

TM50 / TM100 Automatic Medical Face Mask Production Line



Model	TM50	TM100
Masks Type	Size: 175 mm x 95 mm Flat earloop disposable medical face masks	
Productivity <small>*Varies according to production management</small>	40 ~ 60 Pcs / Min	80 ~ 110 Pcs / Min
Leadtime <small>*Confirm with sales in advance</small>	23 ~ 28 Days	25 ~ 30 Days
Power	220V AC \pm 5% , 50 Hz , ~ 7 Kw	220V AC \pm 5% , 50 Hz , ~ 8.8 Kw
Dimensions (LxWxH mm)	4500 x 2500 x 1700	6800 x 4800 x 1860
Area Occupied	~ 15.8 m ²	~ 32.6 m ²
Compressed Air Source Requirements	0.5 ~ 0.8 MPa With basic filtration Airflow rate 300 L / Min	0.5 ~ 0.8 MPa With basic filtration Airflow rate 305 L / Min
Facility environment requirements	Temp. 10 ~ 40 °C humidity 5 ~ 35 % No flammability possibilities No corrosive gas No dust Air Cleanliness is not less than 100,000	
PPM	≥ 60(60 ~ 80), Varies according to materials and specifications	
Qualified rate	≥ 99% (Under correct raw materials and running)	

1. Applications

Used to produce **Flat Earloop Disposable Medical Face Masks*** in mass production. Covers the entire production process of masks from raw materials to finished products.

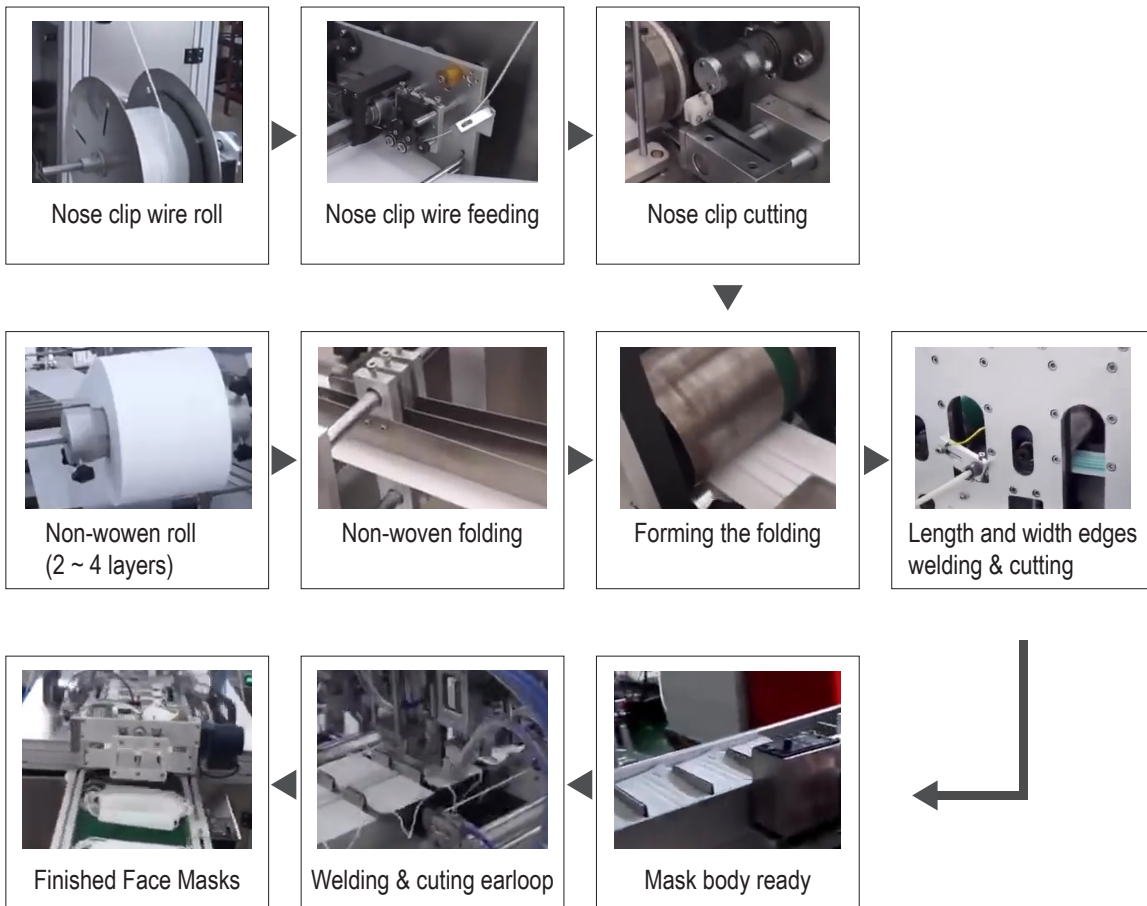
* Not suitable for producing Folding Mask, N95 Mask, Duckbill Mask, Fishing Type Mask.



2. Core Functions:

Non-woven material feeding, folding and pressing, nose clip strip material feeding, automatic mask forming, automatic cutting, ear loop feeding and welding, finished product cutting and other processes.

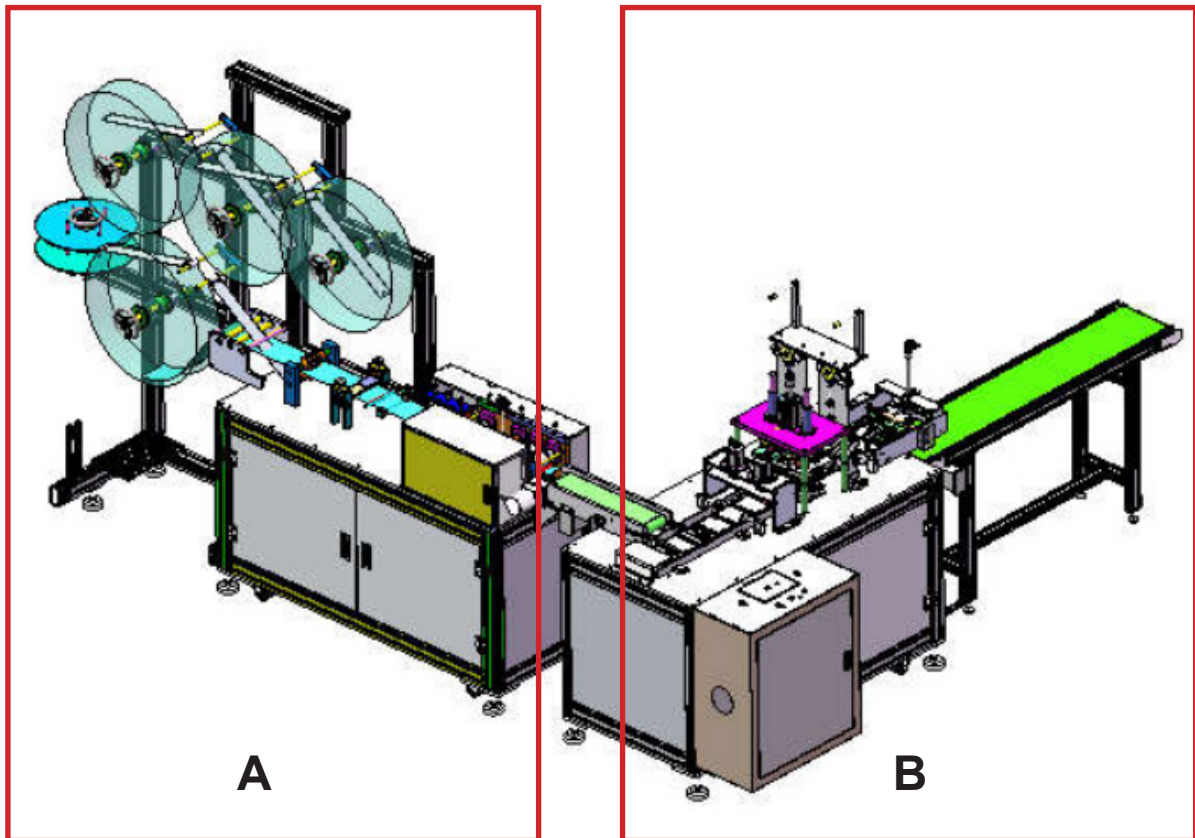
3. Production Processes:



4. Machine Line Structure

This machine line consists of:

- A. Mask body forming device(length and width edge welding)
- B. Earloop welding machines



4.1 Mask Body Forming Device

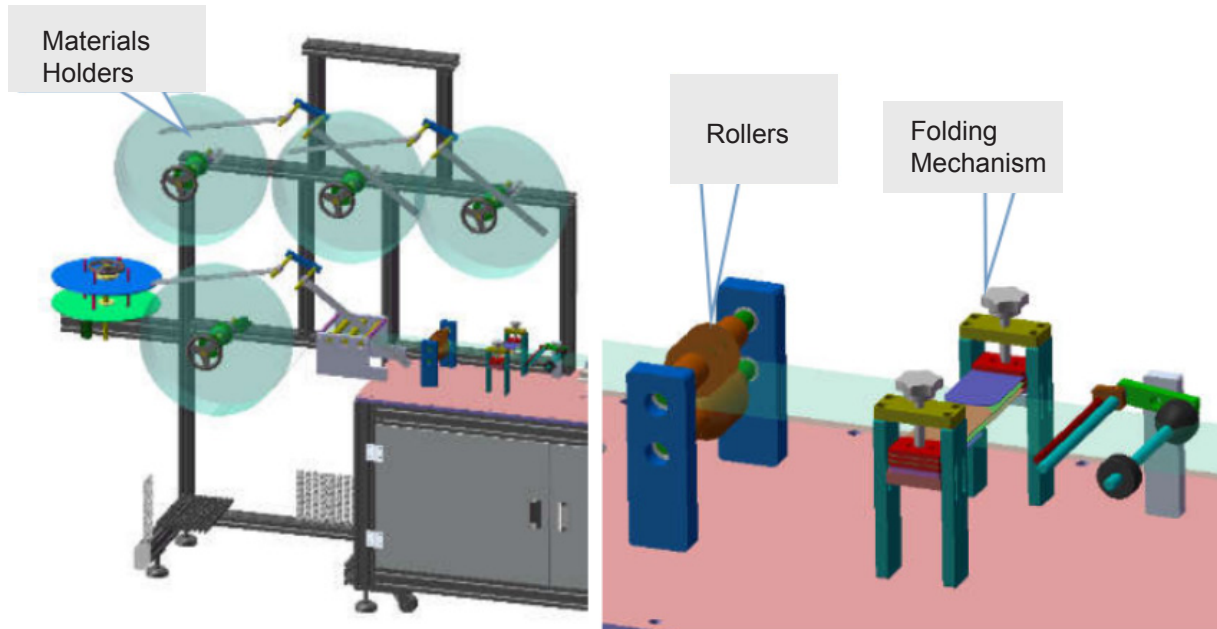
This part is in charge of main mask body forming, including automatic roll unwinding rack, nose clips insertion, truncation, ultrasonic fusion, slicing, etc.

The discharge rack is composed of square steel pipes and profiles. Each group of discharge shafts is provided with a braking device.

The discharge rack is provided with multiple groups of discharge shaft components, which is convenient for the production of masks with different layers.

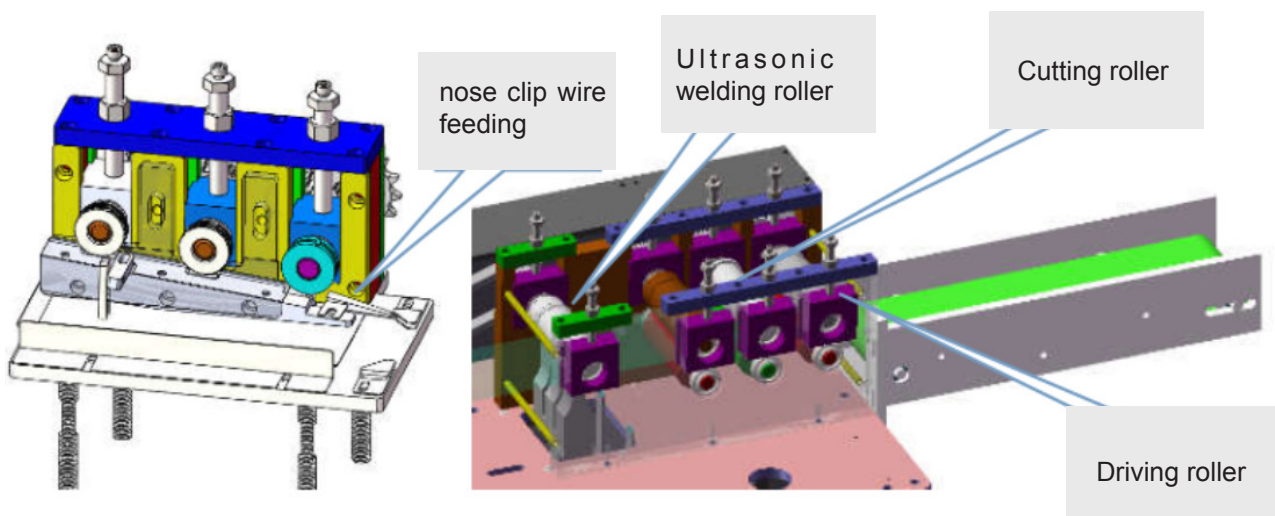
4.1.1 Mask Body Forming Device - Material Feeding System

Workers put the raw materials(non-woven rolls and the nose clip wire roll) to the holders, then be connected to the driving roller, first through the folding mechanic, then be pressed flat by a rooler, finally the mask edges(together with the nose clip unit) be welded and cutted into single mask body unit.



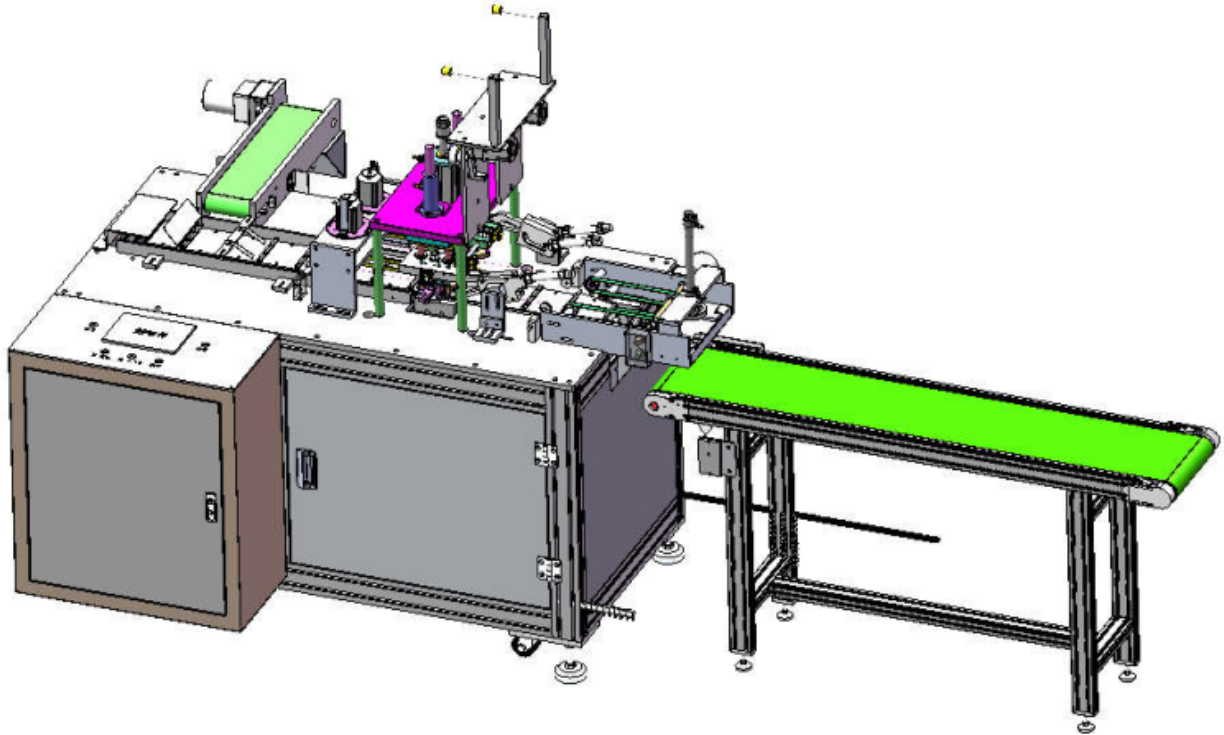
4 2 Mask Body Forming Device - Edges Welding Part

Workers put the raw materials(non-woven rolls and the nose clip wire roll) to the holders, then be connected to the driven force, through the folding mechanic, then be pressed flat by a rooler, finally the edges together with the nose clip unit be welded.



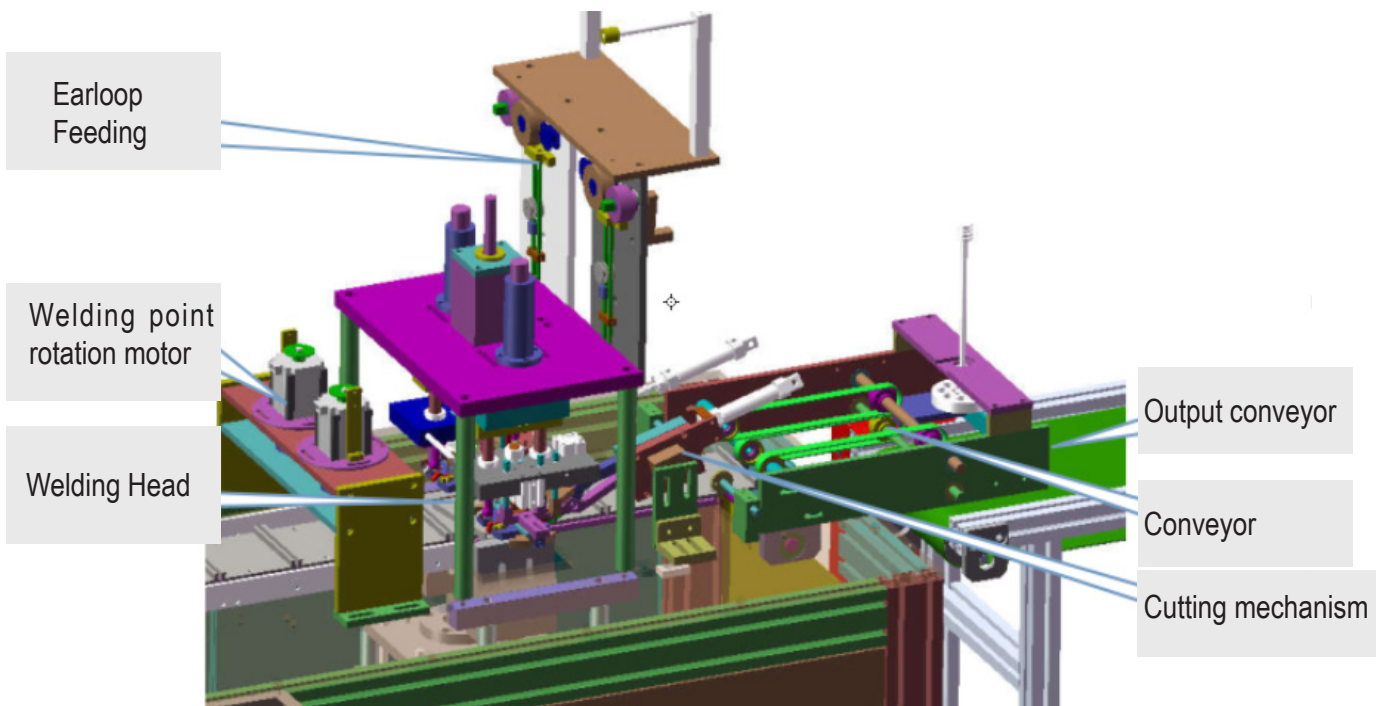
4.2 Earloop Welding Machine

The machine is composed of a frame, a conveying pallet, earloop feeding, earloop welding with a fixed length, earloop cutting, and a discharging mechanism to realize the automatic welding function of the earloop.



4.2.1 Earloop Welding Core Unit

The earloop is fixed and cut by a drawstring mechanism via a 180 ° rotating motor and placed to the precise position, then be stamped and welded.



5. Main Accessories List

No.	Name
1	PLC
2	Touch Screen
3	Ultrasonic welding machine
4	Servo Motor
5	Stepping Motor
6	Inverter
7	Bear
8	Pneumatic Components
9	Guide rail

6. Quality Assurance and After-sales Services

TESTEX offer 12 months free warranty(no warranty for consumables).

Beyond warranty period, services and accessories are charged at actual cost only.