

TUBULAR ELEMENTS FOR CAKE FILTRATION

ABSTRACT

The present invention relates to a filtering device for a water treatment system comprising a biological treatment device adapted to provide a sludge from wastewater or filtrated wastewater, and/or the biological treatment device being fluidic connectable to or in fluidic connection with the filtering device for receiving filtrated wastewater from the filtering device and for delivering sludge to the filtering device. The filtering device is a cake filtration device comprising a fluid penetrable support structure and the support structure is provided as one or more tubular elements having a filtration cake provided on the inside of the fluid penetrable support structure. The filtering device has an inlet being connectable to receive liquid to be filtered so that the flux of liquid to be filtered is from the inside of the support structure, through the filtration cake and to the outside of the support structure thereby providing a filtrate, an outlet for outletting liquid from the interior of the tubular element, and a filtrate outlet for outletting filtrate from the filtering device. The filtration cake is being provided by deposition of solids from the sludge formed in the biological treatment device.

20 [Fig. 4]