

8500m³/d 高磷高有机物印染废水工艺设计

摘要: 本设计说明书是 8500m³/d 的高磷高有机物印染废水的工艺设计。具体废水为阻燃布生产时产生含磷及双氧水的废水约 400 m³，退浆、煮练工序产生的含较多浆料、纤维等污染物的高浓度碱性有机废水约 800 m³，印花、染色等工序产生的可生化性较差的其他废水约 7300 m³。废水经处理达到《纺织染整工业水污染物排放标准》（GB4287-2012）中新建企业水污染简介排放浓度限值外排。

经过各种方案的比较，本设计最终采用下述方案：在处理污水的过程中会分成三种废水分批次进入，首先会对高磷废水进行除磷工艺预处理，处理后不仅能有效去除 COD、BOD₅ 和 SS 等，更能大大的降低了磷含量，接着汇入高浓度碱性废水与第一批次汇入废水混合采取以芬顿氧化为主的二级处理，最后三种废水混合进入采取厌氧与好氧相结合的生物处理，使废水达到排放标准直接排出。

技术、经济分析可知，本设计方案有良好经济效益及社会效益，充分执行了减少土地利用、增加绿化、降低能量消耗的理念，积极新时代参与了保护环境的行动。

关键词: 印染废水处理；芬顿氧化；厌氧好养相结合

Process Design of 8500m³/d Printing and dyeing wastewater with high phosphorus and high organic content

Abstract: The Product requirements document is a process design for 8500 m³/d Printing and dyeing wastewater containing high phosphorus and high organic compounds. The specific waste water is about 400m³ containing phosphorus and hydrogen peroxide in the production of flame retardant cloth, and about 800m³ containing high concentration alkaline organic waste water with more pollutants such as pulp and fiber in the desizing and scouring processes, the other wastewater with poor biodegradability produced by printing, dyeing and other processes is about 7300m³. The wastewater has been treated to meet the discharge standard of water pollutants for textile dyeing and finishing industry (GB4287-2012) .

After the comparison of various plans, the design finally adopts the following plan: in the process of sewage treatment, it will be divided into three kinds of wastewater into batches, first of all, high phosphorus wastewater will be pretreated by the phosphorus removal process, after the treatment, not only COD, BOD₅ and SS can be effectively removed, but also the phosphorus content can be greatly reduced. Then the high concentration alkaline wastewater is mixed with the first batch of wastewater, and the secondary treatment is mainly Fenton oxidation, finally, three kinds of wastewater mixed into the anaerobic and aerobic combination of biological treatment, so that wastewater discharge standards directly.

Technical and economic analysis shows that the design scheme has good economic and social benefits, fully implementing the concept of reducing land use, increasing greening and reducing energy consumption, and actively participating in the new era of environmental protection.

Key words : Printing and dyeing wastewater treatment Fenton oxidation
Combination of anaerobic and nurturing

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