## TSC Category
### Maintenance

### TSC Description
Maintain tools and equipment to meet operation requirements as well as propose strategies for tools and equipment performance improvement

<table>
<thead>
<tr>
<th>TSC Proficiency Description</th>
<th>Level 1</th>
<th>Level 2</th>
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<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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</thead>
<tbody>
<tr>
<td><strong>Upkeep common tools and workshop equipment</strong></td>
<td>PRE-MAI-1014-1.1</td>
<td>PRE-MAI-2014-1.1</td>
<td>PRE-MAI-3014-1.1</td>
<td>PRE-MAI-4014-1.1</td>
<td>PRE-MAI-5014-1.1</td>
<td>PRE-MAI-6014-1.1</td>
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<tr>
<td>Interpret possible equipment failures based on fault indicators and take measures to recover tools and equipment</td>
<td>Implement tools and equipment maintenance operations to maintain the performance of the tools and equipment</td>
<td>Manage tools and major equipment maintenance, troubleshooting and tool recovery</td>
<td>Formulate strategies for tools and equipment performance improvement by analysing the performance metrics</td>
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### Knowledge
- Awareness of work safety and possible danger
- Types and function of common tools and workshop equipment
- Proper methods of handling common tools and workshop equipment
- Correct ergonomic postures and handling of the tools and equipment
- Possible causes of tools, components and equipment damage
- Proper maintenance of tools and equipment
- Types of electrical controls and warning devices
- Equipment functions and operating principles
- Fault diagnostic procedures
- Testing procedures
- Tools and equipment operation and safety requirements
- Functionality of tools and equipment
- Concept and application of maintenance procedures on tools and equipment
- Concept and application of major maintenance on tools and equipment
- Troubleshooting of tools and equipment
- Problem solving techniques
- Tools and equipment performance metrics

### Abilities
- Plan the maintenance of common tools and workshop equipment
- Operate the various tools and equipment to check for functionality
- Check common tools and workshop equipment for non-conformance
- Repair or replace faulty tools and equipment
- Replenish oil and/or lubricant supplies
- Conduct pre-operational checks and inspections to verify working conditions of tools and equipment
- Apply appropriate techniques to determine the fault
- Determine fault codes from test equipment
- Rectify fault(s) using correct techniques, procedures, tools and equipment
- Verify performance of tools and equipment
- Identify tools and equipment functions in the manufacturing process
- Prepare tools and equipment for basic maintenance
- Perform tools and equipment maintenance
- Verify performance of tools and equipment
- Set up the tools and equipment for operational readiness
- Prepare tools and equipment for major maintenance
- Perform tools and equipment major maintenance
- Verify performance of tools and equipment
- Troubleshoot any abnormalities detected
- Resume tools and equipment to operational readiness
- Analyse tools and equipment performance metrics in accordance with equipment specifications
- Select appropriate project that will improve tools and equipment performance
- Define project scope of work and the number of hours based on business requirements
- Execute project in accordance with project plan
| • Create ideas to fool-proof possible selection of wrong tools  
  • Establish orderly storage and differentiation of similar tools for ease of retrieval  
  • Report damaged or dysfunctional tools and equipment for rectification, repair or replacement | • Set up the tools and equipment for operational readiness | • Evaluate project effectiveness in accordance with project objectives  
  • Recommend follow up actions |