

1. Title	Supervise and analyze test run of steam turbine units and eliminate faults	
2. Code	EMPEIT502A	
3. Range	Supervise test run of steam turbine units and eliminate faults in general industrial plants, power plants or other places.	
4. Level	5	
5. Credits	6	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Working principles and functions of steam turbine units</p> <ul style="list-style-type: none"> ◆ Understand the working principles, functions and limitations of steam turbine units ◆ Understand the conditions, status and common faults of steam turbine units <p>6.2 Methods and procedures of supervising test run of steam turbine units and eliminating faults</p> <ul style="list-style-type: none"> ◆ Master basic knowledge of the detail test run of turbine units and monitor the test run <ul style="list-style-type: none"> • Conditions for the test run of steam turbine units • Steps for the test run of steam turbine units • Methods and important points for the test run of steam turbine units ◆ Master the causes of vibrations of rotating machinery and methods of eliminating them, analyze the causes of oil temperature rise for bearings and work out the handling method <ul style="list-style-type: none"> • Concepts of vibration and vibration standard for rotating machinery • General causes of rotating machinery vibration • Phenomenon, causes and elimination of oil whip • General causes of oil temperature rise for rotating machinery bearings and the handling method ◆ Master the analysis of the causes of common faults of steam turbine units and methods of elimination <ul style="list-style-type: none"> • Common defects occurred during detail test run of steam turbine units • Analysis and handling of common defects occurred during detail test run of steam turbine units ◆ Master the method of testing electric hydrogen system wind pressure, analyze the causes of defects and work out elimination methods <ul style="list-style-type: none"> • Methods and important points for testing wind pressure • Causes of common defects of wind pressure test and methods of elimination 	

	<p>6.3 Professionalism in supervising and analyzing test run of steam turbine units and eliminate faults</p> <ul style="list-style-type: none"> ◆ Master the selection of lubrication oil and control the oil pressure ◆ Follow manufacturer’s instructions and procedures to monitor and handle faults of steam turbine units ◆ Understand the code of safety and practical guidelines for monitoring, analyzing and eliminating faults
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to supervise and analyze test run of steam turbine units and handle faults; (ii) Capable to finish work test including correct layout and installation test and standards required; and (iii) Capable to compile reports on monitoring the test run of steam turbine units and elimination of faults.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses the competence in startup preparation, startup operation, normal operation and adjustment and shutdown operation of steam turbine.</p>