

1. Title	Non-destructive test (NDT) – Liquid Penetrant Testing
2. Code	EMCUMA102A
3. Range	Use liquid penetrant, at servicing centres or locations with operating equipment, to inspect equipment or materials for surface cracks and make a simple analysis.
4. Level	1
5. Credits	2
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Techniques and principles of inspecting mechanical equipment or materials for surface cracks</p> <ul style="list-style-type: none"> ◆ Perform visual inspection to locate suspected surface cracks ◆ Understand the techniques and principles of inspecting equipment or materials for surface cracks ◆ Understand the chemical hazards caused by penetrant and developers, and relevant concerns for use ◆ Understand that liquid penetration inspection is not applicable to high temperature materials <p>6.2 Methods and procedures of analyzing and identifying external cracks on metal equipment or materials</p> <ul style="list-style-type: none"> ◆ Capable to use liquid penetrant and developers effectively to inspect the surface cracks of equipment or materials ◆ Capable to mark the position with cracks effectively <p>6.3 Code of practice for using penetrant and developers</p> <ul style="list-style-type: none"> ◆ Use penetrant and developers safely to complete the non-destructive test
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to use liquid penetrant and developer inspection method safely and correctly to identify equipment or materials for surface cracks which are not easily seen; and to mark the cracks correctly.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses the competency of reading mechanical drawings and manuals for materials.