Foot Controlled Water Tap

The foot controlled water tap is a device for delivering water from a plumbing system. The uniqueness of this device is to control the water outflow with the help of foot actuation. It helps in regulating water usage and address hygiene issues with its outreach varying from household to industrial applications. When the device is turned on mechanically, the valve opens and controls the flow in any water or temperature condition. The tap body is usually made of brass, though other material like steel or die-cast zinc may also be used.

It further avoids any external power requirement for driving the apparatus, thus making it unique in terms of its usability even in remote places where electricity has not reached or where there in intermittent supply of electricity. This technology will not only avoid secondary infection by hand, and reduce water wastage but will also allow the user to keep his hands free for other activities to be carried out simultaneously, especially for its application in domestic usage such as kitchen activities. Further, this mechanism can be installed in existing faucet systems for multilevel flow regulation.



Features

- Easily mountable device, without affecting the integrity and existence of original water tap systems.
- Control mechanisms to allow continuous water flow, without any constant user engagement.
- Pedestal control for providing actuation to the water outflow.

Specifications

- Material Brass/ Aluminium
- Outlet size ½ inch (External threading)
- Nominal diameter 20.955

- Outlet thread density 14
- Outlet thread pitch 1.814 mm
- Inlet size ½ inch (External threading)
- Nominal diameter 20.955
- Inlet thread density 14
- Inlet thread pitch 1.814 mm

Applications

The use of foot for the said operation reduces the probability of secondary transfer of germs/ microbes of contagious nature through common usage of faucet. The present invention will not only avoid secondary infection by hand, and reduce water wastage but will also allow the user to keep his hands free for other activities to be carried out simultaneously, especially for its application in domestic usage such as kitchen activities. The developed mechanism can also be used by industries to replace spool/ ball valve where the toxic/ adverse temperature fluids have to be regulated by hand for specific application.

Status

- Field trial completed.
- Technology transferred to M/s JAL JOY Of India Limited, SAS Nagar.

For further information please contact

Director CSIR - Central Scientific Instruments Organisation Sector-30 C, Chandigarh-160030 Phone No.- (+91)-172-2657190 Email: <u>director@csio.res.in</u>