

1. Title	Install pneumatic equipment of trains
2. Code	EMRAIN303A
3. Range	Install pneumatic equipment of trains according to installation instructions and drawings, and adjust and set such equipment.
4. Level	3
5. Credits	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Construction and basic working principles of pneumatic equipment of trains</p> <ul style="list-style-type: none"> ◆ Understand the construction and basic working principles of pneumatic system of trains, including <ul style="list-style-type: none"> • Compressed air generation system • Compressed air pipe line system • Pipe line network ◆ Understand the construction and basic working principles of pneumatic equipment of trains, including <ul style="list-style-type: none"> • Air compressor and control devices • Various kinds of pipe line valves • Pneumatic system protection devices • Pipe line gauges <p>6.2 Methods and procedures of installing and adjusting pneumatic system and equipment of trains</p> <ul style="list-style-type: none"> ◆ Able to read installation instructions and pneumatic system engineering drawings and select suitable information for use ◆ Install pneumatic system and equipment of trains according to the installation instructions and drawings ◆ Adjust, test and set pneumatic system and equipment of trains according to the installation instructions and drawings ◆ Perform pressure and leak tests for the entire pneumatic system and fix the leakage ◆ Use typical tools and instruments for installing and checking pneumatic equipment and pipes of trains effectively <p>6.3 Professionalism in installing pneumatic equipment of trains</p> <ul style="list-style-type: none"> ◆ Capable to follow the requirements of installation instructions to ensure that the procedures and quality of installation are up to standard ◆ Understand the safety guidelines and codes of practice in handling installation and adjustment for pneumatic system and equipment of trains

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to install all kinds of valves, pipes and multiple joints correctly; (ii) Capable to adjust the pressure switches and safety limit valves to control the pressure range of the pneumatic system correctly; and (iii) Capable to perform pressure and leak tests for the entire pneumatic system.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic bench and pipe fitting techniques.