Our Solutions, Your Value

Panasonic BUSINESS

Manufacturing Process Innovation

Model Name
NPM-VF
Model No.NM–EJR9A

Safety Cautions

●Please read the User’s Manual carefully to familiarize yourself with safe and effective usage procedures.
●To ensure safety when using this equipment all work should be performed according to the information given in the supplied Operating Instructions. Read your operating instruction manual thoroughly.

Panasonic Group products are built with the environment in mind.
http://panasonic.net/eco/

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NPM-VF

We are proud to present the NPM-VF series of NPM machines. The NPM-VF series represents a new generation of SMT placement machines that are designed to meet the needs of today’s manufacturing environments. The NPM-VF series is a modular system that offers a wide range of functions, and it is ideal for a variety of applications. Whether you are looking for high-speed performance or high-precision placement, the NPM-VF series has the features you need to achieve your goals.

Panasonic NPM-VF series

The NPM-VF series is designed to provide high-speed performance and high-precision placement, making it ideal for a variety of applications. The NPM-VF series is also a modular system, so you can configure it to meet your specific needs.

The NPM-VF series is equipped with a range of features, including:

● High-speed performance
● High-precision placement
● Modular design

Overall, the NPM-VF series is a reliable and efficient solution for your SMT placement needs.
NPM-VF Innovating PCB assembly components insertion process via automation of odd-form

**Features and aims of NPM-VF**

1. Automation of odd-form components insertion process, followed by integration with SMT specifications
   - Supports both SMT placement + odd-form insertion (developing)
2. Versatile and flexible: various configuration of head tools and machine feeder configuration to adapt to different types of components
3. Contribute to manpower reduction and stable production with high productivity, flexibility, high quality insertion

**Applicable Components**

- Tape
- Stick, Tray, Bulk
- 2~3 pins
- 4 pins and more
- Large capacitors
- Transformers
- Large Connectors
- Relays, power modules
- Shield cases, covers
- IC - DIP
- Small transformers, switches
- Led etc. (in bulk)
- Semiconductors
- Connectors
- Module switching conductors
- Capacitors

**Line Solution**

- Reduce manual insertion assembly process
- Prevent human errors, improve quality

**SMT placement and odd-form components assembly process**

- Convert manual insertion process to SMT inline process
- Reduce processes / dip solder investment

**High Productivity**

- High speed insertion
- Maximum tact of 0.8s is achieved by 2-head 2-head structure. Compared to manual insertion, 1 NPM-VF is able to replace 3 to 4 operators. In addition, each head can hold up to 2 head space, chuck head can fulfill effective movement of the insert heads.

**High speed**

- Stackable stick feeder
- Sticks can be loaded during machine operation, reducing machine down time due to component exhaust

**Non-stop Production**

- [Variable pitch body chuck]
  - Chuck setup is optimized to suit component width
  - Adapters can be attached to the magazine for better gripping of components

**Flexibility**

- Various tools to cater to different components
- Various component feeding types
- Flexible feeder configuration

**Quality insertion**

- Recognition component and component inspection function
  - NPM-VF is equipped with 2 cameras (head camera and component camera) to scan PCB holes, PCB marks and component leads, ensuring high quality and stable insertion.

- Insertion error detection system
  - Component height will be detected via sensor after insertion to determine if it is inserted correctly.

**Recovery Operation**

- In the case of insertion error, PCB will automatically flow to the upstream feeder or conveyor for the operator to remove the error component.

- Cut & Clinch Function (Option)
  - Function: prevent protrusion of components after insertion, improving insertion stability
  - Features: variable pitch clinch (2.5~40 mm) with piezoelectric detection system for insertion error.