

# 年产 14 万吨聚丙烯的生产工艺设计

## 摘 要

本论文设计的内容是关于年产 14 万吨聚丙烯的生产工艺设计，本设计通过学习了聚丙烯的聚丙烯性质和生产原理，进行了生产聚丙烯的一系列的计算流程。本设计帮助大家了解了聚丙烯合成工艺，还有其在化工产业及科学领域不同层面的意义。

本次设计内容包括“三废”处理、安全生产、工艺流程、物料衡算、能量衡算、设备选型、经济分析等方面。在本文中详细的计算出来了聚丙烯在每一阶段的用量，以及最后的产量、根据所需的换热面积等条件可以计算和设计出本设计适合的设备，并且按照 Spheripol 工艺工艺设计出了工艺流程图、生产车间图样以及设备图。

**关键词：**聚丙烯；Spheripol 工艺；物料衡算；能量衡算

## ABSTRACT

The content of this thesis design is about the annual output of 140000 tons of polypropylene production process design, this design by studying the principle of the polypropylene properties and production of polypropylene, a series of calculation process for the production of polypropylene synthesis process, the designed to help you to understand the polypropylene and its significance of different levels in the field of chemical industry and science.

This design content including "three wastes" treatment of safe production process material balance energy balance equipment selection aspects such as economic analysis in this article the detailed calculated the dosage of polypropylene in every stage and the final output according to the required heat exchange area and other conditions can be calculated and designed a suitable design of equipment, and according to the Spheripol process technology to design the process flow diagram figure production workshop drawings and equipment

**Key words:** polypropylene; Spheripol Process; material; balance; energy balance

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