1. Title	Non-destructive test（NDT）- magnetic particle inspection
2. Code	EMCUMA201A
3. Range	Use magnetic particle inspection method, at servicing centres or locations with operating equipment, to inspect equipment or materials for surface and sub-surface cracks and weld defects.
4. Level	2
5. Credit	2
6. Competency	Performance Requirements 6.1 Techniques and working principles of inspecting equipment or materials for cracks ♦ Understand the principles of magnetic particle inspection used to inspect equipment or materials for surface and sub-surface cracks ♦ Understand that the magnetic particle inspection method is applicable to magnetic metals or materials only ♦ Understand the advantages and limitations of using dry particles, wet particles and fluorescent particles in magnetic particle inspection 6.2 Methods and procedures of inspecting equipment and materials for cracks ♦ Capable to apply the magnetic particle inspection method effectively to inspect the surface and sub-surface of equipment or materials for cracks and record the findings ♦ Capable to use different magnetic particle inspection tools for testing according to work pieces and cracks ♦ Capable to inspect different positions for surface and sub-surface cracks ♦ Select dry particles, wet particles or fluorescent particles for inspection according to work pieces and required precision ♦ Capable to mark the position with cracks clearly
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) Capable to use magnetic particle inspection method correctly to inspect equipment or materials for surface and sub-surface cracks; record and mark the positions and size of the cracks; and (ii) Capable to point out the advantages and limitations of dry particles, wet particles and fluorescent particles in magnetic particle inspection.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person is familiar with liquid penetration inspection.