中文摘要

随着人们对于大豆类产品的认知增加，我们越来越愿意购买豆制品。它含有高蛋白质含量，口感好和营养物质丰富，具有很强的生理活性，容易被人的身体机制吸收。然而，在大豆产品加工过程中，容易产生大量的废水。其中主要以有机物居多，造成COD、BOD_5含量高，不能随意的排入河流中。大豆产品在清洗、浸泡和除渣过程均会产生大量废水。人们对豆制品的接受度迅速增加，消费者也迅速扩大，但随之而来的环境问题也达到的不得不解决的地步。未能妥善处理这些大豆产品的污水将导致人们赖以生存的重大环境破坏。

本次课题设计的主要内容是吉林省柳河县山水食品有限公司豆制品废水的处理工程。大豆产品污水集中排放，且废水中有机物居多，因此用微生物处理比较合适。另外，大豆产品的氮和磷含量远大于其他种类废水，任意排放导致接收水体的富营养化和水的生态平衡。由此来说，及时准确的处理豆制品废水是必不可少的，本设计采用 UASB+生物接触氧化工艺处理大豆出水，出水符合《综合废水处理标准》GB8978-1996 的一级排放标准。

关键词：豆制品废水；UASB；生物接触氧化法

Abstract

As people's awareness of soybean products increases, we are increasingly willing to buy soy products. It contains a high protein composition, good taste and nutrient-rich, with a strong physiological activity, easy to be absorbed by the body mechanism of people. However, in the process of soybean product processing, it is easy to produce a large amount of waste water. Among them, the main organic matter, resulting in high content of COD,BOD5, can not be arbitrarily discharged into the river. Soybean products in the cleaning, soaking and slag removal process will produce a large amount of waste water. The acceptance of soy products has increased rapidly, and consumers have expanded rapidly, but the environmental problems that have followed have reached a point where they have to be addressed. If these soybean products are not properly treated, it will cause great damage to the environment in which people depend for their survival.

The main content of this project design is Jilin province Liuhe County Shanshui Food Co., Ltd. Soybean products treatment project. Soybean products sewage concentrated discharge, and the majority of organic matter in wastewater, so it is more appropriate to use microbial treatment. In addition, the nitrogen and phosphorus content of soybean products is much larger than other kinds of waste water, random discharge will cause eutrophication of the water body, broken the ecological balance of the water body. From this point of view, timely and accurate treatment of soybean products wastewater is essential. This design will use uasb-Biological Contact oxidation process treatment of soybean products wastewater, and so that the effluent to meet the "comprehensive sewage discharge standards"GB8978-1996in the primary emission standards.

Keywords :soybean products wastewater; UASB; Biological Contact Oxidation method