

# THE ULTIMATE CHECKLIST FOR EFFICIENT FAT and SAT TESTING





## **AUTOMATION** SYSTEMS APPROVAL

| Date                               |                |
|------------------------------------|----------------|
| – Manufacturer –                   |                |
| - Machine Description              |                |
| – Machine Number –                 |                |
| – Quoted Rate –                    | – Timed Rate – |
| Bowl Manufacturer Number —         |                |
| Quoted Rate                        | Timed Rate     |
| Machine Paint Specially Requested? |                |
|                                    |                |

## **VISUAL** APPEARANCE



| Machine does not have any visible damage   |
|--|
| All air regulator settings are tagged with name and settings   |
| Settings are not attached to removable components that could be replaced                               |
| Feeder bowl has air jet locations engraved on bowl and air lines tagged with proper regulator location |
| All bowls and motor controllers are tagged with settings   |
| All doors open in an operator friendly way as stated in standards                                      |
| Base platform is at an acceptable height   |
| Machine paint is acceptable  |
|  |
|  |



## **ELECTRICAL**



| <b>Level sensors work</b> (low and high when applicable)    |
|---|
| Counter counts every piece correctly and does not overcount |
| Counter keeps memory if power is lost                       |
| No programs are lost when machine is power cycled           |
| All wires are numbered                                      |
| Breakdown/installation hook-ups indicated                   |
| Copy of electrical drawings in electrical enclosure         |
|   |
|   |
|   |
|   |





| Tooling is acceptable  |
|--|
| Everything that is adjustable deemed not necessary should be doweled           |
| Spindle does not stick   |
| Box diverter working is working acceptable and keeps position if power is lost |
| Box shifter is working acceptable  |
| All mechanical designs of machine are acceptable                               |
| Feeder and machine have consistent feeding and neither out run the other       |
| All alarms are properly triggered and displayed within HMIs                    |
|  |
|  |

## **DEFECTIVE** PART DETECTING



Rejected parts are consistent

Machine stops after 3 consecutive rejects

Reject mechanism is fail proof

Parts inspection: sensors are working correctly

#### VISION

Camera bracket(s) supplied are acceptable

PLC is programmed for trigger, reject, and inputs

Machine has spots on terminal strip for wire connections for vision

## **RUNOFF** CRITERIA



| – Overall Equipment Effectiveness – |                     |
|-------------------------------------|---------------------|
| - Overload stoppages                | Low track stoppages |
| - 3 reject stoppages                | – Feeders jams –    |
| Runoff start time                   | Runoff stop time    |
|                                     |                     |
| – Scrap parts –                     | Good parts          |
| Scrap%                              |                     |
|                                     |                     |
|                                     |                     |
|                                     |                     |





| Buyer signature | Vendor print |
|-----------------|--------------|
| Print           | Date         |
| Date            | Signature    |

## **SPECIAL** NOTES

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## **PRINTABLE CHECKLIST**

| VISUAL<br>APPEARANCE        | <ul> <li>Machine does not have any visible damage</li> <li>All air regulator settings are tagged with name and settings</li> <li>Settings are not attached to removable components that could be replaced</li> <li>Feeder bowl has air jet locations engraved on bowl and air lines tagged with proper regulator location</li> <li>All bowls and motor controllers are tagged with settings</li> <li>All doors open in an operator friendly way as stated in standards</li> <li>Base platform is at an acceptable height</li> <li>Machine paint is acceptable</li> </ul> |
|-----------------------------|--|
| SAFETY                      | <ul> <li>All safety circuits are wired where if failure occurs machine will not start</li> <li>All e-stops work when pressed and machine stops immediately upon pressed</li> <li>Main power switch is interlocked There is complete guarding protecting moving components</li> <li>The machine is free from sharp protrusions which may cause possible injury</li> <li>Machine stops when any of all guard doors are open</li> <li>All lower machine guarding is permanently fixed requiring tools or has safety interlocks</li> </ul>                                   |
| ELECTRICAL                  | <ul> <li>Level sensors work (low and high when applicable)</li> <li>Counter counts every piece correctly and does not overcount</li> <li>Counter keeps memory if power is lost</li> <li>No programs are lost when machine is power cycled All wires are numbered</li> <li>Breakdown/installation hook-ups indicated Copy of electrical drawings in electrical enclosure</li> </ul>   |
| MACHINE                     | <ul> <li>Tooling is acceptable</li> <li>Everything that is adjustable deemed not necessary should be doweled</li> <li>Spindle does not stick</li> <li>Box shifter is working acceptable</li> <li>Box diverter working is working acceptable and keeps position if power is lost</li> <li>All mechanical designs of machine are acceptable</li> <li>Feeder and machine have consistent feeding and neither out run the other</li> <li>All alarms are properly triggered and displayed within HMIs</li> </ul>  |
| DEFECTIVE PART<br>DETECTING | Rejected parts are consistent       Machine stops after 3 consecutive rejects         Reject mechanism is fail proof       Parts inspection: sensors are working correctly   |
| MACHINE                     | Camera bracket(s) supplied are acceptable PLC is programmed for trigger, reject, and inputs Machine has spots on terminal strip for wire connections for vision  |

## NEED ANY HELP WITH YOUR AUTOMATION PROCESS OR PROJECT?