

Setup Inspect Button for eDART Diverter Control

Brett Riedy of Molex, Nebraska has a need for his technicians to reverse the conveyor temporarily during setup in order to look at a part.

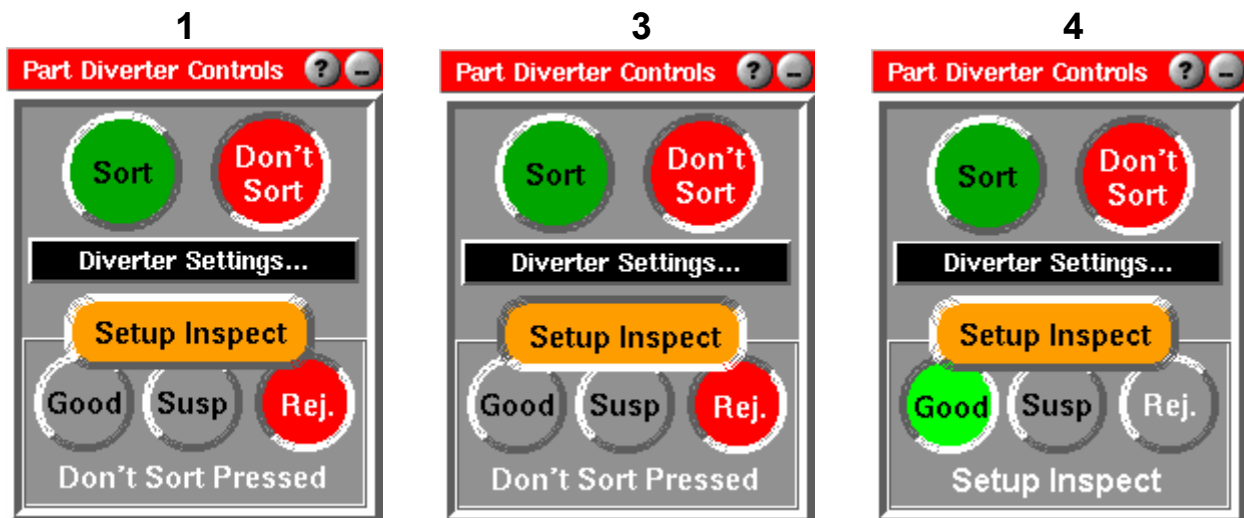
Currently his conveyors take the reject parts out of the back of the machine and the good parts come to the operator's side. During setup the operator presses the "Don't Sort" button on the eDART Diverter Controls. This is set to force the diverter to "Reject". He then must walk around the press to pick up a part to look at it during setup.

This feature will be activated by a switch in system.cfg

The proposed "Setup Inspect" button will force the diverter to reverse itself for one shot. It works this way.

1. When the operator presses the "Don't Sort" button on the Diverter Controls then the orange "Setup Inspect" button pops up. It does not show at all until "Don't Sort" is pressed.
2. The Diverter Output goes to the value set as the default. At Molex this is "Reject" and the rejected parts are traveling to the rear of the machine.
3. When the operator wants to look at a part he presses the "Setup Inspect" button. The button is a toggle button and sticks down until the end of the cycle.
4. At cycle end with the "Setup Inspect" button down the conveyor reverses to the "Good" direction when the cycle ends. At this time the "Setup Inspect" button pops up.
5. If he clicks the button again before the cycle ends it will pop back up and the conveyor will operate normally.
6. Once the "Setup Inspect" button pops (4 above) up then on the next cycle the conveyor delivers the part according to the alarms as set.
7. When the operator presses the "Sort" button the "Setup Inspect" button disappears.

Below is the sequence. Note the text "Setup Inspect" as the "reason" for the Diverter's decision on the one shot.



Unanswered questions:

- A. How should security be set? Are the people that use the "Setup Inspect" button the same as those allowed to press "Don't Sort"? Or are they in another group?
- B. What sort of logging should be done? Changes_N.csv change log? Summary Note? Both? I shall assume that the note would only be logged if the operator did not cancel the function by pressing "Setup Inspect" a second time (i.e. the conveyor actually reversed to the "Good" direction.)
- C. When the "Setup Inspect" button is pressed and the diverter switches to "Good" it will hold that output until the next sorting time on the next cycle. This will be true even if the timer is used i.e. the "Hold the diverter until the alarm changes" switch is off. Is this acceptable?