

1. Title	Overhaul lift traction machines	
2. Code	EMLEOR312A	
3. Range	Arrange and implement overhauls of lift traction machines at field locations.	
4. Level	3	
5. Credit	3	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <div> <div> 6.1 Structure and working principles of lift traction machines </div> <div> <ul style="list-style-type: none"> ◆ Understand the structure and working principles of different kinds of traction motor including: <ul style="list-style-type: none"> • 3-phase AC induction motor • 3-phase AC slip-ring induction motor • 3-phase AC permanent-magnet motor • shunt DC motor • separate exciter DC motor ◆ Understand the structure and working principles of different kinds of traction machine including: <ul style="list-style-type: none"> • worm reduction gear traction machine • helical gear traction machine • gearless traction machine </div> </div> <div> <div> 6.2 overhaul methods and procedures for traction machines </div> <div> <ul style="list-style-type: none"> ◆ Formulate overhaul procedure lists for different kinds of traction machine, including: <ul style="list-style-type: none"> • selecting different kinds of suitable lifting gear • formulating work procedure lists for different kinds of lift car • formulating lifting procedure lists for different kinds of traction machine • Effectively use different lifting gears to implement and assign full lifting work for different kinds of lift car including • safety preparation works for shutdown • safety lifting the cars of single wrap with roping 1:1 and 2:1 • safety lifting the cars of double wrap with roping 1:1 and 2:1 • safe works of resumption operation ◆ Effectively use different lifting gears to implement and assign completed lifting work for traction machines ◆ Effectively use different tools to implement and assign completed disassembly and assembly work for traction machines </div> </div>	

	<p>6.3 Professionalism in full disassembly and assembly of traction machines</p> <ul style="list-style-type: none"> ◆ Apply manufacturer's repair instructions and the code of practice for lift work safety to implement and assign completed disassembly and assembly work for traction machines ◆ Apply manufacturer's repair instructions and the code of practice for lift design and construction to implement and assign completed adjustment and testing work for traction machines including: <ul style="list-style-type: none"> • 3-phase AC and DC worm reduction gear traction machine • 3-phase AC helical gear traction machine • 3-phase AC and DC gearless traction machine
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 completed inspection, disassembly, assembly and adjustment procedures for different kinds of lift traction machine systematically and through effective communication; and (ii) Capable to implement completed inspection, disassembly, assembly and adjustment of different kinds of lift traction machine under general or complicated situations in compliance with the prescribed standards of repair.
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 overhauling general lift traction machines.</p>