



## **INNOVATIVE PLATFORM SYSTEM PROVIDES ADDITIONAL CAPACITY WITHOUT REQUIRING BUILDING EXPANSION**

- SITUATION:** A production supervisor in the cereal manufacturing industry needed to expand his company's manufacturing capacity.
- CRITICAL ISSUE:** The client wanted to enhance their product line by adding new equipment but was limited on physical space at their facility. They manufacture cereal products that are packaged for institutional use.
- REASONS:** Limited warehouse space was available but would require a very creative solution.
- VISION:** To design a hanging platform system to support the new equipment that was comprised of a particulate room, vibratory catwalk, and conveyors.
- PROVIDED:** Sterling Engineering Inc. performed structural engineering services required to design a hanging platform for a particulate room, a hanging structural support for vibratory conveyors and catwalks, and a hanger support for a 13' rough top belt conveyor inclusive of the following:
- Three-dimensional computer-assisted structural analysis of the steel platforms and hangers for both particulate room and vibratory catwalk. Structural design of members, connections and attachment details.
  - Checked the existing structure for additional load and reinforce the structural members, if necessary
  - Prepared design drawings along with the necessary specifications and detailed for particulate room (4DWGs) vibratory catwalk (4DWGs) and conveyor support hanger system (1DWG).
  - Prepare a set of design drawings with Structural Engineer's Seal for permit purposes.
  - Generated detailed shop drawings for particulate room, vibratory catwalk and hanger support along with Bill of Materials.
- RESULT:** Client incorporated the new equipment on time and within budget without having to incur the costs of a building expansion.
- SEI PROJECT #:** (129-DOC-015-(V1R1-CASE STUDY Process Design))