無塵室空調節能方法及效益之研究

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摘要

Taiwan is lack of energy since approximately 96% of energy is imported from other countries. It is an important issue to save the consuming of energy when we face the increase need of this precious resource. Clean room is the equipment which consumes lots of energy. If we can perform energy conservation well then the energy can besaved. IT is one of important industry in global competitive for Taiwan. The clean room is the necessary equipment for high technique industries. The quality of this equipment determine the competition of IT industry and the consumption of the energy.
Therefore clean room must be a stable environment to assure the high quality of the products.This research discusses some energy conservation strategies for clean room. It contains the use of heat recovery system for ice water engine, the use of Clean Booth for clean room, the use of the double temperature ice water system, the use of Variable Air Volume control for MAU air conditioning box, the use of energy conservation improvement for external air supply and indoor exhaust facility for the clean room, to reduce the spillage of external air supply of the clean room, to reduce the exhaust amount and so on. This can provide decision-maker, the designer and the

related
engineers as reference for the construction of the clean room. Through the help of this
study, we can build an energy saving high quality clean room for IT industry.

關鍵字：Clean Room, Energy Saving for Air Condition