ABS 洗发液输流管下件塑料模具设计

摘　　要

塑料制品在国民生活中占据着主要地位，同时在国防，军工以及航天等各方面都有举足轻重的地位。特别是随着社会的不断进步，人们对高强度低质量的材料有了更高要求，塑料各方面的优势都很好的满足了需要，因此得到了广泛的应用和发展。我的设计主要是对于塑料制品的模具加工。

本次设计主要是设计一套 ABS 洗衣液输流管下件的塑料模具，设计中需要完成的主要是成型零件的尺寸计算，浇注系统的设计和计算，侧向分型机构的设计计算，推出机构设计，温控系统的设计以及排气和分型方式的确定。同时，为保证模具中各零件互不干涉，又能最大的节省模具材料。为保证实现自动化加工和保证制件外观，采用了潜伏式浇口的设计。在整个模具设计过程中，在满足模具正常工作的同时，尽量简化了各机构，使得模具运行更加平稳。随着社会的发展，对于模具的要求更加严格，本次设计基于社会实际需要，立足于设计需求。基于社会广范使用的注塑机设备，设计完成了这套模具，这也是我本次设计的出发点。

关键词：注塑模；潜伏式；侧抽芯；浇注系统

Abstract

Plastic products occupy a major position in national life, and play an important role in national defense, military industry, aerospace and other aspects. Especially with the continuous progress of society, people have higher requirements for high-strength and low-quality materials, and the advantages of plastic in all aspects meet the needs, so it has been widely used and developed. My design is mainly for the mold processing of plastic products.

This design is mainly to design a set of plastic mold for the lower part of the ABS washing liquid pipe. The main tasks to be completed in the design are the size calculation of the forming parts, the design and calculation of the pouring system, the design and calculation of the side parting mechanism, the design of the pushing mechanism, the design of the temperature control system, and the determination of the exhaust and parting methods. At the same time, in order to ensure that the parts in the mold do not interfere with each other, and can save the mold material. In order to ensure the automatic processing and the appearance of the parts, the design of the latent gate is adopted. In the whole process of die design, the mechanism is simplified as much as possible to make the die run more smoothly while satisfying the normal work of the die. With the development of the society, the requirements of the mold are more strict. This design is based on the actual needs of the society and the design needs. Based on the injection molding machine equipment widely used in the society, this set of mold has been designed, which is also the starting point of my design.

Keywords: Injection mold; latent; side core pulling; pouring system

目　　录