



SMT mounter Feeder common types & classification

Today, KINGSUN shares with you the common types and classifications of SMT mounters.

一、 According to the feeding method, common ones include:



1. Tape Feeder

Tape Feeder is the most commonly used standard feeder in SMT machine feeders. The traditional structural methods include wheel type, claw type, pneumatic type, and multi spacing electric type. It has now developed into high-precision electric



type. Compared with traditional structural methods, high-precision electric type has higher transmission accuracy, faster feeding speed, more compact structure, and more stable performance, greatly improving production efficiency.

The basic widths include various types such as 8mm, 12mm, 16mm, 24mm, 32mm, 44mm, and 52mm etc. , with spacing of 2mm, 4mm, 8mm, 12mm, and 16mm etc. ;

There are two types of reel diameter sizes: 7 inches and 13 inches.



2. Tray Feeder

It can be divided into single-layer structure and multi-layer structure. The single-layer tray feeder is directly installed on the feeder frame of the SMT machine, occupying multiple slots, and is suitable for situations where there is not much tray material; The multi-layer tray feeder has a multi-layer automatic conveyor tray, which occupies small space and is compact in structure. It is suitable for situations with a large amount of tray materials. The tray mounted components are mostly various IC integrated components.



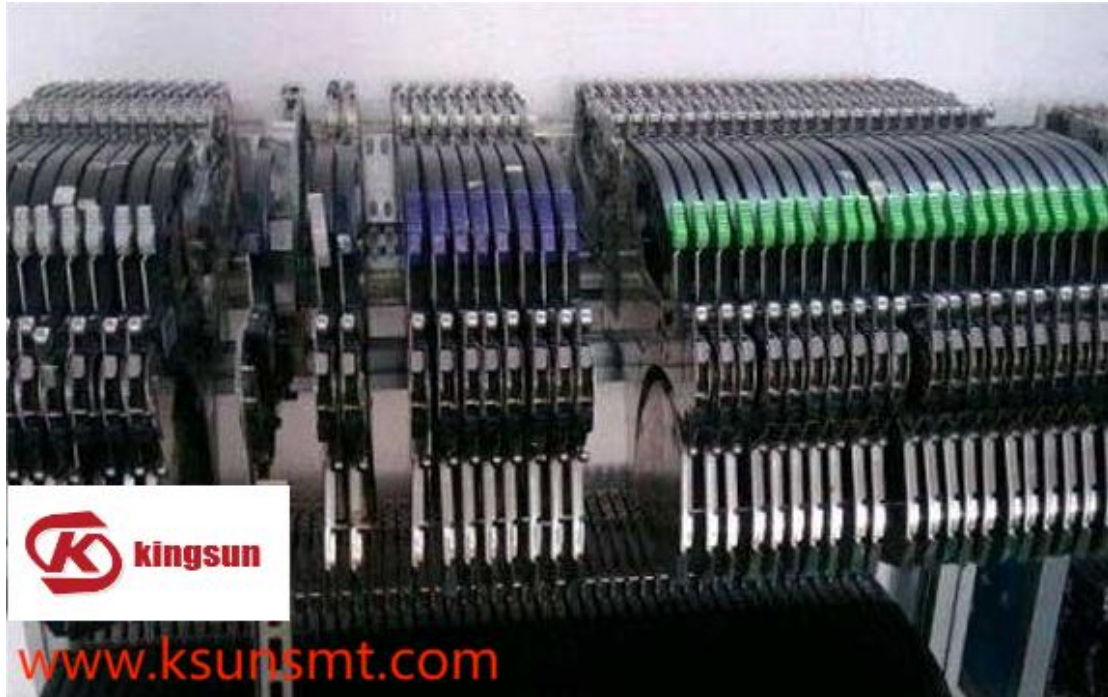
When using palletized materials, it is necessary to pay attention to protecting exposed components with large pipe corners to prevent mechanical and electrical performance damage during transportation and use. When using TQFP, PQFP, BGA, TSOP, and SSOPs components in the tray, the tray size can reach 150mm x 330.2mm, and the height can reach 25.4mm. Interestingly, the tray feeder can not only provide picking up components for the SMT machine, but also serve as a potential throwing station for valuable components.

3. Tube Feeder

Tube feeders usually use vibrating feeders to ensure that the components in the tube continuously enter the suction position of the chip head. Generally, PLCC and SOIC use this method for feeding. The tubular feeder has the characteristics of good protection for component pins, poor stability and standardization, and low production efficiency.

4. Stick Feeder

The working method of a vibrating feeder is to freely pack the components into a molded plastic box or bag, and sequentially feed the components into the SMT machine using a vibrating feeder or feeding tube. This method is usually used for MELF and small shape semi conductive components, only applicable to non-polar rectangular and cylindrical components, not polar components.



5. Special Vibration Feeder

Special Vibration feeder, need to be customized, At present KINGSUN production technology is very mature of Vibration feeder, customers response all very well.

二、 According to the classification of electric and non electric, the common ones are electric feeder and mechanical feeder.

Yamaha's SIGMA SMT machines are all electric feeders, while many of JUKI's feeder are mechanical feeders.....



DONGGUAN KINGSUN AUTOMATION TECHNOLOGY CO.,LTD



Regarding feeders related knowledge, KINGSUN share with you here , hoping to be helpful to you. More information about Products please Contact US at jenny@ksunsm.com or visit www.ksunsm.com .

“DONGGUAN KINGSUN AUTOMATION TECHNOLOGY CO.,LTD” is a leading SMT automation equipment factory provider in China. With many years of profound experience accumulation, we provides comprehensive solutions for global customers with strong resources and high-quality professional technical team.