

1. Title	Shutdown operation of circulating cooling water systems										
2. Code	EMPEOM205A										
3. Range	Perform shutdown operation of circulating cooling water systems in general industrial plants, power plants or other places.										
4. Level	2										
5. Credits	3										
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <table border="0"> <tr> <td style="vertical-align: top;">6.1</td> <td style="vertical-align: top;">Principles for shutdown operation of circulating cooling water systems</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Understand the procedures for the shutdown operation of circulating cooling water systems <ul style="list-style-type: none"> • Confirm that the system unit has stopped • Confirm that the steam side of condenser has stopped operation ◆ Understand the preparations for the shutdown of circulating cooling water systems </td> </tr> <tr> <td style="vertical-align: top;">6.2</td> <td style="vertical-align: top;">Methods and procedures for the shutdown operation of circulating cooling water systems</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Perform system shutdown operation according to the operation procedure ◆ Make preparations for shutdown and know how to coordinate other ancillary equipment accordingly ◆ Perform post-shutdown maintenance and repair <ul style="list-style-type: none"> • Preventing corrosion • Cleaning pipes • Dirt and stability treatment • Anti-microbial fouling treatment </td> </tr> <tr> <td style="vertical-align: top;">6.3</td> <td style="vertical-align: top;">Professionalism in the shutdown operation of circulating cooling water systems</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Follow manufacturer's instructions and procedures for system shutdown operation to perform the shutdown tasks ◆ System shutdown operation should be performed in compliance with the safety requirements of working guidelines and the requirements of codes of practice </td> </tr> </table>		6.1	Principles for shutdown operation of circulating cooling water systems	<ul style="list-style-type: none"> ◆ Understand the procedures for the shutdown operation of circulating cooling water systems <ul style="list-style-type: none"> • Confirm that the system unit has stopped • Confirm that the steam side of condenser has stopped operation ◆ Understand the preparations for the shutdown of circulating cooling water systems 	6.2	Methods and procedures for the shutdown operation of circulating cooling water systems	<ul style="list-style-type: none"> ◆ Perform system shutdown operation according to the operation procedure ◆ Make preparations for shutdown and know how to coordinate other ancillary equipment accordingly ◆ Perform post-shutdown maintenance and repair <ul style="list-style-type: none"> • Preventing corrosion • Cleaning pipes • Dirt and stability treatment • Anti-microbial fouling treatment 	6.3	Professionalism in the shutdown operation of circulating cooling water systems	<ul style="list-style-type: none"> ◆ Follow manufacturer's instructions and procedures for system shutdown operation to perform the shutdown tasks ◆ System shutdown operation should be performed in compliance with the safety requirements of working guidelines and the requirements of codes of practice
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7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to perform shutdown operation of circulating cooling water systems under instruction and according to procedures; (ii) Capable to explain the shutdown procedures for circulating cooling water systems; (iii) Capable to complete report forms for shutting down the circulating cooling water systems; and (iv) Capable to clearly report the shutdown status of the circulating cooling water systems. 										
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of industry safety and mechanical operation.										