

專家系統在自動車床加工之應用 RESEARCH OF EXPERT SYSTEM IS APPLIED IN AUTOMATED LATHE MACHINING

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摘要

本文在說明以專家系統內部之諮詢項目如尺寸、材質、刀具選擇等，作引導提示的方式，讓使用者能更方便的操作。

在使用系統前，先進行外徑尺寸、內徑尺寸、材質、長度等設定，再藉由本系統內簡便的程式語言，輸入工作順序，執行時經由8255卡介面將訊號輸出至Z軸的油壓缸或X軸的步進馬達，進行工件加工。在時間上，從條件的輸入至加工的完成，比起NC車床大為縮短。此應該歸功於專家系統的貢獻，它將專家的知識與經驗相配合，使複雜的工件以推論的方式予以分析、處理，促使前置時間大為縮短，提升了整個工作效率。

關鍵字：專家系統、推論、自動車床

ABSTRACT

The main body of this paper is to expound the Expert System's inquired item, such as the selection's of dimension、material、tool choice etc. Using the method of prompt to make a convenient operation for user.

Before using this system, make sure to set up the outer and inner dimensions、materials、length of workpieces etc., then by means of the brief program language of this system to feed the sequence of work. when they are working by 8255A interface card to transfer signal to Z-axis hydraulic cylinder and X-axis stepping motor for machining. In working time to say, from the inputs of machining