

FUDE
复德科技

Leading Provider of World-Class Semiconductor Packaging & Testing Solutions

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SHENZHEN FUDE TECHNOLOGY CO.LTD.

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- Shenzhen-certified High-Tech Enterprise
- Unit of Guangzhou Semiconductor Industry Association
- ISO9001 Quality System Certified Enterprise
- Member of the Discrete Devices Branch of the China Semiconductor Industry Association

COMPANY PROFILE

Fude Technology is a premier manufacturer specializing in semiconductor backend equipment in China. Since 2005, it has been engaged in the research, development, and manufacturing of semiconductor packaging and testing equipment. Its main products include taping, testing, sorting, and marking integrated machines. Currently, the FD1850 model has achieved a detection capacity of 50K per hour. Fude is committed to providing first-class quality semiconductor packaging and testing equipment, and can offer various series of testing and sorting integrated machine equipment such as SOT, SOD, QFN, DFN, SOP, and TO.

Fude Team

Fude Technology was established in 2013, transformed from the semiconductor equipment division of Yuanwang Industry (established in 2005), with 160 employees and 50 R&D engineers. Yuanwang Industry Automation is a top-tier automation equipment company, established in 2004, specializing in various aspects of automation. It has a total of 430 employees and 160 R&D engineers.

50

R&D Engineer

160

Employee



● Shenzhen High-tech Enterprise

● Unit of the Discrete Device Branch of the China Semiconductor Industry Association

● Member of Guangzhou Semiconductor Industry Association

● ISO9001 Quality System Certified Enterprise

▶ Headquartered in Fuyong Street, Bao'an District, Shenzhen, with a production base located in Chang'an New District, Dongguan, our company enjoys extremely convenient transportation by land, sea, and air.

▶ Fude Technology has absorbed the strengths of various companies and combined them with its own unique expertise in the field of automation equipment to create a semiconductor device testing, sorting, and taping machine with unique advantages. Currently, hundreds of units have been sold, creating value for numerous customers.

▶ As an independent automation equipment supplier, our company is based in Shenzhen and has established offices in multiple industrial cities across the country, such as Guangzhou, Shanghai, Yangzhou, Wuhan, Chengdu, Changchun, Xi'an, Tianshui, and Chuzhou, providing customers with zero-distance, instant supply and after-sales service.

▶ Our company has been included in the procurement systems of numerous enterprises, providing customers with products and services that exceed their expectations. Pursuing perfection, continuous improvement, thinking for you, and meeting your needs are not only our company's quality policy but also our solemn commitment to all customers.





ADVANTAGE



01

Product Advantages

Diversity: We can provide testing and sorting equipment for various series of packaged ICs such as SOT, SOD, QFN, DFN, SOP, and TO. Full functionality: As a leading enterprise in the packaging and testing industry, we provide services for all our products and can adapt to different functional requirements of both domestic and foreign enterprises.



02

Market Advantages

Fude Technology has absorbed the strengths of various companies, coupled with its own unique expertise in the field of automation equipment, to create a semiconductor device testing, sorting, and taping machine with unique advantages. Currently, over 500 units have been sold, and they are loved by many customers. Changjiang Electronics, Huatian Technology, Leshan Radio, Yangjie Technology, Fuman Electronics, and others are all major customers.



03

Technical Advantages

Having obtained multiple patents in this field, we have a deep understanding of the technology. In terms of scale, breadth, and difficulty, it has taken a leading position in the international industry. High speed: UPH>50+@30ms Test Time High stability: MTBA>2hs Full functionality: dual tape, 6 sets of vision, automatic feeding, SECS/GEM, GPIB/TTL/RS232 test methods.



04

Management Advantages

As an independent automation equipment supplier, our company is based in Shenzhen and has established offices in multiple industrial cities across the country, such as Guangzhou, Shanghai, Yangzhou, Wuhan, Chengdu, Changchun, Tianshui, and Chuzhou, providing customers with zero-distance, instant supply and after-sales services. Our company has been included in the procurement systems of numerous enterprises, delivering products and services that exceed customer expectations.

COMPANY PROFILE

WHY CHOOSE FUDE



✂ With a large scale in China, we are leading in technology within the industry

China's largest semiconductor packaging and testing equipment supplier, which has been engaged in research, development, and manufacturing since 2005, has undergone numerous generations of technological advancements and currently holds a leading position in the international industry.

⚙ High-quality accessories at a low price, offering a high cost-performance ratio for the equipment

China's largest semiconductor packaging and testing equipment supplier, which has been engaged in research, development, and manufacturing since 2005, has undergone numerous generations of technological advancements and currently holds a leading position in the international industry.

🏭 Strong manufacturing and R&D capabilities, with a sound quality control system

Meeting the needs of multifunctional scenarios, with a simple interface, real-time operational observation, and the ability to make any extensions, Vision can be expanded by 6, test stations can be expanded by 8, and the belt can be expanded by 2. It can also be extended for tape and material tube discharge.

🏭 High-speed and stable operation, with a wide range of products and high production capacity

Committed to providing world-class equipment, we have achieved a UPH of 50K and can offer various series such as SOT, SOD, QFN, DFN, SOP, TO, etc. With high speed and stable operation, we achieve high productivity.

🔄 Versatile and easy to operate, with wide compatibility and easy expansion

Meeting the needs of multifunctional scenarios, with a simple interface, real-time operational observation, and the ability to make any extensions, Vision can be expanded by 6, test stations can be expanded by 8, and the belt can be expanded by 2. It can also be extended for tape and material tube discharge.

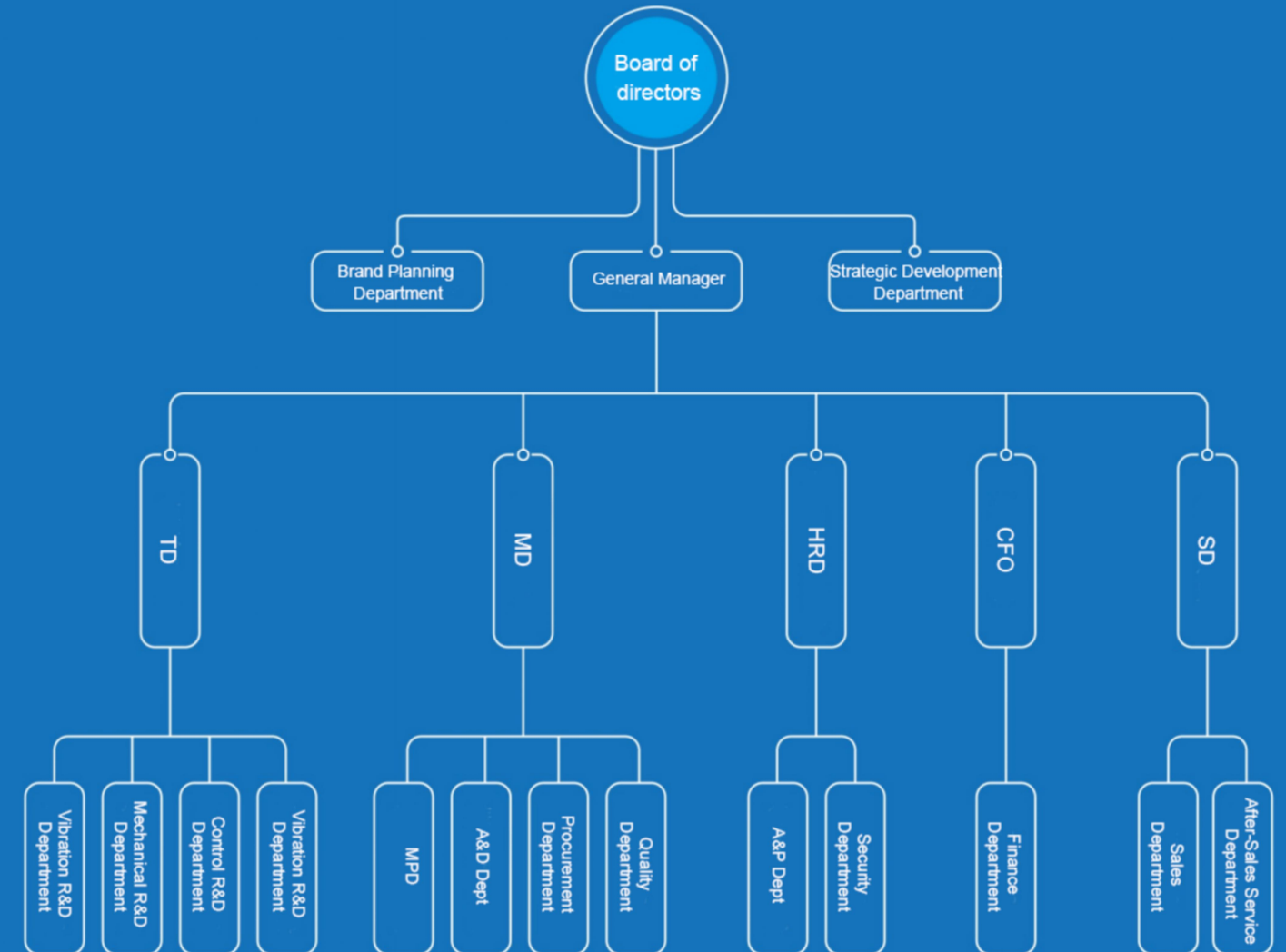
👤 Wide customer recognition, fast delivery and attentive service

With over a decade of industry accumulation, our products have been used by dozens of users and recognized by customers. We have a comprehensive after-sales system, with dozens of after-sales personnel, and have established offices across various regions to ensure the fastest response to customers.

ORGANIZATION STRUCTURE

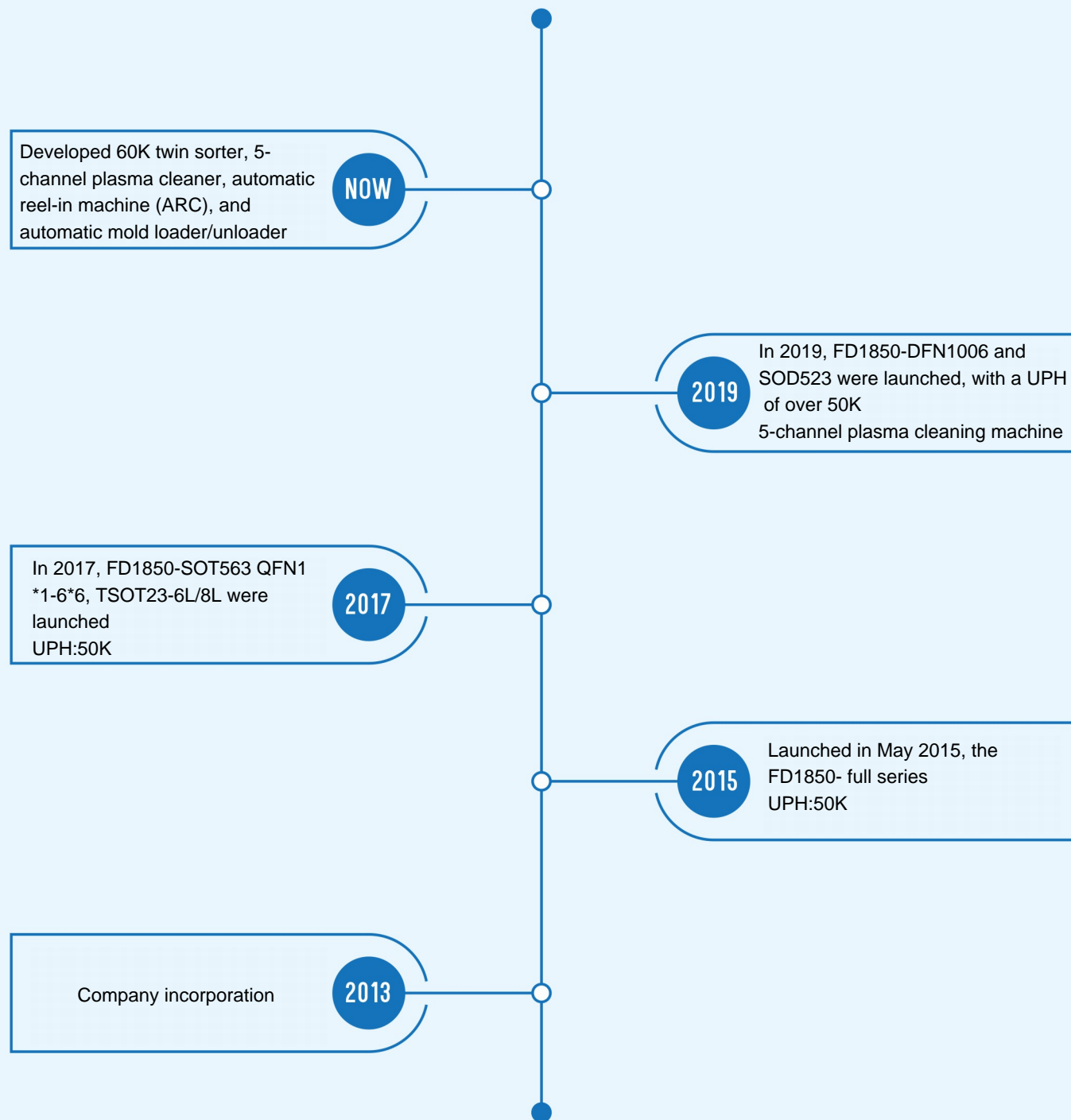
Organizational Structure

Fude boasts a stable and scientific management system, coupled with a robust quality control system



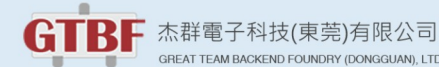
DEVELOPMENT HISTORY

Development history



COOPERATIVE PARTNER

Partner



Pre-sales

Fully understand customer needs and provide feasible solutions



During-sale

Project-based management, strictly adhering to the project schedule for production implementation



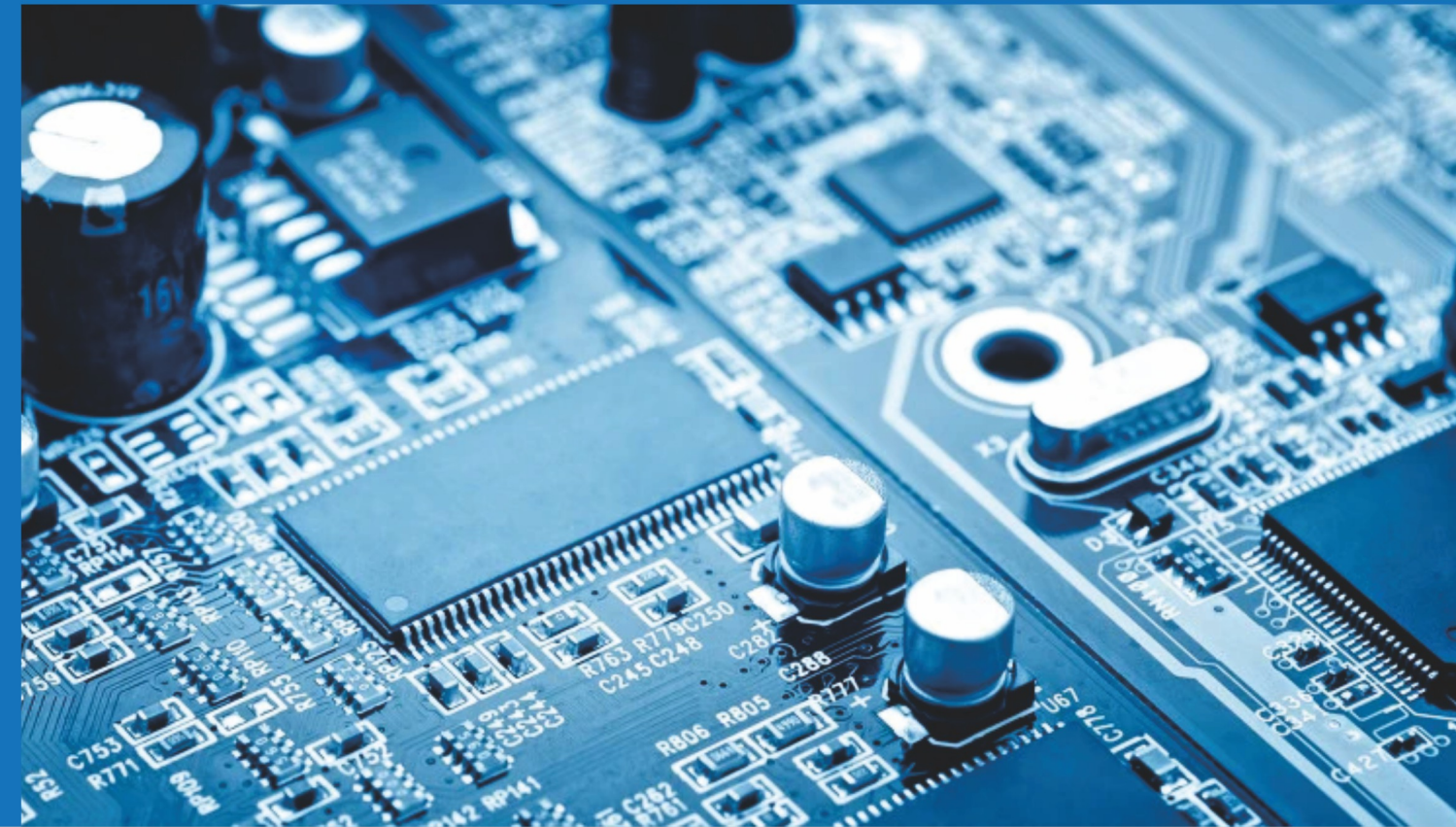
After-sales service

Efficient and prompt after-sales service

MAIN BUSINESS

Main business

Fude Technology boasts a team with technical expertise that surpasses its peers in the industry, encompassing research and development, production, sales, and after-sales service. We provide customers with IC material turret-type high-speed automated testing, sorting, and packaging equipment, as well as PLASMA plasma cleaning equipment. Adhering to the design philosophy of high-speed, high-end, and high-quality research and development, our company specializes in the research, development, and production of semiconductor/IC front-end and back-end process equipment. We have gained high recognition from customers in the field of semiconductor testing and packaging! Currently, we are a leading high-tech enterprise in China specializing in the research, development, and production of automated equipment for semiconductor and IC products.



01

HANDLER

FD Handler tests the integrated machine for sorting, marking, and tape application.



02

PLASMA

Plasma Cleaner - High-Efficiency Plasma Cleaning Machine



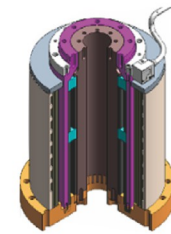
03

ARC

Semiconductor chip automatic high-efficiency tape rewinder ARC.

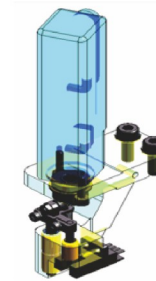


Product advantages



Main rotating DDR motor

NIKKI DENSO DDR motors provide a higher torque/force ratio, achieving faster operating speeds and high precision within the industry.



Independent lower pressing motor (Z-axis)

YASKAWA's high-speed independent Z-axis press system provides rapid and stable press-up movements, featuring torque control with a motor force range of 0.5kg-7kg and an accuracy within +/-10%.



Consumables

- Provide low-priced yet high-quality consumables across the entire industry
- Reduce the operational costs for users
- Efficient and rapid supply of consumables across the entire industry

FD1850/2050

Test sorting and marking integrated machine

- Model: FD1850/2050
- Applicable to: SOT, SOD, QFN, DFN
- UPH:50K

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FD1850/2050 (Turret Based Test Handle)

Device Type

18-position turret system (accuracy +/-10um)

Encapsulation

SOT23, SOT26, SOT223, SOT523, SOD123, QFN1*1-6*6, DFN1006, SOT023, SOT323, SOT346, SOT353, SOT363, SOT457, SOT223, SOT523, SOT563, SOT89, SOD123, SOD323, TSOT236/8L

Specification

UPH: >=50,000 (test time <=30ms)

MTBA>120Min MTBF>168H

Input:Bowl Feeder

Output:Tape and Reel(Hot Seal)

Test Site:Up to 8

Reject:Binning

Controller: Industrial-grade computer with WIN7 OS

Laser Marking

CO2,Fiber Laser

Visual system

Orientation,Mark,Lead2D, 3D,5S and In-Pocket Inspection

FD2420

Test sorting and marking integrated machine

- Model:FD2420
- Applicable to: SOP, TSSOP, TO series
- UPH: 20K

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FD2420 (Turret Based Test Handle)

Device Type

24 Position Turret System (accuracy +/- 10um)

Encapsulation

QFN, TSOP, TSSOP, SOIC, MSOP, SMA, B and C, Resistor and Glass Diodes, TO252

Specification

UPH:>=20,000

MTBA>120Min MTBF>168H

Input:Bowl Feeder

Output:Tape and Reel(Hot Seal)

Test Site:Up to 8

Reject:Binning

Controller: Industrial-grade computer with WIN7 OS

Laser Marking

CO2,Fiber Laser

Visual system

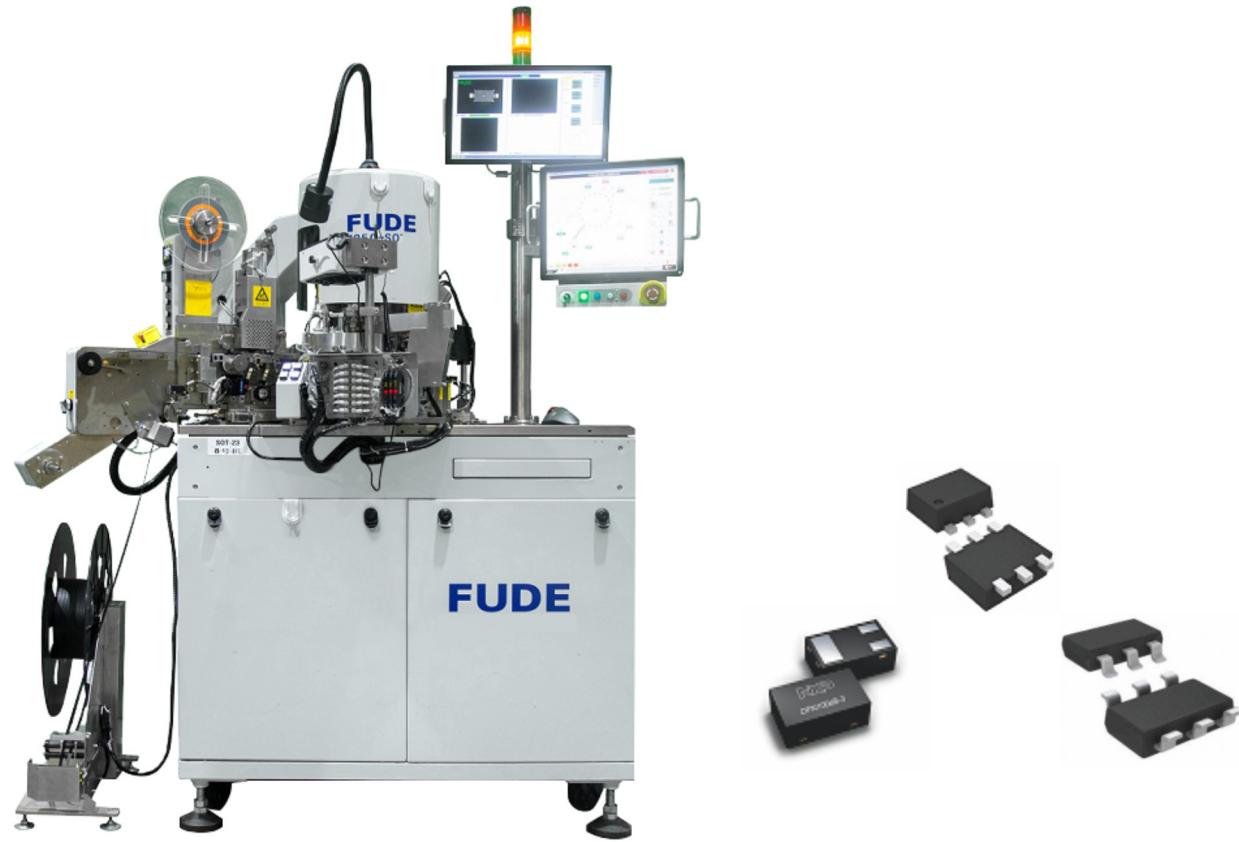
Orientation,Mark,Lead2D, 3D,5S and In-Pocket Inspection

FD2020

Test sorting and marking
integrated machine

- Model: FD2020
- Applicable to: QFN, SOIC, TO
- UPH:20K

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FD2020 (Turret Based Test Handle)

Device Type

20-position turret system (accuracy +/-10um)

Encapsulation

SOT23, SOT26, SOT223, SOT523, SOD123, QFN1*1-6*6, DFN1006, SOT023, SOT323, SOT346, SOT353, SOT363, SOT457, SOT223, SOT523, SOT563, SOT89, SOD123, SOD323, TSOT236/8L

Specification

UPH: >=20,000 MTBA >120Min MTBF >168H
 Input: Bowl Feeder Output: Tape and Reel (Hot Seal)
 Test Site: Up to 8 Reject: Binning

Controller: Industrial-grade computer with WIN7 OS

Laser Marking

CO2, Fiber Laser

Visual system

Orientation, Mark, Lead 2D, 3D, 5S and In-Pocket Inspection

PLASMA CLEANER

Fully automatic high-efficiency
tape collecting machine

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Plasma Cleaner - High-efficiency Plasma Cleaning Machine

RF power supply	F13.56MHz, 1000W (continuously adjustable)
Degree of vacuum	<15 Pa oil-free pump
Cleaning product range	180~280mm×25~90mm (length x width)
Pass box size range	180~290mm×25~93mm (length x width)
Number of flow channels	5, allowing for the simultaneous processing of products with five different widths
Plasma excitation cleaning time	5 Sec
UPH	600 (RF time is 10S, with 5 flow channels)
Cleaning ability	Contact angle test <12°
Power supply	AC380V5.5kw
Compressed gas	5-8 bars 50L/min
Argon	3 bars 1L/min
Nitrogen	3 bars 20 L/min
Overall dimensions and weight	(L)×(W)×(H):1600mm×1050mm×1800mm/700kg

ARC40

Fully automatic high-efficiency
tape rewriter

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ARC40 Fully Automatic High-Efficiency Tape Collector

Project	Specification	Remark
Reel specification	7/13 inches	The edge of the reel needs to have a carrier tape insertion detection hole
Applicable product type	To be specified by the customer	—
Reel placement capacity	30 trays	—
Power supply	1P220V/103w/50Hz	—
atmospheric pressure	Above 5kg/cm ²	saturation pressure
Operation interface	Touch screen	—
Control	PLC and human-machine interface	—
Speed	Meet the speed requirements of the testing packaging machine	—
Utilization rate	95%	—
Overall Dimensions	Length 700 * Width 750 * Height 1800 (mm)	Based on the entity
Color	Red Sea Blue	—
Weight	About 150kg	—