

1. Title	Repair low pressure and low flow water pumps									
2. Code	EMPERM203A									
3. Range	Perform repair of repair low pressure and low flow (hydraulic pressure below 10bar and flow rate below 200m ³ /hr) water pumps in general industrial plants, power plants or other places.									
4. Level	2									
5. Credits	6									
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;">Knowledge and requirements on repairing low pressure and low flow water pumps</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Understand the operating principle of different types of pumps low pressure and low flow water pumps ◆ Understand the methods of repairing different types of pumps low pressure and low flow water pumps </td> </tr> <tr> <td style="vertical-align: top;">6.2</td> <td style="vertical-align: top;">Methods and procedures of repairing low pressure and low flow water pumps</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Know how to use appropriate tools to diagnose the operational problems of low pressure and low flow water pumps, such as <ul style="list-style-type: none"> • Water pumps losing pressure • Noises and vibration • Water pumps leaking water • Performance of water pumps weakening • Operating current being too high ◆ Know how to use appropriate tools to assemble and disassemble low pressure and low flow water pumps ◆ Know how to use different methods to repair low pressure and low flow water pumps <ul style="list-style-type: none"> • Check the damaged or malfunctioned parts of water pumps • Repair or replace the parts ◆ Perform testing of low pressure and low flow water pumps after repair </td> </tr> <tr> <td style="vertical-align: top;">6.3</td> <td style="vertical-align: top;">Professionalism in repairing low pressure and low flow water pumps</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Follow the manufacturer's instructions to repair low pressure and low flow water pumps ◆ Control the repair work progress according to the engineering requirements so as to meet the quality standards ◆ Understand the working guidelines of the safety regulations ◆ Select and use repairing tools and instruments properly </td> </tr> </table>	6.1	Knowledge and requirements on repairing low pressure and low flow water pumps	<ul style="list-style-type: none"> ◆ Understand the operating principle of different types of pumps low pressure and low flow water pumps ◆ Understand the methods of repairing different types of pumps low pressure and low flow water pumps 	6.2	Methods and procedures of repairing low pressure and low flow water pumps	<ul style="list-style-type: none"> ◆ Know how to use appropriate tools to diagnose the operational problems of low pressure and low flow water pumps, such as <ul style="list-style-type: none"> • Water pumps losing pressure • Noises and vibration • Water pumps leaking water • Performance of water pumps weakening • Operating current being too high ◆ Know how to use appropriate tools to assemble and disassemble low pressure and low flow water pumps ◆ Know how to use different methods to repair low pressure and low flow water pumps <ul style="list-style-type: none"> • Check the damaged or malfunctioned parts of water pumps • Repair or replace the parts ◆ Perform testing of low pressure and low flow water pumps after repair 	6.3	Professionalism in repairing low pressure and low flow water pumps	<ul style="list-style-type: none"> ◆ Follow the manufacturer's instructions to repair low pressure and low flow water pumps ◆ Control the repair work progress according to the engineering requirements so as to meet the quality standards ◆ Understand the working guidelines of the safety regulations ◆ Select and use repairing tools and instruments properly
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7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: <ul style="list-style-type: none">(i) Capable to perform low pressure and low flow water pump repair under instruction;(ii) Capable to perform testing under instruction after repair;(iii) Capable to report the status of repair of low pressure and low flow water pumps; and(iv) Capable to complete repairing report forms for low pressure and low flow water pumps.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses the competency of EMPEIN101A “Assist in installing various types of water pumps or the same type of pumps”.