

1. Title	Maintain pneumatic systems of trains
2. Code	EMRAMA309A
3. Range	Maintain pneumatic systems and equipment of trains at train maintenance centres according to maintenance instructions by applying maintenance techniques for mechanical, pneumatic and electrical equipment.
4. Level	3
5. Credits	5
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Working principles of pneumatic systems and equipment of trains and their maintenance standards</p> <ul style="list-style-type: none"> ◆ Understand the structure and working principles of the pneumatic systems and equipment of trains including <ul style="list-style-type: none"> • Air compressors and control circuits • Pneumatic pipe network and fittings • Various kinds of valves • Pressure regulators • Pressure gauges • Pneumatic-operated equipment • Equipment to maintain the compressed air quality ◆ Understand the scope and standards for different levels of maintenance <p>6.2 Method and procedures of maintaining pneumatic systems and equipment of trains</p> <ul style="list-style-type: none"> ◆ Able to read maintenance instructions and select suitable information for use ◆ Capable to maintain air compressing systems and control circuits according to maintenance instructions by applying maintenance techniques for electrical and pneumatic equipment ◆ Capable to maintain pipe line adjusting equipment, pipe line network and fittings, pneumatic control equipment and equipment to maintain the compressed air quality according to maintenance instructions by applying maintenance techniques for pneumatic equipment ◆ Capable to make effective use of typical tools and instruments for maintaining electrical, mechanical and pneumatic equipment <p>6.3 Professionalism in maintaining the pneumatic systems and equipment of trains</p> <ul style="list-style-type: none"> ◆ Capable to follow the requirements of maintenance instructions to ensure that the procedures and quality of maintenance are up to standard ◆ Understand the safety guidelines and codes of practice for railway engineering in handling maintenance for the pneumatic systems and equipment of trains

7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> (i) Capable to maintain and test the pressure regulators, non-return valves, safety valves, dryers, filters and automatic drain valves systematically and efficiently according to maintenance instructions; and (ii) Capable to maintain and adjust the air compressors efficiently according to maintenance instructions and the code of safety.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic electrical, mechanical and pneumatic knowledge.</p>