

E-Track System

Makson Healthcare Pvt. Ltd.

Installation Qualification Document

The document details the summary of Installation qualification and approach for the development of E-Track System for Makson Healthcare.

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Revision History

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| Revision Number | Date | Prepared By | Reviewed By | Comment |
| 1.0 | 31-July-2023 | Leena Patil | Abhishek Palwankar, Mayur Ghole | Installation Qualification Protocol |

Table of Contents

[1 Protocol Approval 1](#_Toc141714269)

[2 Objective 2](#_Toc141714270)

[3 Scope 2](#_Toc141714271)

[4 Responsibilities System Description 3](#_Toc141714272)

[5 Brief Process description 4](#_Toc141714273)

[6 Hardware IQ 5](#_Toc141714274)

[6.1 Barcode Scanner 5](#_Toc141714275)

[6.2 CIJ Printer 6](#_Toc141714276)

[6.3 PAM Machine 7](#_Toc141714277)

[6.4 Thermal Transfer Printer 7](#_Toc141714278)

[6.5 Identification & Verification of Utility Components 9](#_Toc141714279)

[6.6 Verification Of Installed Components 9](#_Toc141714280)

[6.7 Submitted Documents 10](#_Toc141714281)

[7 Software IQ 11](#_Toc141714282)

[7.1 Dev cum QAS Environment 11](#_Toc141714283)

[7.2 Track and Trace Application System Software Installation 12](#_Toc141714284)

[7.3 Verification of System Installation & Details 13](#_Toc141714285)

[7.4 Plant (PC Application) 14](#_Toc141714286)

[7.5 Client (2D Barcode Printing Area) 14](#_Toc141714287)

[7.6 Track and Trace Application 14](#_Toc141714288)

[7.7 Document Abbreviations 15](#_Toc141714289)

[7.8 Deviation report 15](#_Toc141714290)

[8 Conclusion 16](#_Toc141714291)

[9 Protocol Post Approval 17](#_Toc141714292)

# Protocol Approval

|  |  |  |
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| **Department** | **Name** | **Designation** | **Signature & Date** |
| Software | Ritu Kapoor | Head of Engineering |  |

# Objective

Installation Qualification (IQ) determine the hardware and the software used for E-Track is properly installed as per the Design Specifications.

**Hardware IQ**: The Hardware IQ describes the proper setup of the barcode instruments. The hardware IQ procedure ensures that the hardware can properly communicate with the E-Track software installed on the computer.

**Software IQ**: The Software IQ describes the software and the other supporting software installed properly and communicates with the hardware. Also the computer system must be setup and minimum operating requirement must be verified.

# Scope

The scope of this document is limited to outline procedure / provide methodology for the installation qualification of equipment / system within the following boundaries,

* Identification and verification of documents
* Identification and verification of supporting utilities
* Verification of equipment installation & details
* Verification of major components and accessories including specifications

# Responsibilities System Description

Online Quality Inspection/Maintenance is one of the most crucial aspects of the production line. BCI contributes towards serenity of the same. BCI 2D Barcode (2Dbarcode reading system) system mainly consists following major stations.

**Barcode scanner:**

Aggression scanning- As per defined pack size user can manually scan 2D code or secondary carton by using hand held scanner.

**CIJ Printer:**

Printing method will be continues inkjet printer. Print DPI capacity will be 71 to 115 DPI and it will print 12X12 2D barcode with 5 numbers of human readable lines.

**PAM Machine:**

Printing method will be thermal transfer printer. Print DPI capacity will be 300 DPI and it will print 12X12 2D barcode with 5 numbers of human readable lines.

**Zebra ZD230T-Thermal Transfer Printer**

Completion of the Pack size thermal transfer printer will print the shipping label.

**PC configuration:**

Intel(R) Xeon(R) CPU E3-1220 V3 3.10GHz 3.10 GHz 64-bit OS

16 GB RAM 1 TB Hard Drive.

Software Name – E Track Application, Version – v2.0.8608.30669 Developed in Microsoft Visual studio.

# Brief Process description

* User will select the production details in the system installed on conveyor before starting the process.
* User standing starting at conveyor keeps bunch of empty secondary cartons on conveyor.
* CIJ printer and PAM machine will be printing the 2D barcode and human readable data on the secondary cartons.
* Empty cartons manually move to packing line.
* Aggregation scanning - User will print the shipper label by thermal transfer printer as per batch details and manually past on the shipper box.
* After scanning the shipper label, user will start the secondary cartons scanning by handheld wired scanner till pack size completed.
* After completion of packing of shipper box user will follow the same process for next shipper.

# Hardware IQ

**Purpose:** The purpose of this test is to verify the details of the subjected system.

**Test procedure:** Verify the make, model no of the system components from the nameplate.

Record the location of the system component, mounting details & total no’s.

**Acceptance criteria:** The observed details for the given parameters should be same as the

Specifications.

## Barcode Scanner

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr.No** | **Parameter / Description** | **Specification** | **Observation** |
| 1 | Name | Barcode Scanner |  |
| 2 | Make | Zebra |  |
| 3 | Model | DS2278 (Qty 5 nos) |  |
| 4 | S/N | 22358523448112  22358523448120  22358523448125  22358523448127  22358523448271 |  |
| 5 | Communication | USB |  |

**Packing List:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Item** | **Available (Yes/No)** | **Remarks** |
| 1 | DS2278 |  |  |
| 2 | USB Communication Cable |  |  |
| 3 | Power Adapter |  |  |
| 4 | Power Cord |  |  |

## CIJ Printer

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr.No** | **Parameter / Description** | **Specification** | **Observation** |
| 1 | Name | 9450 1.1 G |  |
| 2 | Make | Marken-Imaje |  |
| 3 | Model | 9450 1.1 G |  |
| 4 | S/N | N23300008 |  |
| 5 | Communication | Ethernet |  |

**Packing List:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Item** | **Available (Yes/No)** | **Remarks** |
| 1 | 9450 1.1 G |  |  |
| 2 | Ethernet Communication Cable |  |  |
| 3 | Power Adapter |  |  |
| 4 | Power Cord |  |  |

## PAM Machine

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr.No** | **Parameter / Description** | **Specification** | **Observation** |
| 1 | Name | 2200 TAMP-BLOW |  |
| 2 | Make | Marken-Imaje |  |
| 3 | Model | 2200 TAMP-BLOW |  |
| 4 | S/N |  |  |
| 5 | Communication | Ethernet |  |

**Packing List:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Item** | **Available (Yes/No)** | **Remarks** |
| 1 | 2200 TAMP-BLOW |  |  |
| 2 | USB Communication Cable |  |  |
| 3 | Power Adapter |  |  |
| 4 | Power Cord |  |  |

## Thermal Transfer Printer

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr.No** | **Parameter / Description** | **Specification** | **Observation** |
| 1 | Name | Thermal Transfer Printer |  |
| 2 | Make | Zebra |  |
| 3 | Model | ZT230T (Qty 5 nos) |  |
| 4 | S/N | D5J225106129  D5J225106155  D5J225106188  D5J225106192  D5J225106289 |  |
| 5 | Communication | USB |  |

**Packing List:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Item** | **Available (Yes/No)** | **Remarks** |
| 1 | ZT230T |  |  |
| 2 | USB Communication Cable |  |  |
| 3 | Power Adapter |  |  |
| 4 | Power Cord |  |  |

## Identification & Verification of Utility Components

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **Name** | **Current** | **Voltage** | **Phase** | **Observation** |
| 1 | DS2278 | 1A | 5VDC | Single |  |
| 2 | 9450 1.1 G | 1.25A | 240V | Single |  |
| 3 | 2200 TAMP-BLOW | 300 mA | 24VDC | Single |  |
| 4 | ZT230T | 2.5A | 24VDC | Single |  |

## Verification Of Installed Components

|  |  |  |  |
| --- | --- | --- | --- |
| **Equipment Name** | **Make** | **Model** | **Serial Number** |
| Barcode Scanner | Zebra | DS2278 | 22358523448112  22358523448120  22358523448125  22358523448127  22358523448271 |
| CIJ Printer | Marken-Imaje | 9450 1.1 G | N23300008 |
| PAM Machine | Marken-Imaje | 2200 TAMP-BLOW |  |
| Thermal Transfer Printer | Zebra | ZT230T | D5J225106129  D5J225106155  D5J225106188  D5J225106192  D5J225106289 |

## Submitted Documents

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Document Name** | **Available**  **( Yes / No )** | **Remarks** |
| Barcode Scanner | Specification sheet |  |  |
| CIJ Printer | Specification Sheet |  |  |
| PAM Machine | Specification Sheet |  |  |
| Thermal Transfer Printer | Specification Sheet |  |  |

# Software IQ

## Dev cum QAS Environment

| **Step #** | **Verification Steps** | **Available**  **(Yes / No)** | **Remark** |
| --- | --- | --- | --- |
| 1 | IIS 6 or above \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 2 | .NET Framework 4.6.2 or above \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 3 | Database \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| 4 | Miscellaneous Software (If any) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |

## Track and Trace Application System Software Installation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **Description** | | **Available**  **( Yes / No )** | | **Remark** |
| Web Application | Refer the Installation Document for hosting the website in Server.  Open the browser and access the Link  <http://192.168.100.10:8080/Login_NEW.aspx>  The Web Site Should Open with Login Page |  | |  | |
| Client Software | Refer the Installation Document and run the setup for Client application.  Double Click on the Track and Trace Application  Icon from desktop. The Client application opens a login window. |  | |  | |

## Verification of System Installation & Details

**Purpose:** To verify that the system is installed properly as per the specifications / requirements, system has been installed as per the installation manual and it has been cleaned & cleared of debris.

**Acceptance criteria:** The system should be installed as per the specifications.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter / Description** | **Specification** | **Observations** | | |
| Physical Condition | No Physical damage to the system after locating on the final site of installation |  | | |
| Physical Installation | Installation should be as per the Specification |  |  |  |  |  |
| Cleanliness | All access ports are examined and cleared of any debris |  | | |

## Plant (PC Application)

**Client (Packing Area)**

|  |  |  |
| --- | --- | --- |
| **Item** | **Available (Yes/No)** | **Remarks** |
| Intel Core i3 processor 6100 3.70 GHz |  |  |
| Memory ([4GB](mailto:CPU@3.70Ghz,4GB#inbox/_blank) RAM or greater) |  |  |
| Available disk space( 400 GB HDD or grater) |  |  |

## Client (2D Barcode Printing Area)

|  |  |  |
| --- | --- | --- |
| **Item** | **Available (Yes/No)** | **Remarks** |
| Intel Core i3 processor 6100 3.70 GHz |  |  |
| Memory ([4GB](mailto:CPU@3.70Ghz,4GB#inbox/_blank) RAM or greater) |  |  |
| Available disk space( 400 GB HDD or grater) |  |  |

## Track and Trace Application

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Parameter/**  **Description** | **Specification** | **Observation** |
| 1 | Name | Track and Trace Application |  |
| 2 | Version | v2.0.8608.30669 |  |

## Document Abbreviations

|  |  |
| --- | --- |
| **Component** | **Description** |
| CIJ | Contineous Ink jet |
| BCI | Bar Code India Limited |
| BOM | Bill of Material |
| LAN | Local Area Network |
| SRS | Software Requirements Specification |
| URS | User Requirement Specification |
| UAT | User Acceptance Testing |
| NA | Not Available |

## Deviation report

|  |  |  |
| --- | --- | --- |
| **Deviation if any** | **Available**  **[ Yes / No ]** | **Remark** |
|  |  |  |

# Conclusion

# Protocol Post Approval

|  |  |  |
| --- | --- | --- |
| **Prepared By** | | |
| **Name** | **Designation** | **Signature & Date** |
| Leena Patil | Technical Writer |  |
| **Checked** **By** | | |
| **Name** | **Designation** | **Signature & Date** |
| Abhishek Palwankar | Project Manager |  |
| Mayur Ghole | Project Manager - Automation |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Approved By** | | | |
| **Department** | **Name** | **Designation** | **Signature & Date** |
| Software | Ritu Kapoor | Head of Engineering |  |

Installation Qualification Document

2D Barcode Machine, P&G

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