

押出機螺桿之效率與特性分析之研究

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摘要

屏障單螺桿押出機是最有用的一個現代化設備，其中應用於聚合物加工工業，食品加工工業，化妝品加工工業和製藥加工工業。應用科學為最佳屏障單螺桿總是預期達到目標。其目標是做好這項工作的質量，數量和均勻性高輸出的生產的押出機。本研究提出的優化方法屏障單螺桿的基礎參考了馬耶屏障螺桿，加上克里夫Rauwendaal的優化設計，使一個先進的屏障螺桿，提高了熔融和混合性能的螺旋角使屏障螺桿導程比螺旋角主要的螺桿導程還好，基本上消除雙重機會堵塞。然後應用Darnell-Mol's理論計算質量流量的結果超過押出機。以AutoCad模擬三維模型繪出屏障單螺桿押出機，並用CF Design分析軟體來分析屏障單螺桿押出機三維模型。因此，屏障單螺桿在性能獲得由CF Design分析軟體結果得知。最後，使用歸納方法來創建一個無障礙設計單螺桿流程圖。

關鍵詞：分析特點，CF Design，屏障單螺桿

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