城市生活污水处理方案

摘要

城市生活污水处理是城市建设的一个重要部分，目前随着城市人口的快速增长，导致城市生活污水排放量越来越大，而且生活污水的随意排放会对周边水体和土壤造成不同程度的污染，所以必须建设城市生活污水处理厂对污水进行严格的处理。本设计针对城市生活污水处理厂源头工艺以及工程等方面设计，在污水处理量每天平均达到 7.5 万吨以及污水处理量每天最大限度 9.9 万吨。根据水质水量以及各种污水处理工艺对比，本设计采用 A^2O 生化工艺。 此工艺对于污染物有高效能以及运行稳定，对于所有的运营有较好的冲击负荷能力，生化池通过不断的曝气装置推进器以及回流渠道的布置，分为不同工艺段，在工艺处理过程中，对各种形式的化合物和微量元素进行相对应的除去，处理之后的水达到城市污水处理厂的排放标准，本文主要介绍了 A2O 特点以及运行的方式条件，通过对不同的建筑物进行了不同的计算以及设备的选材之后的方案布置，以处理该工艺模式下污染物去除效率高，运行稳定，有较好的耐冲击负荷，同时对污水厂的投资费用和运营分析。

关键字：生活污水；A2O 生化；污水污泥

Abstract

Urban sewage treatment is an important part of urban construction, currently with the rapid growth of urban population, urban sewage emissions is more and more big, casual and sewage discharge will cause varying degrees of pollution to water and soil around, so you have to construction of urban sewage treatment plant to strict processing wastewater. This design is aimed at the source process and engineering design of urban domestic sewage treatment plant. The average sewage treatment capacity reaches 75,000 tons per day and the maximum sewage treatment capacity reaches 99,000 tons per day. According to the comparison of water quality and quantity and various sewage treatment processes, this design adopts A2O biochemical process. This process for pollutants are highly efficient and stable operation, for the operation in all have good impact load capacity, biochemical pool through continuous aeration device of propeller and circumfluence channel layout, divided into different process section, in the process of processing, for all kinds of compounds and trace elements in the corresponding removal, treatment after the water reach the city sewage treatment plant emissions standards, this article mainly introduced the A2O characteristics and running conditions, based on the different building in different calculation and equipment selection scheme after decorate, to handle the process mode high pollutant removal efficiency, stable operation, Have good impact resistance load, and analyze the investment cost and operation of sewage plant.

Key words: domestic sewage; A2O biochemistry; sewage sludge

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