

《Refrigeration_Technology(制冷技术)》

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编辑推荐

这20多年内，制冷技术的其他方面也有了长足的发展。G-M、脉管气体制冷机和自动复叠式混合工质制冷机已经扩展到低温的温区，并达到了实用阶段；在热电制冷方面，正在探索高性能指数的材料；变频电机技术的成功及推广、电子膨胀阀部分地替代热力膨胀阀，使制冷系统运行更加安全有效等。基于上述的这些情况，编者编著了这本书，希望在讲清制冷技术基本原理的前提下，适当地反映近年来制冷技术的重要发展，同时也介绍国内外制冷行业的动态。

内容简介

本书为高等教育“十一五”*规划教材，是国内第一本有关制冷技术的英文教材。本书详细地阐述制冷的基本技术，介绍了近20多年来制冷技术的重要发展，也适当地介绍国内外制冷行业的动态。全书共13章，包括4个部分。第1部分主要介绍制冷的范畴、应用、发展历史和国内外的学术组织和刊物。第2部分系统叙述制冷原理，讨论制冷循环的热力学分析、使工质降温的基本方法（包括流体制冷工质和固体制冷工质）、气体制冷循环、机械驱动和热驱动的蒸汽压缩制冷循环、蒸汽压缩制冷的循环分析。第3部分详细介绍制冷用的工质，讨论了制冷循环对工质的要求，工质的物理、化学和制冷的特性；某些制冷工质破坏臭氧层和增强温室效应的机理和程度，新的环境友好的制冷工质；同时也介绍了湿空气学与空气处理过程。第4部分介绍蒸汽压缩制冷循环的主要部件和设备，包括压缩机、冷凝器、蒸发器和流量控制部件。

本书可作为制冷、动力、建筑空调等专业的英语教材，也可供制冷、空调、动力等公司、企业的技术人员参考。

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