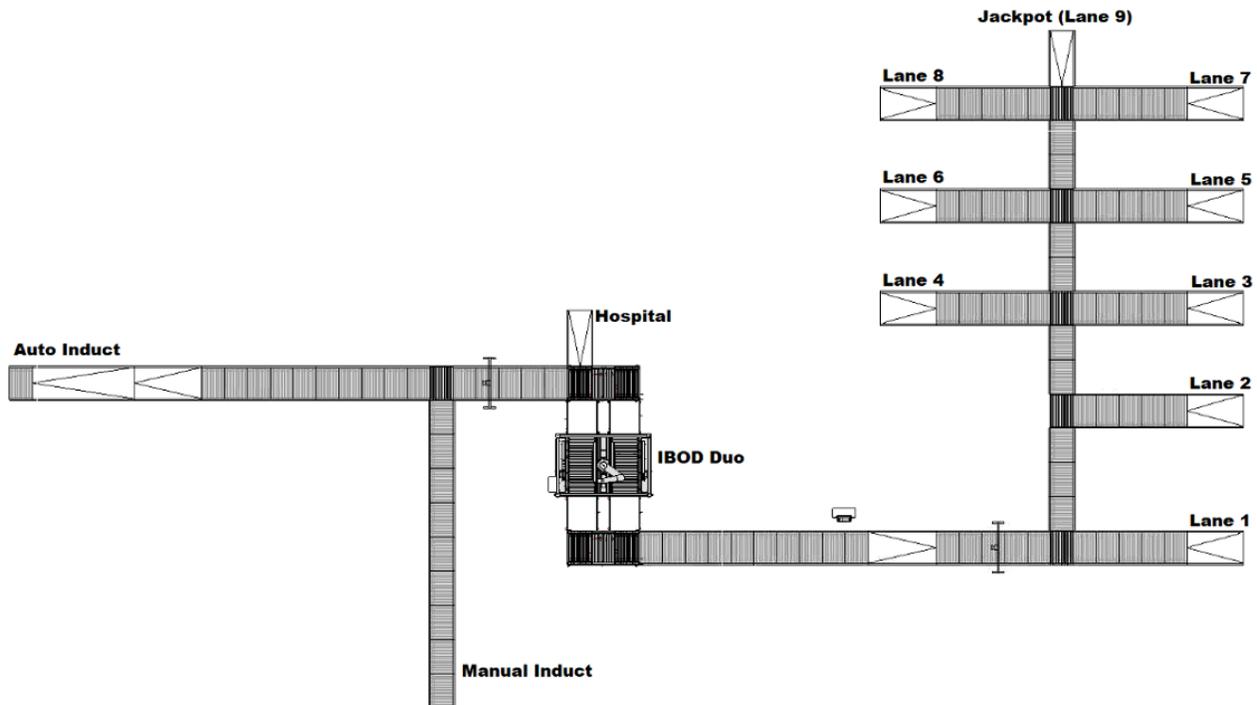


CASI-IBOD

Intelligent Box Opening Device

FAT - Factory Acceptance Test



for



| | |
|--------------------------|--|
| Title | IBOD Duo with Sortation |
| Project No. | 28444 |
| Location | Bloomington, CA |
| Customer | Arnold Packaging (GXO - adidas) |
| Description | FAT - Factory Acceptance Test |
| Author | Jeff Grindstaff |
| Technical Support | (800) 930-3788 |

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1 System Tests

| Step | Test | Pass / Fail | Comments |
|----------------------------------|---|-------------|-------------------------------|
| System Design | | | |
| 1 | Verify that the IBOD has an electrical disconnect switch which will remove power from the system | | |
| 2 | Verify the HMI (Human Machine Interface) shows the system status on the screen | | |
| 3 | Verify the system starts when the start button is selected | | |
| 4 | Verify the three user access levels exist: Operator, Maintenance, and Supervisor | | |
| Box Dimensions and Weight | | | |
| 5 | The IBOD shall convey and cut a minimum box size of 6"x6"x5" and a maximum of 30"x21"x19" | | |
| 6 | The IBOD shall convey and cut a minimum box weight of 1lb and a maximum of 50lbs | | Not demonstrated in video FAT |
| 7 | Verify the size of the box is shown on the HMI screen | | |
| Remote Support | | | |
| 8 | Verify that the CASI system can receive support via remote access | | |
| Safety | | | |
| 9 | Verify that the door interlocks remove power to the robot motors when a door is opened | | |
| 10 | While the system is in operation, verify that all motion stops on the IBOD system when an emergency stop is engaged | | |
| 11 | Verify that there is an audible and visual indicator for the emergency stop | | |
| 12 | Verify that the CASI CORE indicates when an emergency stop is engaged | | |
| 13 | Verify system air dumps whenever an emergency stop is engaged | | |

| | | | |
|--------------------------------|---|--|--|
| | | | |
| 14 | Verify the systems returns to a ready status after the emergency stop is reset | | |
| 15 | Both electrical and pneumatic disconnects are LOTO capable | | |
| IBOD Performance | | | |
| 16 | Confirm the cut rate is: 525 cph | | |
| 17 | IBODs shall successfully cut the top on all 4 sides. <small>*A successful cut assumes that the box meets all requirements of the SRD, and the lid is cut to a point where it can be easily removed by hand or automatic lid remover.</small> | | |
| Recipe Builder | | | |
| 18 | Operator can only select a recipe to cut with but cannot edit. | | |
| 19 | Maintenance / Supervisor can add/edit/delete recipes | | |
| 20 | Supervisor can edit users | | |
| Automatic Blade Changer | | | |
| 21 | IBOD will automatically change tools when blade usage has passed preset threshold | | |
| 22 | Confirm successful pick/place at every position on the tool holder | | |
| 23 | IBOD will only pick tools that are marked good (green) and will bypass used (red) tools | | |
| Induct Line | | | |
| 24 | Verify Induct scanners read front and rear facing SSCC label | | |
| 25 | Confirm induct, merge/scan rate will meet/exceed IBOD rate of 525/hr | | |
| 26 | Verify event log shows reads, no-reads, sort codes, and API call status | | |
| Sortation Line | | | |

| | | | |
|-----------------------------------|---|--|--|
| 27 | Verify Sort verify scanner reads front and rear facing SSCC label | | |
| 28 | Confirm sortation rate will meet/exceed IBOD rate of 525/hr | | |
| 29 | Verify event log shows reads, no-reads, sort assignments, and rejects. | | |
| 30 | Verify cartons are sorted to designated lanes | | |
| 31 | Verify the lane full sensor on each sortation lane pauses sortation to that individual lane | | |
| 32 | Verify packages with errors are routed to the jackpot lane. | | |
| Sorter HMI | | | |
| 33 | Verify ability to add/delete sort codes | | |
| 34 | Verify ability to assign/remove sort codes to sort lanes (multiple lanes if required) | | |
| 35 | Verify ability to enable/disable sort lanes | | |
| 36 | Verify only Supervisors and Maintenance have access to "Routes" tab | | |
| System Warnings/Indicators | | | |
| 37 | System warnings/error will have a visual indicator either on HMI or light tower | | |

2 Notes

| Notes |
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ACCEPTANCE SHEET

This document is hereby approved by all parties. All sections are hereby specified by CASI project #28444, "Arnold Packaging (GXO - adidas)" meeting all requirements necessary pertaining to the CASI scope of work. This Acceptance Sheet, belonging to the document titled "**28444 - Arnold - GXO - adidas FAT rev 1.0**" of the current revision, needs to be returned to CASI promptly to ensure progress of the scope of work detailed in this document in accordance with the project schedule.

Arnold Packaging (GXO - adidas)

| | | | |
|-----------------------|------|---------------------|-------|
| Signature of Approval | Date | Name (Please Print) | Title |
| Signature of Approval | Date | Name (Please Print) | Title |

Cornerstone Automation Systems, LLC
(CASI)

| | | | |
|-----------------------|------|---------------------|-------|
| Signature of Approval | Date | Name (Please Print) | Title |
| Signature of Approval | Date | Name (Please Print) | Title |