面向能力培养的化工仿真实习软件 MES

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摘要:以 能力培养为目标，我们编制了化工仿真实习软件 MES，在软件中运用现代化的教学手段，如二维、三维动画，视频、音频技术，工业仿真技术等，解决原来化工类专业实习教学中的问题，培养学生的工程实践能力，改善 教学效果。该软件以具有代表性的年产 30 万吨合成氨装置为蓝本，讲述了化工工艺、设备、测控仪表及 DCS 等方面的知识，并备有开测验题库及仿真培训软件部 分。该软件系统在我校试用获得了很好的教学效果。

关键词:化工；软件；仿真

An Education Software System Based on Ability Training for Chemical Engineering Plant Practice

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Abstract: An education software system based on ability training is developed. The purpose of the system will be used for plant practice of students majoring in chemical engineering. Through modern technology such as moving picture, video and audio technology, simulation technology etc, The software system solved the problems now encountered in plant practice teaching, It trains student's practicing ability in plant, improved the result of teaching. Through the process of ammonia synthesis, one of the most typical chemical engineering processes, the software system teaches the knowledge in chemical technics, equipment, instruments and automation. There is a test section for student's self-evaluation, and a simulation operation system for DCS operation practice. The system has been use in our university and has got good results.

Key words: chemical engineering, software, simulation