

# **Standard Vibratory System Diagram**

# 1. Storage Hopper

• A bulk storage device mounted above the feeder that automatically meters additional parts into the bowl.

#### 2. Controls

Controllers, typically RODIX, that regulate the vibration and part flow of the bowl.

#### 3. Bowl Level Sensor

• A device that monitors the part level in a the bowl and triggers control actions to maintain proper fill.

#### 4. Feeder Bowl

The entire weldment that orients parts into a desired position consistently.

#### 5. Bowl Drive Unit

• The power based assembly that generates the vibrations needed to move and orient parts in the bowl.

#### 6. Inline

A linear track that transports oriented parts from the bowl to the discharge.

#### 7. Inline/Track Drive Unit

• The power based assembly that generates the vibrations needed to move parts down the inline.

## 8. Track High Level Sensor

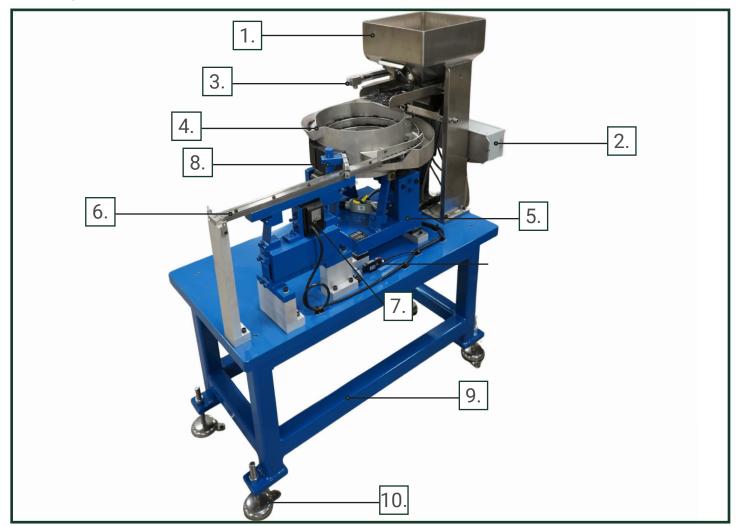
• A sensor that monitors the part level in the inline and signals the system to stop feeding when the maximum part level is reached.

#### 9. Frame

A structural base that holds and positions all components of the vibratory feeder system.

#### 10. Standard Leveling Foot

• Adjustable supports used to level the structure while reducing vibration transmission.





# **Base Drive Unit Diagram**

# 1. Base Drive Coil (120VAC or 240VAC)

• A magnet that turns off and on at a set frequency, generating the vibration necessary for the feeder's operation.

### 2. Striker Plate Assembly

• A plate that is pulled back and forth when the coil is engaged to create the vibration, or part drive.

### 3. Coil Gap

• The space between the striker plate and coil. This is adjusted for tuning of the bowl and, depending on placement, will determine how hard the coil has to work to create movement of the parts.

#### 4. Toe Clamp

• A clamp that secures the bowl to the crossarms on the base drive.

# 5. Spring Bank

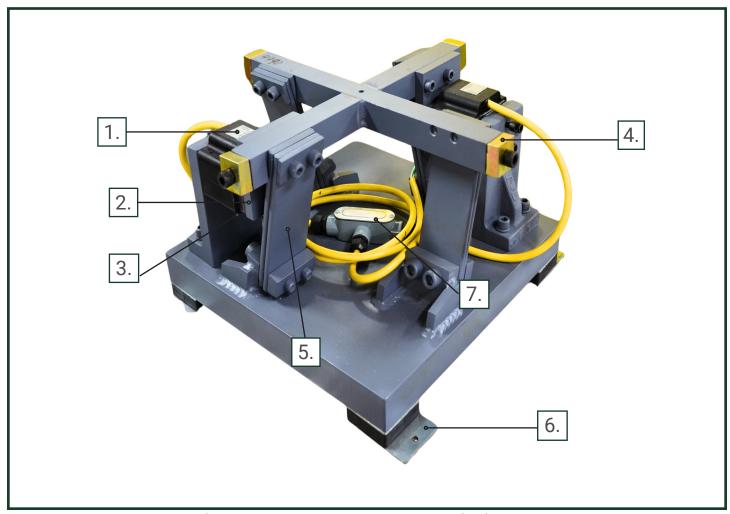
• A group of springs, varying in size, that are added or subtracted to tune the bowl.

## 6. Rubber Isolated Mounting Feet

• Rubber feet that create a secure contact between the base and the table, simultaniously helping to minimize the vibration fom the base drive to the table.

### 7. Power Supply

• Wiring that connects the coils to the controller.





# **Feeder Bowl Diagram**

# 1. Bowl Tooling

• Metal added to the inside and the outside of the bowl that orients, selects, or confines parts during their travel through the feeder bowl.

#### 2. Feeder Bowl

The entire weldment that orients parts into a desired position consistently.

## 3. Counter Weights

• Weights that are added to the bowl to ensure the bowl is balanced. The bowl being balanced is critical to properly tune and run the system more efficiently and effectively.

# 4. Return Pan

• A metal pan that surrounds the outside of the bowl where the tooling is located to catch parts that are selected off and recirculated.

