1368

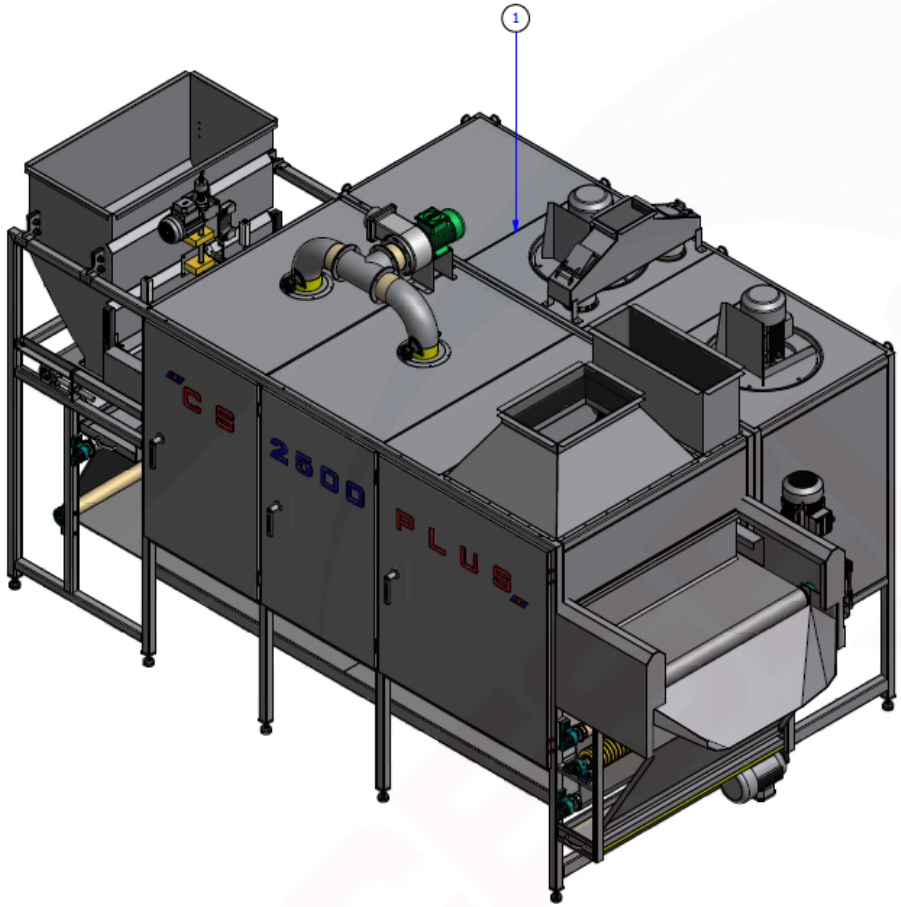
CESELSAN®

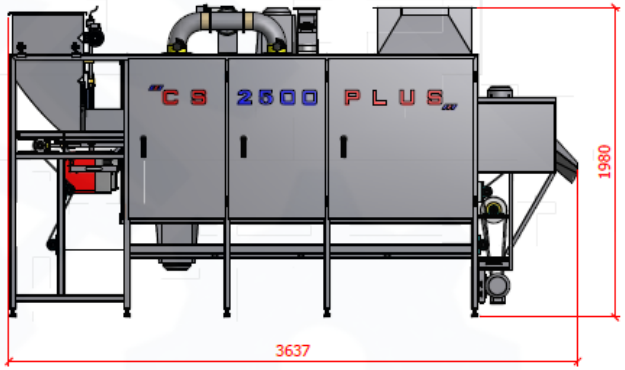
CS 2500-KF PLUS ROASTING OVEN

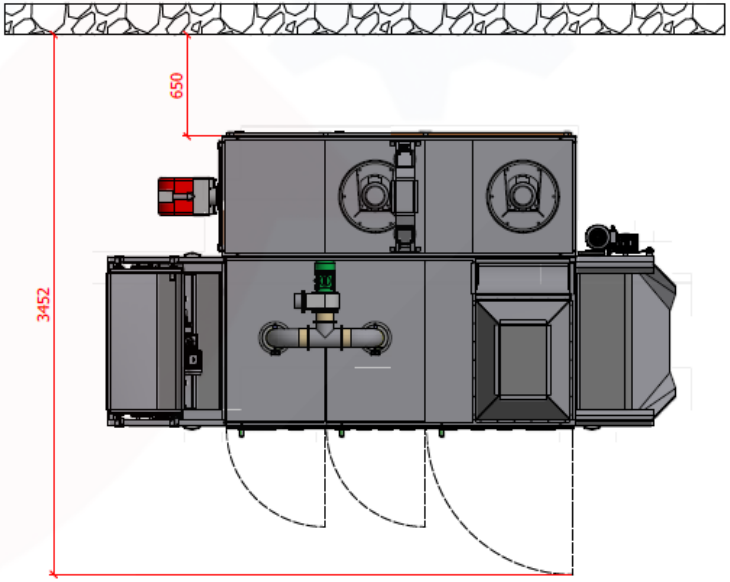
User Manuel

Eng

FIRST ADDITION DATA	20.11.2019
PAGE NO	1







ITEM	QTY	FILE NAME	MATERIAL	DESCRIPTION
1	1	CS 2500 KF Plus-Roasting Oven	AISI 304	

CESELSAN MAKİNA SAN. ve TİC. A.Ş.	Proje Kodu 202520	7	Designed by CESELSAN

Contents

Safety Instructions

Read below mentioned matters carefully !

1. Please read User Manual before using machine and follow the instructions strictly.
2. Pay attention to caution and warning signs on the machine
3. Take precautions for gas leak if you use natural gas or LPG.
4. Take precautions for electric shock on all parts where the warning signs are posted.
5. Be sure to have grounding line.
6. Do not touch to hot surfaces.
7. Do not get closer to moving and turning parts.
8. Do not open the front covers because of hot air in the oven (except cold air cabin cover).
9. Definitely not open back covers (thermo block covers).
10. Do not do maintenance during work process.
11. Pay attention not to get wet the electrical components during cleaning.
12. Do periodic cleaning and maintenance without interruption. Especially, prevent dust accumulation which will cause fire in the oven.
13. Have a fire extinguisher next to the oven. Fire extinguisher should be ABC-powder type or a chemical gas, which is suggested by the regional fire department and has a fire extinction property.
14. Put warning sign board in front of the covers, while making cleaning, maintenance and repairing. Be sure that there is no one or nothing in the cabin, while closing the oven cabin covers.

No responsibility is accepted if a problem arises which results from any change made on the oven or its equipments !

Warning Signs and Meanings

Hot Surface, Do not touch!

Your hand may squeeze into!

Read user manual absolutely!

Danger, electric shock!

Grounding Point!

CS 2500 KF - KFE PLUS Hat Tüketimler:

Elektrik Tüketimi:

Kurulu Güç: 5 kW/h

Opsiyon Fırçalama: 1,1 kW/h

Opsiyon Yıkama: 1,6 kW/h

Rezistans: 81 kw/h

Doğalgaz Tüketimi:

LPG: 1,2 m³/h

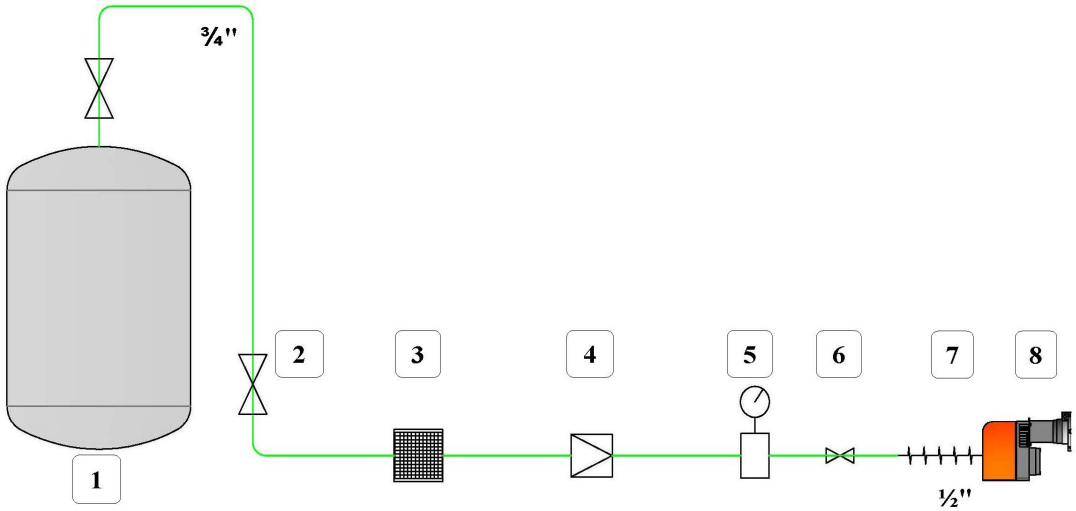
Doğalgaz: 3,1 m³/h

Boyutlar [mm]			
Modeller	Uzunluk	Genişlik	Yükseklik
Gazlı, Elektrikli ve Motorinli Model	3636	1946	2000

LPG, Doğalgaz Bağlantı Tesisat Şemaları

(CS 2500-KF PLUS)

DOĞAL GAZ VEYA LPG BAĞLANTI ŞEMASI



PARÇA LISTESI VE OZELLIKLERI

1	Gaz besleme tankı (Çıkış basıncı 1 bar)
2	Küresel gaz vanası (¾'')
3	Filtre (50 µm, gövde dayanımı Pmax:6 bar)
4	Regülatör (çıkış basıncı 0-100 mbar, debi:2 - 4,5 m³/h)
5	Manometre (0-100 mbar, ayrıca tank çıkışına 0-6 bar manometrede montajlanabilir)
6	Küresel brülör giriş vanası (½'')
7	Flex esnek bağlantı hortumu (½'')
8	Doğalgaz veya lpg brülörü

NOT: Brülörün zeminden yüksekliği : ≈850 mm

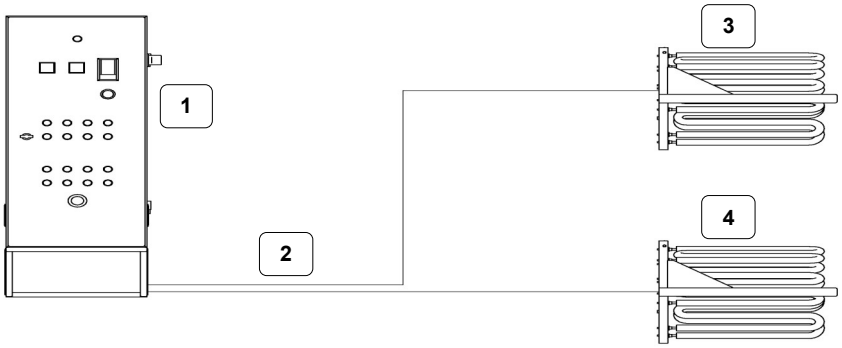
Şekil - 1 : Uygun Gaz Bağlantı Şeması

Olması Gereken Baca Gazı Emisyonu Standardı (Motorin ve gazlar için)

- **O2 — % 2-5 arası**
- **CO — % 0.1 maksimum (100 ppm maksimum)**
- **CO2 — % 11-12,5 maksimum**
- **Verim — % 90 minumum**
- **So2 — 120 ppm maksimum**
- **Nox — 120 ppm maksimum**
- **No — 120 ppm maksimum**

Yukarıdaki emisyon değerleri brülör imalatcı firma tarafından teyit edilmektedir.

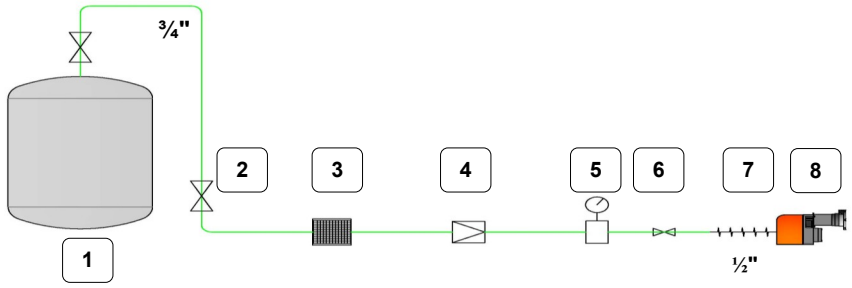
Elektrik, LPG, DG ve Motorin Bağlantı Tesisat Şemaları



Parça Listesi

1.Elektrik panosu
2.Besleme kablosu
3.1.Bölge rezistans
4.2.Bölge rezistans

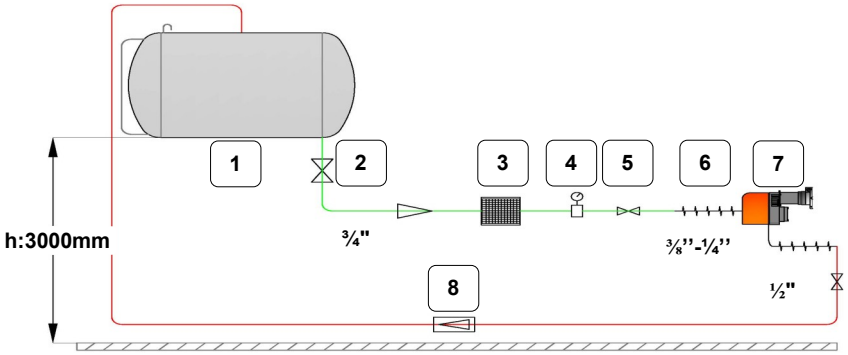
Şekil - 2 : Uygun Elektrik Bağlantı Şeması



Parça Listesi

1.Gaz besleme tankı (Çıkış basıncı 3-4 bar)
2.Küresel gaz vanası (¾'')
3.Filtre (50 µm, pmax :6 bar)
4.Regülatör (çıkış basıncı 0-30 mbar, debi:4 m³/h)
5.Manometre (0-100 mbar)
6.Küresel brülör giriş vanası(½'')
7.Flex esnek bağlantı hortum(½'')
8.Doğalgaz veya lpg brülörü

Şekil - 2.1 : Uygun Gaz Bağlantı Şeması



Parça Listesi

1.Motorin besleme tankı
2.Küresel vana (¾'')
3.Motorin filtresi (cam gövdeli, yıkanabilir)
4.Manometre(¾'' gliserinli)
5.Brülör giriş vanası(¾'')
6.Esnek bağlantı hortumu
7.Motorin brülörü
8.Motorin dönüş borusu(½'')

Şekil - 2.2 : Uygun Motorin Bağlantı Şeması

Minimum spaces that should be left around the Oven.

It should be paid attention to the margins of the oven in the building during the installation. Minimum dimensions, which should be left, are showed in the below figure. These spaces place an important role during the periodic maintenance and service processes.

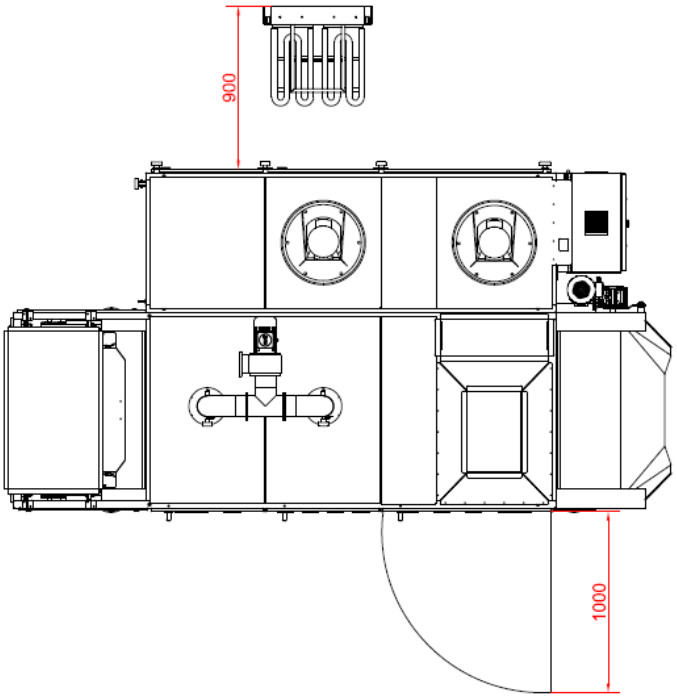


Figure - 3 : Minimum spaces that should be left around the electrical and gas model oven during installation.

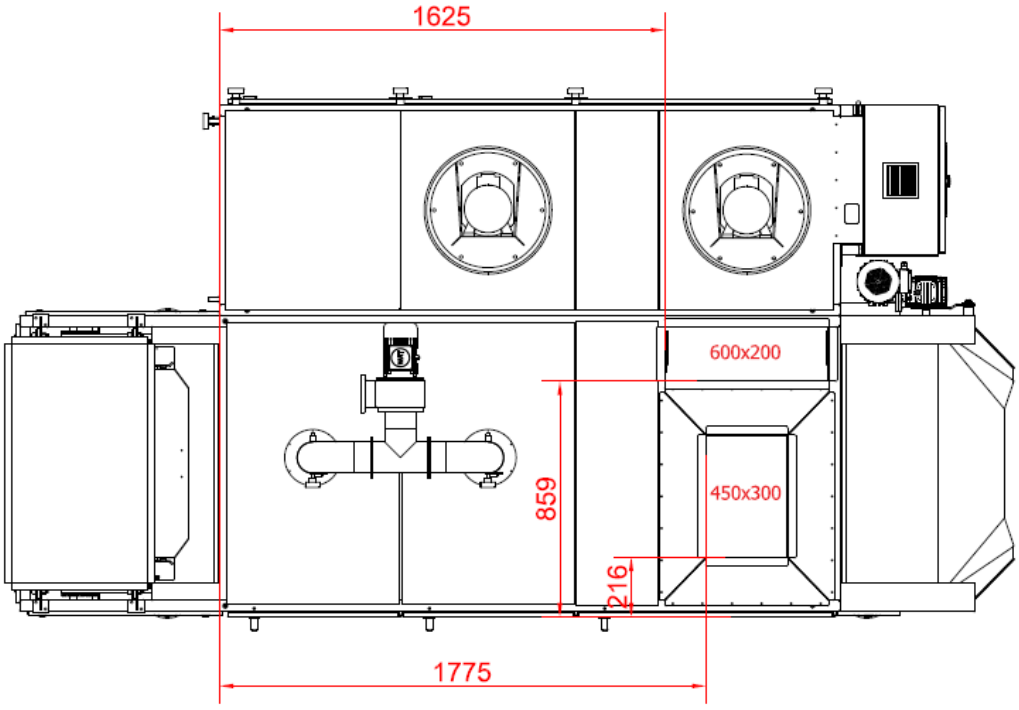
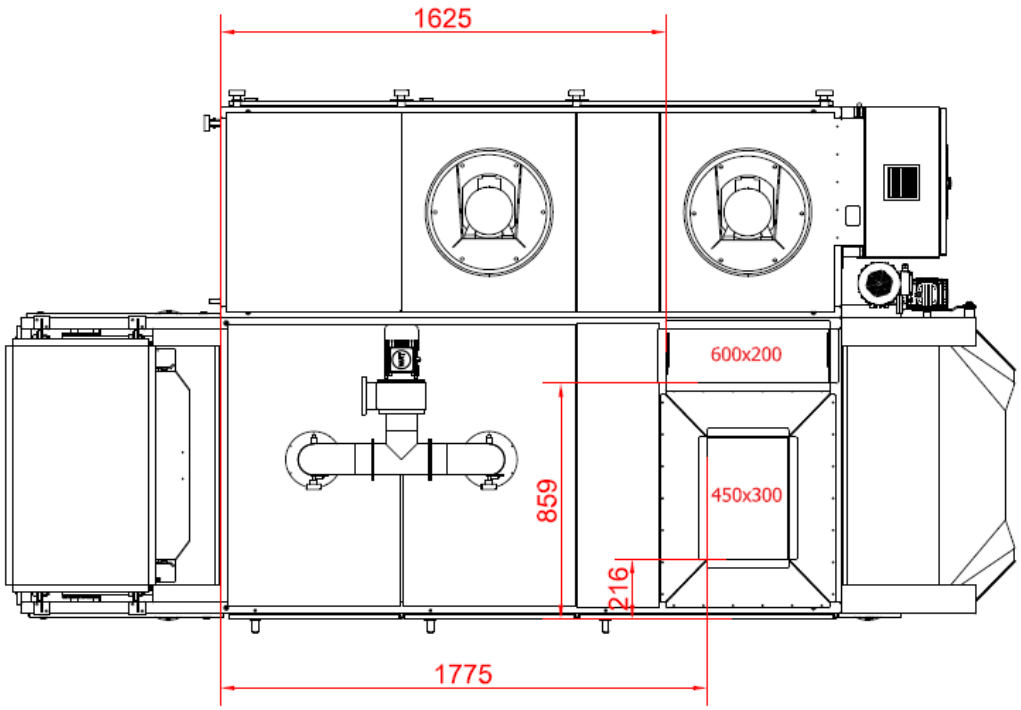


Figure - 4 : Chimney exit dimensions. (Electrical models do not have exhaust chimney exit.)



Figure– 5 : Electrical model oven's chimney exit dimensions.

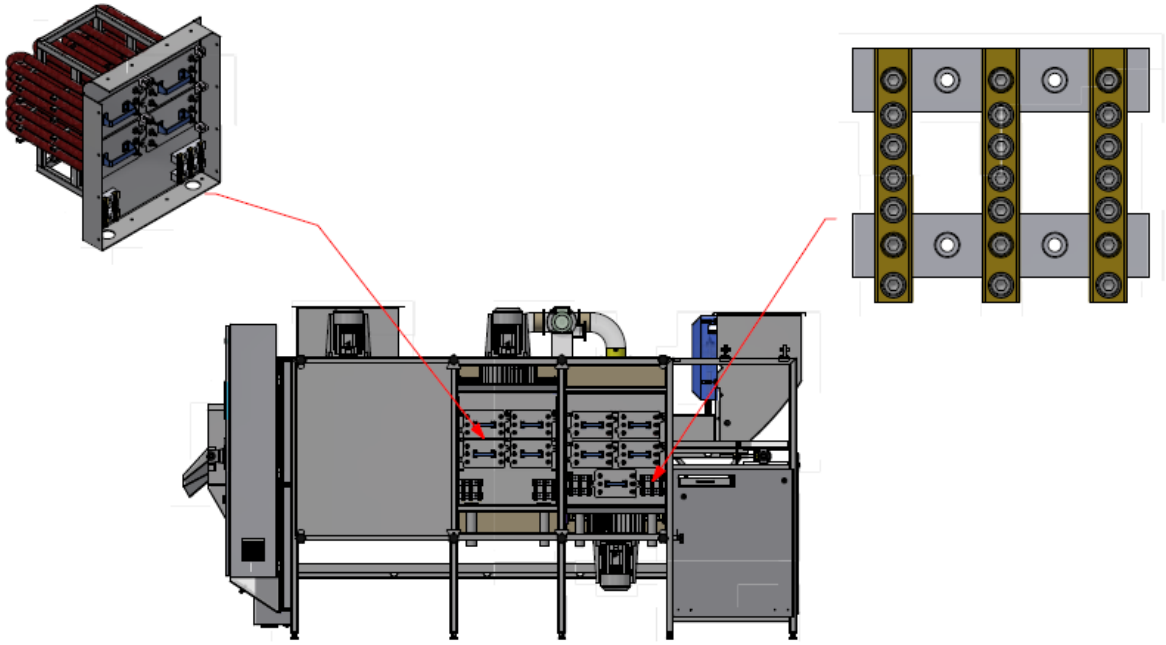
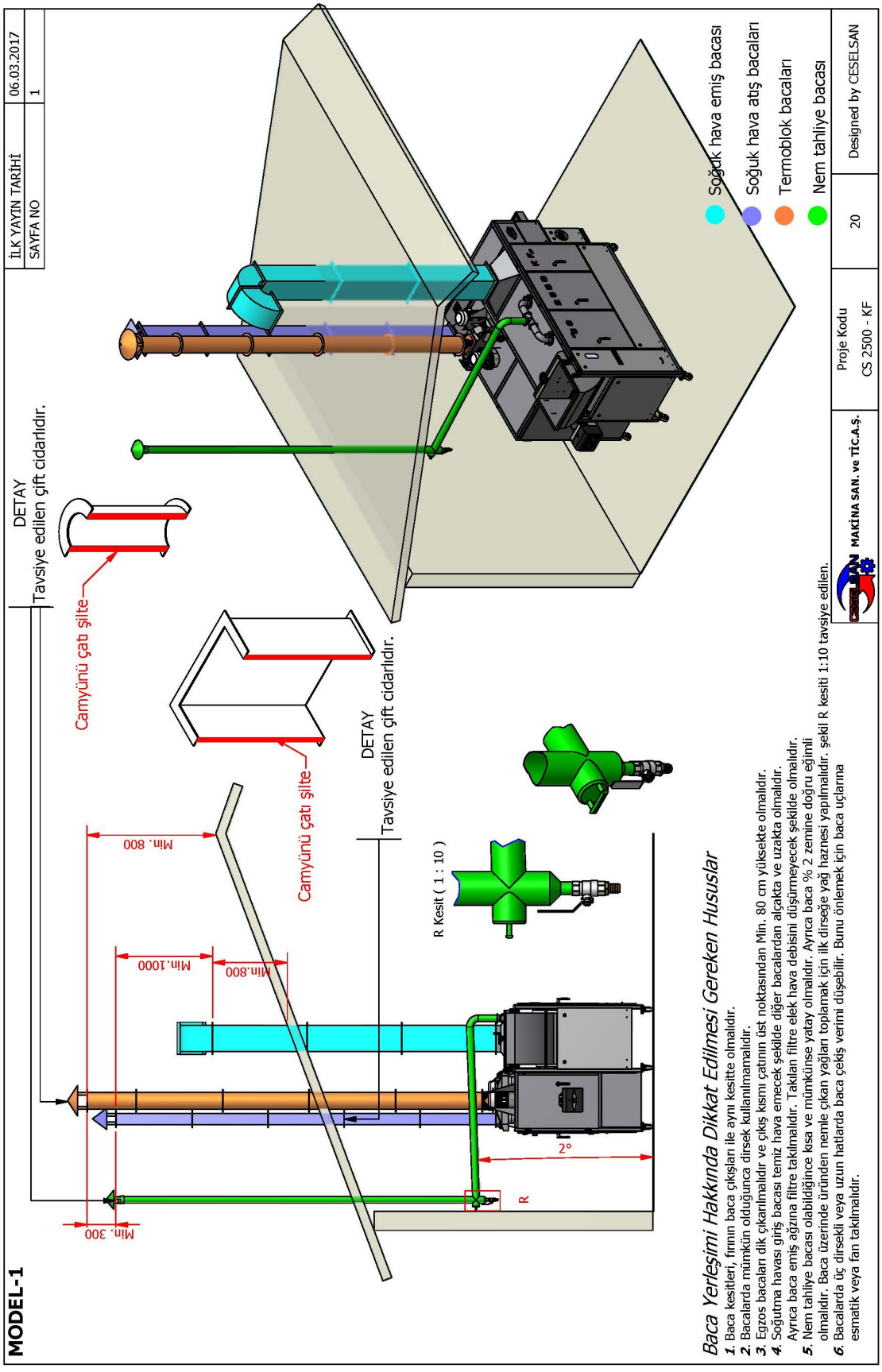


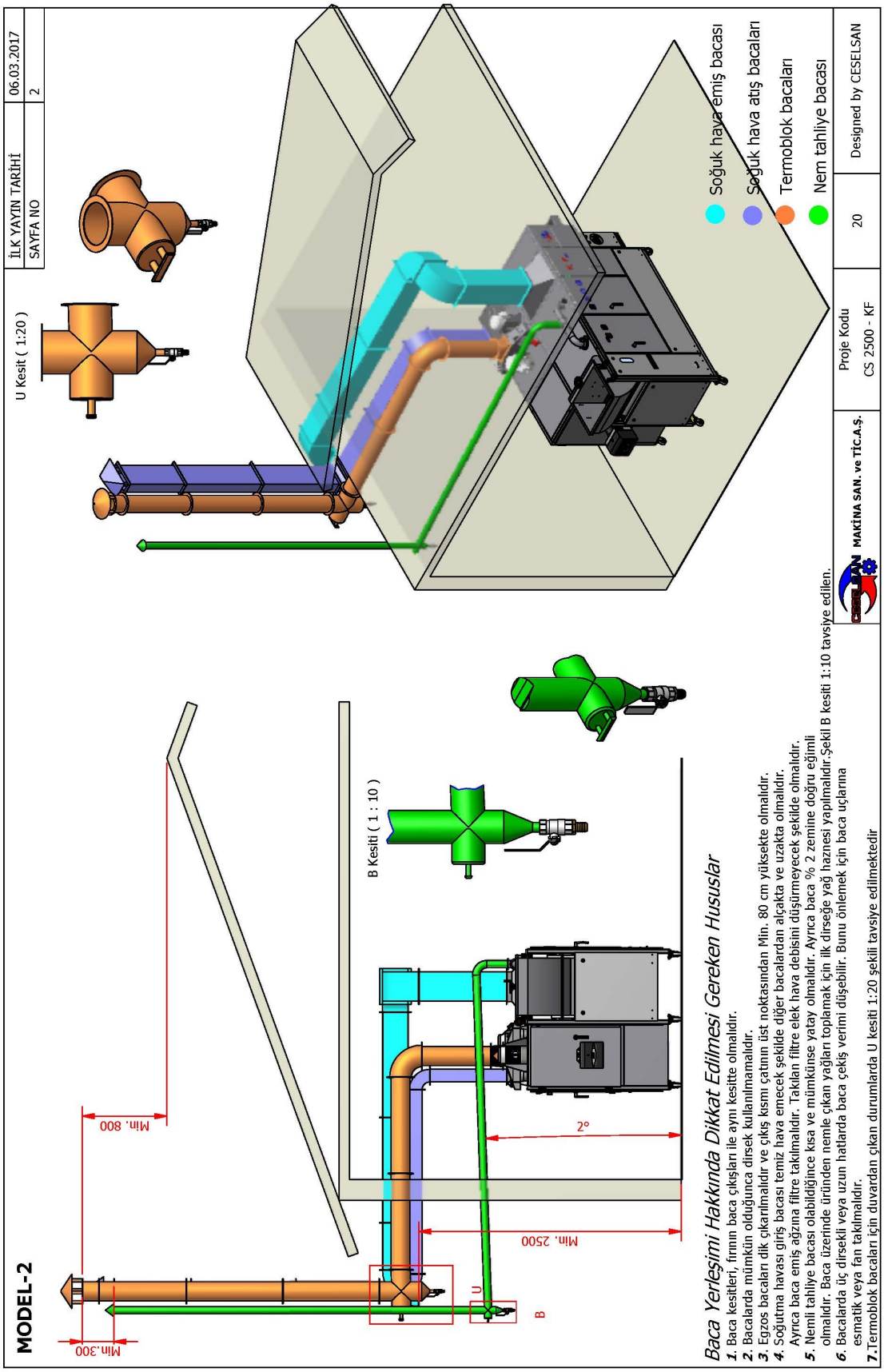
Figure - 6 : Electrical model oven's resistance and electric terminal connection boxes.

List of Electric Connection Parts

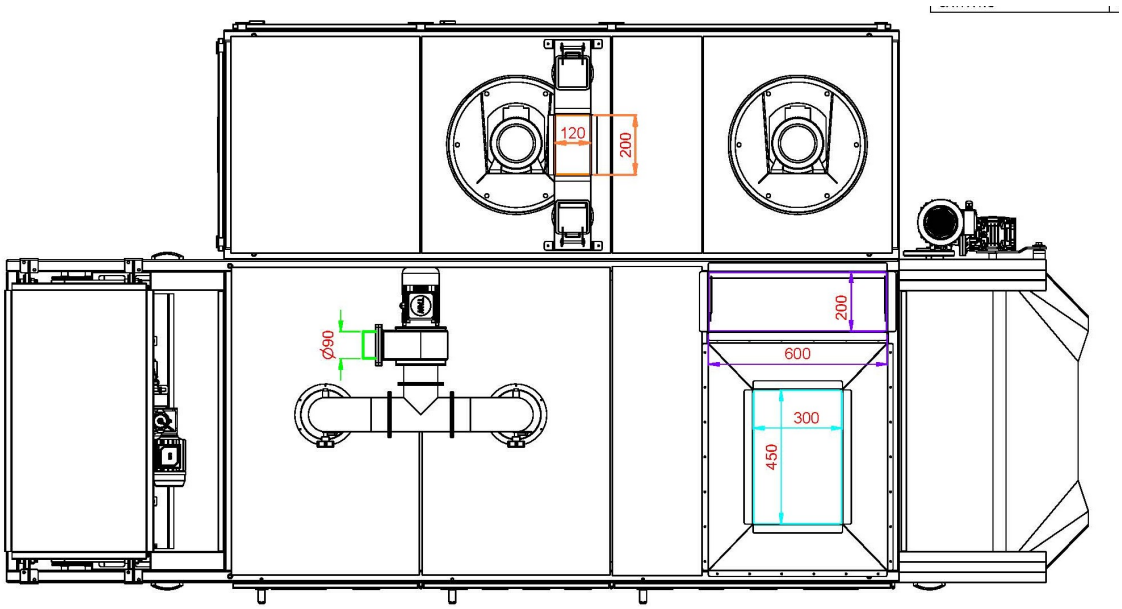
1. Heating resistance groups,
2. Copper busbar,
3. Resistances,
4. Connection electric terminal grounding screw.
5. Fixing locks of resistance groups



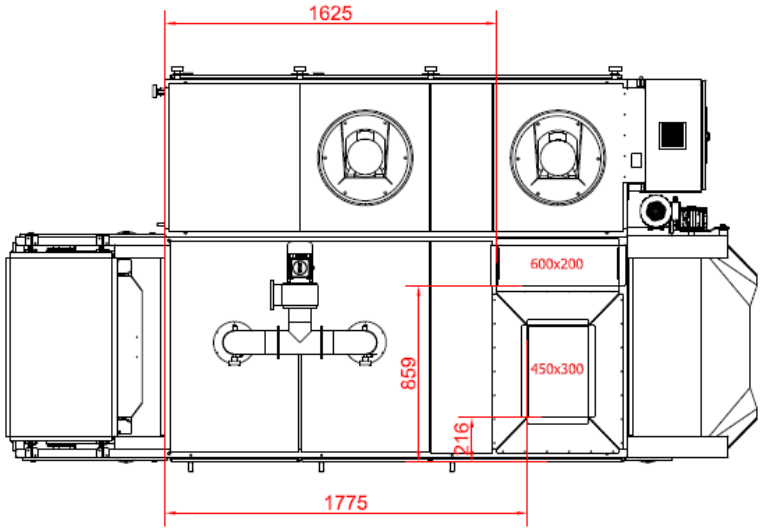
Şekil - 7 : Örnek dikey baca yerleşimi ve ölçüleri (Elektrikli modellerde egzos baca çıkışı bulunmamaktadır).



Şekil - 8 : Örnek dikey baca yerleşimi ve ölçüleri (Elektrikli modellerde egzos baca çıkışı bulunmamaktadır).



Şekil - 9 : Örnek ebat ölçüleri (Elektrikli modellerde egzos baca çıkışı bulunmamaktadır).



Baca Yerleşimi Hakkında Dikkat Edilmesi Gereken Hususlar

- Baca kesitleri, fırının baca çıkışları ile aynı kesitte olmalıdır.
- Bacalarda mümkün olduğunca dirsek kullanılmamalıdır.
- Egzos bacaları dik çıkarılmalıdır ve çıkış kısmı çatının üst noktasından 1 metre yüksekte olmalıdır.
- Soğutma havası giriş bacası temiz hava emecek şekilde diğer bacalardan alçakta ve uzakta olmalıdır. Ayrıca baca emiş ağzına filtre takılmalıdır.Takılan filtre elek hava debisini düşürmeyecek şekilde olmalıdır.
- Nemli hava çıkış bacası olabildiğince kısa ve mümkünse yatay olmalıdır. Ayrıca baca 2° zemine doğru eğimli olmalıdır.Baca üzerinde üründen nemle çıkan yağları toplamak için ilk dirseğe yağ haznesi yapılmalıdır.
- Üç dirsekli veya uzun hatlarda baca çekiş verimi düşebilir. Bunu önlemek için baca çıkışlarına es matik veya fan takılmalıdır.
- Makine testleri yapılırken baca gazı analiz cihazı ile yanma verimliliği ölçülmeli ve kabul edilen standart değerler de CO ve CO2 ayarlanmalıdır. (Bakınız sayfa 3)

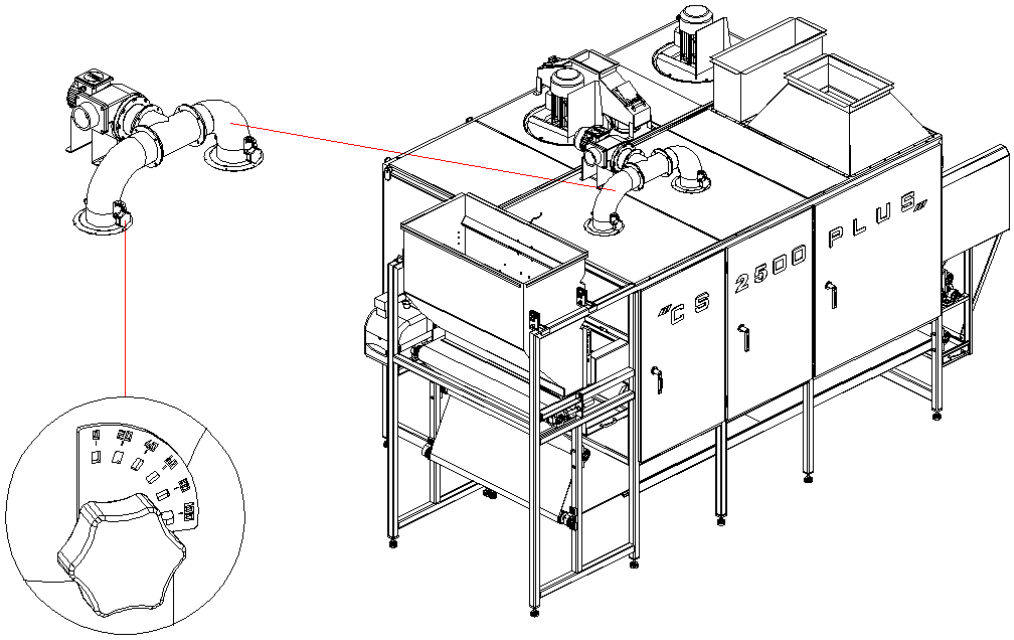
Starting and Stopping Manually

Starting

1. Be sure all covers are closed. Check inside and outside of the oven for anything that could prevent the machine from starting.
2. Set the position of moisture leveling valves (figure16) that belongs to each roasting cabin. (Starting from the product inlet, set it proportional by means of becoming lower from the first cabin to the last cabin. Ex: 1. cabin 100, 2. cabin 60, etc.)
3. Start to fill inlet hopper of oven.
4. Set the heat values of roasting cabins according to product which will be roasted.
5. Define the thickness of the product will be spread on roasting belt.
6. Define the proceeding speed of the roasting belt to desired value.
7. Start circulation fans one by one (few second intervals).
8. Start the burners.
9. Start resistance heaters in the electrical models.
10. Wait until temperatures of roasting cabins will reach to desired value.
11. Start roasting belt.
12. Start cold air circulation fans and if there is any equipment in front of the oven, start them, too.

Stopping

1. Stop loading product to the oven inlet hopper.
2. Be sure that inlet hopper is empty and there is no product left in the roasting oven.
3. Stop burners.
4. Stop resistance heaters in the electrical models.
5. Stop cooling fans.
6. Do not stop the circulation fans of roasting zones before the cabinets temperature decreases under 60° C
7. Stop hot air circulation fans.
8. Get the hopper's cover position to ''0''
9. Turn off the main switch.



Figure—10 : Appearance of roasting zones' humidity chimneys and valves.

Thickness Setting of the Oven Inlet Hopper

There is a thickness setting on the inlet hopper of the oven. The thickness of the product, which enters the oven, can be increased or decreased by turning the No.1 flywheel shown at the Figure – 11 to the right or left side. The thickness is gotten to desired range by looking from the No.2 viewing window. Product thickness move between the range of 0 – 120 mm.

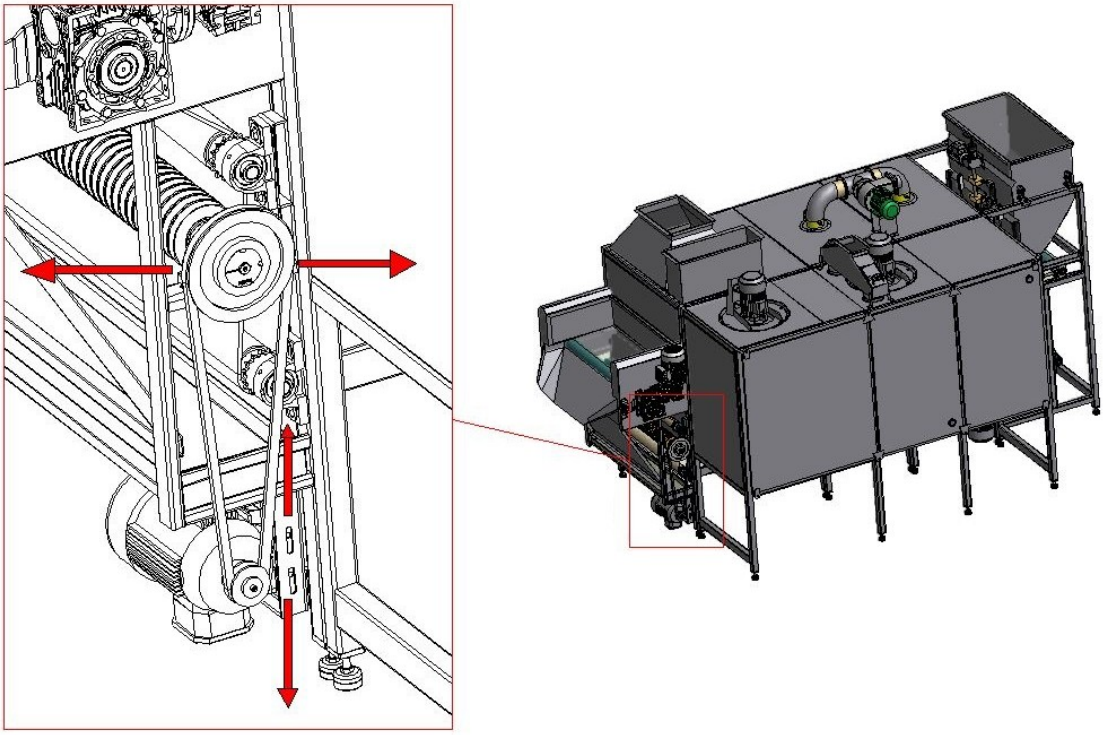


Figure – 11: Thickness Setting of the Oven Inlet Hopper

Stretch Setting Mechanism of oven belt

Open the accessories cover, which is showed with red color at Figure12, by the help of spanner. In the event of loosening at oven belt, remove the problem by stretching the belt.

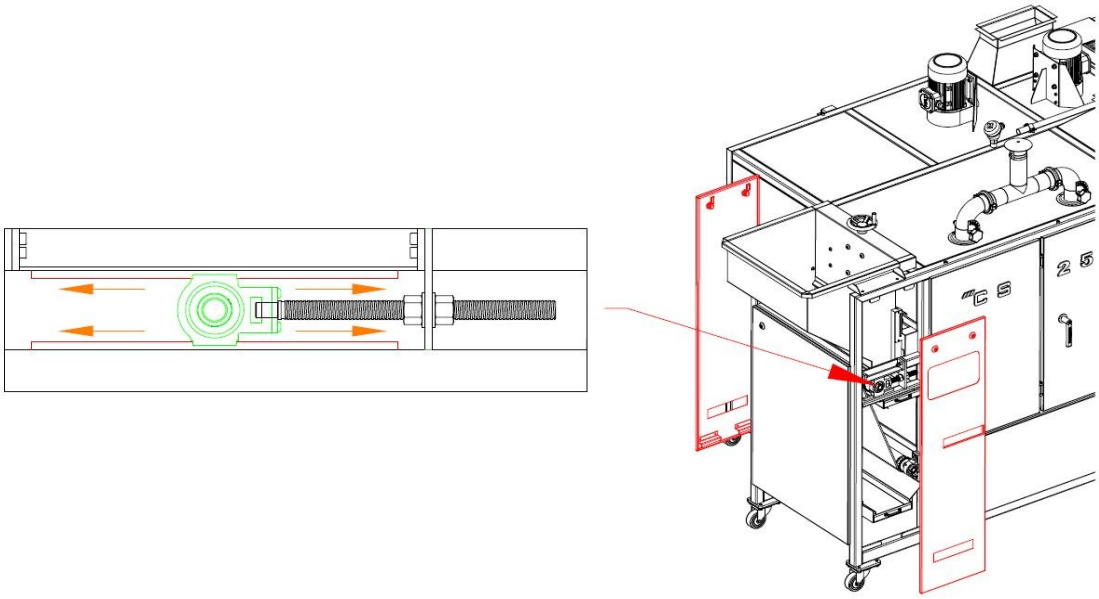


Figure- 12 : Stretch Setting Mechanism of oven belt

Periodical Maintenance

Cleaning Instructions After Using Period

- Clean dust accumulated on air filters in the cabin. Otherwise this dust prevents air circulation in bad manner and causes an excessive heat on the thermo blocks, so the oven can not work properly. Also, if periodic maintenance instructions of the wire sieve filters are not followed properly, the excessive heat in the oven may cause fire.
- Clean the wire sieve filter at the end of every 8 hours working period.
- Clean the fresh air filters.
- Clean the dust and product particles which accumulate in the cabin.
- Empty dust (debris) which accumulates in the dust pans that are situated on the inlet and outlet side of product .
- Clean dust, which accumulated in the hood at the cool air outlet chimney, by opening from the adjustment point after every weekly working period.

Weekly Maintenance Instructions

- Clean the oil layers inside the oven.
- Open thermo blocks' covers and clean the dust accumulated in this area.
- Clean the fresh air sucking filters on the thermo block covers.
- Control the belt thickness. Tighten the belt if needed.

Six Monthly Maintenance Instructions

- Clean the oil layers and residues on the roasting belt. Disassemble roasting belt to do this cleaning.
- By opening the covers of dehumidify pipes collector, clean the dusts accumulated in it.
- Clean the oil layers accumulated in dehumidify pipes.
- Check the filters belong to thermo block covers and flap. Replace them if they are worn.
- At the end of the two years operation period, in six monthly intervals, check thermo blocks , by opening term block covers, to see if there is any damage or not. (For gassy and diesel model ovens). If there is any damage on thermo blocks, please contact technical service.
- Check tightness of cap screws.

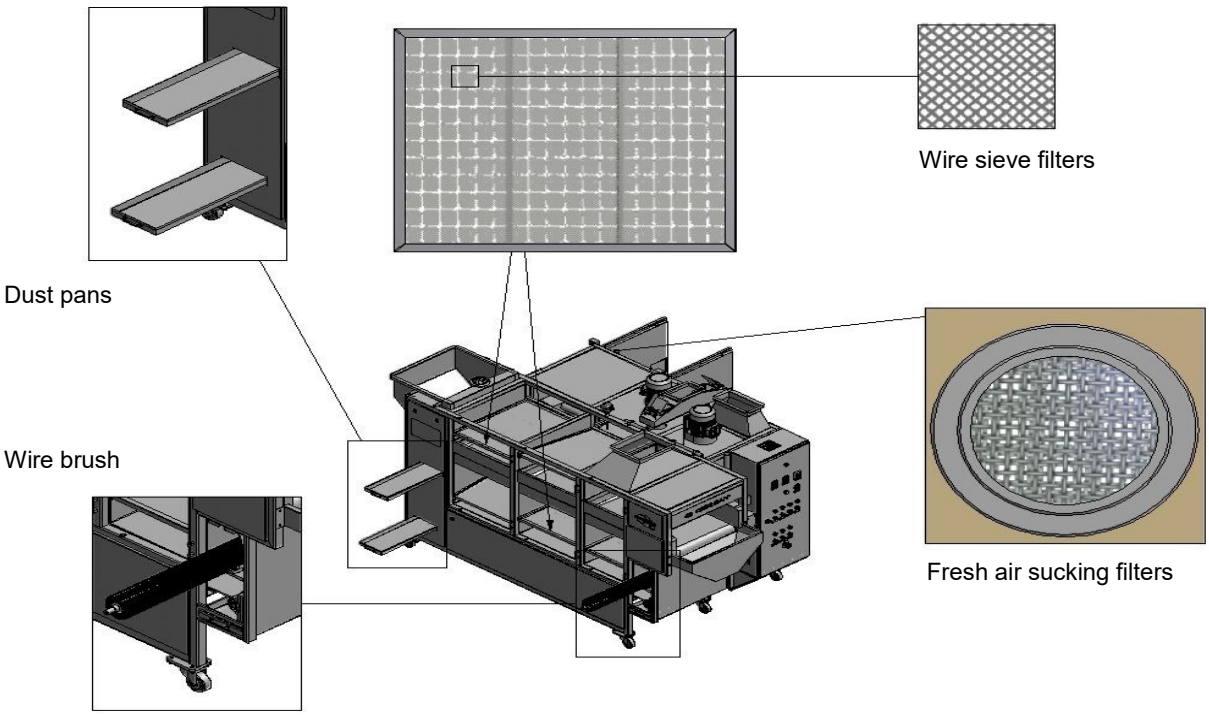


Figure 13 : The parts of the oven, which should be cleaned daily after working process.

Lubrication Instructions

Place	Oil Type	Oil Quantity [lt.]	Lubrication Period
All bearings Drums Hinge flaps Belt cleaning brush	Grease	~	Weekly
Main drive reducer Model : EN40+30	ISO VG 220 Synthetic Oil	0.04+0.03	20000 Hours

Matters Related to the Reducers' Oil Change

- It is advisable to shorten the lubrication period under severe environmental conditions (sudden temperature changes, excessive humidity, etc.).
- Definitely do not mix mineral oils and synthetic oils with each other.
- Oil changing process must be done immediately after working period when the oil is hot. Since the particles in the reducer are mixing to oil, best cleaning will be done and oil will be discharged easily with this kind of oil change.

Turn off the switch from the board and hang a warning sign, if the covers of electrical (resistance heating) ovens will be opened for repairing or maintenance. Security with safety key is replaced on the oven covers.

You can find electric project of the oven in electric board.

It is very important to clean wire sieve filters in the oven daily for working of the oven properly. Definitely, clean the filters daily.

Do not get wet electrical parts during cleaning and maintenance, turn off the switch.

Do not forget lubrication instructions during the periodical maintenances.

No responsibility is accepted if a problem arises which results from any change made on the oven or its equipments !

Probable Problems and Their Solutions

- **One of the burners isn't working.**
- It is possible that the burner doesn't have electrical-energy. (Heating resistances can be damaged)
  - » Perform necessary controls.
- Out of fuel oil or because of any causes, it can't reach to the burner.
  - » Perform necessary controls.
- Thermostat or thermocouple have a problem.
  - » Change the broken part with its spare part.
- Circulating fan, which is in the cabin same with the burner, has a problem.
  - » Check the circulation fan.
- Air pressurestat, which belongs to the cabin same with burner has a problem.*
  - » Change the air pressurestat with new one.
- Burner can be broken down.
  - » Call the authorized burner service.
- The temperature of any roasting cabin increased above 50 ~ 60 ºC from defined value but burner is still working.
  - » Thermostat or Thermocouple may be broken down.
  - » Change the broken part with its spare one.
- For electrical ovens: Heating resistances are open, but the cabin heat is not increasing.
  - » Control the resistances, if they are broken down, change with the spare one.
  - » If the filters in the oven are not clean, the air flow decreases and the heat distribution is not homogenous; clean the filters according to the periodical cleaning and maintenance instructions.
- The product, which exits from the oven is not homogenous.
  - » If there is any product roasting problem, clean the filters, fans and heaters.

*** Demand service or technical support in the situations that you can not interfere.**

***Air pressurestat is optional for ovens.**

Do not get wet electrical parts during cleaning and maintenance, turn off the switch.

It is very important to clean wire sieve filters in the oven daily for working of the oven properly. Definitely, clean the filters daily.

Ceselsan Makina A.Ş. reserve the rights of making changes on the machines without informing before.

Service Stations

THE LIST, WHICH SHOWS SERVICE STATIONS.
IMPORTER/PRODUCER-MANUFACTURER COMPANY
1. TITLE: CESELSAN MAKİNA SANAYİ VE TİCARET .A.Ş.
2. HEADQUARTER ADDRESS: GAZİ CAD. SARI ALEMDAR SOK. KİTAPCILAR İŞHANI KAT 2, GİRESUN/TURKEY
3. TELEPHONE: +90(454) 315 2501
4. FAX: +90 454 315 25 08
6.TRADE REGISTER NUMBER:
8.TAX NUMBER: 2060389450

1

- **Name of the Service:** CESELSAN MAKİNA SANAYİ VE TİCARET .A.Ş.
- **Executive Name & Surname:** Mr. TANER DALMAN
- **Tax Office :**GİRESUN
- **Tax Number :**2060389450
- **Telephone Number:**0 454 315 25 01
- **HYB NO:**28.14.02/235
- **Address:** PAZARSUYU KÖYÜ ÇARDAKTEPE MEVKİİ NO:2 BULANCAK
- **City/Country:** GİRESUN/TURKEY

Physical life of food, milk and beverage machines are 10 years.

Warranty Certificate

1. FOLLOWING THE CERTAIN ASSEMBLY DATE, OBEYING THE USER PROCEDURES, THE MACHINE AND EQUIPMENTS ARE WARRANTED FOR 1 (ONE) YEARS.
2. THE SELLER COMPANY IS NOT RESPONSIBLE FOR DAMAGES DUE TO MISUSAGE.
3. IN CASE A MALFUNCTION HAS ARISEN FROM MANUFACTURING DEFECTS IN WARRANTY EXTENT, NO FEE IS CHARGED FOR CHANGE OF SPARE PARTS.
4. ELECTRIC ENGINES AND FANS ARE EXCLUDED FROM WARRANTY.
5. WE GUARANTEE TO GIVE MAINTENANCE SERVICES AND PROVIDING SPARE PARTS DURING TEN YEARS AFTER INSTALLATION OF MACHINE.
6. THE SELLER IS NOT RESPONSIBLE FOR ANY FAULT OR LOSSES THAT HAPPENED AND NOT GENERATED FROM THE SELLER , DUE TO MAIN ELECTRICITY NETWORK OR FORCE MAJEURE , AND NATURAL EVENTS.

Serial No	: ……..
Type	: CS 2500 - KF Roasting Oven
Delivery Date	: ……./……./…….
Delivery Place	: ……..
Invoice No	: ……..
Invoice Date	: ……./……/……
Seller's Company Title	: CESELSAN MAKİNA SANAYİ VE TİCARET A.Ş.
Tel	: +90454 315 25 01
Fax	: +90454 315 25 08
Industrial Registration No	: 1493
Address	: PAZARSUYU KÖYÜ ÇARDAKTEPE MEVKİİ NO:2 BULANCAK

Taner DALMAN:
Director of administrative
and financial affairs
Stamp / Signature

EC - DECLARATION OF CONFORMITY
AT – UYGUNLUK BEYANI

CE

Manufacturer / İmalatçı
Name / Ünvan:
CESELSAN MAKİNA SANAYİ VE TİCARET A.Ş.

Adress / Adress:

Pazarsuyu Köyü Çardaktepe Mevkii No:2
Bulancak / GİRESUN / TÜRKİYE

Biz deklare ediyoruz / *We here with declare that;*

Equipment Type / Model:
CS 2500 - KF Roasting Oven

Serial No:

Direktif / Directive :

MAKİNA EMNİYETİ DİREKTİFİ **2006/42/AT –** MACHINE DIRECTIVE **2006/42/EC**
ALÇAK GERİLİM DİREKTİFİ (LVD) **2014/35/EU** - LOW VOLTAGE DIRECTIVE (LVD) **2014/35/EU**

Harmonize Standartlar/Harmonised Standards :

EN 60204 – 1: 2006 A1 2009
(TR) Makinalarda güvenlik; Makinaların elektrik donanımı - Bölüm 1: Genel kurallar
(EN) Safety of machinery - Electrical equipment of machines - Part 1: General requirements

EN ISO 13857: 2009
(TR) Makinelerde güvenlik; El ve kolların tehlikeli bölgelere erişmesine karşı güvenlik mesafeleri
(EN) Safety of machinery; safety distances to prevent danger zones being reached by the upper limbs

EN ISO 12100:2010
(TR) Makinalarda güvenlik- Tasarım için genel prensipler-Risk değerlendirmesi - Bölüm 1: Prensipler
(EN) Safety of machinery - General principles for design-Risk assessment - Part 1: Principles

EN ISO 4414:2010
(TR) Pnömatik akışkan güç- Sistemler ve bileşenleri için güvenlik kuralları ve genel kurallar
(EN) Pneumatic fluid power - General rules and safety requirements for systems and their components

EN ISO 4413 :2011
(TR) Hidrolik akışkan güç- Sistemler ve bileşenleri için güvenlik kuralları ve genel kurallar
(EN) Hydraulic fluid power - General rules and safety requirements for systems and their components

Ürünün bir sistemle entegre olarak ya da diğer bir birim ile birleştirilerek kullanıldığı durumlarda, Makine Direktifi ***(2006/42/AT)*** ile uyumluluk yalnızca bu ürünü kapsar ve ancak ürünün ekindeki Montaj, Çalıştırma ve Bakım Talimatı'na uygun şekilde monte edilmesi şartıyla geçerlidir. Sistem kurucusu sistemin tamamının Makine Direktifi ***(2006/42/AT)*** uyumluluğundan sorumludur.

The compliance with Machine Directive ***(2006/42/EC)*** applies only this to the product if the product is integrated in a system or combined with other units, ensured that the connections are made in accordance with the Installation, Operating and Maintenance Instructions supplied with the product. The system manufacturer is responsible for the compliance of the complete system with machine Directive ***(2006/42/EC)***

Giresun /Turkiye

General Manager

Contact Information

Map View

Satellite View

CESELSAN Makina Sanayi ve Ticaret A.Ş.

Fabrika adresi	: Pazarsuyu Köyü Çardaktepe Mevkii No:2 BULANCAK / GİRESUN
Tel	: +90 454 315 25 01
Faks	: +90 454 315 25 08
E-posta	: ceselsan@ceselsan.com
İnternet adresi	: http://www.ceselsan.com

Notes