

Auto Feed & Load Machine Specifications

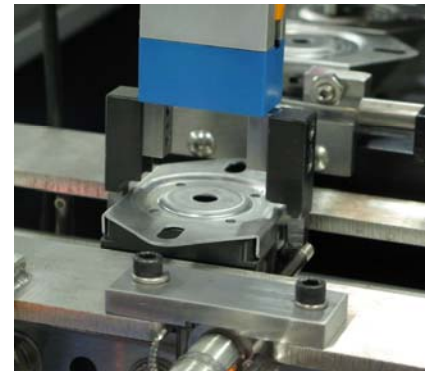
- **Assembly:** Three piece case, disc, and baseplate subassembly.
- **Feeder:** 42" dia. vibratory bowl with 3 cu. ft. front hopper/elevator. Hopper holds one hour of production.
- **Production Rate:** 1,400 parts per hour feed rate.
- **Dimensions:** 64" W x 87"L x 56"H
- **Utilities:** Electrical, 110/1/60, Control voltage 24VDC, Compressed Air ¼ NPT, 70 psi.
- **Control:** Allen Bradley PLC.
- **Safety Features:** Plexiglas guarding of all machine functions. Vibratory bowl enclosure limits sound level to less than 80 db.

Sequence:

1. Cases (with discs) are brought to the machine on an existing conveyor and staged to accept the baseplate.
2. Perpendicular to the conveyor, baseplates are vibratory bowl fed and oriented at the end of a track.
3. Machine confirms that disc is present and located properly in the case subassembly.
4. Multi- axis, pick-and place unit transfers the baseplate from the track and places it on the case subassembly.
5. Part height is measured with contact probe to confirm baseplate is installed and disc below is seated properly. Any part outside of +/-0.010" height tolerance is rejected.
6. Finished assembly is rotated 90° and escaped onto an exit conveyor.
7. Exit conveyor accumulates 10 assembled pieces with a track full sensor that releases pieces to an op checker.



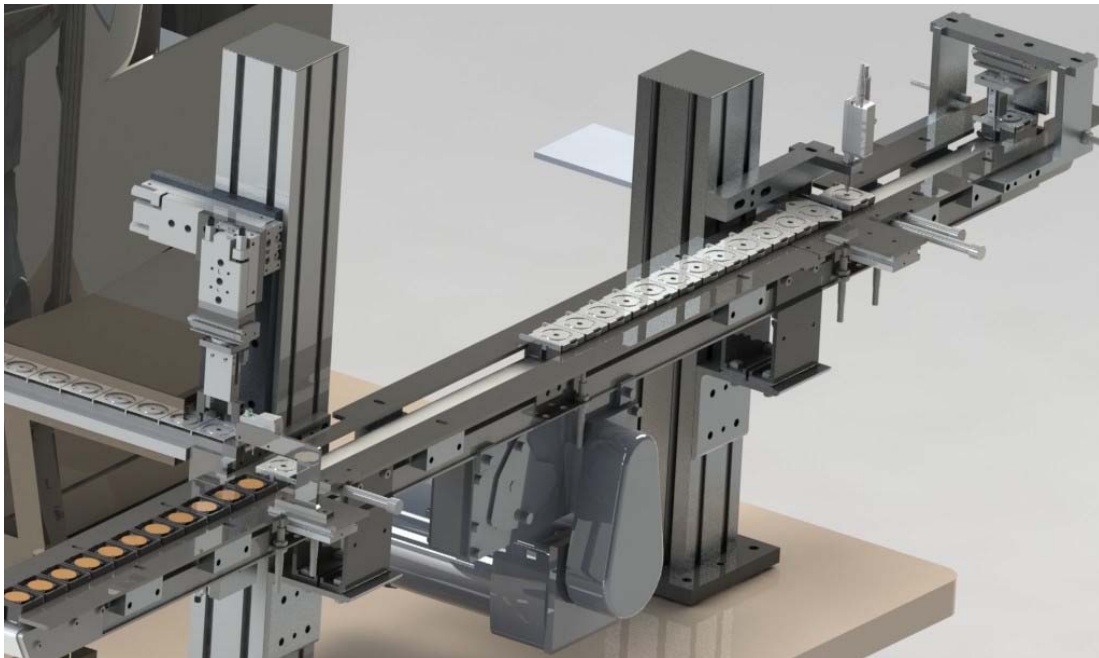
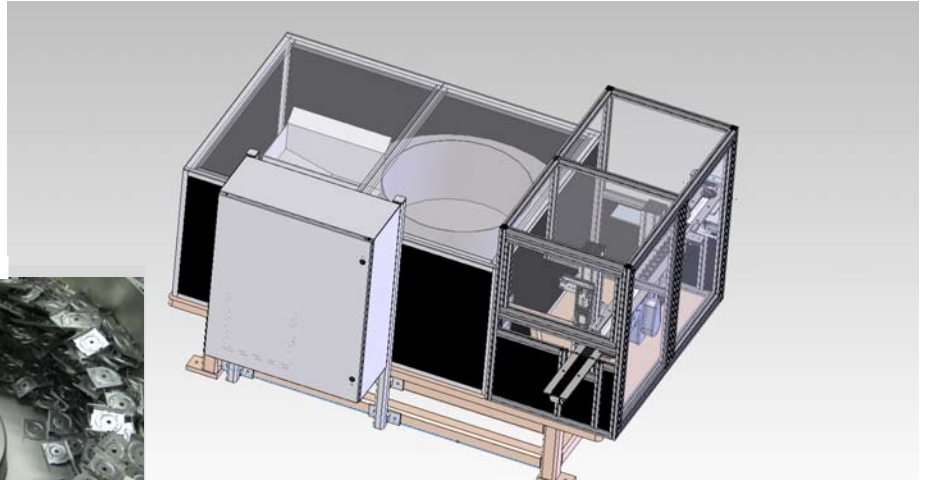
Pick-and-Place unit transfers baseplate onto the case.



Contact probe verifies height of case subassembly.



Vibratory Bowl Feeder



Pick-and-Place with Conveyor

Auto Feed & Load Machine Special Features

- Machine feeds two baseplate styles without tooling changes.
- 42" dia. vibratory bowl and hopper holds one hour (1,400) of parts.
- Vibratory bowl has quick dump gate to facilitate changeover between two part styles.
- Pick-and place tooling is spring loaded to prevent part damage.

