

Screw Conveyors



A conveyor consisting of a central shaft with helical paddles or a complete helical screw rotating within a stationary tube or trough ('U' TYPE) filled with the material being conveyed or A conveyor consisting of a helical screw that rotates upon a single shaft within a stationary trough or casing, and which can move bulk material along a horizontal, inclined, or vertical plane. Screw conveyor is based on the principle of rotation of the continuous screw made up of multiple flights joined together on the common shaft in a tubular or semi tubular casing. The material is fed from the bottom hopper and lifted upwards or moved horizontally at a distance space. The screw conveyor is one of the most economical conveyor types available for moving bulk materials. Screw conveyor is completely enclosed standard unit, with variations in design, is suitable for solving a variety of bulk material handling problems. The vertical screw conveyor is known as screw lift.

We at Silver Star engineers have designed vertical screw conveyor for the lift more that 5 to 6 meters height. This design consists of a gear box, stuffing box, outlet opening (chute), inlet chute, bearing assembly to convey material very smoothly with maximum efficiency. These conveyors are free from vibrations and are designated as high speed vertical screw conveyors. These type of screw conveyors are mainly applicable in continuous process rather than batch process as these vertical conveyors might require CIP (Cleaning in process).

Outstanding Features of Our Screw Conveyors

- Custom-designed to handle almost any material in almost any application
- Moves granular, flake, and chunk materials—pulp stock, powders and minerals.
- Corrosive and abrasive materials are also conveyed by modifying design
- Employed for transportation of pulverized, granular and, Handles small-size lumpy bulk materials to relatively short distance
- Economical method of elevating and conveying.

Applications of Screw Conveyor

- In Gaur gum powder plants, Tamarind Kernel powder plants. (T.K.P)
- Agriculture feed and Cattle feed plants & Supplements
- Chemical and Dyestuff
- Pesticides, Fertilizer & Organic industries
- Paints, Dry color pigments
- Food industry, pet foods & Spices
- Cement mixes, Coal industry
- Pharmaceutical products

Types of Screw Conveyors

According to position of flow:-

- Horizontal screw conveyors
- Inclined screw conveyors
- Vertical screw conveyors (Screw lift).

According to its external trough:-

- U turf screw conveyors
- Tubular or pipe type screw conveyers

According to the type of flight used:-

- Single flight or double flight screw conveyors
- Short pitch, variable pitch & long pitch type screw conveyors
- Cut flights, cut & folded flights
- Paddle conveyors & mixing paddles
- Ribbon type screw conveyors