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- Light weight

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- One-button operation
- EASY seam adjustment

6. Brand(Inventor)



EQUALS-S (Table automatic can seamer)

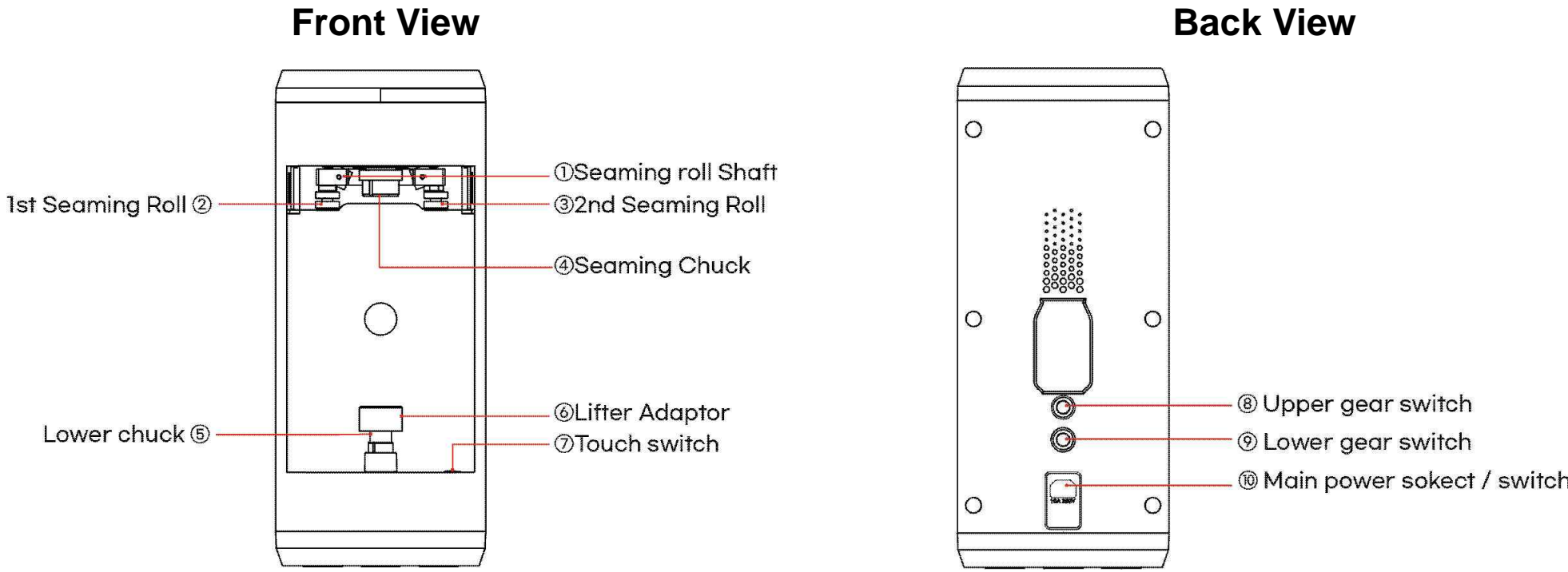
- Available cans : Slim, Standard, Crowler(32oz)
- Electrical spec : 110-240V, 50-60Hz
- Dimension(W/D/H) : 196 x 196x 463mm
- Weigh : 7.9 kg
- Color : White Perl, Black Perl
- (Color may be limited by your country's distributors.)

Model S is a our new work that has overcome the design limitations of conventional table canseamer while maintaining precision.

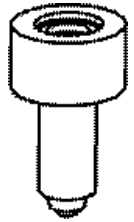
From standard cans to 195mm cans up to 32oz high, the design reminiscent of a beverage can and the light weight of 8kg will allow you to deploy and use products in small businesses such as cafes, pubs and restaurants where space is important.

Model-S supports both 110V-240V and 50-60Hz, so there is no limit to different power specifications for different countries.

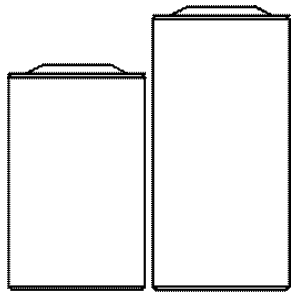
When you connect the power and touch the touch switch on the front, the can you want is created in 3 seconds.
Take full advantage of the appeal and benefits of cans with Equals Canseamer Model - S.



• **Basic Component**



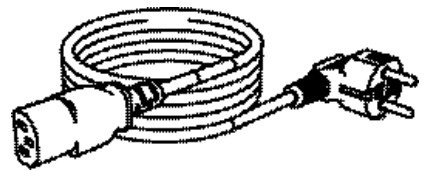
1 Lower chuck



2 Adaptors



1 Splash Guard



1 Power Cable

Who-Why

Who Use.

- Anywhere that offers beverage service.
- Anyone who wants to make a product out of cans.

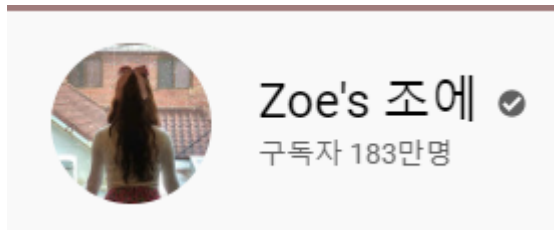


Why Use.

- To-go
- Delivery
- Catering
- Marketing
- Branding
- Small production for market reaction
- Etc.



Best Practice



Youtuber Zoe's
Subscribers 183 Million
Café Vlog



Kave Café in Okubo(Japan)

A cafe run by a Korean singer in Japan.

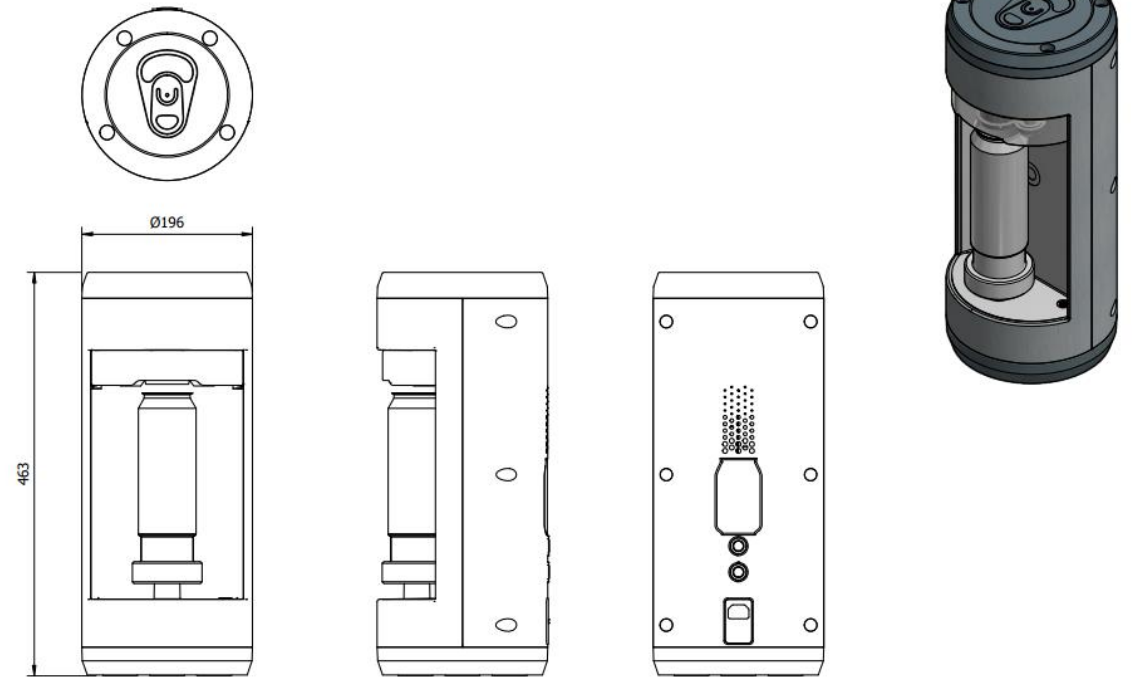
With the popularity of singers, drinks are sold as goods in cans.



Product Design Point

**Product Design Point 1.
Can Shape Design**

Product Design Point 1. Can shape design



The cylindrical shape is the most ideal shape for space utilization because death-space is minimal. Our canseamer can only be placed with a narrow space of 20cm. The product is not long forward or long sideways. Therefore, it takes up less space on the table.

Product Design Point 2. Splash Guard

Product Design Point 2. Splash guard



This photo shows how to prevent liquid scattering when using canseamers.

As the can rotates, the contents of the can may splash out. If the spattered liquid builds up on the floor, the floor may become slippery and the operator may be injured. Splash guard solves this problem. You can keep your clothes and space clean and safe.

**Product Design Point 3.
Free voltage power supply**

Product Design Point 3. Free voltage power supply



We designed it so that you can use our products anywhere in the world.

Electricity for product operation is in charge of 200W and 24V SMPS, which have been certified for electrical safety.

**Product Design Point 4.
Light Weight**

Product Design Point 4. Light Weight



a picture of a woman or child
holding with one hand



Weigh Photo

Table can range in weight from 15kg to 100kg. We exceeded the limit and realized the weight of 8kg.

If you use our products, you will be able to carry a canseamer not only in a fixed space but also in outdoor activities such as Flea Market.

Also, if we use it with a portable battery that supports 200W AC Inlet, you will run our product on top of Everest.

Product Quality Point

**Product Quality Point 1.
Seaming roller**

Product Quality Point 1. Seaming roller

Introduction

Seaming roll/roller

It is the part of the seamer that performs the deforming operation of the metal, to configure the lid and body hooks and the link between them, giving rise to the seam. There are two types, the first operation, which forms the hooks and binds them, and the second operation, which crushes them together. It also receives other names such as: Trucks, seaming wheels, molars, seaming roll

Seaming roll 1st operation: As we have said is the one that constitutes the hooks of the seam. Its function is more important than the 2nd operation, and its proper definition to achieve a good seam is essential. There are many types in the market and their design can vary between them, although it is always linked to the type of seam that is to be made and the characteristics of the materials used in the manufacture of the container.

The critical area of the seaming roll is the throat that acts on the wing of the lid, rolling it over the flange of the body, thereby generating the shape of the hooks between them. This area is called the profile of the seaming roll and usually has a curved contour, formed by several arcs of different radius.

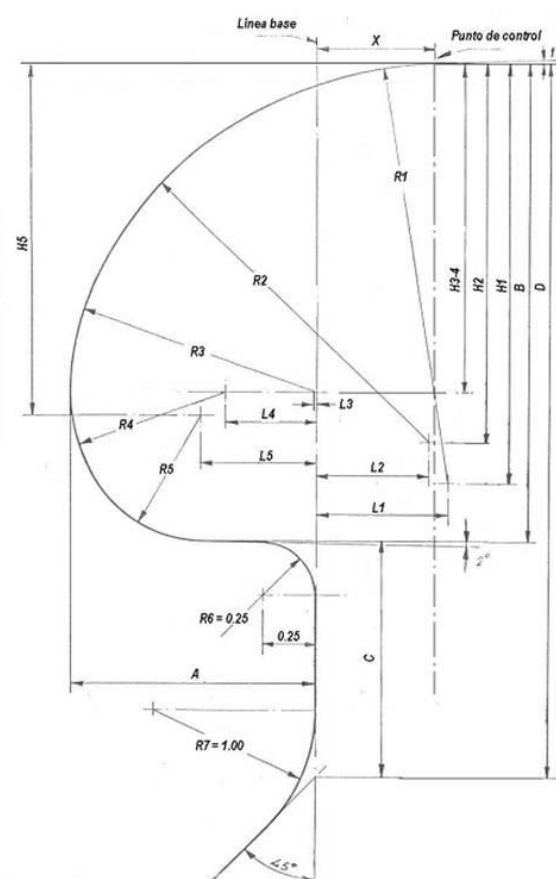


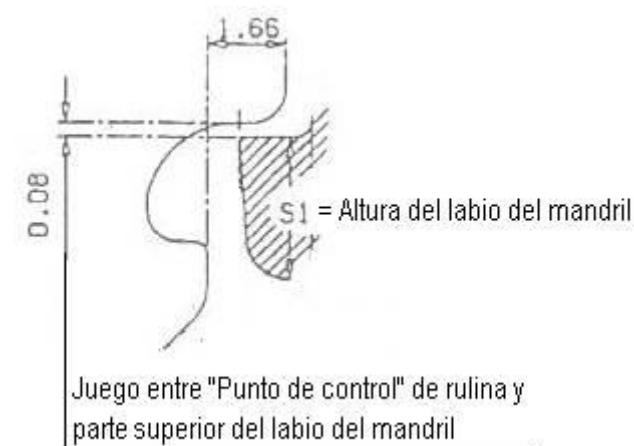
Figure nº 1: Generic profile of a 1st operation seaming roll

DESIGN OF THE PROFILE OF A SEAMING ROLL 1st OPERATION

The upper part of this profile starts with a slightly inclined plane, approximately 1° of slope, followed by an arch of great radius that links with other arcs that progressively decrease in radius. The number of radios can vary from a maximum of 5 to at least 3, although most often they are 3. Finally the profile ends in another inclined plane with a slope angle between 1st and 2nd. The profile has a lower heel that is more or less pronounced depending on whether the container is notched or not, or the type of seam. See figure # 1

Keeping in mind this drawing, it is worth highlighting the following as important points of the profile of a seaming roll of 1st operation:

Control point : This is where the upper inclined plane ends and the entry arc with the highest radius starts. The vertical axis that passes through it is taken as reference to delimit the different height heights of the profile. From this point the seaming roll is adjusted in height in relation to the lip of the seaming head. The set that must exist between this point and the upper part of the lip of the chuck is 0.08 mm .. See figure n ° 2



Baseline : It is the vertical line determined by the front face of the lower heel of the seaming roll. Defines the depth of the profile throat. It is taken as a reference to limit the measures of depth of this.

Radios : In drawing no. 1 a profile of five radios has been reflected, which is the maximum used in this type of pieces. Of these, the most decisive are the first (R1), the highest value, which initiates the bending of the wing of the lid, and the last one (R5), the smallest, which winds up the end of the wing and forms the hook of the wing. lid, fundamental element of the seam.

Measurements : There are a few stockings that can remain constant whatever the profile of the seaming roll, these are the upper and lower angles and the radii of the heel. The rest varies as we have said with the type of seam, which in turn is linked to the dimensions of the wing of the lid and the body flange, as well as the characteristics of the materials used in the container. Each company develops the ideal profiles to be used in each case, keeping some discretion in its dissemination. This gives rise to a multitude of solutions.

Product Quality Point 1. Seaming roller

Introduction

Seaming roll/roller : It is the part of the seamer that performs the deforming operation of the metal, to configure the lid and body hooks and the link between them, giving rise to the seam. There are two types, the first operation, which forms the hooks and binds them, and the second operation, which crushes them together. It also receives other names such as: Wheelbarrows, seaming wheels, molars, seaming rollers

Seaming roll 2nd operation: As we have said, it is the one that crushes the body hooks and lid of the seam. Its function is less important than that of the 1st operation, and its proper definition admits certain margins when it comes to achieving a good seam.

There are many types in the market and their design can vary between them, although it is always linked to the type of seam that is to be made and the characteristics of the materials used in the manufacture of the container.

Its critical zone of the seaming roll is the throat, which acts on the incipient hooks of cover and body initiated by the seaming roll of 1^o operation. This area is called the profile of the seaming roll and usually has a curved contour, formed by several arcs of different radii.

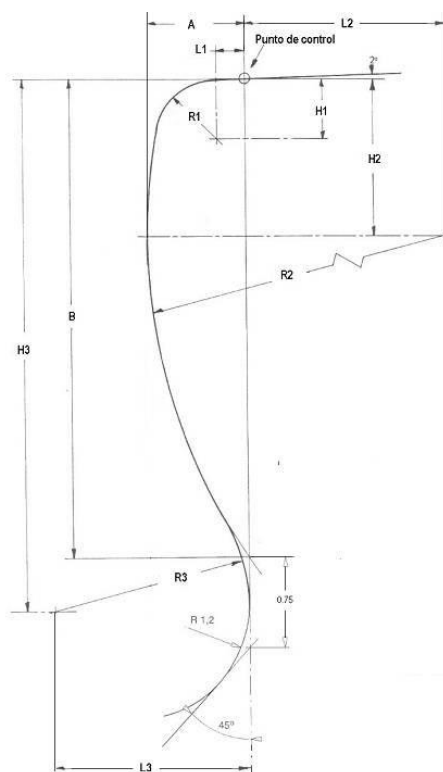


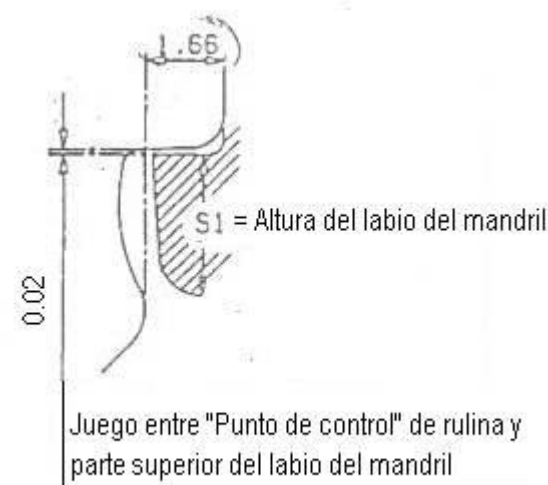
Figure n° 1: Generic profile of a 2nd operation seaming roll

DESIGN OF THE PROFILE OF A SEAMING ROLL 2nd OPERATION

The upper part of this profile starts with a slightly inclined plane, approximately 2° of slope, followed by a small radius arc that links with another of greater radius, which ends in a lower double radius bead. Radii can vary between 5 maximum and at least 3, although most often they are 3. See figure n° 1

Keeping in mind this drawing, it is worth highlighting the following as important points of the profile of a seaming roll of 2nd operation:

Control point : This is where the top inclined plane ends and the small radius input arc starts. The vertical axis that passes through it is taken as reference to delimit the different height and depth of the profile, this axis is called the base line, and is usually tangent to the lower heel of the seaming roll. From this point the seaming roll is adjusted in height in relation to the lip of the seaming chuck. The set that must exist between this point and the upper part of the lip of the chuck is 0.02 mm .. See figure n ° 2



Radius : Figure 1 shows a profile of three radii, which is the most used in this type of pieces. Of these, the most decisive is the central one (R2), of greater value, which defines the external silhouette of the seam.

Measurements : There are a few means that can remain constant whatever the profile of the seaming roll, these are the upper angle and the lower radius of the heel. The rest varies as we have said with the type of seam, which in turn is linked to the dimensions of the wing of the lid and the body flange, as well as the characteristics of the materials used in the container. Each company develops the ideal profiles to be used in each case, keeping some discretion in its dissemination. This gives rise to a multitude of solutions.

Product Quality Point 1. Seaming roller

Drawing



Processing



- Material : SUS 440
- Processing : CNC, Heat treatment, Diamond Polishing
- Titanium Coating is optional

Quality Comparison

EQUALS : Industry-level high quality seam



Bad case : Low quality seam causes the leakage.



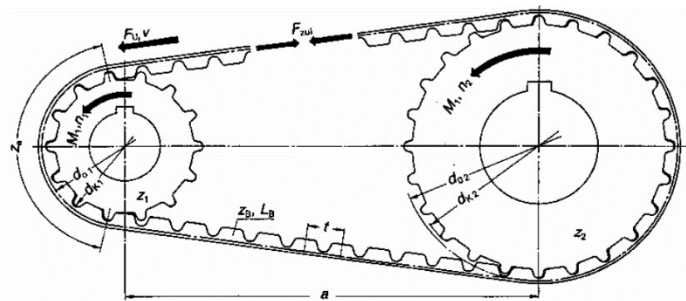
Product Quality Point 2. Seaming Head Module

Product Quality Point 2. Modular Design

Previous our products design by seaming head

Our early products were designed in such a way that they were driven by a timing belt. As a result, competitors also copied products with timing belt operation. This power transmission method is simple, but it has a disadvantage that it is designed to be horizontally long and the product becomes heavy when designing the product.

This is a major obstacle to making the product smaller and more scalable.

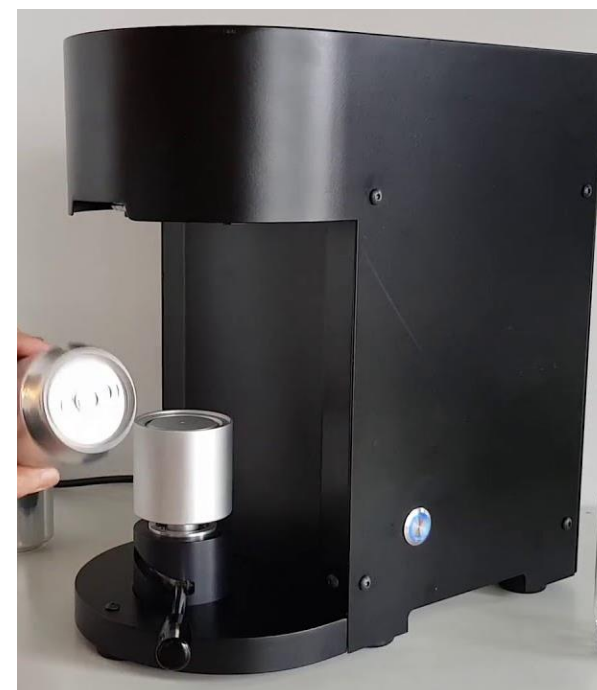


EQUALS M



EQUALS W

Table cansemer products in Korea and China Competitors



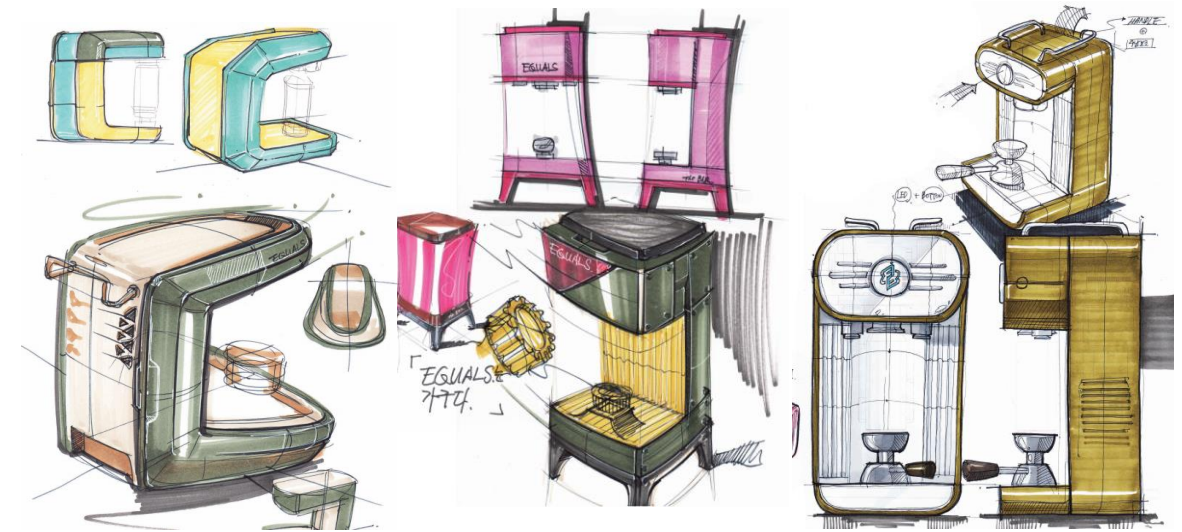
Product Quality Point 2. Modular Design

Our New seaming head module

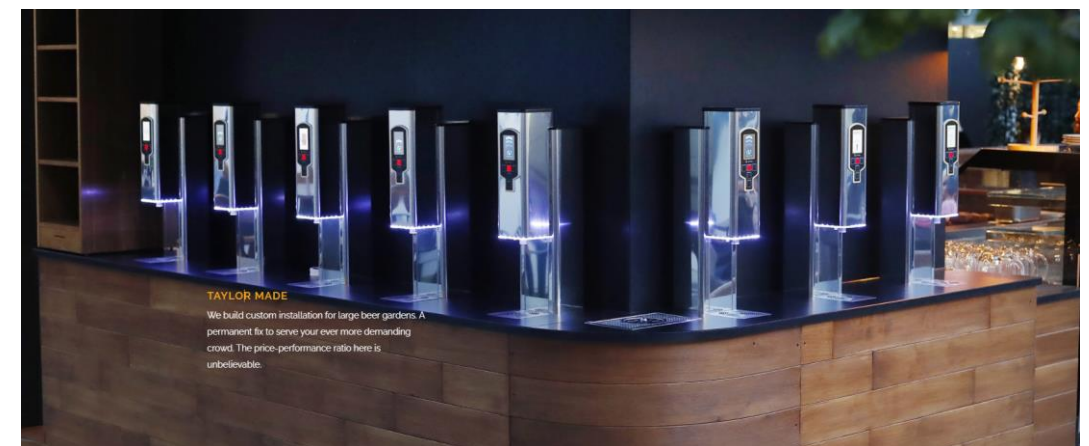
So we thought about a new way of driving and developed the Seaming Head Module. It is about the size of an adult man's fist. It is designed as an integral role of the reducer and the cam to move the seaming rolls.

As a result, smaller and more diverse designs have allowed the design of the table canseamers, which can also be installed in the automation and robot sectors.

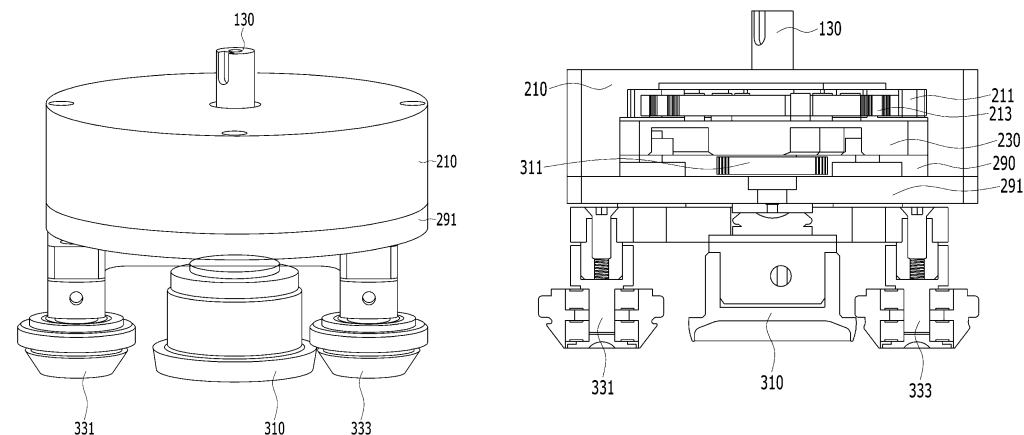
Most of all, most of the problems are solved by replacing only this module in case of structural problems of the machine.



No restrictions on the exterior design of products



Apply on automation dispenser : Quicktap(UK)



Cooperation with Robot barista and Robot cafes

Product Quality Point 3. Patents and Certification

Product Quality Point 3. Certification.

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제출된 문서:	<table border="1"> <tr> <td>OP20200005WO-appb.xml</td> <td>55193</td> </tr> <tr> <td>(OP20200005WO.xml)</td> <td></td> </tr> <tr> <td>OP20200005WO-dpcf-000001.rar</td> <td>114453</td> </tr> <tr> <td>OP20200005WO-fees.xml</td> <td>1654</td> </tr> <tr> <td>OP20200005WO-poat-000001.xml</td> <td>2480</td> </tr> <tr> <td>OP20200005WO-requ.xml</td> <td>8361</td> </tr> <tr> <td>OP20200005WO-vlog.xml</td> <td>434</td> </tr> </table>	OP20200005WO-appb.xml	55193	(OP20200005WO.xml)		OP20200005WO-dpcf-000001.rar	114453	OP20200005WO-fees.xml	1654	OP20200005WO-poat-000001.xml	2480	OP20200005WO-requ.xml	8361	OP20200005WO-vlog.xml	434
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제출자:	MINKYUNG YONG (고객 아이디: user_KR_YONG_MINKYUNG_2572)														
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Medley, Behrens & Lewis, LLC
6100 Rockside Woods Blvd.
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Independence, OH 44131

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ROSE JR., DONALD B

ART UNIT PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

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Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):
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Patent Pending
Korea : P20199262KR
PCT : KR2020/002234
US Design Patent

Ref. No.: LR500122010M

4, Songju-ro 236beon-gil, Yangji-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do, 17159, Korea
Tel: +82-31-323-6008 Fax: +82-31-323-6010
<http://www.ltalab.com>

EMC TEST REPORT

Dates of Tests: October 14 - 16, 2020
Test Report S/N: LR500122010M
Test Site : LTA Co., Ltd.

Model No. **EQUALS-S**

APPLICANT **Corp. EQUALS**

Equipment name : EQUALS CANSEAMER Model-S
Manufacturer : Corp. EQUALS
Model name : EQUALS-S
Test Device Serial No.: Identical prototype
Directive : Electromagnetic Compatibility Directive 2014/30/EU
Rule Part(s) : EN 55014-1:2017
EN 55014-2:2015
EN 61000-3-2:2014
EN 61000-3-3:2013
Date of issue : October 21, 2020

This test report is issued under the authority of: The test was supervised by:
Young Kyu Shin, Technical Manager Seung Min Han, Test Engineer

This test result only responds to the tested sample. It is not allowed to copy this report even partly without the allowance of the test laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

NVLAP
Accredited test lab by NVLAP
NVLAP LAB Code: 200723-0

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EMC TEST- CE Certification

EU-Declaration of Conformity

We, Manufacturer/Importer (full address)
Corp. EQUALS
A-407, research building, 410, Jeongseojin-ro, Seo-gu, Incheon, Republic of Korea

Declare under our own responsibility that the product (description of the apparatus, system, installation to which it refers)
EQUALS CANSEAMER Model-S
Model No.: EQUALS-S

To which this declaration refers conforms with the relevant standards or other standardizing documents

EMC: EN 55014-1:2017
EN 55014-2:2015
EN 61000-3-2:2014
EN 61000-3-3:2013

According to the regulations in Directive 2014/30/EU (EMC).

Manufacturer
Signature: **조민우**
Date: 2020-11-05 Name: Minwoo Cho

Tested by **LTA**
Accredited test lab by NVLAP
NVLAP LAB Code: 200723-0

Date: October 21, 2020
Ref. No.: LR500122010M (EMC)

DOC - CE

LTA Test Report No.: LR500122010K

TEST REPORT

This laboratory is accredited by National Radio Research Agency Laboratory and National Voluntary Laboratory Accreditation Program.
The tests reported herein have been performed in accordance with its terms of accreditation.

Test Report No. : LR500122010K
Issue Date : October 21, 2020
Applied Standard : FCC Part 15, Subpart B
Trade Name : Corp. EQUALS
Equipment Name : EQUALS CANSEAMER Model-S
Model Name : EQUALS-S
Serial Number : Identification

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TESTING NVLAP LAB CODE 200723-0

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EMC TEST - FCC Certification

Product Function Point

**Product Function Point 1.
One-button Operation**

Product Functional Point 1. Plug and Play



- **Plug and Play**

If the product is set up for seaming, just connect the power and use it immediately.

Just by raising the can on Model-S and touching the operation button, the whole sequence of cans is performed..

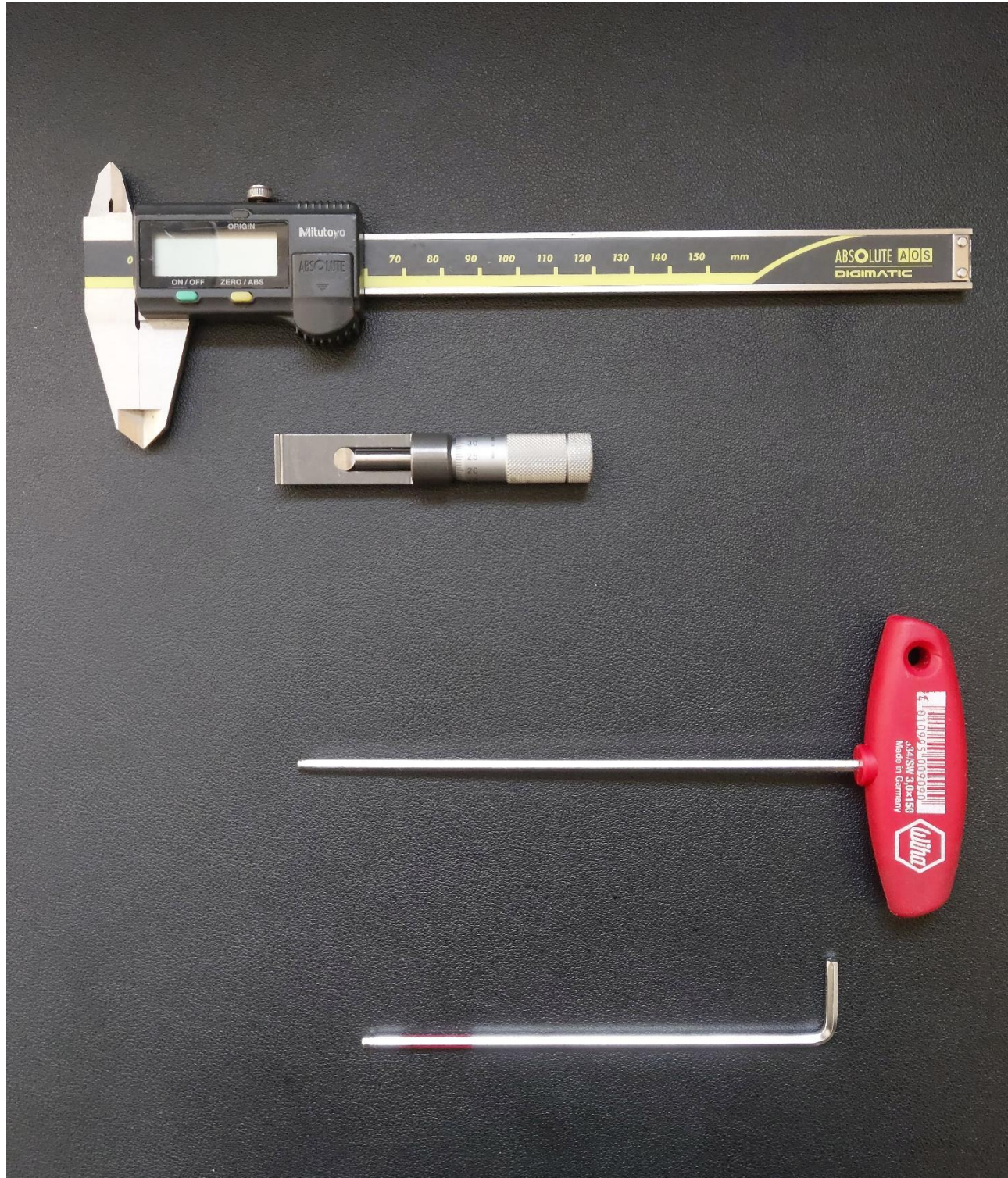
- **Setup Mode (Step operation)**



**Product Function Point 2.
Easy Seam Adjustment**

Product Functional Point 2. EASY SEAM ADJUSTMENT

Tools for seam adjustment



- **Vernier calipers or Seam micrometer**
It is necessary to measure the thickness of 1st and 2nd seam.

- **3mm Hexagon wrench.**
It is necessary to adjust the gap (clearance) between the sealing roll and the chuck.

Product Functional Point 2. EASY SEAM ADJUSTMENT

1. Lower chuck



Best Length 70.5~70.7mm

Permissible range : 70.3mm~71.5mm

To adjust the pressure the can receives between the adapter and the chuck(Pin height), you can adjust the height by turning the screw on the ball flange of the Lower chuck.

Model S applies appropriate pressure to the can when the Lower chuck is between 70.3 mm and 71.5 mm long.

The short length of the lower chuck does not making double seam and the long length increases the load on the entire Lifter parts.

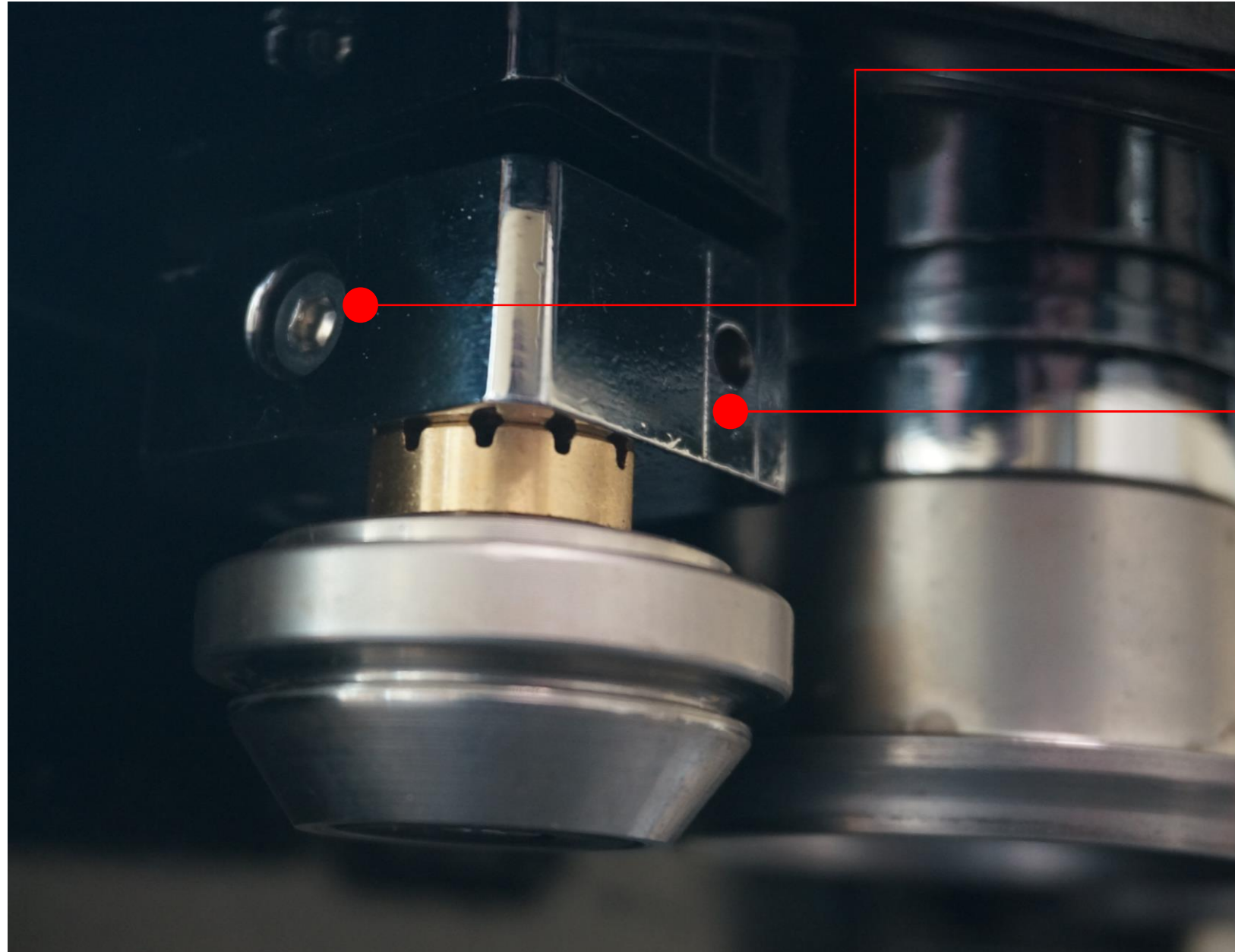
A large load can shorten the life of the machine.

So we recommend a height of 70.5mm to 70.7mm.



Product Functional Point 2. EASY SEAM ADJUSTMENT

2. Seaming roll and chuck gap(clearance)



This screw fixing value after adjustment is completed.

Use 3mm hexagon wrench.

Use 3mm hexagon wrench for fine adjustment

Product Functional Point 2. EASY SEAM ADJUSTMENT

2. Seaming roll and chuck gap (clearance)

Model-S does not need to adjust the seaming roll height. You only need to adjust the seaming roll clearance.

This means you can adjust the seam values very easily.

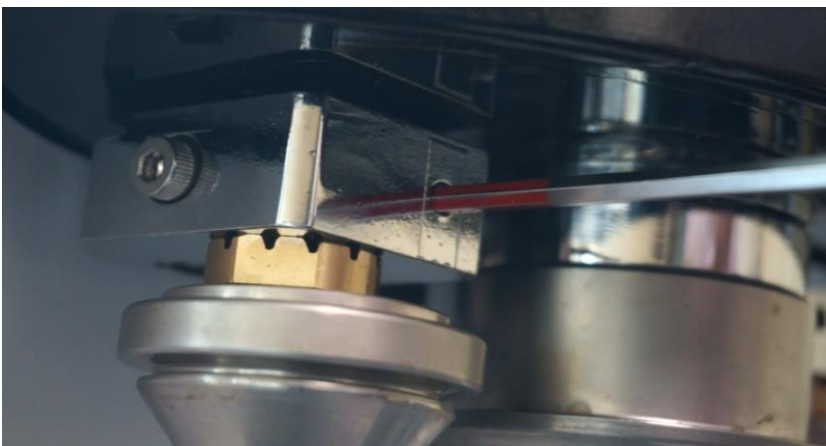
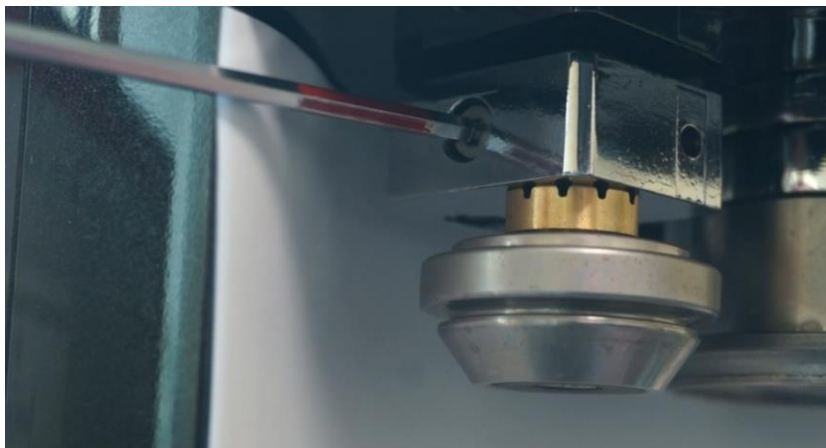
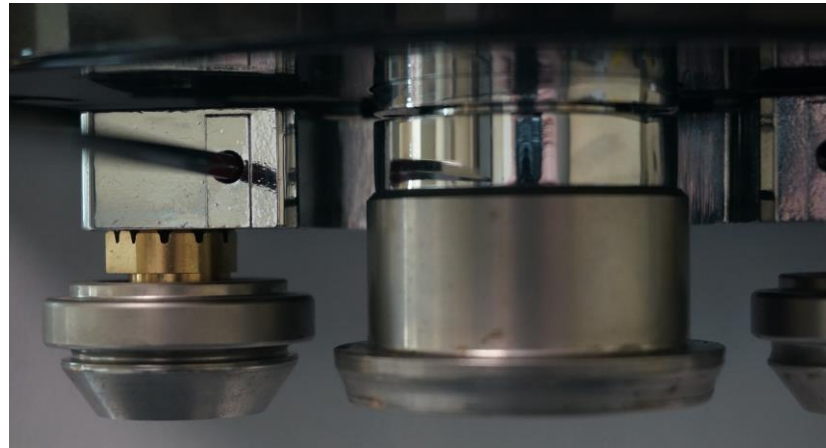
Step 1. Use a 3mm hexagon wrench to loosen the fixing screws of the 1st and 2nd shafts of seaming rolls.

Step 2. Enter Setup mode to step operations.
(Press the two buttons on the back of Model-S at the same time for more than 3 seconds)

Step 3. After put ends on the can body and placing it on the lifter adaptor, only 1st seam operation is performed, and then measuring the 1st seam thickness

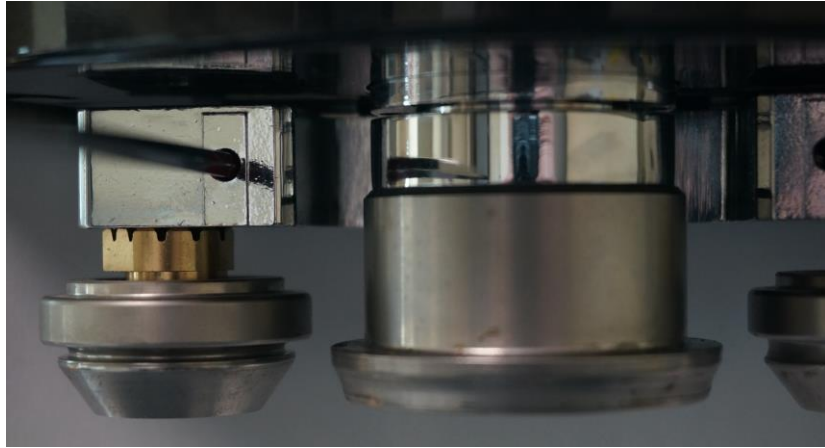
Adjust with the adjusting screw until the appropriate seam value.

	202END	300END
1st seam Thickness	1.92mm~2.02mm	2.65mm~2.75mm
2nd seam thickness	1.15mm~1.25mm	1.62mm~1.72mm
Seam length	2.50mm~2.60mm	3.05mm~3.15mm
END/Body Hook	1.40mm~1.80mm	1.90mm~2.15mm



Product Functional Point 2. EASY SEAM ADJUSTMENT

2. Seaming roll and chuck gap (clearance)



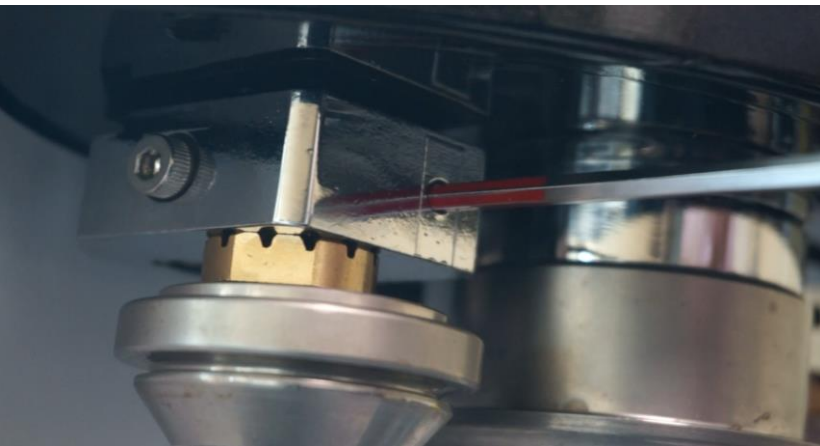
Step4. Adjust the 2nd seaming roll as well as the 1st seaming roll until the appropriate value comes out.

Step5. After adjusting both seaming rolls 1st and 2nd seaming roll, tighten the fixing screw.

Step6. Press the operation button on the front of the Model –S for 3 seconds to exit to operation mode.

Step7. Use it after operating once without a can.

Additional information is available on our YouTube channel.



Who is Inventor ?



Founder **CHO Min-woo**

Career

- 17- EQUALS Founder
- '14-16 Hyundai Pharm – Hospital Sales / Marketing
- '05 -12 INHA UNIV. – Bio engineering

Special skill :

- Creativity, Trend maker
- Metal Packaging design
- Bio process & Food process design Control & Optimization

Award

- Design innovation to select top 30 companies(Korea, 2019)
- Alphagear Hardware cup Connection Prize (Pittsburg, 2019)
- A-stream Hardware cup Final Winner(Hongkong, 2018)
- Best Company on the Eco Start-up Campus(Korea,2018)

EQUALS
CULTURE CREATION THROUGH INNOVATION