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

Functional Area - Product Manufacturing

Title	Mould polishing
Code	106411L3
Range	This unit of competency is applicable to the production department of the corporation of tooling manufacturing industry. Practitioners should be capable to understand the knowledge of tooling polishing and carry out tooling polishing.
Level	3
Credit	6 （For Reference Only）
Competency	Performance Requirements 1. Understand tooling polishing • Understand the common methods and principles of polishing, such as mechanical polishing and ultrasonic polishing • Understand the commonly used tools and specifications categories of tooling polishing • Understand the level and standards of tooling polishing, and different grades and standards required for roughness, processing methods, procedures and operating skills • Understand the aims of polishing, problems caused by insufficient or excessive polishing, such as unevenness, orange peel structure, pull-outs, burr, scratches • Understand the factors that affect the quality of tooling polishing, such as the surface condition of the workpiece before the heat treatment and the hardness of the steel surface. 2. Carry out tooling polishing • Operate the commonly used tooling polishing tools and machinery, such as sandpaper, stone, diamond polishing paste and round rotating grinding machines. • Avoid generating poor surface during the tooling polishing process, such as abrasions and burns of the workpiece surface • Master the timing of tooling polishing, maintain polishing effect, efficiency and quality • Meet the processing requirements to select the appropriate polishing materials and set parameters, such as polishing time and speed • Simply adjust, maintain and repair various polishing machine 3. Professional handling of tooling polishing • Follow safety guidelines of polishing (such as handle metal scrap produced in the polishing process) and related Code, and in accordance with processing and productivity requirements to carry out tooling polishing • Ensure the environment of tooling and workshop is clean; during polishing processing, avoid hard dust particles affect the tooling polishing effect
Assessment Criteria	The integrated outcome requirements of this unit of competency are: • Capable to operate general the tools and machinery of tooling polishing, achieve an excellent production efficiency and product quality and precision requirements. • Capable to select, configure and load/unload the appropriate polishing materials with workpiece materials and engineering design. • Capable to solve general operation problems of the polishing tools and machinery and carry out preventive maintenance.
Remark	