Specification of Competency Standards
for the Manufacturing Technology Industry
Unit of Competency

Functional Area - Product Manufacturing

Title	Establishment and preventive maintenance of cleanroom
Code	106459L4
Range	This unit of competency is applicable to the corporation of Manufacturing Technologies Industries. Practitioners should be capable to carry out planning and management of cleanroom
Level	4
Credit	3 （For Reference Only）
Competency	Performance Requirements 1. Understand relevant knowledge of establishment and preventive maintenance of cleanroom • Understand the points of selection of air filter and decoration arrangement of different cleanliness levels of cleanroom • Understand relevant the level and standards of cleanliness of cleanroom • Understand the applications and features related to cleaning equipment of cleanroom, such as the unit of airshower, HEPA and air filter • Understand commonly used materials of the cleanroom, such as clean closed doors, clean closed windows, clean airtight lights • Understand the methods and techniques of cleanroom design and planning, such as piping systems, exhaust pipes, materials handling and work procedures • Understand the cleanroom equipment and environmental preventive maintenance methods, techniques and frequency 2. Establishment and preventive maintenance of cleanroom • Formulate the production guidelines of cleanroom and monitor their production process, so as to ensure the production efficiency and product quality • Control the temperature, cleanliness, room pressure, air velocity and air distribution, noise vibration and lighting, static of the cleanroom in a range of needs, and improve continuously • Select appropriate purification equipment and plant material to establish cleanrooms • Carry out daily preventive maintenance of purification equipment of cleanroom, and formulate relevant point checklist 3. Professional handling of establishment and preventive maintenance of cleanroom • Follow the safety guidelines of "Occupational Safety and Health Regulations", establish, manage and continuous improve the cleanroom production
Assessment Criteria	The integrated outcome requirements of this unit of competency are: • Capable to set up technical and management requirements of cleanroom, and establish the production procedures of the cleanroom • Capable to formulate guidelines and effectively manage and propose improvements • Capable to regularly monitor the production process efficiency and product quality
Remark	