

# Product Descriptions

High Quality Mask machine



Korea company

INTRO.

CLESON is Korea's leading manufacturer of high-quality mask machines.

We are a company with a history of 30 years and are experts in ultrasonic technology and automation technology.

Our database and know-how have completed the best mask production machine in Korea, and are more stable and durable.

It is the only company in Korea that produces ultrasonic welders and mask machines together.

Please review the next chapter kindly and contact us.

Let's create great value together.



www.clesonmask.com

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#### 1. Flat Mask Machine

### Flat Mask(Surgical, Medical)



Full Auto Servo-Motor control Flat mask machine

### Model: CLS-Flat-1

This machine is used for automatic production of flat (surgical) masks, and the fabric roll is automatically injected to make processes faster and more stable such as fabric transfer, nose bridge and material cutting, lengthen mask length, edge fold, folding and flattening. And all processes of flat mask manufacturing are automatically completed, including mask body and ear strap ultrasonic welding joining.



#### 1. Flat Mask Machine

#### CLS-Flat-1

#### 1. OUTLINE

The nine new absolute value servo motor and decelerator controls are simpler, more stable and efficient than normal mask machine cylinder control debugging. And reduced cylinder's malfunction caused by censor not detecting cylinder. In particular, our Ultrasonic Welder is manufactured and applied by our company which has 30 years of history of ultrasonic technic, and therefore the machine have a system that minimizes the rate of defects in process of molding and adhesion of ear strap, and also, it has immediate after-sales service too. Precision processing products such as molding & cutting roller, and ultrasonic horn also have conditions that can be improved in the shortest time when shape changes occur by utilizing specialized processing companies that are in agreement with us. It is configured for automatic production of threeparted disposable medical and surgical masks. Generally, the inner layer uses a normal non-woven fabric, and the outer layer is a waterproof fabric that is used mainly to separate the liquid discharged by the patient. the middle layer is polypropylene, also known as Melt blown non-woven fabric. And of course, all these materials can be applied at the request of the final customer.

#### 2. Feature

Optimal fit and auto-align of inner, outer, and middle layers. Constructed with a nose bridge on both symmetrical sides of a continuously driven roller and ultrasonic wave and cut with a continuous roller press to produce a mask of good balance. And it can automatically counts and stacks mask after machine cuts and welds ear strap and this progresses making high efficient. High reliability, low failure rate, clean appearance, high efficiency, and full automation of energy savings.



Resultant product		Adult mask 175mm x 95 mm
생산량	1-Ear line	65ea/min
Material		PP non-woven composite fiber (+Melt Brown)
Layer		Three ~ Four (layer)
Processing mode		Ultrasonic welding (CLESON)
Air pressure		0.5-0.6Mpa (5-6 bar)
Air flow volume		1.7L / min
Total Power		1-Ear line around 20kw/hr

Voltage	220V or 380V
Lay-out	5000(d) x 3000(w) x 1800(h)
Weight	1,000KG
Touch screen	LS / Proface
Motor	Servo
Cylinder	SMC / TPC
Driver	Panasonic / Mitsubishi
PLC	LS / Mitsubishi
Ultrasonic Welder	CLESON





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#### 2. 3D Mask Machine

### *3D Mask(KF94)*



Full Auto Servo-Motor control 3D mask machine

#### Model: CLS-3D-1

This machine is used for automatic production of KF94 masks, and the fabric roll is automatically injected to make processes faster and more stable such as fabric transfer, nose bridge and material cutting, lengthen mask length, edge fold, folding and flattening. And all processes of KF94 mask manufacturing are automatically completed, including mask body and ear strap ultrasonic welding joining



#### 2. 3D Mask Machine

#### *CLS-3D-1*

#### 1. OUTLINE

The five new absolute value servo motor and moderator controls are simpler, more stable and efficient than normal mask machine cylinder control debugging. And reduced cylinder's malfunction caused by censor not detecting cylinder. In particular, our Ultrasonic Welder is manufactured and applied by our company which has 30 years of history of ultrasonic technic, and therefore the machine have a system that minimizes the rate of defects in process of molding and adhesion of ear strap, and also, it has immediate after-sales service too. In particular, 3D molding part is larger than part for normal Dental use and requires more detailed ultrasonic fusion conditions. We have developed 15KHz frequency application and have made it meet customer's needs. Precision processing products such as molding & cutting roller, and ultrasonic horn also have conditions that can be improved in the shortest time when shape changes occur by utilizing specialized processing companies that are in agreement with us. It is configured for automatic production of KF94 masks. all these materials can be applied at the request of the final customer.

#### 2. FEATURE

Optimal fit and auto-align of inner, outer, middle, and MB (Melt Brown) layers. Constructed with a nose bridge on both symmetrical sides of a continuously driven roller and ultrasonic wave and cut with a continuous roller press to produce a mask of good balance. And it can automatically counts and stacks mask after machine cuts and welds ear strap and this progresses making high efficient. High reliability, low failure rate, clean appearance, high efficiency, and full automation of energy savings.



Resultant product		Adult mask 210mm x 80 mm
Capacity 생산량	1-Ear line	45ea/min
Mat	terial	PP non-woven composite fiber (+Melt Brown)
Layer		Four (layer)
Processing mode		Ultrasonic welding (CLESON)
Air pressure		0.5-0.6Mpa
Air flow volume		1.7L / min
Total Power		1-Ear line around 16kw/hr

Voltage	220V or 380V
Lay-out	6700(d) x 3000(w) x 1800(h)
Weight	1,500KG
Touch screen	LS / Proface
Motor	Servo / Stepping
Cylinder	SMC / TPC
Driver	LS / Mitsubishi
PLC	LS / Mitsubishi
Ultrasonic Welder	CLESON
	CĽESON



#### 3. Ultrasonic welder



Commonly used combo			
Using	Generator	Transducer	Horn
Main body	15khz x 2600W	-	250 x 25 mm
Ear strap	20khz x 2000W	-	119 x 20 mm
Voltage		1P 220V	

#### 1. Introduce

CLESON's mask ultrasonic fusion device is developed by combining the technology and know-how of 30 years of ultrasonic wave history and has excellent performance.

#### 2. Information

This machine is largely divided into generator, transducer, and horn, and the relationship between the components above, the components and the ultrasonic frequency characteristics of the ultrasonic wave frequency are understood and the formula design is completed with the best domestic product with excellent durability and optimum ultrasonic output along with numerous tests.



### 4. CLESON's product intro

## CLESON : \*\*

#### 4-1. Mask machine model

1. Flat mask main body	CLS-FM1
2. Flat mask main body + Ear strap 1Line	CLS-FM1-1
3. Flat mask main body + Ear strap 2Line	CLS-FM1-2
4. 3D mask main body	CLS-3D1
5. 3D mask main body + Ear strap 1Line	CLS-3D1-1
6. 3D mask main body + Ear strap 2Line	CLS-3D1-2
7. 2D mask main body	CLS-2D1
8. 2D mask main body + Ear strap 1Line	CLS-2D1-1
9. Ear strap Auto machine	CLS-EAW-1
10. Ear strap Semi-auto machine	CLS-ESW-1
11. Ear strap manual machine	CLS-EMW-1
12. Ear strap Mini machine(mobile)	CLS-HW-1

### 4. CLESON's product intro



Generator	CLS-15K-2600	15khz - 2600w suitable for main body welding
	CLS-15K-3500	15khz - 3500w suitable for main body welding
	CLS-20K-1500	20khz - 1500w suitable for ear strap welding
	CLS-20K-2000	20khz - 2000w suitable for ear strap welding
Transducer (with. Booster)	CLS-15T-2600	15khz - 2600w suitable for main body welding
	CLS-15T-3500	15khz - 3500w suitable for main body welding
	CLS-20T-1500	20khz - 1500w suitable for ear strap welding
	CLS-20T-2000	20khz - 2000w suitable for ear strap welding
Horn	CLS-TH27-25	270 x 25 mm suitable for main body welding
	CLS-TH25-25	250 x 25 mm suitable for main body welding
	CLS-TH11-20	110 x 20 mm suitable for ear strap welding

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### CLS-EAW-1



Full Auto Servo-Motor control Earloop machine

### Model: CLS-EAW-1

This machine is used for automatic welding of ear strap of mask, and is a practical equipment dedicated to ear strap made for companies that are carrying out semi-automatic or manual welding in response to stable production of mask body, or companies that are having difficulty in quality NG of ear strap.



Voltage	220V or 380V
Lay-out	2500(d) x 1500(w) x 2000(h)
Weight	500KG
Touch screen	LS / Proface
Motor	Servo
Cylinder	SMC / TPC
Driver	Panasonic / Mitsubishi
PLC	LS / Mitsubishi
Ultrasonic Welder	CLESON



### 5. 마스크 이어루프 기계

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### CLS-EAW-1



Flat Mask body Auto Feeding machine

*Model*: CLS-FF(flat feeder)

This machine is used for injection of the unwelded mask body, and drains one by one with the ear strap line. This product is a practical product made for companies that are having difficulty setting up the link between the mask body and ear strap.





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