## Automation Management

### Automation Systems Maintenance

**TSC Description**
Maintain automation systems to meet operation requirements as well as propose strategies for the automation systems performance improvement

<table>
<thead>
<tr>
<th>TSC</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<tbody>
<tr>
<td>ELE-RAO-1004-1.1</td>
<td>ELE-RAO-2004-1.1</td>
<td>ELE-RAO-3004-1.1</td>
<td>ELE-RAO-4004-1.1</td>
<td>ELE-RAO-5004-1.1</td>
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<tr>
<td><strong>Proficiency Description</strong></td>
<td>Carry out autonomous maintenance activities on machines and equipment</td>
<td>Perform inspections and plan for parts replacement needed related to wear and tear</td>
<td>Maintain automation systems and interpret system performance metrics for performance verification</td>
<td>Manage major maintenance of automation systems and troubleshoot abnormalities to ensure prompt system recovery</td>
<td>Formulate strategies for automation systems performance improvement through the analysis of automation systems performance metrics</td>
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### Knowledge

- Activities to eliminate the losses during to maintenance
- Steps in autonomous maintenance
- Equipment cleaning and inspection techniques and standards
- Common hand tools used
- Common Equipment abnormalities
- Corrective actions to eliminate abnormalities identified

### Abilities

- Conduct equipment cleaning and inspection activities
- Carry out corrective actions against abnormalities
- Troubleshoot basic robot issues
- Optimise basic robot functions
- Maintain uptime performance
- Interpret robot’s performance data and maintenance schedules
- Interpret simple electrical schematic and mechanical design diagrams
- Maintain Automated Material Handling System (AMHS) equipment by dis-assembling and replacing worn parts

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