

1. Title	Inspect, test and commission the mechanical equipment of trains
2. Code	EMRAIT402A
3. Range	Perform visual inspection, measure and function tests, and adjust and set the mechanical equipment of trains for train installation work according to guidelines and standards for inspection, testing and commissioning.
4. Level	4
5. Credits	9
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Working principles of and standards for inspecting, testing and commissioning the mechanical equipment of trains</p> <ul style="list-style-type: none"> ◆ Understand the structure and working principles of the mechanical equipment of trains, including: <ul style="list-style-type: none"> • Train bogies, gangways and couplers • Brake system devices • Train door system ◆ Understand the scope and standards for inspection, testing and commissioning of the mechanical equipment of trains <p>6.2 Methods and procedures of inspecting, testing and commissioning the mechanical equipment of trains</p> <ul style="list-style-type: none"> ◆ Able to read the inspection, testing and commissioning guidelines and select useful information ◆ Calculate and compile the details for testing and commissioning according to relevant information ◆ Inspect components of train bogies, gangways and couplers according to guidelines and standards, and record the data ◆ Adjust and set the train bogies, gangways and couplers according to guidelines and standards ◆ Check whether the data of train bogies, gangways and couplers meet the commissioning standard according to specified standards ◆ Inspect and adjust the brake system's mechanical devices according to guidelines and standards ◆ Set the pressure of different brake levels for the brake system according to standards ◆ Inspect train door mechanical devices, their locations and alignment according to guidelines and standards ◆ Adjust the mechanical, interlocking and isolation devices according to standards ◆ Use efficiently general electrical and mechanical equipment repairing and testing instruments and a range of instruments and tools specialized for testing mechanical devices of trains

	<p>6.3 Professionalism in inspecting, testing and commissioning the mechanical equipment of trains</p> <ul style="list-style-type: none"> ◆ Inspect, test and commission the mechanical equipment of trains according to the standards and requirements for work safety, health, environmental protection and quality management of railway works
<p>7. Assessment Criteria</p>	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> (i) Capable to inspect and test efficiently the train bogies, gangways and couplers, and set the train height according to the standards; (ii) Capable to test efficiently the friction brake system and wheel slide protection devices of trains and set the pneumatic pressure of different brake levels of the brake system according to the standards; and (iii) Capable to test efficiently the train door system and set the train door loop protection according to the standards.
<p>8. Remarks</p>	<p>The credit value of this unit of competency is set on the presumption that the person already possesses knowledge of electrical and mechanical engineering.</p>