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| **Project Specification / Requirement Document** | |
| **Print Mark Cross-Cutter** | |
|  | |
|  |  |
| Date: | 18/12/2023 |
| Author | Sahil Kasliwal |

1. Project

|  |  |  |
| --- | --- | --- |
|  | Customer Name | B&R Industrial Automation |
|  | Location / Address | Pune |
|  | Machine Name | Print Mark Cross - Cutter |
|  | Machine Type |  |
|  | Industry Type | Textile Industry |

Table 1: Project

1. Versions

|  | Version | Date | Comment | Corresponding Project Name | Edited by |
| --- | --- | --- | --- | --- | --- |
|  | 1.0 | 12/12/2023 | First Version | V1 |  |
|  | 2.0 | 14/12/2023 | Second Version | V2 |  |
|  | 3.0 | 17/12/2023 | Final Version | V3 |  |
|  |  |  |  |  |  |

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# Requirement / Specification for Project

## Objective

|  |
| --- |
| To design an Automation Solution consisting of two axis for detecting print mark and cutting the product the as per the length given. |

# Hardware Schematic

|  |
| --- |
|  |

# Machine Details

## Units

### Auto Control

A Central Auto Control is established within the logic to control PID Controlling of all four zones together as well as through individual methods.

### Conveyor Control

Logic to control the conveyor axis and its homing procedure.

### Cutter Control

Logic to control the cutter axis and its homing procedure.

### Infrastructure Solutions

Alarms and Data Recorder are the Infrastructure Solutions added onto the logic which cover all the specifications.

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## 

# Mode of operations

## 4.1 Automatic Mode

Cutting Process starts after homing is done and it continues till the stop command is given.

And there are two cutters for dual mode. Can operate it into Single cutter or can use Dual Cutter

## 4.2 Manual Mode

Can Manually Turn on or off the drives. Can give basic jog commands

# Visualization

# 5.1 Alarm

|  |  |  |  |
| --- | --- | --- | --- |
| **Alarm Text** | | **Alarm Condition** | |
| Alarm for Cutting Zone | Machine does not start if cutter is in cutting zone | |
| Alarm for Products without PM | Machine Stops after a certain limit exceeds. | |
| Alarm for Drives | General Alarms for drives are displayed on Alarms | |

## Password Level

|  |  |
| --- | --- |
| **Level** | **User** |
| 0 | Anonymous |
| 1 | Operator |
| 2 | Admin |

# Working Hours

|  | **Details** |
| --- | --- |
| Timing | 9:30 AM TO 6 PM |
| Working days | Monday – Sunday |
| Starting Date | 11/12/2023 |
| No of days required | 7 |
| Agreed Date | 17/12/2023 |
| Agreed Days | 7 |