<u>年产90万吨氧化铝的沉降车间设计</u>

## 摘要

本次毕业设计的任务是设计一个年产 90 万吨氧化铝的沉降车间,选择的是锥底沉 降槽生产的方式,以平果铝厂的铝土矿为原料进行生产。其生产方法是采用目前工艺流 程最简单、综合能耗较低的拜耳法,。根据所学的理论知识并相关的工厂生产数据资料, 进行了各项冶金计算,如物料平衡、设备选择、沉降车间的设备选择计算、沉降车间工 艺流程与技术经济条件的选择论证及沉降车间车间热平衡,并进行了厂址和生产的选择 与论证,生产 90 万吨氧化铝产品的辅助材料单耗和成本计算,最后绘制了有关的图纸。 关键字:氧化铝;沉降槽

## Design of Settlement Workshop for Alumina Production of 900,000 tons per year

## WEI Ming-shang

Abstract: The task of this graduation project is to design a sedimentation workshop with an annual output of 900,000 tons of alumina. The production mode of cone bottom sedimentation tank is chosen, and bauxite from Pingguo Bauxite Plant is used as raw material for production. Its production method is Bayer process, which has the simplest process flow and lower comprehensive energy consumption. Based on the theoretical knowledge learned and the relevant production data of factories, various metallurgical calculations have been carried out, such as material balance, equipment selection, equipment selection calculation of sedimentation workshop, selection and demonstration of process flow and technical and economic conditions of sedimentation workshop, and heat balance of sedimentation workshop. Selection and demonstration of site and production have been carried out to produce auxiliary materials for 900,000 tons of alumina products. Material unit consumption and cost calculation, and finally draw the relevant drawings.

Key words: alumina; settling tank

以上内容仅为本文档的试下载部分,为可阅读页数的一半内容。如要 下载或阅读全文,请访问:

https://d.book118.com/596143000123011004