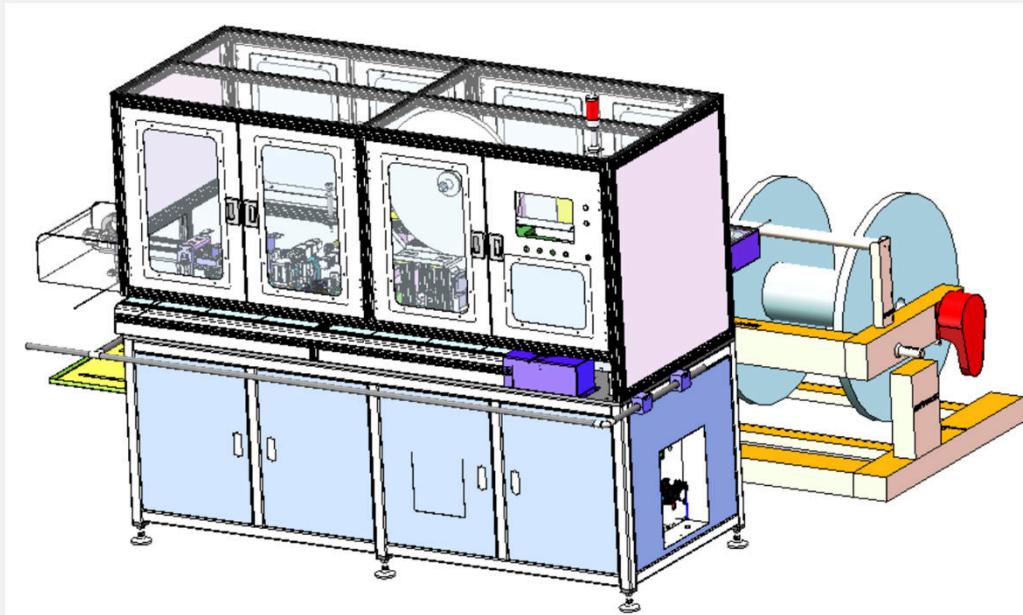


Su Zhou Na Zhi Precision Technology Co.,Ltd

Automatic cable cut, strip, crimping, connector insert and tighten machine



Proposal information

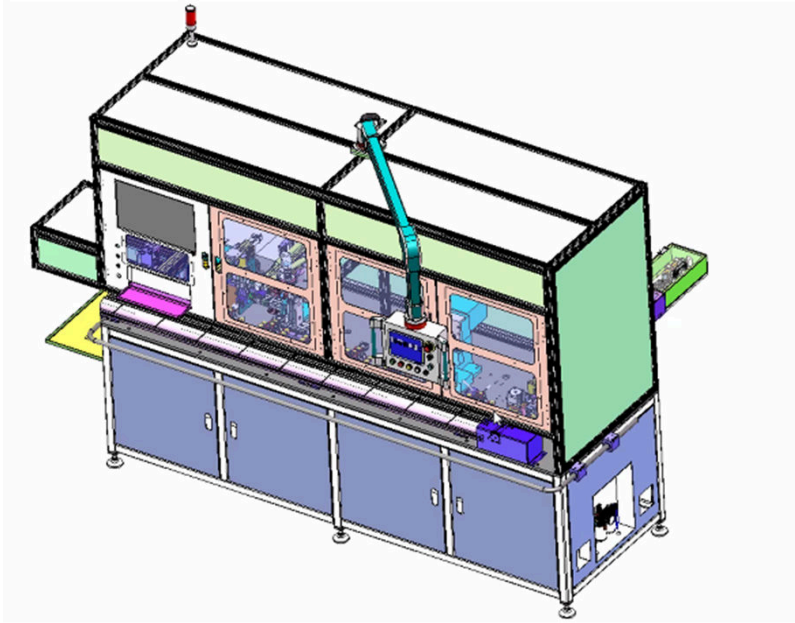
Proposal No.	NZ23G0002-A
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I. Machine introduction



This machine is used to process the PV cable with the connector. The PV cable will be fed from the cable coil feeding system into the machine, and then cut and strip the two side of the cable, crimp the terminal on one side of the cable, insert the crimped side into the connector which is feed by the vibrating system, and finally tighten the nut on the connector. This machine can save lot of labor works and increase working efficacy

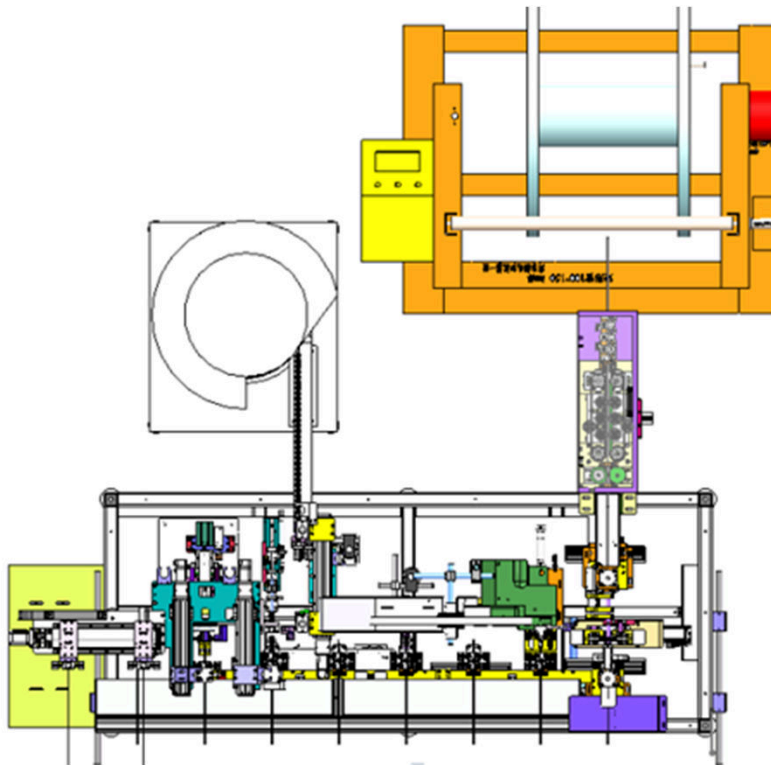
II. Machine parameters

1. Cable processing range: PV cable 4 or 6mm²
2. Cable cutting length: 200-2100mm
3. Capacity: 3.3-3.7S/PCS (The capacity depends on the cable length)
4. Wire feeding speed: 6m/s
5. Strip length: 1-10mm
6. Crimping force: 3Ton
7. Voltage : 220V, 50/60Hz
8. Power: 9KW
9. Air consumption : 80L/Min
10. Dimension: L 2260 x W 890 x H 1850
11. Weight: 3000kg
12. Voltage for feeder: 380V

III. Machine Component Brand

Item	Brand	Origin	Remark
Cylinder	AIRTAC	Tai Wan	
Servo	INOVANCE	China	China Famous Brand
PLC	INOVANCE	China	China Famous Brand
CFM	OES	Canada	2 SET
CCD Camera	KEYENCE	Japan	2 SET
Feeder for Bobbin	BOZWANG	China	2 SET
Crimp station	Ju Yuan	China	2 SET
Slide rail	Ding Han	Tai Wan	

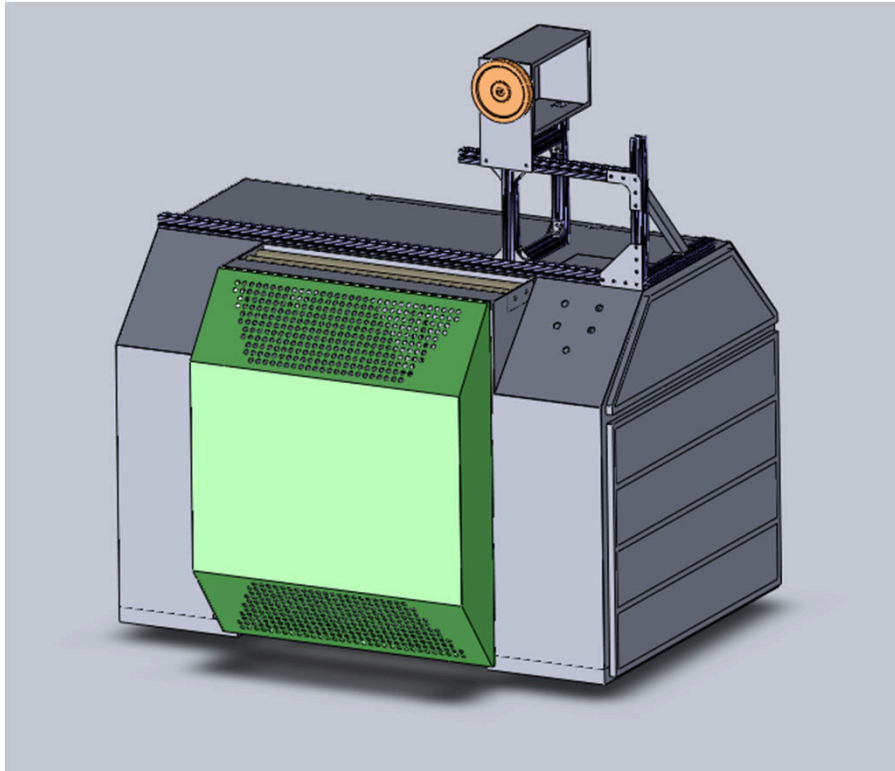
IV. Machine General Layout



1. Feeder for Wooden Bobbin
2. Cable straighten and feeding
3. Cable cut and strip unit
4. Terminal crimping station
5. Camera check after crimp
6. Connector vibrating feeding system
7. Connector inserting unit
8. Nut tighten unit
9. Finished product release unit

V. Processing Station Introduction

1. Feeder for Wooden Bobbin

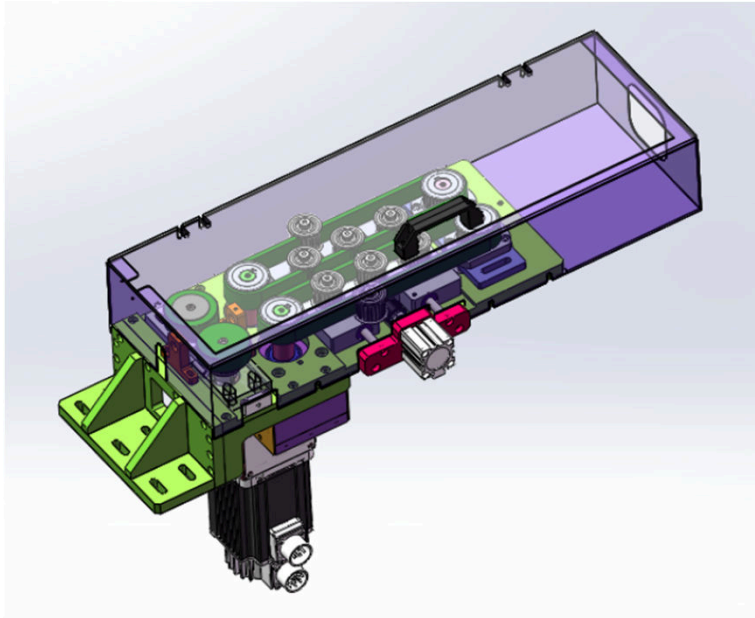


Features:

1. This feeder which is used to hold the wooden bobbin, to rotate it and release the cable into the machine
2. The feeder also have the cable storage part to the ensure the automatic running of the machine
3. The feeder is fully covered which ensure the safety running of the operation

V. Processing Station Introduction

2. Cable straighten and feeding

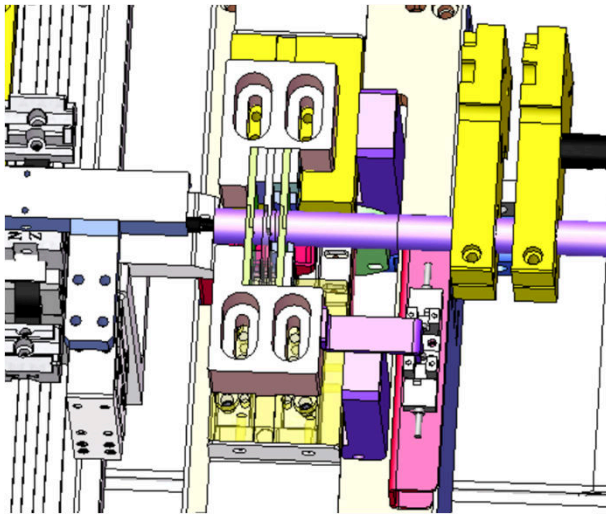


Features:

1. The cable will be straighten during the feeding processing
2. There is encoder installed on the feeding part to ensure the feeding length precision
3. Belt feeding which can avoid the damage of the insulation of the cable

V. Processing Station Introduction

3. Cable cut and strip unit

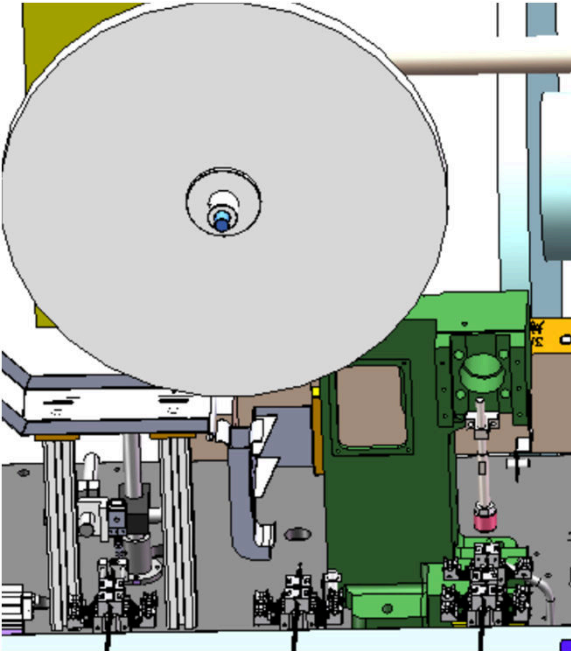


Features:

1. This station cut and strip the cable, normally one side fully stripped and another side is half stripping
2. The blade is made of tungsten steel which ensure the materials hardness and working life is more longer

V. Processing Station Introduction

4. Terminal crimping station

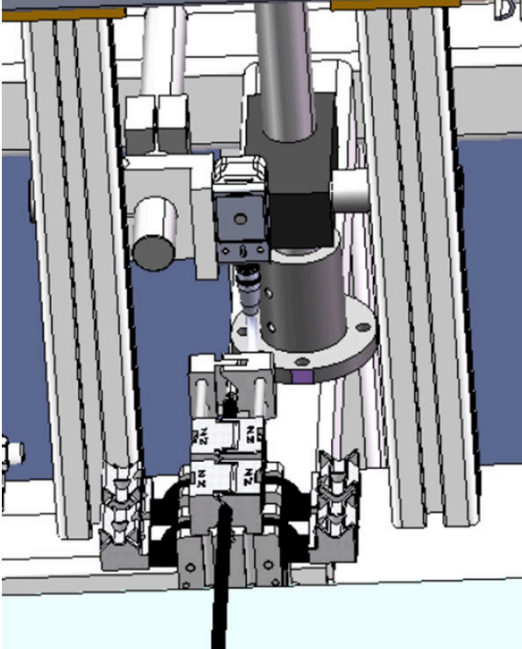


Feature:

1. This station is used to crimp the PV terminal on the one side of the cable
2. The station crimping force is 3Ton and ensure its crimping force is enough
3. The crimping station also installed with the CFM to monitor the crimping force

V. Processing Station Introduction

5. Camera check after crimp

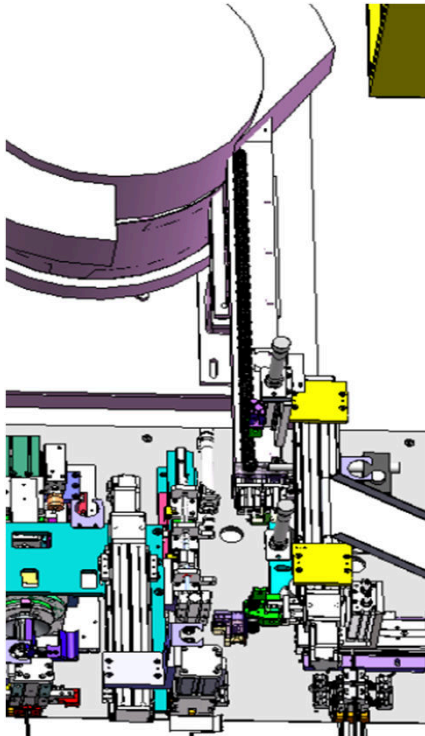


Feature:

1. This station installs the camera to check the crimping appearance after the crimping

V. Processing Station Introduction

6. Connector vibrating feeding system

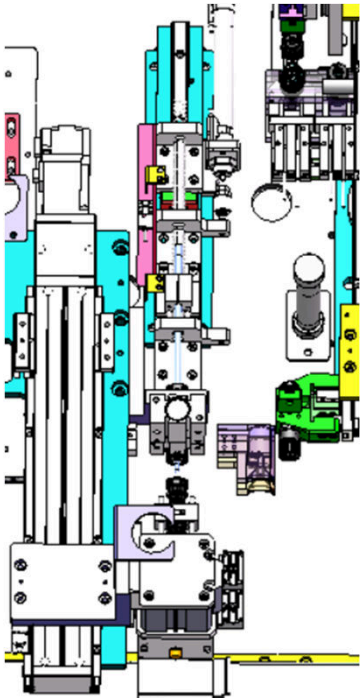


Feature:

1. This station is used to feeding the connector to the pre-inserting position to be prepared for wire inserting
2. The vibrating plate volume is about 1500-2000 pcs
3. The vibrating plate unit which is fully covered and also with the anti-noise layer

V. Processing Station Introduction

7. Connector inserting unit

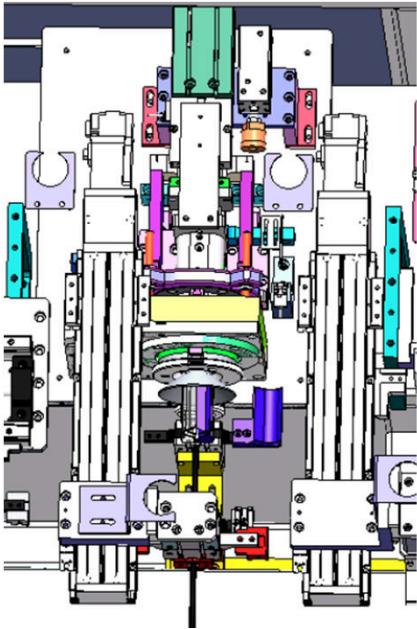


Feature:

1. This station is used to insert the wire into the connector
2. It also has the position sensor to check whether the cable is inserted to the position or not
3. It is also prepared for the nut tightening station for the next station

V. Processing Station Introduction

8. Nut tighten unit

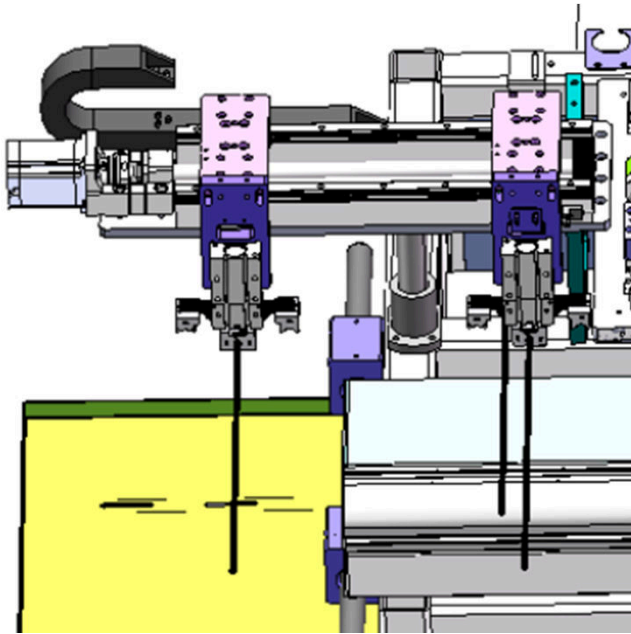


Feature:

1. This station is used to tighten the nut after the wire inserting into the connector
2. The nut tighten is controlled by the distance mode

V. Processing Station Introduction

9. Finished product release unit

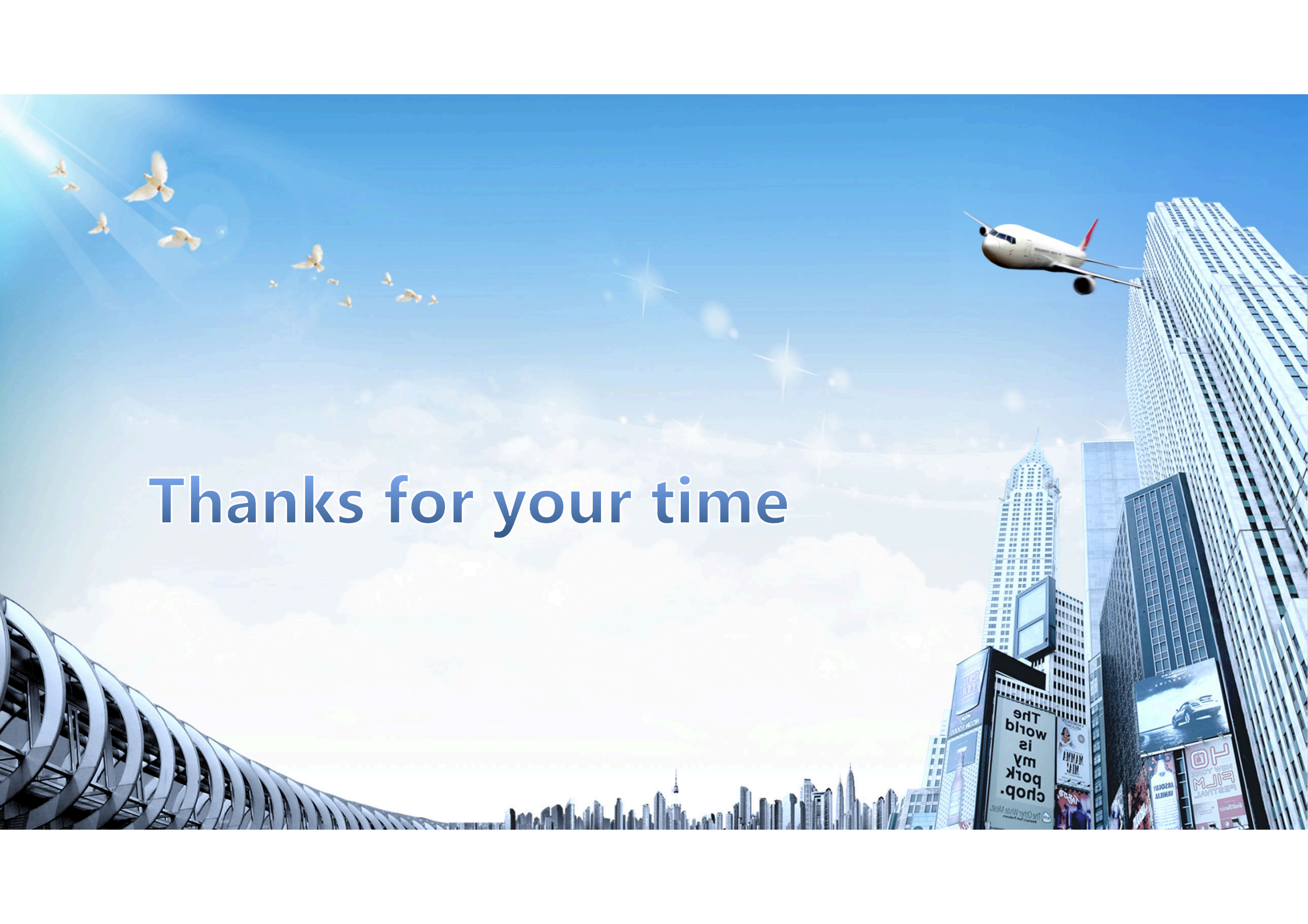


Feature:

1. This station is used to release the finished product from the production line
2. This station also can separate 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