Design Ideas for Auto SMT Part Feeder

Hardware:

1. FPD Mount
   1. Mounting Hardware
      1. Extrusion nuts
   2. Motor mount
      1. Laser Cut Acrylic
   3. Limit Switch Mount
2. Motor
   1. Main Drive Motor
3. Component Source
   1. Trays of parts
4. 3D Plastic Components
   1. Trays
   2. Axle Hub
5. Different Size SMT Components
   1. Loose Parts, not an issue
6. Misc
   1. Vibration Elimination

Pre-Design Needs:

1. Torque Testing
2. Sourcing
3. Manufacturing Methods

CAD Design:

1. FPD Mount
   1. Laser Cut
2. Assembly Drawings
3. Limit Switch Mount
4. BOM
5. Tray
   1. Balance when not in feeder
6. Main Flywheel
7. Endstop Switch Activator

Current Design Requirements:

1. Mounted to FPD
2. End Stop Switch

Electronics Requirements:

1. Connected to motion controller
2. Doesn't require custom PCB