

1. Title	Install suspension ropes of lift
2. Code	EMLEIN306A
3. Range	Arrange and implement the installation works of lift suspension ropes at construction sites.
4. Level	3
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Types, structure and tensile strength of lift suspension ropes and calculation of car and counterweight headroom</p> <ul style="list-style-type: none"> <li>◆ Understand different suspension ropes including: <ul style="list-style-type: none"> <li>• ordinary lay suspension ropes</li> <li>• regular lay suspension ropes</li> </ul> </li> <li>◆ Understand the structure of different suspension ropes including: <ul style="list-style-type: none"> <li>• fiber core</li> <li>• steel strand</li> <li>• steel wire</li> </ul> </li> <li>◆ Understand the tensile strength of different suspension ropes including: <ul style="list-style-type: none"> <li>• single tensile strength</li> <li>• dual tensile strength</li> </ul> </li> <li>◆ Understand the calculation of overhead runby for different lift cars and counterweights including: <ul style="list-style-type: none"> <li>• reduction of overhead runby by termination slowdown devices</li> <li>• reduction of overhead runby by using anti-rebound devices</li> </ul> </li> </ul> <p>6.2 Installation methods and procedures for suspension ropes</p> <ul style="list-style-type: none"> <li>◆ Formulate the installation procedure lists for different suspension ropes including: <ul style="list-style-type: none"> <li>• Enable to select suitable lifting gears</li> <li>• Enable to formulate the working procedure lists for lifting different lift cars</li> <li>• Enable to formulate the working procedure lists for the suspension ropes with different kinds of wrapping and roping ratio</li> </ul> </li> <li>◆ Effectively use different lifting gears to implement and assign completed lifting work for different lift cars including: <ul style="list-style-type: none"> <li>• lift cars with single wrap and roping ratio 1:1 or 2:1</li> <li>• lift cars with double wrap and roping ratio 1:1 or 2:1</li> <li>• anti-creep precautions for lift cars</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>◆ Effectively use different tools to implement and assign completed installation work for different suspension ropes including: <ul style="list-style-type: none"> <li>• laying of suspension ropes</li> <li>• attachment and termination of suspension rope</li> <li>• tensioners between suspension ropes</li> <li>• anti-creeping works of suspension ropes</li> </ul> </li> </ul> <p>6.3 Professionalism in full installation of suspension ropes</p> <ul style="list-style-type: none"> <li>◆ Apply manufacturer’s installation instructions and the code of practice for lift work safety to implement and assign completed installation work for different suspension ropes</li> <li>◆ Apply manufacturer’s installation instructions and the code of practice for lift design and construction to implement and assign completed testing work for different suspension ropes including: <ul style="list-style-type: none"> <li>• termination sockets of suspension rope</li> <li>• rope slacking devices</li> <li>• equalization of tension devices</li> <li>• safety guards for prevention objects falling into the grooves of pulley</li> </ul> </li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> <li>(i) Capable to arrange and assign completed installation and testing procedures for different lift suspension ropes systematically and through effective communication; and</li> <li>(ii) Capable to implement completed installation and testing for different lift suspension ropes under general or complicated situations in compliance with the prescribed standards.</li> </ul>
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses knowledge and skills in installing general lift suspension ropes.</p>