

1. Title	Install lift machine room's mechanical equipment
2. Code	EMLEIN302A
3. Range	Arrange and implement the installation of lift machine room's mechanical equipment at construction sites.
4. Level	3
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Structure, working principles and installation drawings of lift machine room's mechanical equipment</p> <ul style="list-style-type: none"> ◆ Understand the structure and working principles of different traction machines including: <ul style="list-style-type: none"> • 3-phase AC worm reduction gear traction machines • 3-phase AC helical gear traction machines • 3-phase AC gearless traction machines ◆ Understand the structure and working principles of different control cabinets including: <ul style="list-style-type: none"> • AC Variable Voltage (ACVV) control cabinet • AC Variable Voltage Variable Frequency (ACVVVF) control cabinet ◆ Understand the structure and working principles of different overspeed governors including: <ul style="list-style-type: none"> • one-way horizontal centrifugal governor • two-way horizontal centrifugal governor • one-way vertical flyball overspeed governor ◆ Understand the installation drawings of different machine room's mechanical equipment and the drawings include: <ul style="list-style-type: none"> • different traction machines • different control cabinets • different overspeed governors <p>6.2 Installation methods and procedures for machine room's mechanical equipment</p> <ul style="list-style-type: none"> ◆ Formulate the installation procedure lists for different machine room's mechanical equipment including: <ul style="list-style-type: none"> • different traction machines • different control cabinets • different overspeed governors ◆ Effectively use different lifting gears to implement and assign full lifting work for different machine room's mechanical equipment

	<p>6.3 Professionalism in full installation of machine room's mechanical equipment</p> <ul style="list-style-type: none"> ◆ Effectively use different tools and installation drawings of different machine room's mechanical equipment to implement and assign full installation work for all kinds of machine room's mechanical equipment ◆ Apply manufacturer's installation instructions and the code of practice for lift work safety to implement and assign full installation work for all kinds of machine room's mechanical equipment ◆ Apply manufacturer's installation instructions and the code of practice for lift design and construction to implement and assign full adjustment and testing work for different machine room's mechanical equipment including: <ul style="list-style-type: none"> • 3-phase AC worm reduction gear traction machines • 3-phase AC helical gear traction machines • 3-phase AC gearless traction machines • AC Variable Voltage variable (ACVV) control cabinet • AC Variable Voltage Variable Frequency (ACVVVF) control cabinet • one-way horizontal centrifugal governor • two-way horizontal centrifugal governor • one-way vertical flyball overspeed governor
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to arrange and assign full installation and adjustment procedures for different lift machine room's mechanical equipment systematically and through effective communication; and (ii) Capable to implement full installation and adjustment different lift machine room's mechanical equipment under general or complicated situations in compliance with the prescribed standards.
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 lift top machine room's mechanical equipment.</p>