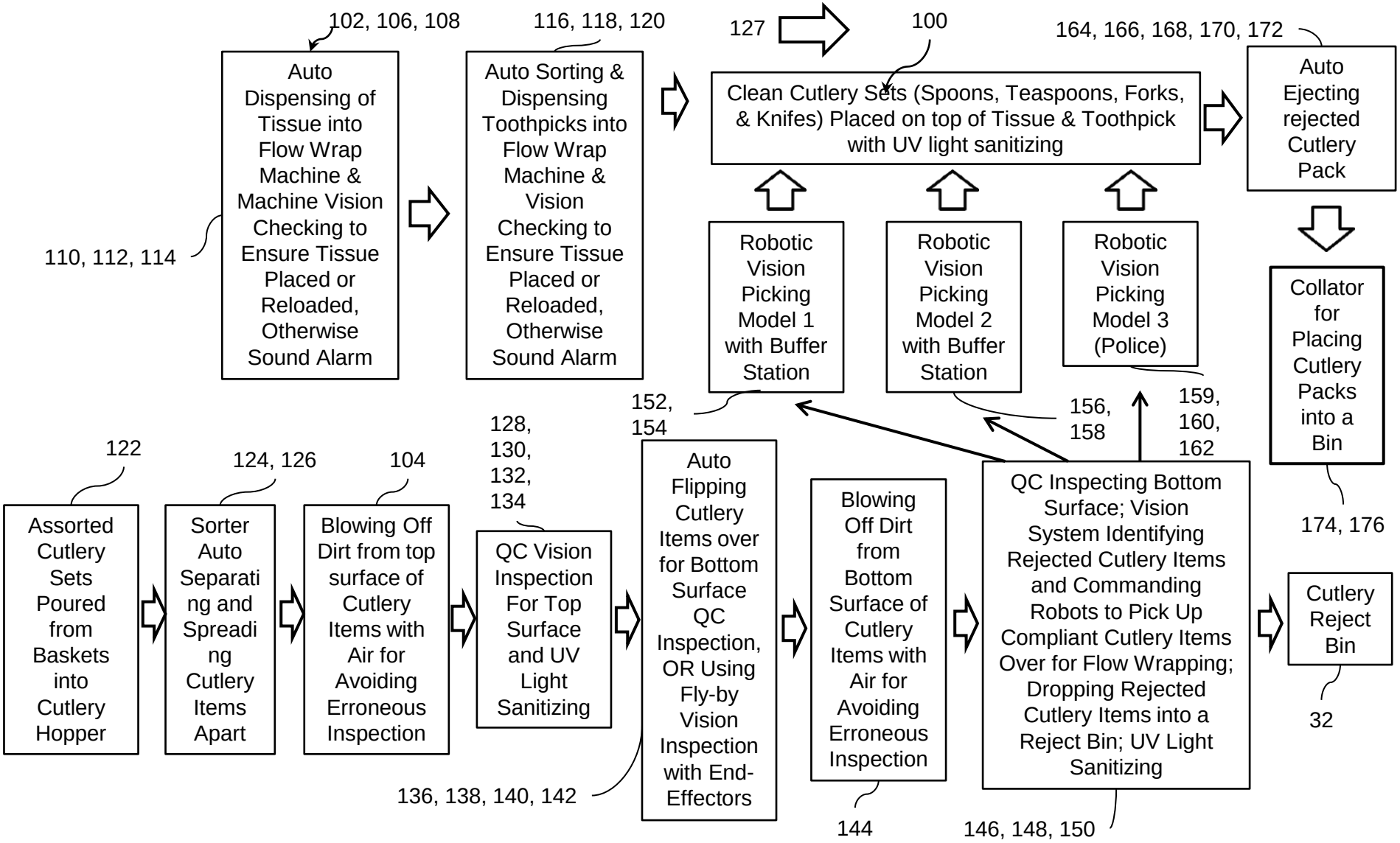
Assorted Cutlery Sets Poured from Baskets into Cutlery Hopper
122
Sorter Auto Separating and Spreading Cutlery Items Apart
124, 126
Blowing Off Dirt from top surface of Cutlery Items with Air for Avoiding Erroneous Inspection
104
QC Vision Inspection For Top Surface and UV Light Sanitizing
128, 130, 132, 134
Auto Flipping Cutlery Items over for Bottom Surface QC Inspection, OR Using Fly-by Vision Inspection with End-Effectors
136, 138, 140, 142
Blowing Off Dirt from Bottom Surface of Cutlery Items with Air for Avoiding Erroneous Inspection
144
QC Inspecting Bottom Surface; Vision System Identifying Rejected Cutlery Items and Commanding Robots to Pick Up Compliant Cutlery Items Over for Flow Wrapping; Dropping Rejected Cutlery Items into a Reject Bin; UV Light Sanitizing
146, 148, 150
Cutlery Reject Bin
32
Collator for Placing Cutlery Packs into a Bin
174, 176
Auto Ejecting rejected Cutlery Pack
164, 166, 168, 170, 172
Clean Cutlery Sets (Spoons, Teaspoons, Forks, & Knifes) Placed on top of Tissue & Toothpick with UV light sanitizing
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Robotic Vision Picking Model 1 with Buffer Station
Robotic Vision Picking Model 2 with Buffer Station
Robotic Vision Picking Model 3 (Police)
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156, 158
159, 160, 162
Auto Dispensing of Tissue into Flow Wrap Machine & Machine Vision Checking to Ensure Tissue Placed or Reloaded, Otherwise Sound Alarm
102, 106, 108
110, 112, 114
Auto Sorting & Dispensing Toothpicks into Flow Wrap Machine & Vision Checking to Ensure Tissue Placed or Reloaded, Otherwise Sound Alarm
116, 118, 120

~~Fig. 2~~ Fig. 3

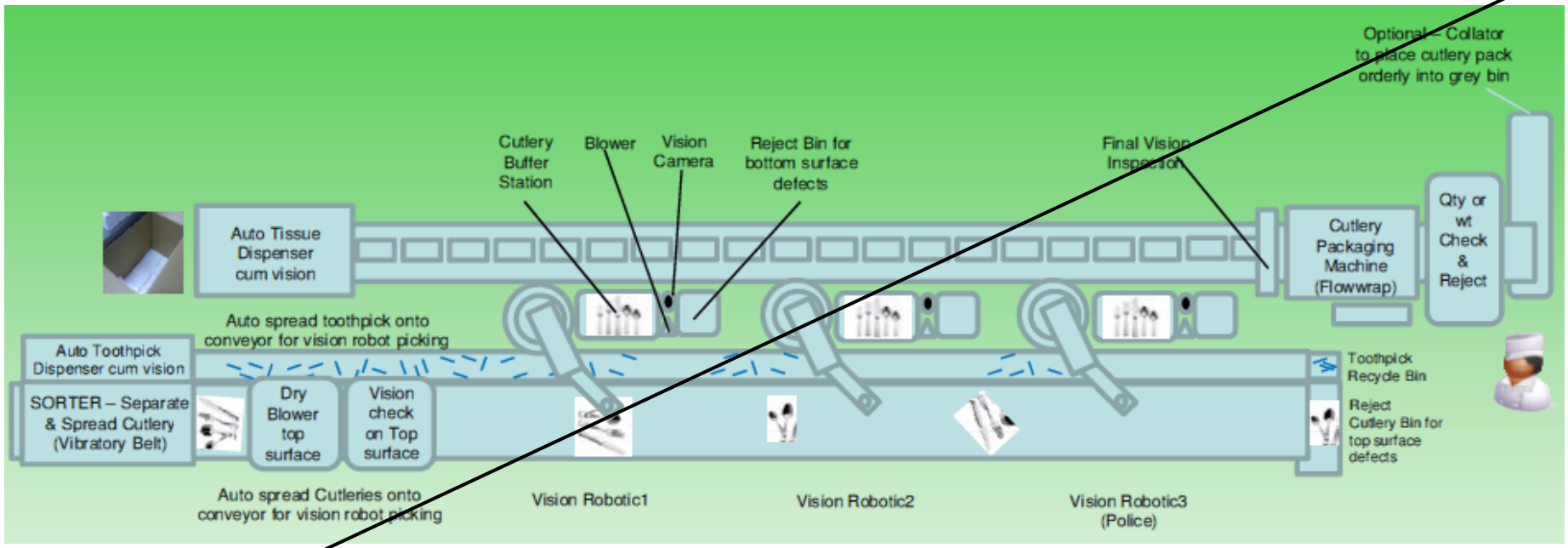
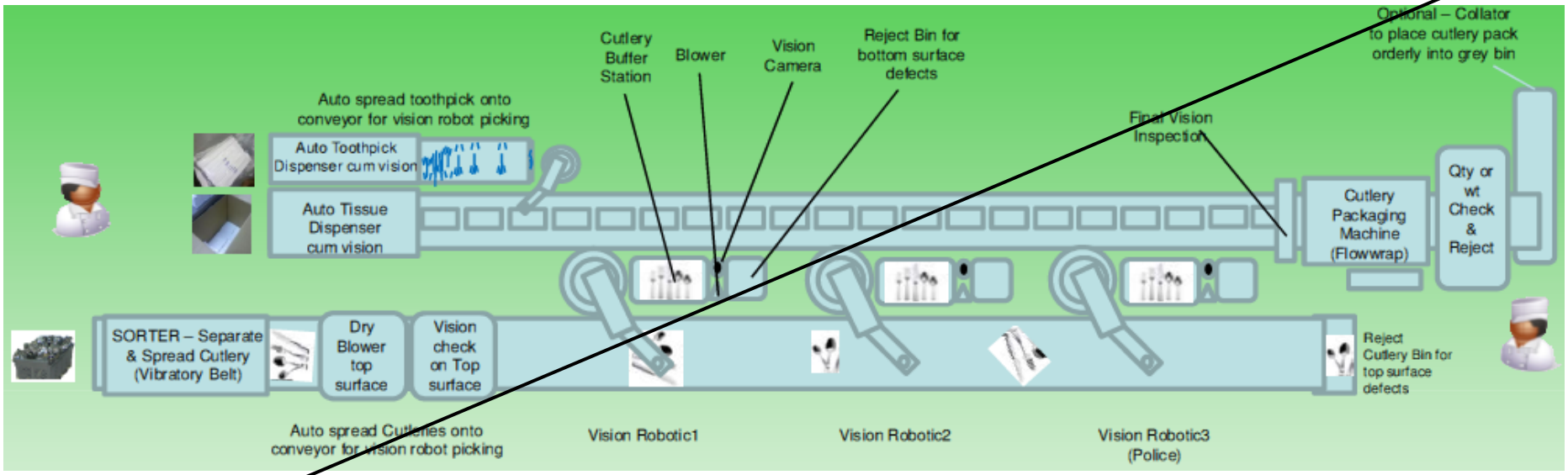

Optional – Collator to place cutlery pack orderly into grey bin
Cutlery Buffer Station
Blower
Vision Camera
Reject Bin for bottom surface defects
Final Vision Inspection
Auto Tissue Dispenser cum vision
Cutlery Packaging Machine (Flowwrap)
Qty or wt Check & Reject
Auto spread toothpick onto conveyor for vision robot picking
Auto Toothpick Dispenser cum vision
SORTER – Separate & Spread Cutlery (Vibratory Belt)
Dry Blower top surface
Vision check on Top surface
Toothpick Recycle Bin
Reject Cutlery Bin for top surface defects
Auto spread Cutleries onto conveyor for vision robot picking
Vision Robotic1
Vision Robotic2
Vision Robotic3 (Police)

Fig. 5


Cutlery Buffer Station
Blower
Vision Camera
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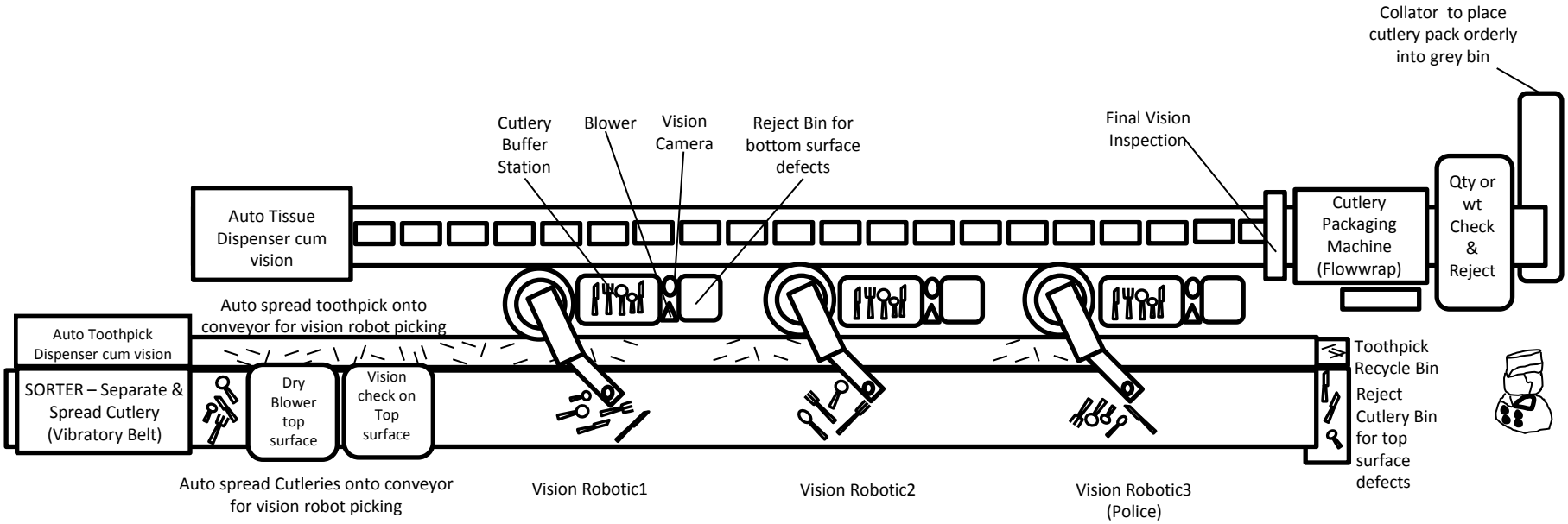
Vision check on Top surface
Reject Cutlery Bin for top surface defects
Auto spread Cutleries onto conveyor for vision robot picking
Vision Robotic1
Vision Robotic2
Vision Robotic3 (Police)

Fig. 6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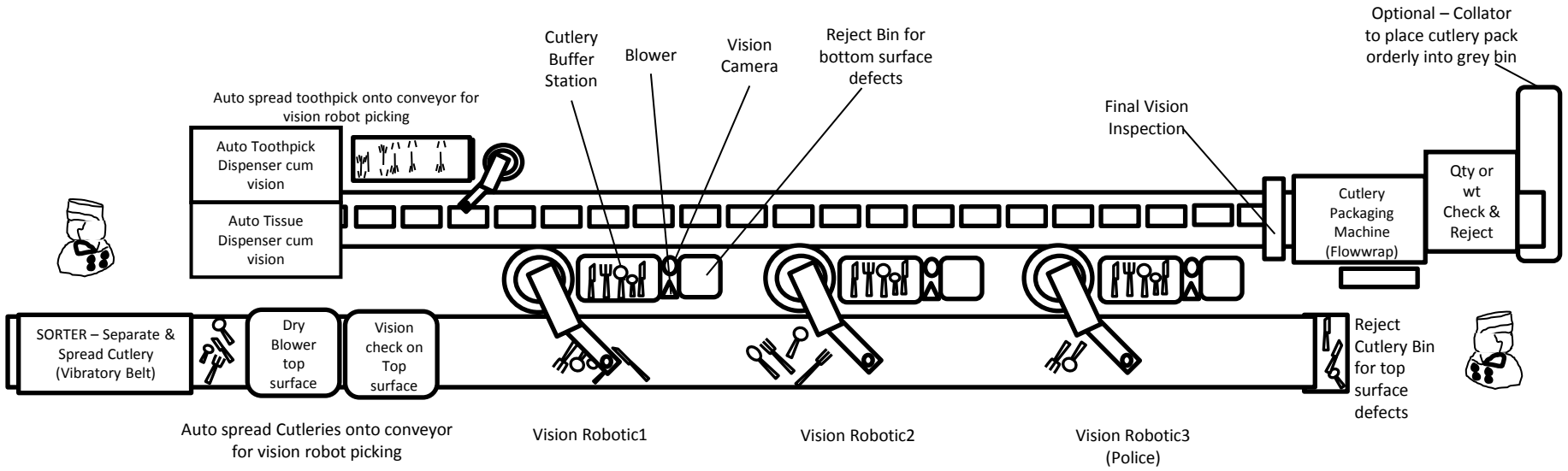
Vision Robotic1
Vision Robotic2
Vision Robotic3 (Police)

Fig. 5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Reject Cutlery Bin for top surface defects
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Vision Robotic2
Vision Robotic3 (Police)

Fig.6