

1. Title	Inspect lifting wire ropes
2. Code	EMPEIT305A
3. Range	Inspect lifting wire ropes in general industrial plants, power plants or other places.
4. Level	3
5. Credits	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Noting points for inspecting lifting wire ropes</p> <ul style="list-style-type: none"> ◆ Understand the noting points for the inspection of lifting wire ropes <ul style="list-style-type: none"> • Requirements of the code of practice • Lifting rope types and applications ◆ Safety concerns for performing inspection procedures, including: <ul style="list-style-type: none"> • Use of tools and personal equipment <p>6.2 Procedures of inspecting lifting wire ropes</p> <ul style="list-style-type: none"> ◆ Know the procedures of inspecting lifting wire ropes, including: <ul style="list-style-type: none"> • Eliminate the internal strain of lifting ropes • Separate the lifting wire rope from the motor of lifting machine ◆ Know various types of testing methods including: <ul style="list-style-type: none"> • Visual inspection <ul style="list-style-type: none"> ▶ Corrosive condition of lifting wire ropes ▶ Deforming condition of lifting wire ropes ▶ Mechanical damage condition of lifting wire ropes • Dimension inspection <ul style="list-style-type: none"> ▶ Measurement of the radius and length of lifting wire ropes ◆ Select and use inspection tools and instruments properly <p>6.3 Professionalism in inspecting lifting wire ropes</p> <ul style="list-style-type: none"> ◆ Follow the requirements of the codes of practice and wire rope manufacturer's inspection guidelines to perform inspection of lifting ropes ◆ Know that the specifications of lifting wire ropes meet the legal requirements for safety
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to select and use appropriate tools to finish the inspection of lifting wire ropes according to the guidelines;</p> <p>(ii) Capable to clearly explain the procedures and work safety concerns for wire rope inspection; and</p> <p>(iii) Capable to understand rope manufacturer's requirements for wire rope replacement.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic mechanical installation skills and basic knowledge of the properties of wire rope materials.