

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

Functional Area - Product Manufacturing

Title	Metal tube and wire forming
Code	106416L3
Range	This unit of competency is applicable to the production department of the corporation of metal stamping manufacturing industry. Practitioners should be capable to understand the knowledge of metal tube and wire forming, so as to carry out the processing of metal tube and wire forming and solve the production problem.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <ol style="list-style-type: none"> 1. Understand the technologies and techniques of metal tube and wire forming <ul style="list-style-type: none"> • Understand the types and standard specifications of commonly used metal tube and wire • Understand the principles and applications of metal tube and wire forming, including bending, forming, forging and coining • Understand the methods and techniques of metal tube and wire forming • Understand the characteristics of all kinds of metal tube and wire forming, such as physical performance, chemical performance and mechanical performance • Understand all kinds of common product defects of metal tube and wire forming, including poor moulding, bending rebound, lack of material, deformation, wrinkles, scratches and burns • Understand the types, structures, working principles, specifications, applications and operating methods of all kinds of stamping machines and special machinery (such as bending machine, multi-slide forming machine) 2. Carry out metal tube and wire forming <ul style="list-style-type: none"> • Proper identification of the specifications of metal tube and wire • Select and operate the correct equipment, and carry out forming of different metal tube and wire • According to the factors of production volume, product shape, precision, materials, tooling size, select the appropriate stamping machine and Special machinery to carry out metal tube and wire forming • Effectively assemble, disassemble and correct all kinds of tooling on stamping machines and special machinery of metal tube and wire forming • Carry out simple adjustments, maintenance and repair for commonly used stamping machines, special machinery of metal tube and wire forming and tooling • Identify and systematically analyse the common quality problems and causes of metal tube and wire forming and carry out improvement 3. Professional handling of metal tube and wire forming <ul style="list-style-type: none"> • Follow safety guidelines and related codes of practice, in accordance with product specifications and production efficiency requirements, carry out metal tube and wire forming
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> • Capable to carry out metal tube and wire forming in accordance with the drawing and requirements of technologies and techniques, and solve production problems • Capable to independently operate all kinds of stamping machines and special machinery, and carry out simple daily maintenance

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Remark	The wire here generally refers to the material with 10mm diameter below
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