

## Auto Tape Feeder

# KFTA3D



The KFTA3D automatic tape feeder is a critical precision production line device designed for reel-mounted tape-packaged components. It performs automatic indexing, cover tape peeling and high-precision positioning to steadily deliver standard SMD components including resistors, capacitors, miniature ICs and 0201 micro-components to the pickup position of P&P for efficient feeding. It serves as a core component to boost productivity and yield rate in mass electronic manufacturing.

### World's First



World's first intelligent automatic component consumption counting technology: After component pickup by the P&P, the KFTA3D series feeder automatically subtracts one from the preset component quantity and stores data in memory.

Each feeder is assigned a unique Component ID and Feeder ID. Combined with the scanning function of AutoTronik software, it effectively prevents human error caused by incorrect feeder slot installation.

Full traceability is available for Stock Codes, Lot Codes and Production Date Code to standardize material management.

### Unique Feature

Built-in independent battery module enables offline inquiry of component data and remaining quantity anytime.



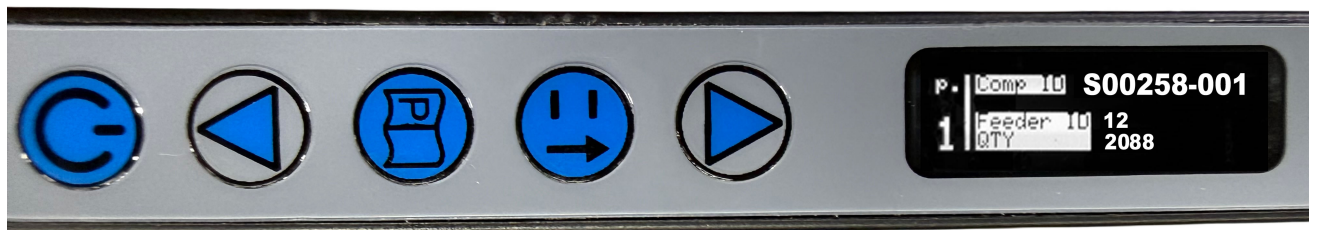
## 1. What You See Is What You Get, All Data at Your Fingertips.

### High-Definition Industrial-Grade OLED Display

Fitted with a high-contrast OLED panel, the display is crisp and transparent. It presents production data clearly amid harsh workshop light. Free from the viewing angle restrictions and heavy glare of traditional screens, it enables accurate data reading at all angles.

### Main Advantages

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### Remaining Quantity Monitoring

Display feeder Component ID & Feeder ID  
Real-time display of remaining quantity



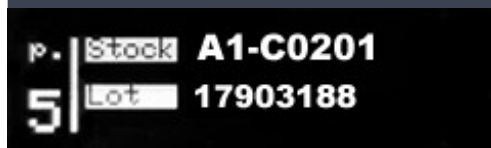
### Component Model Tracking

Display feeder component library  
Display feeder advance steps



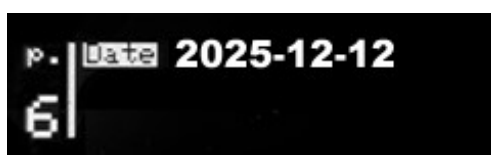
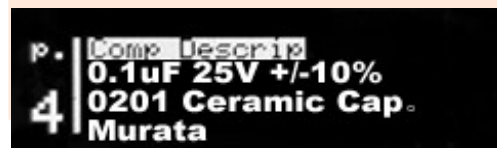
### Component Code Tracking

Display Stock Code & Lot Code.  
Display Production Date Code



### Component Description Tracking

Display component description  
Configure easily recognizable part alias



## 2. Optimized routing achieves thorough separation between scraps and materials.

### Newly Upgraded Separation Tank Structure

We have improved upon traditional designs and reorganized the routing for waste belt collection and separation. The optimized structure guides waste belts into the collection zone automatically and smoothly, preventing jams fundamentally and delivering a more streamlined production flow.

### Solve Industry Pain Points Completely

The exclusive separation tank efficiently strips waste belts off materials, eliminating tangling, buildup and machine jams at the source and delivering far more stable and reliable operation.

### Simple and Hassle-Free Cleaning.

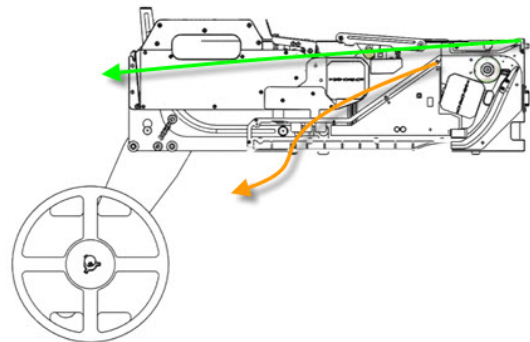
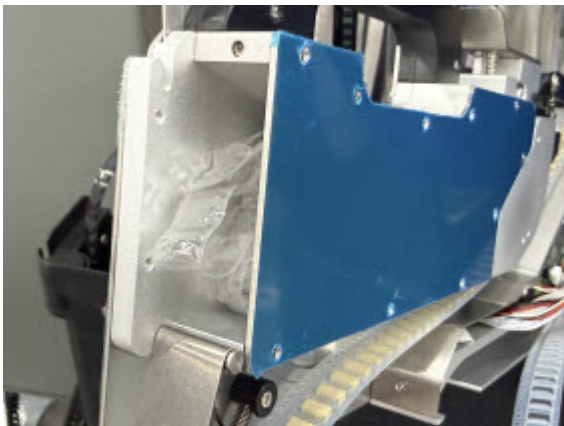
Cleaning waste belts is effortless - just open the cover without using complex professional tools. The streamlined maintenance is easy to master even for beginners. It cuts dependence on skilled technicians and speeds up on-site responses.

70%↓

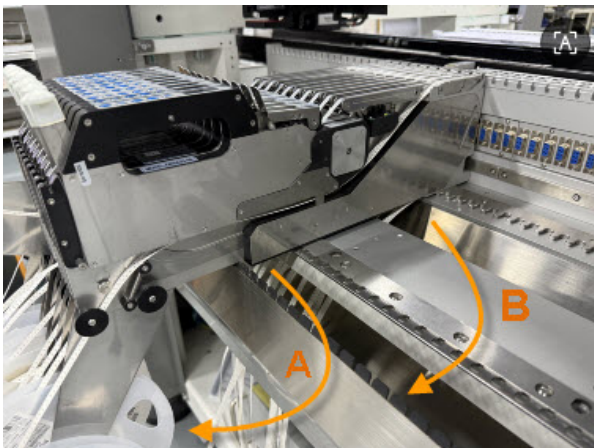
Less daily maintenance required

80%↓

Shorter idle standby time required



The KFTA3D device is equipped with two discharge ports (A and B), allowing optional tape output methods.



### 3. Dual-motor Synchronous Drive: Perfect integration of power and precision.

#### Dual-motor Synchronous Drive Structure

Ditching the conventional single-motor setup, it uses two high-performance stepper motors in parallel. Enhanced torque and coordinated control eradicate power fluctuations, ensuring ultra-smooth operation at high speeds.

It completely resolves long-standing industry problems such as inadequate power, uneven transmission and positioning errors of single motors, and creates a robust power base for high-end manufacturing.

#### Precise Pulse Signal Control

Equipped with high-frequency high-precision pulse signal technology, it enables real-time micron-level synchronous control of dual motors. The system instantly adapts to load changes, regulating feeding pace, travel distance and speed in milliseconds to reduce mechanical transmission errors to the minimum physical threshold.

Smooth transmission with no stalling or offset guarantees accurate process performance, ideal for high-precision micro-assembly and precision machining.

**50%+**

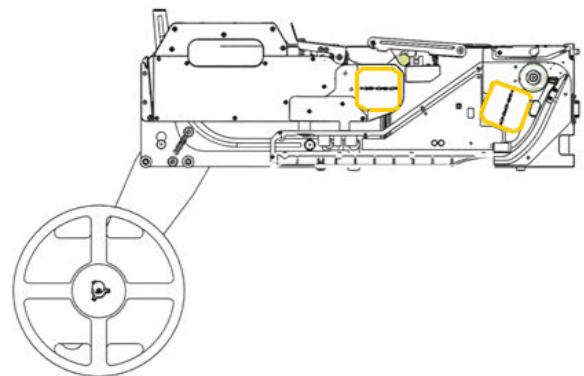
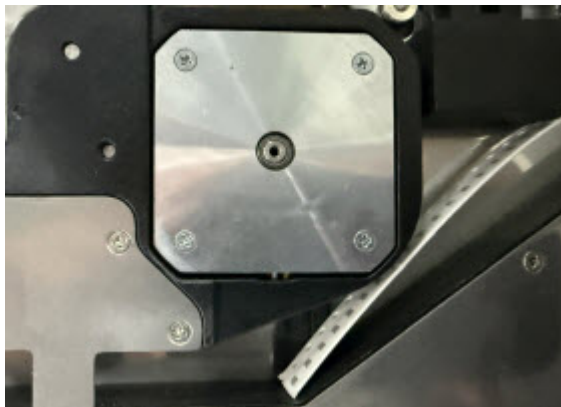
#### Substantial increase in power output

Dual motors work in tandem to overcome performance limitations, ensuring sufficient power for complex conditions and heavy loads.

**30%**

#### Substantial leap in feeding efficiency

Transmission links and control algorithms are optimized to cut cycle time effectively, bringing improved productivity.



### 4. Powerful core delivers sustained stable operation.

#### Core Driving Component: High-performance Stepping Motor

Equipped with industrial-grade high-performance stepper motors, the equipment delivers outstanding stability and durability. These motors consume less power and produce little heat to avoid performance loss from overheating. Precision manufacturing keeps mechanical wear to a minimum. With strong fatigue resistance, they operate steadily even under long-term, high-frequency working conditions and provide reliable core power support.

#### Extended Service Life & Reliable Performance

Backed by premium core components, the equipment boasts a dramatic improvement in overall durability with a far longer design life than conventional counterparts. Its low-wear mechanical design greatly lowers failure risks, slashing routine maintenance workload and downtime-related hidden losses, and reliably sustains long-term stable production.

## 5. Select KFTA3D to achieve full-scale production optimization.

KFTA3D is more than a high-performance feeder. It is a smart production solution fully tailored to the demands of modern intelligent manufacturing. Through technological innovation and process optimization, it delivers measurable and tangible improvements across efficiency, cost control, product quality and overall management.

### Leap in Production Efficiency

Beyond traditional mechanical constraints, it features faster feeding, superior positioning precision and smoother, steadier production cycles.

**25%** Higher Overall Production Capacity

### Operational Cost Optimization

Minimal mechanical structure for easy maintenance. Durable parts minimize downtime, while low energy consumption slashes power expenses.

**30%** Lower Total Cost of Ownership

### Enhanced Product Quality

Micron-scale positioning minimizes material waste and lowers product defect rates.

**60%** Drop in Defect Rate

### Innovated Management Efficiency

Intuitive HMI with real-time operational data streamlines on-site production scheduling and management.

**15%** Higher Overall Equipment Effectiveness



Acting as the component transmission hub of SMT production lines, this automatic tape feeder provides accurate, efficient and intelligent feeding solutions. It stabilizes production rhythm, raises first-pass yield, and cuts losses and changeover costs. It satisfies both large-scale production and flexible manufacturing demands, making it an ideal option for high-precision mounting in automotive electronics, consumer electronics and communication equipment industries.



| KFTA code    | Tape width range                              |
|--------------|-----------------------------------------------|
| KFTA3D-08-   | Applicable to 8mm roll tape spacing           |
| KFTA3D-08SW- | Applicable to 8mm roll tape spacing, for 0201 |
| KFTA3D-12-   | Applicable to 12mm roll tape spacing          |
| KFTA3D-16-   | Applicable to 16mm roll tape spacing          |
| KFTA3D-24-   | Applicable to 24mm roll tape spacing          |
| KFTA3D-24S-  | Applicable to 24mm roll tape spacing          |
| KFTA3D-32-   | Applicable to 32mm roll tape spacing          |
| KFTA3D-44-   | Applicable to 77mm roll tape spacing          |
| KFTA3D-56-   | Applicable to 56mm roll tape spacing          |
| KFTA3D-72-   | Applicable to 72mm roll tape spacing          |
| KFTA3D-88-   | Applicable to 88mm roll tape spacing          |
| KFTA3D-104-  | Applicable to 104mm roll tape spacing         |
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