Mini Conveyor using Geneva Mechanism

The geneva mechanism is a system to convert continuous circular motion into fixed step circular motion. Geneva mechanism requires a rising circular connector extending above the rotating disc to lock between slots in the geneva wheel and drive it. So here we propose a conveyer belt that moves products at regular time intervals, as needed by many automation lines. Our system uses a motorized disc to drive the geneva wheel. The geneva wheel is thus driven at regular time intervals. The wheel is connected to rollers mounted with conveyer belt. As the wheel rotates the belt also rotates at fixed intervals. Thus we demonstrate the design and fabrication of a mini conveyer belt based system using geneva mechanism.

Components

- Motor
- Geneva Wheel
- Rollers
- Disc
- Conveyer Belt
- Supporting Frame
- Joints & Screws

Advantages

- Regular Motion
- Efficient Automation