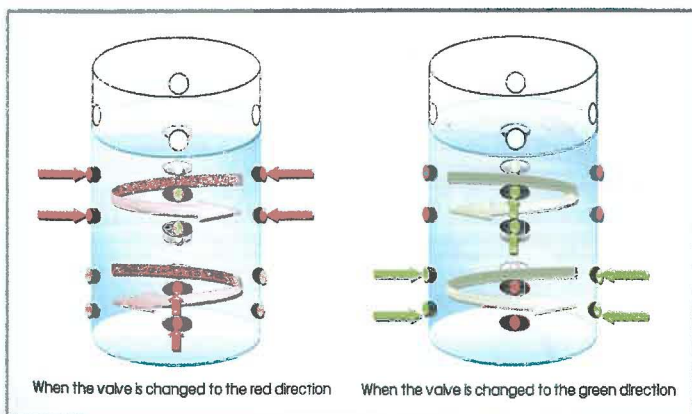
Proposes a new washing technology and new design of the washing machine that can be as a base of its new type. These machines will have better outcome data; improve quality of washing the process and effective use of washing liquid.

NOVELTIES

The new washing machine does not have rotary parts at all and utilises active than washing process with squeezing of linens and more productive then known washing machines. The machine can also recycle and feed cleaned washing liquid of perfect design, the new machine uses ultrasonic technology inthe washing process.

OBJECTIVES

To develop a new technology and type of washing machine which finds application in modern engineering industries and fulfils more demand, based on its power, size and efficiency. The new machine is be simple design, reliable, and cheaper than other types currently available.



ADVANTAGES/RESULT

- Active washing process stands the potential to replace the old washing process and be a perfect washing technology if extension of the study could be preceeded. More money should be required in order to make this new washing technology succesful and to produce better washing product. Green technology would be one of the considerations to included in this washing technology to save the mother earth and optimize the system to enable water to be recycled.
- In active washing technology, a non rotating drum is where the contaminant cloth is loaded. Detergent and -supplied water will clean the dirty clothes filled in the washing drum, with rotary motion created by the nozzle of incline direction. This is an active and dynamic mechanical action cloth washing process as water is directed to clothes by nozzle and this will exert force on the clothes surface.
- The advantages of the active washing process is that it will eliminate the use of rotary units. It tackles the washing machine major failures such as excessive vibration and balancing problem which is produced by rotating mechanism. On the other hand, this active washing method simplifies the whole washing process as the turnover process is not necessary here, which is normally required in passive washing technology.Noise which is generally produced by rotary mechanism can be avoided. Since this is an active washing machine, shorter time is needed to clean be amount of cloth, which also means less power is used.

Comparison Result of Prototype Machine and Washing Machine Model WA91U3

by using the highest cleaning score (CSt) result,

Prototype Machine	Washing Machine Model WA91U3
Highest CSt (%)	Highest CSt (%)
41.2390	28.0429

$$\begin{aligned}
 \% \text{ performance of improvement} &= \frac{41.2390 \% - 28.0429 \%}{28.0429\%} \times 100\% \\
 &= 47.05683\% \\
 &= 47\%
 \end{aligned}$$