第六章 重大设备的失效分析

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4. 燃气用HDPE管在光照下老化降解机理的研究

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6.9 城市管网的失效分析

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第六章 思考题

1. 概述引进的重水堆核电装置RCW热交换器钛管异常泄漏的失效分析主要分析步骤。哪些方法对该复杂案例分析运用得相当精准?
2. 在对进口的超超临界1000MW火电机组循环水泵发生过早失效的案例分析中，泵体接管的设计与制造存在哪些隐患？应如何改进?
3. 试从风电设备两个失效案例中，安装过程应该吸取哪些教训?
4. 通过对引进的石化装置PTA干燥器的失效分析，简述设备在检修与维护过程中须应注意哪些安全因素?
5. 化工设备一般存在冲刷与腐蚀的交互作用工况，从安全角度应如何选材及防护？就弯管而言，采用什么方法可抑制这种复杂的失效?
6. 在冶炼设备的失效分析案例中，控制哪些因素可以避免燃气轮机叶片发生过早失效呢?
7. 在对汽车纤维增强树脂复合材料踏板开展的失效分析过程中，复合材料构件最易发生哪些类型的失效？产生的原因主要有哪些?
8. 微电子元器件都要进行表面处理，从芯片引线框架高速电镀到芯片贴装表面回流焊的失效案例中，必须认真应对哪些工艺环节?
9. 印制电路板是一种层状复合材料，试从高密度互连PCB的失效案例中概述PCB的主要失效形式？影响产品质量的因素一般有哪些 ?