

Silos are fundamental components of any storage or processing plant as weighing, dosing, or buffer bins. However, a silo alone cannot ensure seamless plant operation. It requires various accessories and steel structures to ensure functionality and safety, such as supporting or overhead structures and process rooms.

CESCO specializes in the design and manufacture of a wide range of steel structures for dedicated buildings and industrial plants, including bridges, walkways, entablatures, solid frames, machinery towers, and sheds.

CESCO custom-made steel structures are engineered to support process machinery, sections, stairs, roofing, and cladding. They can be tailored to meet specific contract requirements.

ADVANTAGES

- Diverse range of fully bolted steel structures for process dedicated buildings and industrial plants.
- Custom-made steel structures designed to support process machinery, sections, stairs, roofing, and cladding.
- Expertise in optimizing design for integrated silos and structures within process buildings.
- Focus on improving static cooperation, selecting optimal structural typology, and enhancing safety.
- Integration of flexible, bolted silos in square and cylindrical shapes, manufactured from various materials.
- Detailed prefabrication, short delivery times, and faster erection for steel structures.
- Static calculation of all steel structures within a plant according to Eurocode.

Principle of design

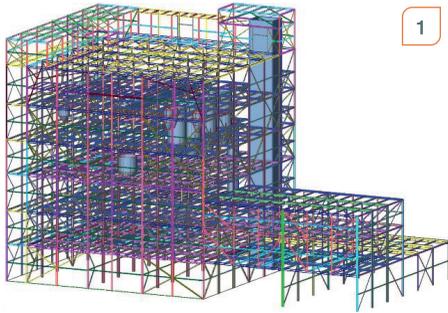


Cereal and rice processing plants, require daily and dosing silos, process department structures, and silos for finished and byproducts. Yet, these components are often designed separately, resulting in suboptimal integration.

Designing these plants also involves addressing space limitations and heavy seismic loads, which can be costly and risky if not handled properly.

CESCO's engineering department offers extensive experience in optimizing the design of integrated silos and structures for process buildings. We focus on enhancing static cooperation, selecting the best structural typology, simplifying foundation design, standardizing grids, combining reinforced concrete and steel, eliminating dead areas, and improving safety.





- 1 3D FE software for comprehensive internal architectural and functional design.
- 2 Standard framework type bridge for conveying systems with up to 400 kg/m weight.
- 3 Lattice framework type bridge for heavy-duty conveying systems up to 800 kg/m weight.
- 4 Open and closed walkways with railings.
- 5 Platforms and ladders designed for inspection and safety.
- 6 Comprehensive range of stairs and ladders with safety features.
- 7 Towers supporting conveying bridges.
- 8 Steel sheds for agricultural purposes, particularly grain storage, with customization options for doors, windows, and ventilation systems.
- 9 Mill buildings with complete cladding and roofing.
- 10 Machinery towers for process machines and vertical conveying systems.

