**Sequence Title**: Incline conveyor

**Doc Version:** 1.00.2

**Published By:** Tim Reamsbottom

**Publish Date**: 21/07/2015

# Version History

*The version number corresponds with the program version number set in Automation Studio.*

|  |  |  |  |
| --- | --- | --- | --- |
| Publish Date | Version Number | Comments | Engineer Initials |
| 21/07/2015 | 1.00.1 | First Release | Click here to enter text. |
| [Select Date] | 1.00.2 | Bug Fix Buffer stop Var given 2 names | Click here to enter text. |
| 07/07/2017 | 1.00.3 | Add Bag released to step 7 | Click here to enter text. |
| 07/02/2018 | 1.00.4 | Change dynamic variable standards | TR |
| 07/04/2018 | 1.00.5 | Step 7 was failing when used with point, when bag data was moved | TR |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| [Select Date] | Click here to enter text. | Click here to enter text. | Click here to enter text. |

# Sequence Description

## Basic Sequence Description

|  |
| --- |
| Standard incline/decline conveyor, for full and empty bags. |

## Sequence Steps

|  |  |
| --- | --- |
| Step | Description |
| 0 | Disabled |
| 1 | Run to paddle in position |
| 2 | Wait for bag at buffer |
| 3 | Wait for bag to arrive in incline |
| 4 | Bag settles in incline |
| 5 | Run motor |
| 6 | Check for buffer space |
| 7 | Wait for bag to be released |
| 8 | Click here to enter text. |
| 9 | Click here to enter text. |
| 10 | Click here to enter text. |
| 11 | Click here to enter text. |
| 12 | Click here to enter text. |
| 13 | Click here to enter text. |
| 14 | Click here to enter text. |
| 15 | Click here to enter text. |
| 16 | Click here to enter text. |
| 17 | Click here to enter text. |
| 18 | Click here to enter text. |
| 19 | Click here to enter text. |
| 20 | Click here to enter text. |

# IO Description

## Standard IO Descriptions

|  |  |  |  |
| --- | --- | --- | --- |
| Standard Block number | Block Port | Input  Output | Description |
| 171 | 1 | X | SIC1 – Paddle in position |
| 171 | 2 | X | Spare |
| 171 | 3 | X | SIC1 – Bag at buffer |
| 171 | 4 | X | SIC1 – Bag in incline |
| 171 | 5 | X | SIC1 – Bag released |
| 171 | 6 | Y | SIC1 – Open buffer |
| 171 | 7 | Y | Spare |
| 171 | 8 | Y | Spare |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - | Click here to enter text. |
| n/a | - | - |  |

*Description must contain “–“after sequence identifier (i.e.SPN1 – ).*

# Manual Description

|  |
| --- |
| 1. Disabled   All controls functions are disabled.   1. Run to paddle in position   The motor will run until a paddle makes the “paddle in position” proximity switch, then the sequence will then change to step 2.   1. Wait for bag at buffer.   A logical assessment is made of the input buffer condition, by checking the “bag at buffer” proximity switch and data for validity (if applicable), or the request release state of the incoming buffer sequence.  When the assessment is true the sequence will change to step 3.   1. Wait for bag to arrive in incline.   The incoming buffer will open, or the incoming buffer sequence will release a bag. The bag will then gravitate into the incline. When the first trolley is detected via the “Bag in incline” proximity switch, the sequence will change to step 4.   1. Bag settles in incline.   The bag is allowed to settle at the base of the incline for 3 seconds, before the sequence changes to step 5.   1. Run motor   The motor will run for a preset time, before the sequence will change to step 6.   1. Check for buffer space   An assessment is made to determine if releasing of the bag is allowed, once release is allowed the sequence will change to step 7.  If tracking is being used then a data integrity check takes place.  If there is outgoing buffer, the line full trip is checked. The “bag at buffer” proximity and state of the going buffer stop is also checked if this is a single bag buffer to ensure a bag is not released with the buffer stop being in a close position.  If there is no outgoing buffer, a request release signal is sent to the outgoing sequence, valid release is when an enable release signal is received.   1. Wait for bag to be released.   The motor will run until the bag is able to gravitate away into its next position.  If there is an outgoing buffer then arrival in the buffer is detected by the line trip proximity switch. If there is no outgoing buffer arrival is detected by the enable release signal changing to false.  If a bag out trip is fitted, this may also reset the sequence. |