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## 摘 要

金属切削机床 (Metal Cutting Machine Tools) 是通过切削将金属坯料加工成机器零件的机器。它也被称为工作机或工具机。其准确性直接影响加工产品的质量。因此，对机床的设计要求更高的精度。本次毕业设计主要是通过计算机辅助软件对普通车床 (CA6140) 横向进给机构进行设计，以提高车床的加工精度，提高了设计效率。设计主要内容包括横向进给传动系统的机构的设计、基于 Pro/E 的三维建模及零件库的创建和进给丝杠的工艺规程的设计。

Pro/E 是由 PTC (Parameters) Company 在美国开发的三维软件。Pro/E 功能强大，使用简单。

**关键词：** 横向进给 Pro/E 零件库 工艺规程

## **Abstract**

Metal cutting machine tools is the machine that using the methods of cutting to process the metal blank into the machine parts. It is the machine of manufacturing machine, so called "Mother machine" or "Machine tool ".Its accuracy directly affects the quality of products processed from , therefor , the design of the machine requires higher precision. The graduation design aims at designing of transversal feeding mechanism for lathe(CA6140) by CAD-Computer Aided Design software..the main contents include the design of backlash institutions for transversal feeding mechanism ,3D modeling and the creation of parts library based Pro/E , and the screw process planning .

Pro/E is a three-dimensional software developed by the U.S. PTC (parameters) .As a representative of the high-level 3D software , the powerful , easy to use , has now become a 3D software commonly used by mechanical design , appliance design , mold design industry . Compared with the past, the domestic use of the most common graphics software such as AutoCAD , the software directly using a unified database and associated processing , 3D modeling and 2D drawings and associated technologies .

Screw process planning involves selection and determining the blank and mechanical machining allowance and procedure sizes and tolerance, drawing up the process route, selection process equipment, filling in machining process card and machining process card.

**Keywords:** Horizontal Feed Pro/E Parts Library Procedure

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