



With Decades of experience & state of art R&D Facilities, Essae is venturing deep into the field of Grain handling systems.

We build quality products with best material and modern technology, We assure you prolonged storage and minimal wastage.

Essae has the infrastructure to handle Storage capacities from 100tons to 12,500 tons & material handling capacity from 10tph to 350 TPH.

Essae Group

Standing for World Class Quality and trust since 1965





Flat Bottom Silo

Flat Bottomed Silos are preferred for long term and high capacity storage, Diameter Varies from 4m to 40m

Key points

- ❖ 350 to 600 gr/m³ Galvanized Steel Construction
- ❖ High quality Fasteners with 10.9 grade Geomet 500 A plus
- ❖ 100 MT to 12,500 MT capacity

Hopper Bottom Silo

Hopper Bottomed Silos are preferred for Medium term and Low capacity storage, Diameter Varies from 4m to 12m

Key points

- ❖ 600 gr/m³ Galvanized Steel Construction
- ❖ High quality Fasteners with 10.9 grade Geomet 500 A plus
- ❖ 50 MT to 2000 MT capacity



Grain Aeration & Conditioning

Unique Features

- ❖ **SILO ROOF** : We design Silo roofs considering Seismic zone
- ❖ **LADDERS & PLATFORM** : Our bolting ladder designs are built with safety cages & intermediate rest platforms
- ❖ **STIFFENERS SUPPORT** : With "W" type vertical stiffeners and multiple rows of stiffeners our silos can bear higher vertical loads, we used fish plate arrangement with black carbon steel to carry higher loads
- ❖ **SILO WALL** : We use high yield corrugated side wall sheets with ultra high tensile strength, Sheet thickness vary according to the requirement & application
- ❖ **DESIGN PARAMETERS,**
 - ❖ Silo designed considering WIND LOADs of 144Kmph to 225Kmph
 - ❖ Silo designed considering 750MT LOAD ON SILO WALL
 - ❖ Silo designed considering 0.25g/Zone V SEISMIC LOAD

Chain Conveyor



Up to 350TPH

- ❖ Highly efficient solutions depending on type of grain which is to be conveyed at required speed
- ❖ 300 gr / m² galvanized steel structure which is corrosion resistant. easy installation, maintenance and repair with bolted construction.
- ❖ special Bearings with oil seals are nodular cast iron and resists harsh negative ambient conditions,
- ❖ Linear UHMW PE bearing is used to reduce friction during the chain movement reducing resistance and encouraging silent operation.
- ❖ Grain level can be monitored through level monitoring windows on conveyors.

Bucket Elevator



Up to 350TPH

- ❖ Bolted connection in the structure facilitates easy installation and maintenance.
- ❖ Use of engineering plastics in elevator buckets enables a smooth OPERATION
- ❖ long-lasting use due to LOW resistance to wear, heat and corrosion.
- ❖ Centrifugal discharge efficiency is increased by making bucket selection as per the crop type and conveyance capacity.
- ❖ UHMW PE used to aid grain flow, this helps to increase wear resistance and replaceable.
- ❖ Heavy-duty roller bearings on drive heads and shafts hardened in stages helps to extend lifespan of moving parts.
- ❖ Removable drum, shaft connection and removable rubber coating on the drum provide ease in installation and maintenance.
- ❖ Latch covers for inspection provide ease during monitoring, maintenance and repair in case when necessary.

Belt Conveyor



Up to 350TPH

- ❖ A belt conveyor system can be implemented with a very economical cost per foot of the conveyor for many warehouse and industrial applications. Because it includes just one motor and a simple belt system they are quite simple. Hence we design based on the requirement

Sweep Augers



Up to 350TPH

- ❖ A spiral unloader or conveyor are used to unload crops on the silo base completely. These are specially designed equipment for extracting leftover inside the silo after grain is unloaded to a certain extent with its own flowing force. They can be manufactured from galvanized steel, painted steel or stainless steel as required by customers. The basic material is high grade steel. It conveys crops fast and smoothly without any problem. It is recommended for use twice or three times a year.