***P&ID Walkdown Testing Procedure:***

***HOW TO USE THIS DOCUMENT:***

**1) Description of Test**

The objective of the test is to verify all direct impact components are installed and orientated correctly as per the functional illustration on the P&ID.

**2) Linkage to Requirements Challenged**

Confirm correct installation and orientation of direct impact components as per the P&ID schematic illustration.

**3) Acceptance Criteria**

All direct impact components are functionally installed and orientated correctly as per the P&ID specification.

**4) Prerequisites and/or Assumptions**

1. All commissioning activities are complete and commissioning punch-list items are closed out.
2. All testers shall be trained and educated in the test method listed in section-5 below: it is crucial to the success of the testing effort that the testing process be well understood by all participants.

**5) Test Method**

1. On a blank copy of the P&ID draw in the direct-impact system boundary in black-ink
2. Walk down the P&ID and using a yellow-highlighter confirm each component is correctly installed and orientated as represented on the P&ID
3. Confirm all component tag numbers are correct
4. Confirm all lines are correctly labelled
5. Confirm all lines where applicable are correctly insulated
6. Ensure all flow direction components are orientated correctly
7. Ensure all instruments indicators are orientated correctly so as operators can readily view them in the field
8. Ensure all commissioning filters are installed in filter-housings
9. On the P&ID any additions shall be drawn in using blue-ink, any deletions shall be crossed-out using red ink, comments shall be inserted using green-ink, and sign and date any entries on the P&ID using black-ink

**6) Expected Results and Actual results**

1. In the IQ GMP test-sheet(s) overleaf, reach a conclusion as to whether each test step has been successfully completed by transcribing bold text from the ‘Expected Results’ column into the corresponding ‘Actual Results’ field.
2. Assess each step listed and determine whether the step has passed or failed.
3. The person performing the test should be identified and the date the testing was performed should be recorded.
4. At the bottom of the test script a validation peer (other than the person performing the test) shall review the script post execution.
5. Quality Assurance (QA) shall approve the completed test.

**P&ID Walkdown Installation Verification and Validation Protocol GMP Checksheet**

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| P&ID # |  |
| P&ID Description |  |

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| --- | --- | --- | --- | --- | --- |
|  | **Test Step** | **Expected Results** | **Actual Results** | **Pass / Fail** | **Initials and Date****(dd/mmm/yyyy)** |
| 1 | Walk down the P&ID and using a yellow-highlighter confirm each component is correctly installed and orientated as represented on the P&ID | **Components correctly installed** |  |  |  |
| 2 | Confirm all component tag numbers are correct | **Tag numbers correct** |  |  |  |
| 3 | Confirm all lines are correctly labelled | **Lines correctly labelled** |  |  |  |
| 4 | Confirm all lines where applicable are correctly insulated | **Lines correctly insulated** |  |  |  |
| 5 | Ensure all flow direction components are orientated correctly | **Flow directions correct** |  |  |  |
| 6 | Ensure all instruments indicators are orientated correctly so as operators can readily view them | **Indicators orientated correctly** |  |  |  |
| 7 | Ensure all commissioning filters are installed in filter-housings | **Filters installed** |  |  |  |

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|  | **Comments:** |  |
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|  | **Validation Peer Review** |  |  |  |  |  |
|  | **Print Name** |  | **Signature** |  | **Date** |  |

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|  | **QA Approval** |  |  |  |  |  |
|  | **Print Name** |  | **Signature** |  | **Date** |  |