HENWI

Automatic Cartoning Machine

The Automatic Horizontal Cartoning Machine is a highly versatile, high-speed packaging system designed for packaging various items, including blister packs, bottles, tubes, soap, and other items in the pharmaceutical, food, cosmetic, and daily chemical industries. It employs a chain-driven, unidirectional transmission system for smooth, stable operation and a broad adjustment range, making it suitable for a wide range of products and packaging requirements.

Key Features:

1. Fully Automated Cartoning Process: This machine performs multiple packaging steps automatically, including leaflet folding, carton forming and opening, product insertion, batch printing, and carton sealing. It supports multiple sealing options, such as tuck-in or hot melt adhesive sealing with an optional hot glue system, providing flexibility for diverse packaging needs.

2. Advanced PLC Control with Error Detection: The machine is managed by a PLC (Programmable Logic Controller) system, with photoelectric sensors that monitor each part of the operation. If any issue arises, the machine will automatically stop and display the error on the control panel, allowing for quick troubleshooting and minimizing downtime.

3. Integrated Safety Features: Inside the machine frame, a main drive motor and a clutch brake ensure operational safety. Torque overload protectors are installed in the drive system to disengage the main motor from individual drive components under overload conditions, protecting the machine from damage and enhancing overall safety.

4. Intelligent Detection System: Equipped with a smart detection mechanism, the machine will not insert a leaflet or carton if no product is detected. It seamlessly integrates with upstream equipment to ensure smooth workflow. Defective items (such as those missing leaflets or products) are automatically rejected at the output, ensuring only fully compliant products reach the final packaging stage.

5. Standalone and Inline Flexibility: The machine can function as a standalone unit or work in conjunction with blister packaging machines and other equipment to form a fully automated production line, providing versatility for different production scales and needs.

6. Adaptability for Different Packaging Sizes and Formats: The machine allows for easy changeover between different packaging sizes, supporting small batch production with frequent changeovers. This adaptability makes it ideal for users who need to handle a wide range of product types with various carton sizes.

7. Diverse Feeding Solutions: Due to the wide variety of materials, the machine offers several feeding options to match different product shapes and sizes:

- **Servo-Driven Blister Feeding Hopper:** Ideal for storing and feeding blister packs or similarly shaped items with high storage capacity. Feeding time and quantity are controlled by a servo motor, adjustable via the touchscreen for convenient control.

- **Bottle Buffer Platform:** Designed for bottles, featuring a circular platform that organizes, stores, and queues bottle-shaped items, ensuring orderly entry into the cartoning machine.
- **Granule and Patch Feeding Unit:** For items with varying shapes and quantities, this unit uses conveyor sorting and robotic arms to handle feeding with automated control for counting, stacking, rejecting, and queuing.
- **Custom Feeding Options:** For special materials, custom feeding solutions can be designed to meet specific requirements.

Technical Specifications:

- Power Supply: AC 380V, 50Hz, three-phase, five-wire system
- Total Power: 1.5 kW
- Dimensions (L×W×H): 3300 × 1150 × 1900 mm
- Machine Weight: 1300 kg
- Production Capacity: 60-100 cartons/min
- Folding Speed for Leaflets: 60-100 leaflets/min
- Compressed Air Requirement: 2 cubic meters/hour at 0.5-0.7 MPa
- Carton Specifications:
  - Carton quality: 250-350 g/m² (dependent on carton size)
  - Max Carton Size (L×W×H): 190 × 97 × 60 mm
  - Min Carton Size (L×W×H): 58 × 25 × 15 mm
- Leaflet Specifications:
  - Paper quality: 60-70 g/m²
  - Max Leaflet Size (L×W): 320 × 210 mm
  - Min Leaflet Size (L×W): 100 × 100 mm