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| Reference. No. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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### SELF - ASSESSMENT GUIDE

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| Qualification:   | <b>MOLD MAKING NC III</b>  |           |  |
| Units of Competency Covered:   | <ul style="list-style-type: none"> <li>• <b>Machine mold components</b></li> <li>• <b>Implement surface finishing</b></li> <li>• <b>Fit and assemble mold</b></li> <li>• <b>Rectify mold flaw</b></li> </ul> |           |  |
| Instruction: <ul style="list-style-type: none"> <li>• Read each of the questions in the left-hand column of the chart.</li> <li>• Place a tick in the appropriate box opposite each question to indicate your answer.</li> </ul> |  |           |  |
| <b>Can I?</b>  | <b>YES</b>   | <b>NO</b> |  |
| <ul style="list-style-type: none"> <li>• <b>Determine job requirements*</b></li> </ul>   |  |           |  |
| - Interpret drawing to produce mold components according to drawing specifications   |  |           |  |
| - Determine sequence of operation to produce mold component according to specification   |  |           |  |
| - Select cutting tools according to the requirements of the operation  |  |           |  |
| <ul style="list-style-type: none"> <li>• <b>Prepare the CAM environment*</b></li> </ul>  |  |           |  |
| - Obtain all relevant manuals, instructions and operating procedures for the CAM software in accordance with the standard operating procedures   |  |           |  |
| - Boot up CAM package in accordance with the standard operating procedures   |  |           |  |
| - Set screen display areas and tools and workpiece parameters in accordance with instructions  |  |           |  |
| <ul style="list-style-type: none"> <li>• <b>Generate CNC machining program*</b></li> </ul>   |  |           |  |
| - Prepare 3D CAD drawing according to appropriate machining sequence   |  |           |  |
| - Create machining program of mold components using CAM software   |  |           |  |
| - Generate machining program in standard CNC operations, code and format in accordance with SOP  |  |           |  |
| <ul style="list-style-type: none"> <li>• <b>Edit CNC program*</b></li> </ul>   |  |           |  |
| - Simulate program using CAM software according to SOP   |  |           |  |

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| - Edit program using CAM software according to SOP                          |  |  |
| - Save and downloads edited program to machine according SOP                |  |  |
| <b>• Set-up machine and cutting tools*</b>                                  |  |  |
| - Set machine zero point to required position                               |  |  |
| - Set cutting tool to required position using pre-setting device            |  |  |
| - Position cooling medium according to SOP                                  |  |  |
| - Perform cuttings tool and holders set-up according to SOP                 |  |  |
| <b>• Set up workpiece*</b>  |  |  |
| - Mount workpiece on the machine using clamping device                      |  |  |
| - Align workpiece using gauges  |  |  |
| - Determine workpiece reference point based on generated program            |  |  |
| <b>• Dry run program*</b>   |  |  |
| - Download program to CNC machine   |  |  |
| - Edit program according to the required tool path                          |  |  |
| - Edit program based on available cutting tool                              |  |  |
| - Perform program dry run in accordance with the desired tool path movement |  |  |
| <b>• Perform trial cut on workpiece*</b>                                    |  |  |
| - Machine workpiece as program  |  |  |
| - Check workpiece dimension using appropriate measuring instruments         |  |  |
| - Edit program and adjusts tool parameters as required                      |  |  |
| <b>• Perform machining of workpiece*</b>                                    |  |  |
| - Machine workpiece based on final program                                  |  |  |
| - Inspect workpiece dimension using appropriate measuring instruments       |  |  |
| - Edit and re-run program as required                                       |  |  |

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| <ul style="list-style-type: none"> <li>• <b>Perform machine shut down*</b></li> </ul>  |  |  |
| <ul style="list-style-type: none"> <li>- Clean and remove machined workpiece in accordance to workplace procedures</li> </ul>                    |  |  |
| <ul style="list-style-type: none"> <li>- Remove tools and holders as required</li> </ul>   |  |  |
| <ul style="list-style-type: none"> <li>- Shut down the machine in accordance with SOP</li> </ul>   |  |  |
| <ul style="list-style-type: none"> <li>• <b>Perform housekeeping*</b></li> </ul>   |  |  |
| <ul style="list-style-type: none"> <li>- Clean machine and tools in accordance with workplace procedures</li> </ul>                              |  |  |
| <ul style="list-style-type: none"> <li>- Dispose waste material according to environmental standard</li> </ul>                                   |  |  |
| <ul style="list-style-type: none"> <li>• <b>Determine job requirements for surface finishing*</b></li> </ul>                                     |  |  |
| <ul style="list-style-type: none"> <li>- Interpret drawing to determine mold finishing requirements</li> </ul>                                   |  |  |
| <ul style="list-style-type: none"> <li>- Determine sequence of operation to produce the required finishing according to specification</li> </ul> |  |  |
| <ul style="list-style-type: none"> <li>- Select finishing tool, equipment and supplies according to the requirement of the operation</li> </ul>  |  |  |
| <ul style="list-style-type: none"> <li>• <b>Prepare mold components*</b></li> </ul>  |  |  |
| <ul style="list-style-type: none"> <li>- Identify components for surface finishing based on parts drawing</li> </ul>                             |  |  |
| <ul style="list-style-type: none"> <li>- Set up mold component according to workplace procedures</li> </ul>                                      |  |  |
| <ul style="list-style-type: none"> <li>- Set up components in accordance with safety procedures and using PPE</li> </ul>                         |  |  |
| <ul style="list-style-type: none"> <li>• <b>Set-up surface finishing tools and equipment*</b></li> </ul>   |  |  |
| <ul style="list-style-type: none"> <li>- Determine type of surface finish according to specification</li> </ul>                                  |  |  |
| <ul style="list-style-type: none"> <li>- Prepare tools and equipment according to work requirements</li> </ul>                                   |  |  |
| <ul style="list-style-type: none"> <li>- Set up surface finishing tools and equipment according to SOP</li> </ul>                                |  |  |
| <ul style="list-style-type: none"> <li>• <b>Perform surface finishing*</b></li> </ul>  |  |  |
| <ul style="list-style-type: none"> <li>- Perform surface finishing of mold in accordance with safety procedure and using PPE</li> </ul>          |  |  |
| <ul style="list-style-type: none"> <li>• <b>Perform equipment shutdown*</b></li> </ul>   |  |  |
| <ul style="list-style-type: none"> <li>- Clean and remove finished workpiece in accordance to workplace procedures</li> </ul>                    |  |  |
| <ul style="list-style-type: none"> <li>- Remove tools and holders as required</li> </ul>   |  |  |

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| - Shut down the equipment in accordance with SOP                                   |  |  |
| <b>• Perform housekeeping*</b>   |  |  |
| - Clean equipment and tools used in accordance workplace procedures                |  |  |
| - Keep unused supplies in accordance with workplace procedures                     |  |  |
| - Dispose waste material according to environmental standard                       |  |  |
| <b>• Determine mold components to be fitted*</b>                                   |  |  |
| - Interpret assembly drawing to determine mold components to be fitted             |  |  |
| - Check quantity of mold components and standard parts                             |  |  |
| - Identify fitting tool , equipment and supplies according to work requirements    |  |  |
| <b>• Perform mold components assembly*</b>   |  |  |
| - Perform assembly of components in accordance with safety procedures and uses PPE |  |  |
| - Perform assembly according to required sequence                                  |  |  |
| - Perform fitting and aligning of mold components according to assembly procedure  |  |  |
| - Assemble mold components according to assembly drawing                           |  |  |
| <b>• Perform housekeeping for assembly*</b>  |  |  |
| - Clean and keep tools and equipment used in accordance with workplace procedures  |  |  |
| - Keep unused supplies in accordance with workplace procedures                     |  |  |
| - Dispose waste material according to environmental standard                       |  |  |
| <b>• Identify and analyze mold flaws*</b>  |  |  |
| - Inspect molded products for presence of defects                                  |  |  |
| - Identify mold flaws based of observe products defects                            |  |  |
| - Identify and analyses mold components attributed to flaws                        |  |  |

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| <ul style="list-style-type: none"> <li>• <b>Correct/ Modify mold flaws*</b></li> </ul>  |                     |  |
| <ul style="list-style-type: none"> <li>- Determine corrective action based on flaws</li> </ul>  |                     |  |
| <ul style="list-style-type: none"> <li>- Disassemble mold for correction according to workplace procedures</li> </ul>   |                     |  |
| <ul style="list-style-type: none"> <li>- Correct identified mold components</li> </ul>  |                     |  |
| <ul style="list-style-type: none"> <li>- Assemble mold according to assembly drawing</li> </ul>   |                     |  |
| <p>I agree to undertake assessment in the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.</p> |                     |  |
| <p><b>Candidate's Name &amp; Signature:</b></p>   | <p><b>Date:</b></p> |  |