

《机械设计过程》

图书基本信息

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前言

机械工业出版社在2006年出版了美国大卫G·乌尔曼 (David G.Ullman) 所著《机械设计过程》第3版的中文翻译本，几年以后我们又见到了该书英文原版的第4版，这一版在保留原有特色的基础上有了较大的改进，反映了机械设计近年来的一些重要的发展和研究成果。本书明确提出了“产品设计”的设计原理，是针对产品设计的设计思想、理论、技术和方法的总结，而对于那些针对“机构”和“零件结构”的设计手段，只作为基础知识介绍。同时，本书全面、具体地给出了“设计学”的基本内容，详细地引出了设计的典型步骤，每一个步骤的任务和目标，应考虑的主要问题和常用的解决方法，对产品设计具有很好的指导作用。本书的主要特点是：1.针对各章节知识点给出了计算机设计用的表格，供设计者参考。2.给出了更多的设计实例和照片。3.各章前面给出了“要点问题”(Keyquestions)，使读者阅读时目标更加明确。4.更新了参考资料，使本书更加实用。

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内容概要

《机械设计过程(英文版·原书第4版)》明确提出了“产品设计”的设计技术，是针对产品设计的设计思想，理论、技术和方法，而对于那些针对“机构”和“零件结构”的设计技术，只作为基础知识介绍。《机械设计过程(英文版·原书第4版)》全面、具体地给出了“设计学”的基本内容，详细地引出了设计的典型步骤，每一个步骤的任务、目标，应考虑的主要问题和常用的解决方法，对产品设计具有很好的指导作用。

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章节摘录

插图：Unfortunately, often what is manufactured by a company using the over-the-wall process is not what the customer had in mind. This is because of the many weaknesses in this product development process. First, marketing may not be able to communicate to engineering a clear picture of what the customers want. Since the design engineers have no contact with the customers and limited communication with marketing, there is much room for poor understanding of the design problem. Second, design engineers do not know as much about the manufacturing processes as manufacturing specialists, and therefore some parts may not be able to be manufactured as drawn or manufactured on existing equipment. Further, manufacturing experts may know less-expensive methods to produce the product. Thus, this single-direction over-the-wall approach is inefficient and costly and may result in poor-quality products. Although many companies still use this method, most are realizing its weaknesses and are moving away from its use. In the late 1970s and early 1980s, the concept of simultaneous engineering began to break down the walls. This philosophy emphasized the simultaneous development of the manufacturing process with the evolution of the product. Simultaneous engineering was accomplished by assigning manufacturing representatives to be members of design teams so that they could interact with the design engineers throughout the design process. The goal was the simultaneous development of the product and the manufacturing process.

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编辑推荐

《机械设计过程(英文版·原书第4版)》由机械工业出版社出版。

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精彩短评

- 1、机械设计大范畴下的讨论
- 2、非常好，很喜欢！非常不错
- 3、没想到机工社的书的质量可以做的这么好，纸张很不错，字迹清晰，一改华章书籍的质量给我心中留下的阴影。本书讲的内容还是比较翔实，看了一些了，收获很大，里面的一些理念很值得借鉴，英语的难度不太大，读起来还是可以很流畅，一本好书，比较推荐。
- 4、这个简单易懂，很多正好和专业相关~
- 5、英语挺简单的，内容合适，以后有的看了
- 6、看这本书，就像有一个老师傅在一点一滴的述说他的思考与经验
- 7、全英文版，但是节选的，没有想象的那好。案例很实际，但缺少参考书目。
- 8、挺好，期待机械出版社多出版此类书籍。例如Mechanical Design等。
- 9、书很好，很喜欢，深入浅出
- 10、对于想在通过专业书籍提高专业英语水平很有帮助
- 11、注重在概念上，看着不难，对意识提高很有帮助，比较适合工程设计管理的吧
- 12、还没看呢，看完再说吧
- 13、如题，本来看了前边几页觉得跟pdf一样而且没有印刷错误很高兴，可是看完第一章结尾跟原版pdf对比之后就让我大失所望，没有了总结感觉好像整章书少了一个归宿，怎样都好像有根刺一样，少了资源链接更是让人伤心，少了这么多拓展知识的阅读（虽然不一定会看），整本书都好像断链了，后续学习困难了.....少了习题（虽然不是很多人会在意这个），我真的心都碎了，叫我怎么用最快的方式来检验我的学习呢？这本书还说是原书第四版，我想应该将名字改成缩编版好了！！各位要买的童鞋得留个心眼啦！！
- 14、本书非常系统地讲解了从概念到产品的科学的设计过程，是对什么是机械设计的一个很好诠释。搞机械设计也6年了，期间做了很多失败的设计，总是希望能总结一些设计中通用的方法论，此书对此时的我总结经验非常有用。如果大学时能用上这样的教材，工作时应该可以少走很多弯路了。书中部分内容跟项目管理（如PMP的教材）很类似，可能机械设计就是要用科学的项目管理方法来提高效率的。
- 15、A craft artist refines his skills.
- 16、很工程化的书，眼前一亮
- 17、帮助你理解机械设计的过程
- 18、收到后 外观还可以 内容没来的急看
- 19、不错的英文书籍

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