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

Functional Area - Process Design and Development

Title	Develop and define automatic processing and testing procedures, methodologies and equipment for stamping products
Code	106488L4
Range	This unit of competency is applicable to the engineering or manufacturing development department of the corporation of metal stamping product. Practitioners should be capable to master the knowledge of automatic processing of the industry
Level	4
Credit	6 （For Reference Only）
Competency	Performance Requirements 1. Understand all kinds of automatic stamping methods and equipment • Understand all kinds of stamping automatic processing and the types, specifications and applications of auxiliary equipment of handling parts, including transfer manipulator, multi-axis robot, conveyor belts, flat machine and feeder • Understand the advantages, disadvantages, equipment upgrades and maintenance ways of all kinds of stamping automatic processing and auxiliary equipment of handling parts in the market • Understand the types, specifications, functions and applications of all kinds of automatic testing equipment of stamping, including misdelivery detectors, detectors of stacked pieces, optical measuring instrument high-speed camera and integrated measuring instrument • Understand the advantages, disadvantages, equipment upgrades and maintenance ways of all kinds of stamping automatic testing equipment in the market • Understand the types, specifications and applications of commonly used pneumatic, hydraulic, vibration plate, Programmable Logic Controller (PLC) elements and systems 2. Develop and define automatic processing and testing procedures and equipment of stamping • Meet the design, production quantity and quality requirements as a precondition, develop and select automatic processing procedures, methodologies and equipment of stamping products • Ensure there is no defect of processes and equipment, control and minimise the chances of failure probability • Evaluate the effectiveness of metal stamping product automation and carry out continuously improvement • Ensure after the development of metal stamping product automatic processing procedures and equipment, no product defects will be created 3. Professional handling of develop and define all kinds of automatic processing and equipment of stamping • Insight the potential safety issues and accident, optimise the development and defination of systems, and enhance the efficiency, stability and security of the automation systems
Assessment Criteria	The integrated outcome requirements of this unit of competency are: • Capable to meet the corporate development and product requirements, define metal stamping product automation plan • Capable to develop and define automatic processing and testing procedures, methodologies and equipment of stamping products, enhance production efficiency and reduce costs
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