ii. Conveyor System

We’re going to look at what a conveyor system is, how they are used, what their applications are, and much more in this article. If you need to discuss how a conveyor system could help you or want to see what other solutions are available to help your business excel, SK Robotics & Automation are here to help.

About

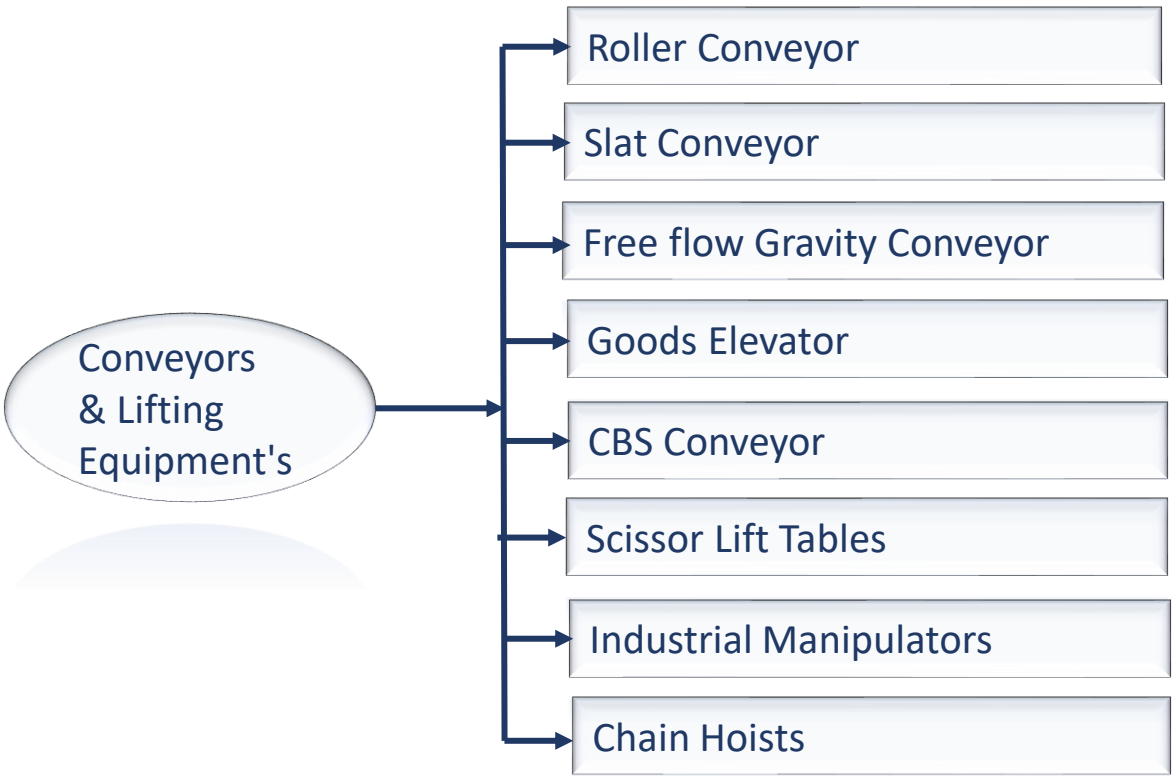
A conveyor system is used in many industries as a standard piece of mechanical handling equipment to move goods, products, raw goods, and other materials from one location to another, usually in the same area or building. They are extremely handy for businesses that deal with heavy goods, sharp items, raw materials, and mass-produced products.

Benefits of using a conveyor system

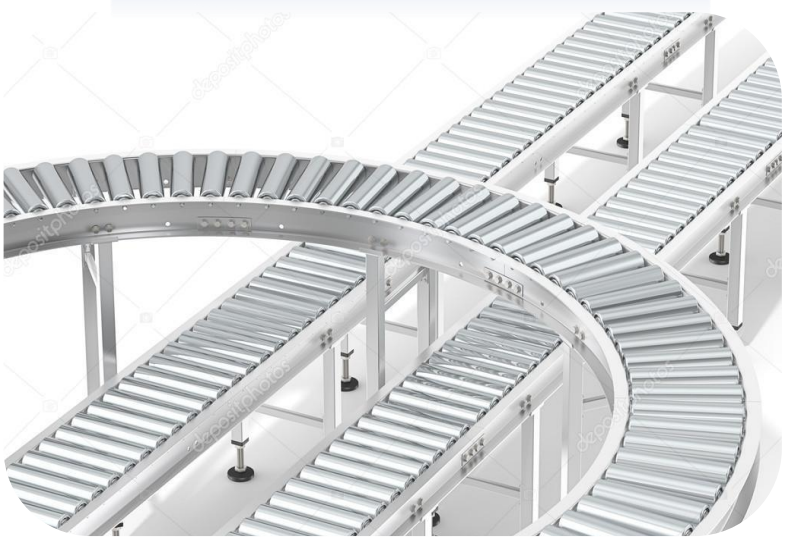
- Can safely transport materials from one level to another through elevated conveyors.
- Can be installed in most situations while usually being able to add value and increase the safety of the workplace due to automation, failsafe’s, and safeguards.
- Conveyors can move high quantities of items in various shapes, sizes, and weights.
- Have advanced safety features that prevent accidents and injuries while increasing throughput of the system.
- Variety of options to run the conveying systems, including the hydraulic, mechanical, and fully automated.

Where are conveyor systems used?

All sorts of materials are conveyed thanks to the different conveyor belts you can get to manage different loads and materials. Some of the common items that are used by conveyors are food items such as beans, nuts, canned foods, and vegetables, bottles, canned drinks, automotive parts such as engines, car frames, and tyres, pills such as medicine or supplements, large amounts of powder, furniture, and much more.



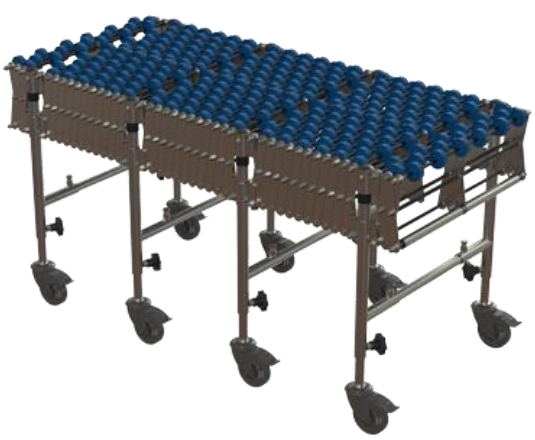
Roller conveyors are a series of rollers supported within a frame where objects can be moved either manually, by gravity, or by power



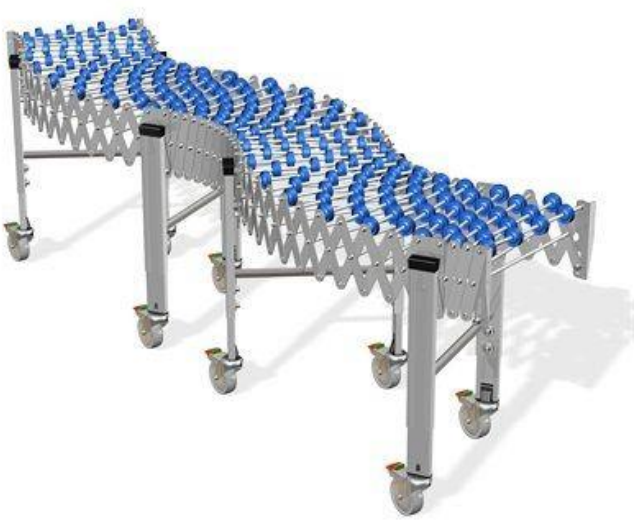
Slat conveyors are typically used to convey heavy loads, hot or oily parts or items through a heat drying process. Slat conveyors are also ideal for assembly line and production operations.

The Free Flow Conveyor design allows all pallets in line to move forward together and can be separate by using stopper. Customer could determine number of station and location in flexible way.

Belt conveyors are the most commonly used powered conveyors because they are the most versatile and the least expensive.[Products are conveyed directly on the belt so both regular and irregular shaped objects, large or small, light and heavy, can be transported successfully.



skate wheel conveyors with extendable, flexible frames are sturdier, have a higher weight capacity, and can handle higher volumes of conveyed items than light-duty skate wheel conveyors with extendable, flexible frames. They have accordion-style frames that can stretch, curve, and contract to change the shape and length of the conveyor. The conveyors collapse for compact storage and are ideal for loading and unloading trailers, creating temporary assembly lines, and adding length to an existing conveyor.



An industrial manipulator is a machine with a rigid steel manipulator arm that allow complex pneumatic tilts and rotations — even when the product being moved is handled outside it's barycenter.

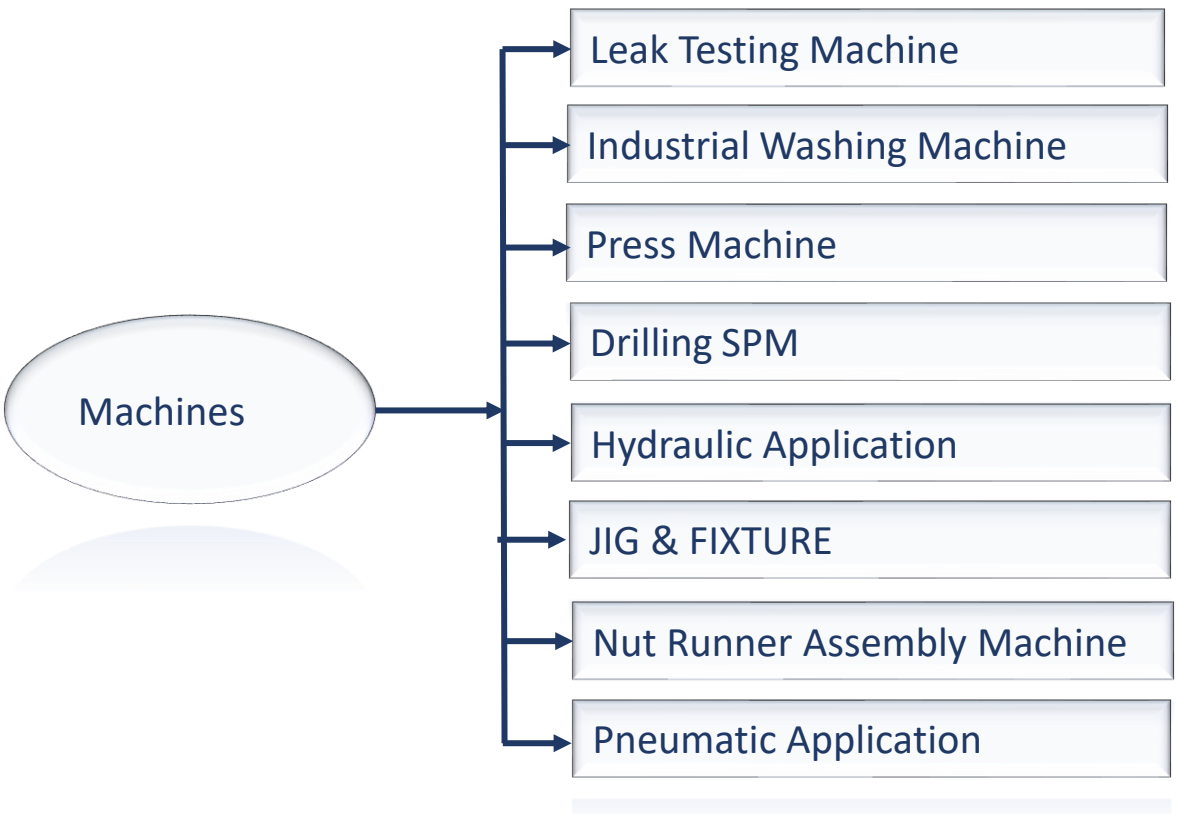
A hoist is a device used for lifting or lowering a load by means of a drum or lift-wheel around which rope or chain wraps. It may be manually operated, electrically or pneumatically driven and may use chain, fiber or wire rope as its lifting medium.

A goods Elevator is a machine to lift goods vertically in a safe way. Persons are not allowed on the lift, only for loading and unloading. There is one exception: a goods lift with an attendant (sometimes called a goods / persons lift). These kind of lifts require special safety measures. There are a lot of different types of goods lifts (or cargo lifts): small goods lifts, service lifts, kitchen lifts, tyre lifts, lifts in storage spaces, heavy duty goods lifts, goods lifts with a cage, car lifts, and many more types for any use.

A lift table is a device that employs a scissors mechanism to raise or lower goods and/or persons. Typically lift tables are used to raise large, heavy loads through relatively small distances. Common applications include pallet handling, vehicle loading and work positioning.

iii. Machines

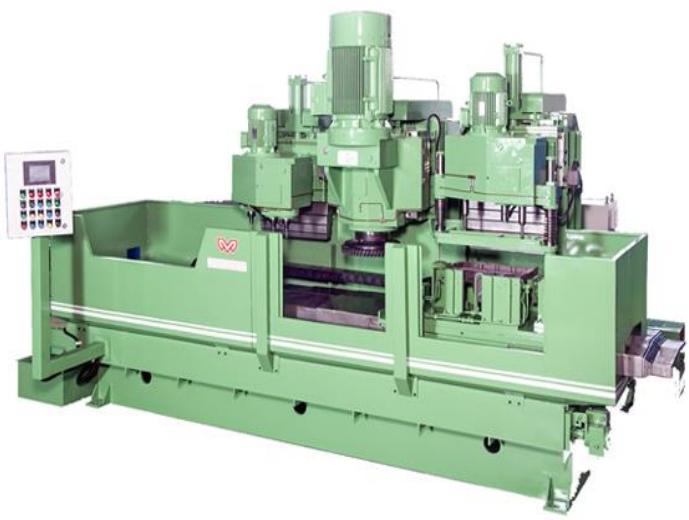
We have vast experience in development of SMPs in Automation sector. We deliver Custom built Machine to our client to achieve their goal in competitive market. Few type of machines are started below



Leak testing machines help to ensure proper product quality, safety, and performance. There are various leak testing machines. ... Some examples of leak detection equipment are vacuum decay, helium leak, mass flow, and pressure decay.

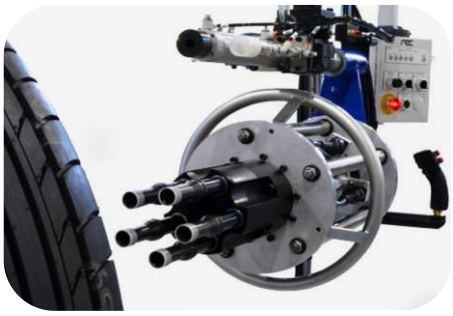
Washing machine which is used for Clean the components before assembly and intermediate operation. This machine we have supplied to Virgo valves and controls, Fiat, John Deere etc. We are supplying General purpose cleaning machine.

Presses are machine tools that are used to change the shape of a workpiece by adding pressure. They are extensively used in the metal forging industry along with metal extrusion and sheet metal fabrication processes



SPMs or Special Purpose Machines offer tremendous scope for high volume production at low investment and at low cost of production when compared to CNC machines. SPM, Special Purpose Machines is a high productivity machine, with specially designed tooling and fixture, dedicated for mass producing the same component day in and day out. A judicious combination of limit switches, sensors, logic controls, automatic job clamping etc is the essence of a SPM

The jig and fixture generally function in securing the workpiece and machine parts. However, there is a difference between both. With the fixture, the tool does not move when the workpiece moves. This is not so with the jigs where the tool moves. Depending on the types of jigs and fixtures, you might need to clamp also.



Nutrunner, is a member of the industrial torque wrench family - a series of tools used to tighten nuts, bolts, and screws in situations where torque is crucial. Unlike standard wrenches, torque wrenches are capable of applying a defined level of torque to a bolt. By being able to gauge the tightness of a bolt, operators can ensure that they're successfully meeting the project specifications a job or project.

Pneumatic systems used in industry are commonly powered by compressed air or compressed inert gases. A centrally located and electrically-powered compressor powers cylinders, air motors, pneumatic actuators, and other pneumatic devices. A pneumatic system controlled through manual or automatic solenoid valves is selected when it provides a lower cost, more flexible, or safer alternative to electric motors, and hydraulic actuators