

1. Title	Inspect busbars and switchboard enclosures
2. Code	EMELIT203A
3. Range	Perform inspection for the fabrication and assembly of busbars and steel enclosures of switchboards at switchboard fabrication workshops or switch rooms.
4. Level	2
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Understand keypoints for busbar and switchboard enclosure inspection</p> <ul style="list-style-type: none"> ◆ Understand the mechanical structure of switchboard enclosures ◆ Understand the keypoints for busbar and switchboard enclosure inspection according to relevant international standards <p>6.2 Carry out electrical or mechanical structural inspection on busbars and switchboard enclosures according to relevant international standards</p> <ul style="list-style-type: none"> ◆ Use general testing instruments such as micro-resistance tester and insulation tester to conduct the following tests on busbar assembly: <ul style="list-style-type: none"> • Visual inspection • Insulation resistance test • Micro-resistance test • Tightness test of bolts to connection surface ◆ Use various types of switchboard enclosure testing tools such as feeler gauge, level, callipers and weigh meter to conduct the following tests: <ul style="list-style-type: none"> • Visual inspection • Level inspection • Alignment inspection • Bolt tightness inspectio
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to apply simple theories and operating principles of switchboard and relevant international standards to inspect the standard of busbar assemblies; and</p> <p>(ii) Capable to apply simple principles of switchboard mechanical structure and relevant international standards to inspect the assembly and sheet metal quality for switchboard enclosures.</p>
8. Remarks	