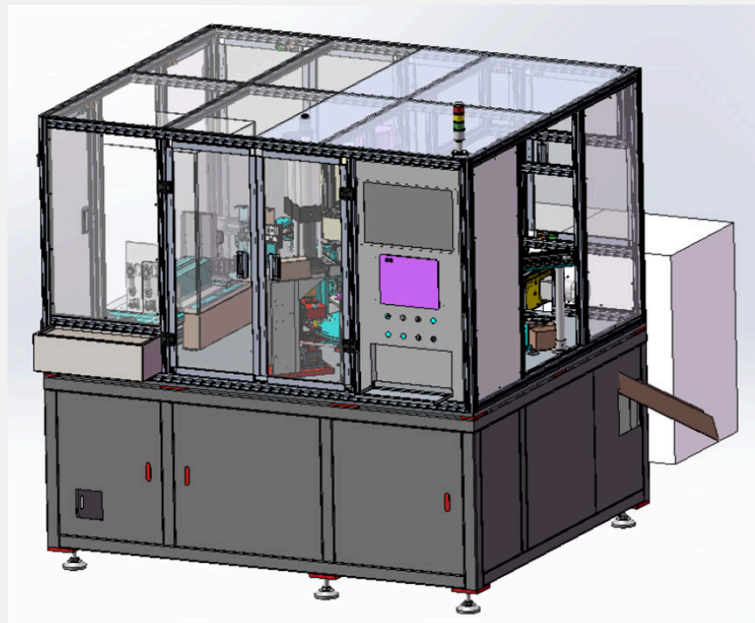
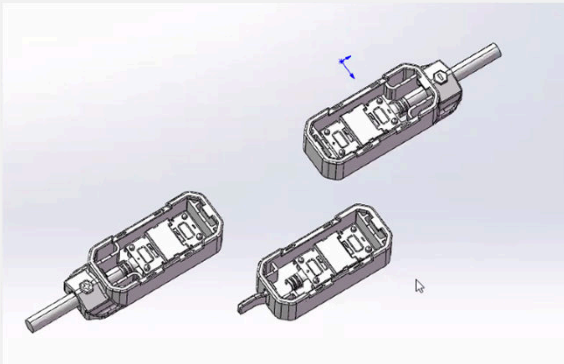


Su Zhou Na Zhi Precision Technology Co.,Ltd

Automatic Diodes Assembling Machine for the Negative and Middle box



Proposal information

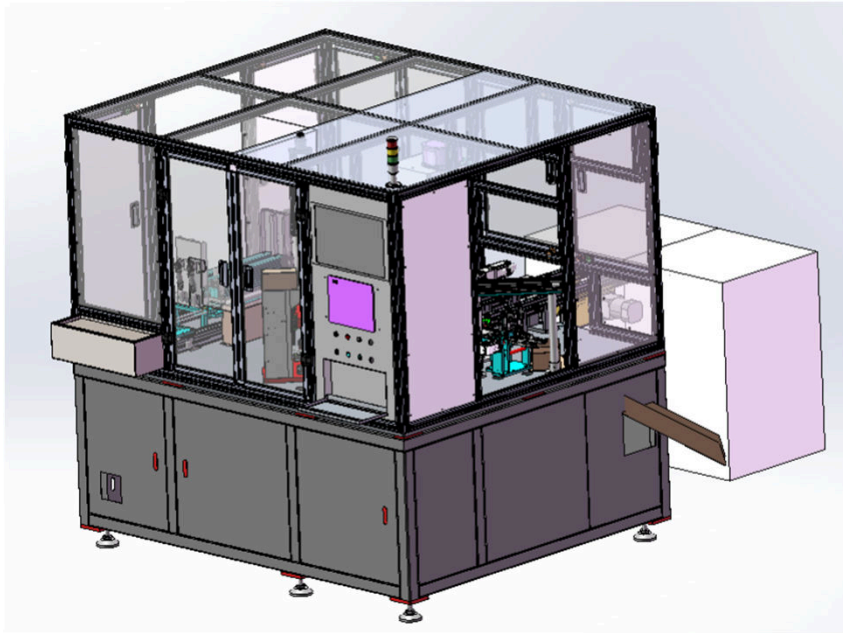
Proposal No.	NZ23G0002-B
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I. Machine introduction



This machine is used to process the diode assembling for the negative box and middle box. It installs the diode on the box and also testing and checking station for the middle box. It is fully automatic machine for the processing, which save the labor cost and increase the production efficiency for mass production line

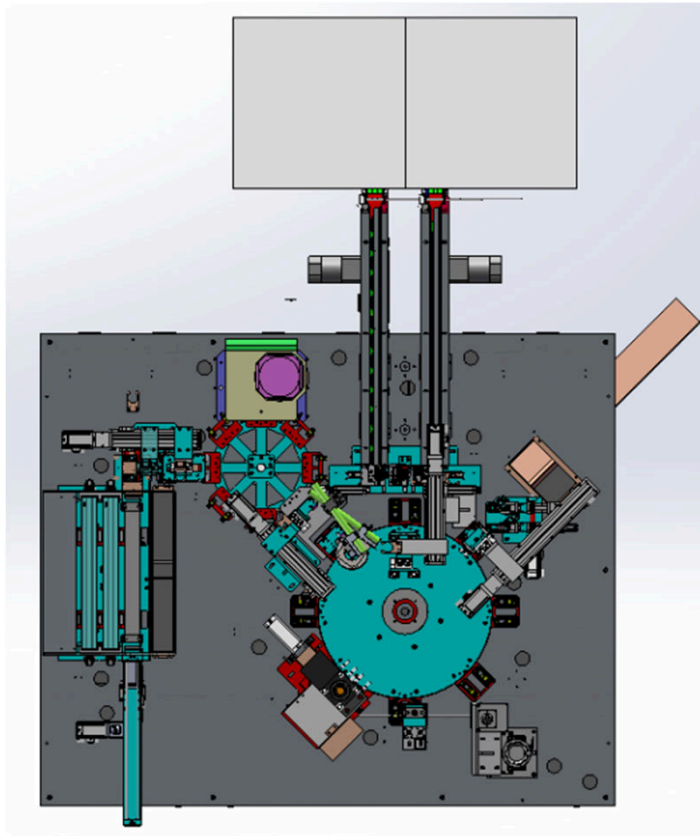
II. Machine parameters

1. Application range: Diode installation for negative and middle box
2. Capacity: 3.2 S/PCS
3. Crimping force for cutting unit : 3Ton
4. Crimping force for hot melting unit : 3Ton
5. Voltage : 220V, 50/60Hz
6. Power: 15KW
7. Air consumption: 80L/Min
8. Dimension: L 2000 x W 2755 x H 1950
9. Weight: 2500kg

III. Machine Component Brand

Item	Brand	Origin	Remark
Motor for rotary plate	CKD	Japan	
Cylinder	AIRTAC	Tai Wan	
Servo	INOVANCE	China	China Famous Brand
PLC	INOVANCE	China	China Famous Brand
CCD Camera	KEYENCE	Japan	1 SET
Laser marking	HAN'S	China	1 SET for Middle box
Slide rail	Ding Han	Tai Wan	
Splitter	ENDLESS	China	

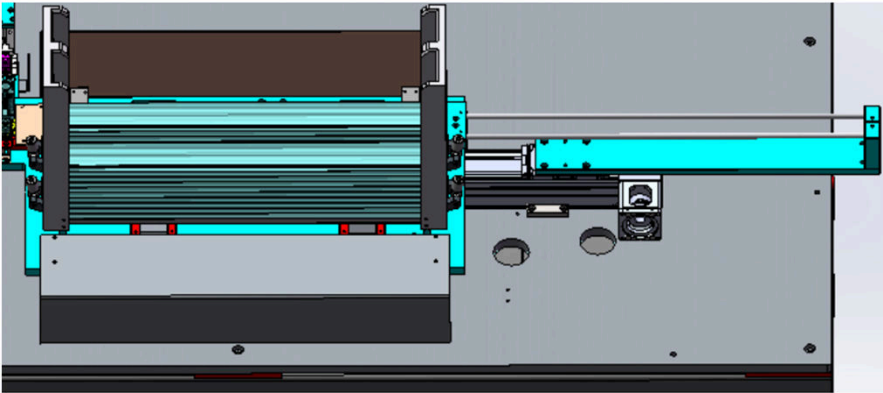
IV. Machine General Layout



1. Diode feeding station
2. Diode transforms to carrier
3. Diode cutting for the negative and middle box
4. Transform the diode to the box assembling carrier
5. Split box feeding unit
6. Put the diode into the box
7. CCD check the diode position in negative and middle box
8. Cold crimping and height testing
9. Testing unit for the middle box
10. Laser marking for middle box
11. Scanning gun for the middle box
12. Materials discharging station

V. Processing Station Introduction

1. Diode feeding station

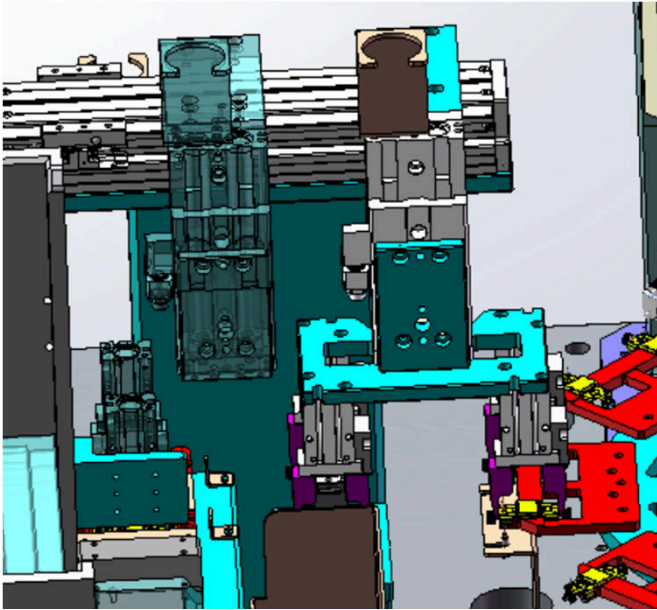


Features:

1. This unit is used for feeding diode in rows.
2. It feeds two diodes at the same time, one is for the negative box and another is for the middle box
3. The diode is feed by special pushing rod which is driven by the servo motor
4. The diode installation is precise and high efficiency

V. Processing Station Introduction

2. Diode transforms to carrier

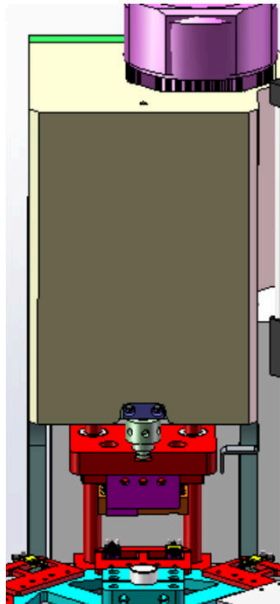


Features:

1. The diode will be transformed by the two jiggers at the same time to the carrier on the rotary unit

V. Processing Station Introduction

3. Diode cutting for the negative and middle box

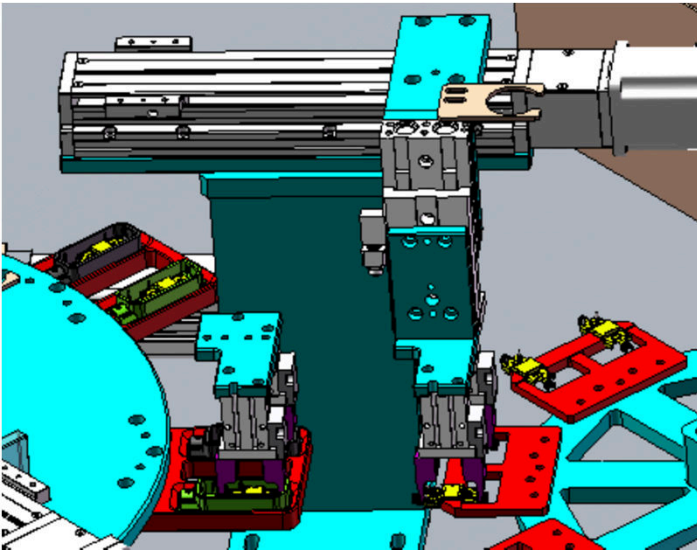


Features:

1. This unit is cut one side leg of the diode for the negative and middle box.
2. It uses the crimping machine structure to make special cutting mold to cut the leg of the diode

V. Processing Station Introduction

4. Transform the diode to the box assembling carrier

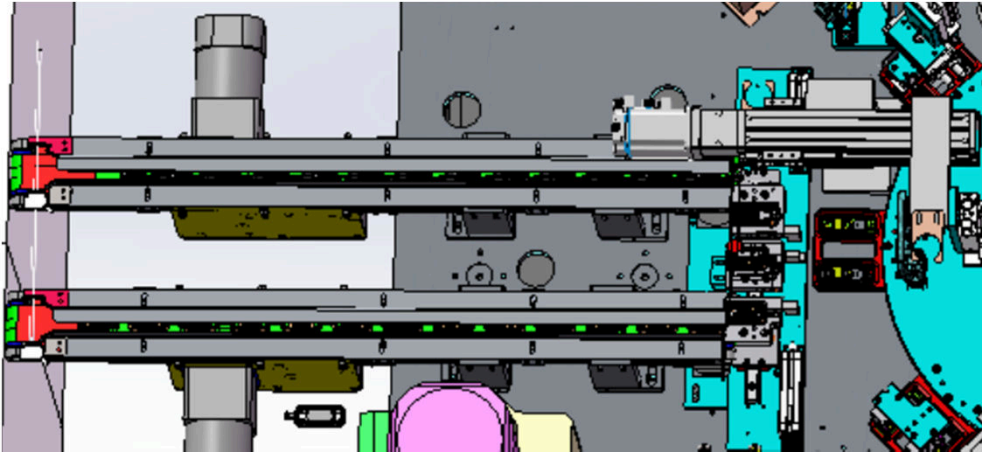


Features:

1. This unit transform the processed diode into the diode assembling carrier on the bigger rotary table

V. Processing Station Introduction

5. Split box feeding unit

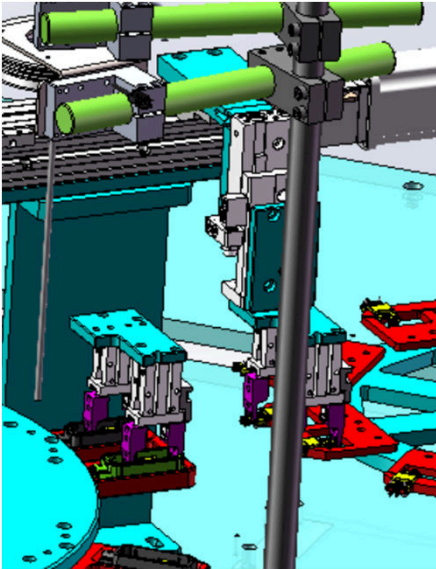


Features:

1. This unit use the vibrating feeding plate system to feed the box to the rotary carrier by the jigger

V. Processing Station Introduction

6. Put the diode into the box

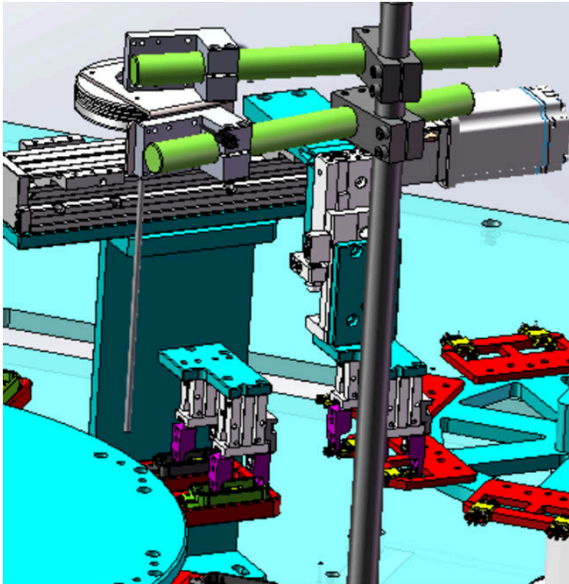


Features:

1. This unit is used to put the diode into the box which is held by the carrier on the big rotary plate

V. Processing Station Introduction

7. CCD check the diode position in negative and middle box

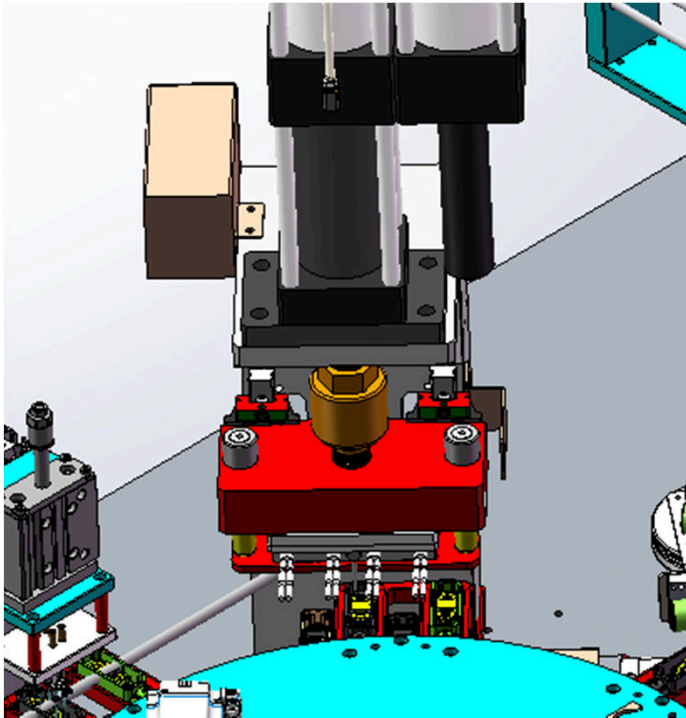


Features:

1. This unit is used to version check the diode direction in the negative and middle box, weather polarity is in the same side for the diode and box

V. Processing Station Introduction

8. Cold crimping and height testing

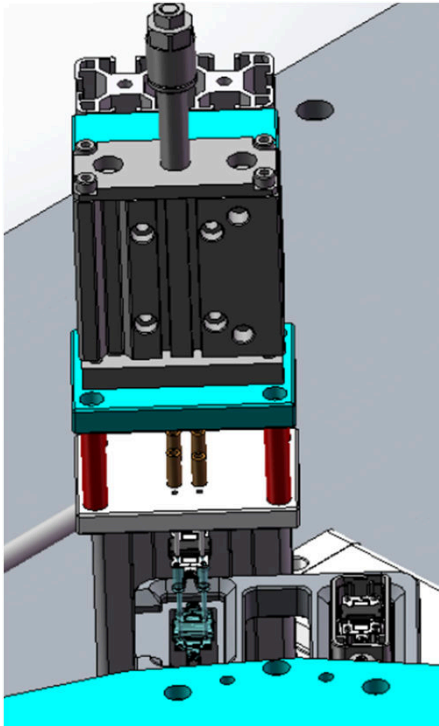


Features:

1. This unit is used to cold crimp the fixing point on the box to fix the diode on the box bottom
2. After crimping also have the height check unit to ensure the crimping quality

V. Processing Station Introduction

9. Testing unit for the middle box

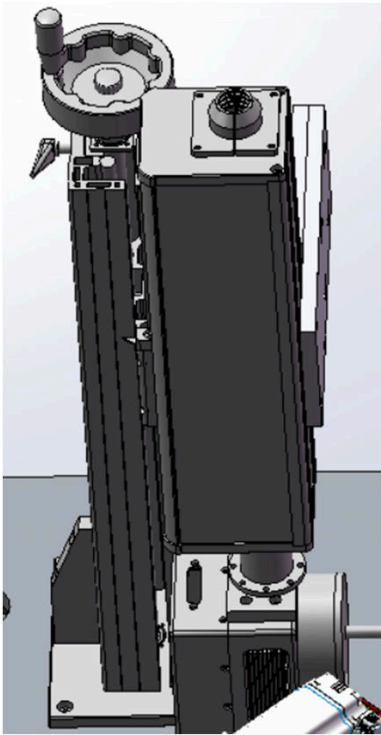


Features:

1. This unit is used to testing the diode in the middle box, such as conductivity, resistance and etc.

V. Processing Station Introduction

10. Laser marking for middle box

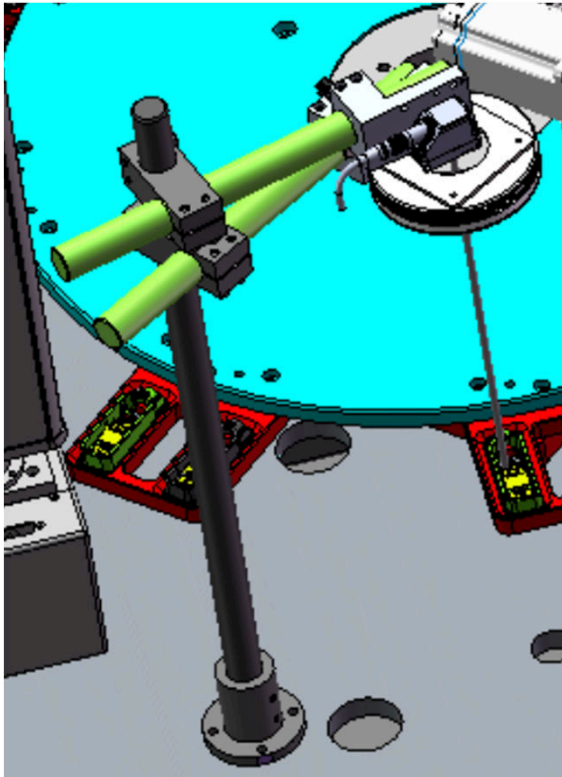


Features:

1. This unit is used to make the laser marking on the box as per the production requirement, the marking position which can be decided by the customers

V. Processing Station Introduction

11. Scanning gun for the middle box

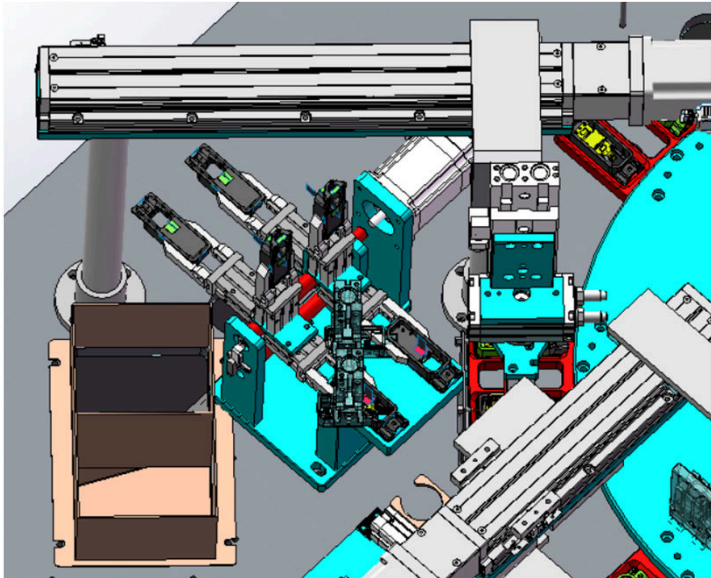


Features:

1. This unit is used to scan for the laser making on the middle box
2. It scans the marks to get the information of the product, monitor the production condition at the real time

V. Processing Station Introduction

12. Materials discharging station

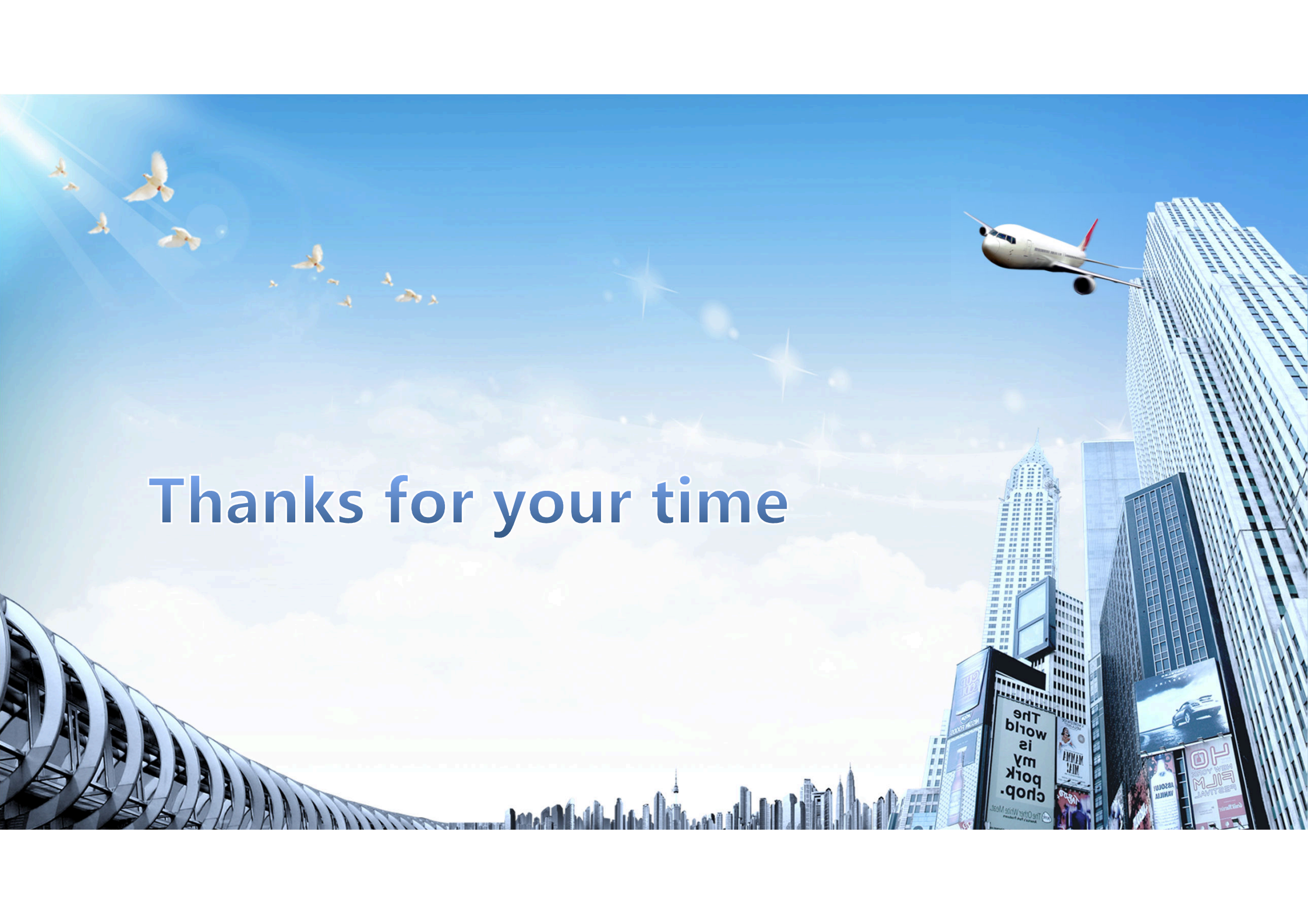


Features:

1. This unit is used to release the goods from the big rotary plate
2. It picks up the negative box and middle at the same time, the negative box will be transforms to the latter machine by the conveyor belt. The middle will be transforms to the finished box
3. This unit also have the separate groove for the NG and OK product

VI. Basic Clause

Item	Clause Content
Production time	60 working days after confirmation of order, the machine drawing, required payment and samples
Warranty period	One year since the installation date on buyer's site (Not includes the consuming parts)
Training	The seller will send technician on buyer's site, to support the machine installation and debugging works
Service/ Maintenance	For the first time, the seller will send the technician on the site and after that, the seller will supply the online service for the machine service and maintenance work
Document	The seller will give the required document to buyer, such as: Operation system manual, basic PDF drawing of the machine, technical drawing of the parts, spare part list, Electronic circuit diagram and pneumatic circuit diagram
Industry 4.0 traceability	The machine screen has the port for connect to the MES system of customers
Scrap rate	<0.02%
Production conversion setup time (SMED)	The set up time for each mode of product is about one hour, which include changing the crimping applicator, change the parameter setting, connector feeding part changing, mechanical and system parameter modify and etc.
OEE Capacity	For the whole line production capacity is 15000-20000 set per shift, 10 working hours per shift
Payment terms	20% payment after the order confirmation, (USD 58000) 20% payment after the design approval, (USD 58000) 20% payment after preliminary acceptance beofre the delivery on seller site (USD 58000) 30% payment after installation of the system in the factory on buyer site (USD 87000) 10% paymen after the system operates Smoothly for 1 month on buyer site (USD 29000)



Thanks for your time