CAFEMINO GAS

TKMSX-1 COFFEE ROASTER

Toper Karakundakoğlu Değirmen Makine San Ve Tic Ltd Şti
Address: 5911 sk. no:1 Karabağlar- İzmir-Turkey
Tel : 90-232-254-01-21 Fax: 90-232-2372127
www.toper.com

Model:	TKMSX-1
Batch Capacity:	1 Kg green coffee
Roasting Time:	LIGHT ROAST (Fast Roast): : 8 Minutes LIGHT ROAST (Slow Roast) : 14 Minutes DARK ROAST (Fast Roast) : 12 Minutes DARK ROAST (Slow Roast) : 20 Minutes (Roasting time: It may depend on the type, production year specifications, humidity, altitude of the green coffee and the customers choice of blend.
Cooling Time:	4 Minutes **Attention:** The machine can do both roasting and cooling operations at the same time. This machine is designed for continuous roasting. Example: The first roasting time finishes in 10 minutes and cooling time is 4 minutes. Total operation ends in 14 minutes. But since the machine can do both roasting and cooling, the second batch time will be 10 minutes because you can start the second batch while the first batch's cooling is still ongoing.
Hour Capacity:	LIGHT ROAST (Fast Roast) : 7,5 kg / Hour (60 kg in 8 hours/in a day) LIGHT ROAST (Slow Roast): 4,3 kg / Hour (34 kg in 8 hours/in a day) DARK ROAST (Fast Roast) : 5 kg / Hour (40 kg in 8 hours/in a day) DARK ROAST (Slow Roast) : 3 kg / Hour (24 kg in 8 hours/in a day)
Dimensions (HxWxL)	81 x 73 x 100 Cm
Weight:	82 Kg
Voltage:	110-220-380 Volts, 50-60Hz, 1-3 Phase are available regarding to customer preference.
Type of Fuel:	LPG / LNG / Natural Gas.
Number of Motors	3 motors
Color:	Black, red, green, any other customer preference
Body Type:	▪ Chrome body ▪ Brass body ▪ Cooper body ▪ Hammered brass and Cooper body

Security Systems :

- **Gas Security & Pilot System for security and electronic ignition :** Cut the gas connection
- **Mixer Security System**: To protect any injury to user from rotating cooling tray arms.

Temperature Control : Digital Temperature controls and Digital Temperature indication

Other Specifications :

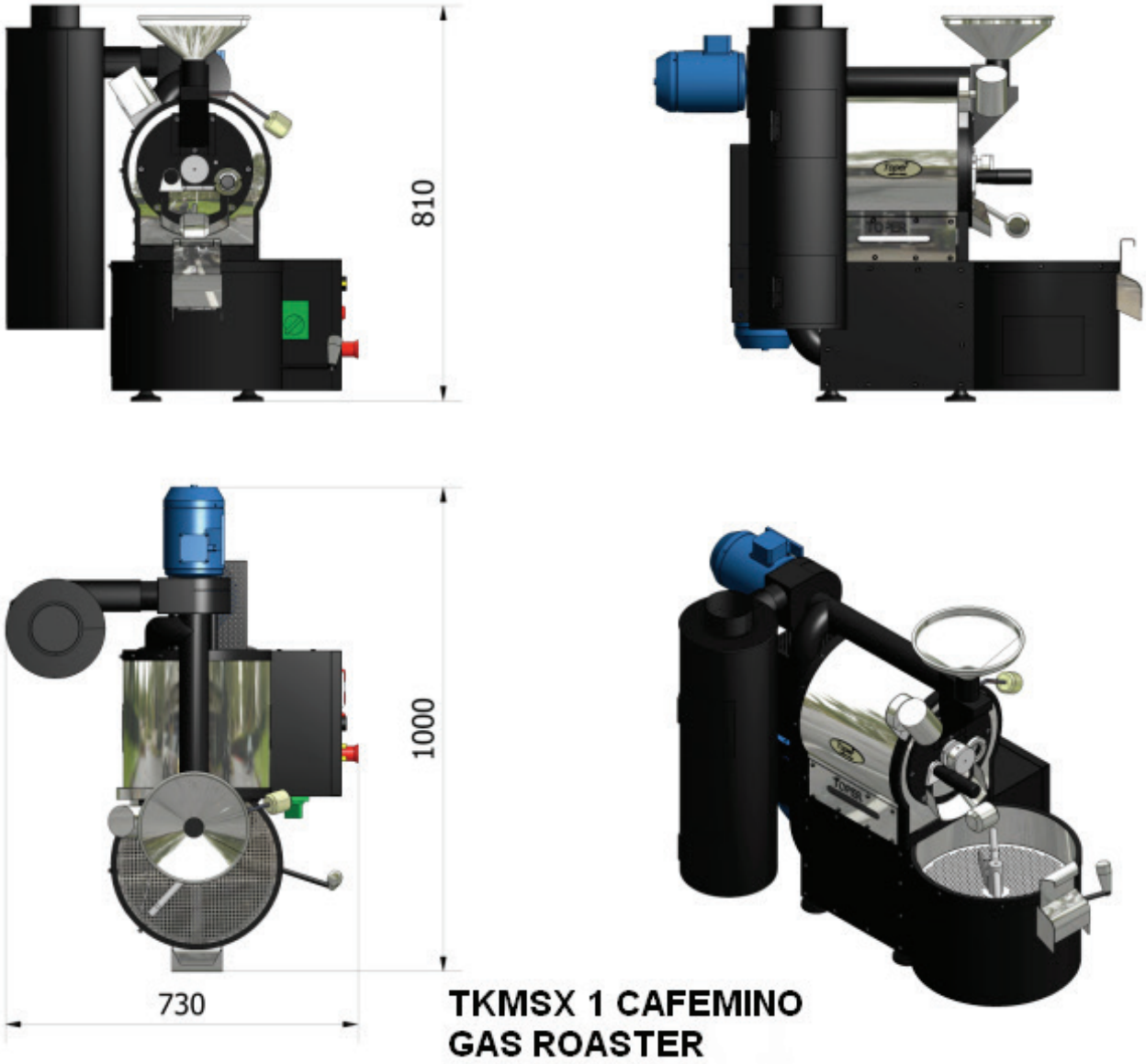
- Standard timer
- Security drawer for the beans
- New type chaff collector for easy chaff discharging
- Simultaneous roasting and cooling at same time
- Sampler and glass window to control roasting
- Viewing window for green bean hopper
- Installation and start up manual for easy using
- High capacity suction for cooling fan
- 2 year guarantee
- Gas and electric components are compatible to CE-– TSE – GOST -– KGS ISO 9001:2008 standards
- Testing lamp (for checking roasting results at the same color in the same lighting conditions.)
- A detailed user manual is provided with each machine together with a CD
- Drum adjustment tool also provided with the machine
- Rake wheel for cleaning cooling tray

- **Afterburner (Optional)**
- **Loader and unloaders (Optional)**
- **Destoner (Optional)**
- **Profile system (Optional)**

Toper Roasting Systems

• Fill the green bean hopper by proper kgs with the batch capacity
• Than get the beans inside the batch after heating the roaster up
• The roasting process occurs inside the drum .
• During the process the dusts and chaffs get out through to the dust room by the exhaust fan .
• The dusts and chaffs colects and the smoke given out
• Coffee is roasted by the equal thermal heating transpher .
• The equal heat is given all the roasted coffee .
• The beans taken out to the cooling tray after roasting
• The beans get cool to the room temperature by sucking the hot air on the coffee .
• You may roast another batch when your previous roasted coffee in the cooling tray.
• Enjoy your roast !

Schematic Diagram



For more information :

Web : www.toper.com

Facebook: http://lin.kim/Cs7wM

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PART LIST

1- **ELECTRICAL CONTROL PANEL**

2- **CHAFF COLLECTOR GATE VALVE**

3- **GREEN BEAN HOPPER**

4- **CHAF COLLECTOR**.

5- **BURNER**

6- **THERMOCOUPLE**

7- **SAMPLER SPOON**

8- **VIEWING WINDOW**

9- **GREEN BEAN INLET VALVE**

10- **COOLING MIXER**

11- **COOLING MIXER LID**

12- **EXHAUST EXIT PIPE**

13- **DRUM DISCHARGING VALVE**

14- **EXHAUST VALVE**

15- **DIGITAL THERMOSTAT**

16- **ON / OFF BUTONS ON CONTROL PANEL**

17- **COOLING VALVE**

18- LAMP

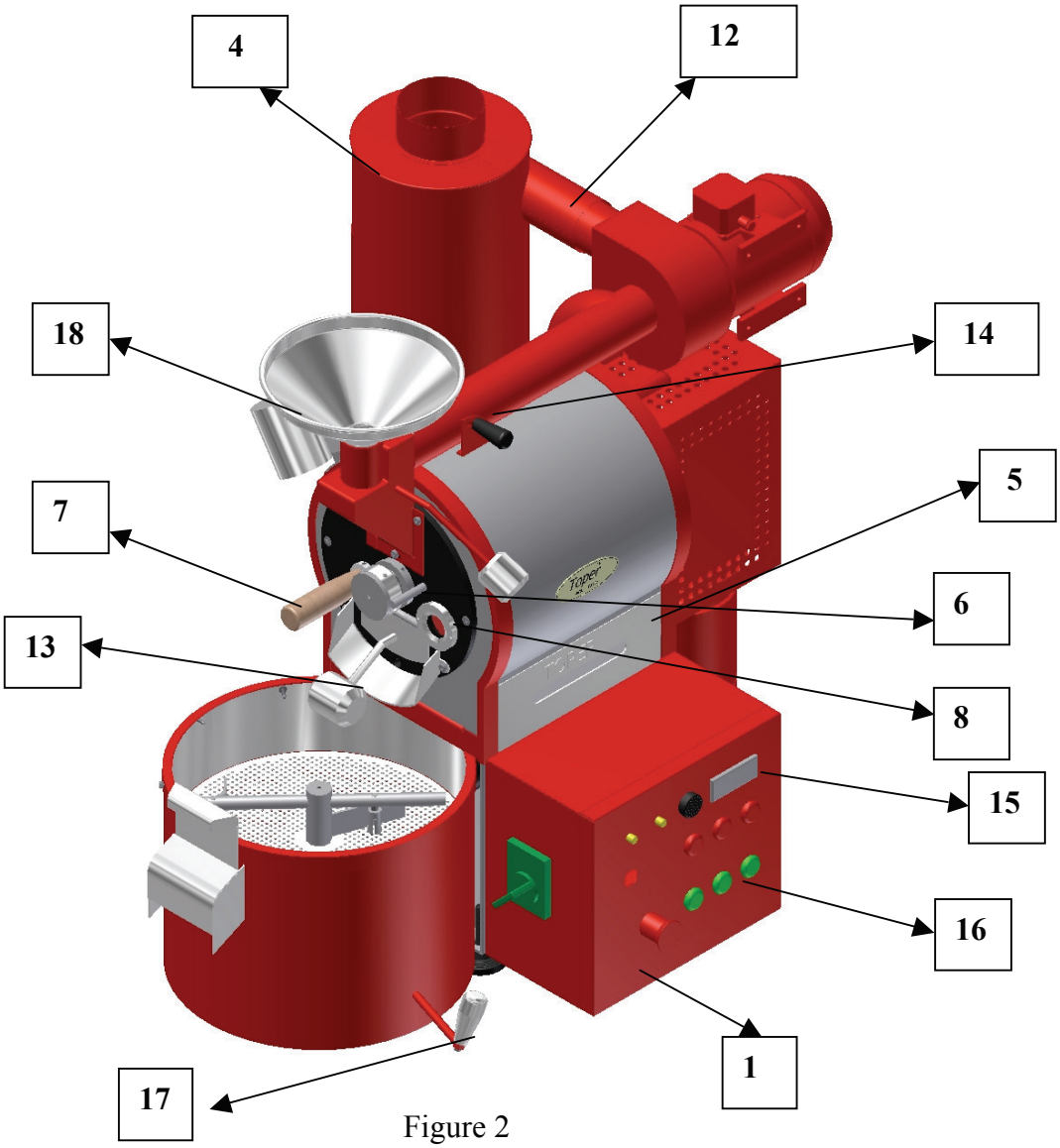


Figure 2

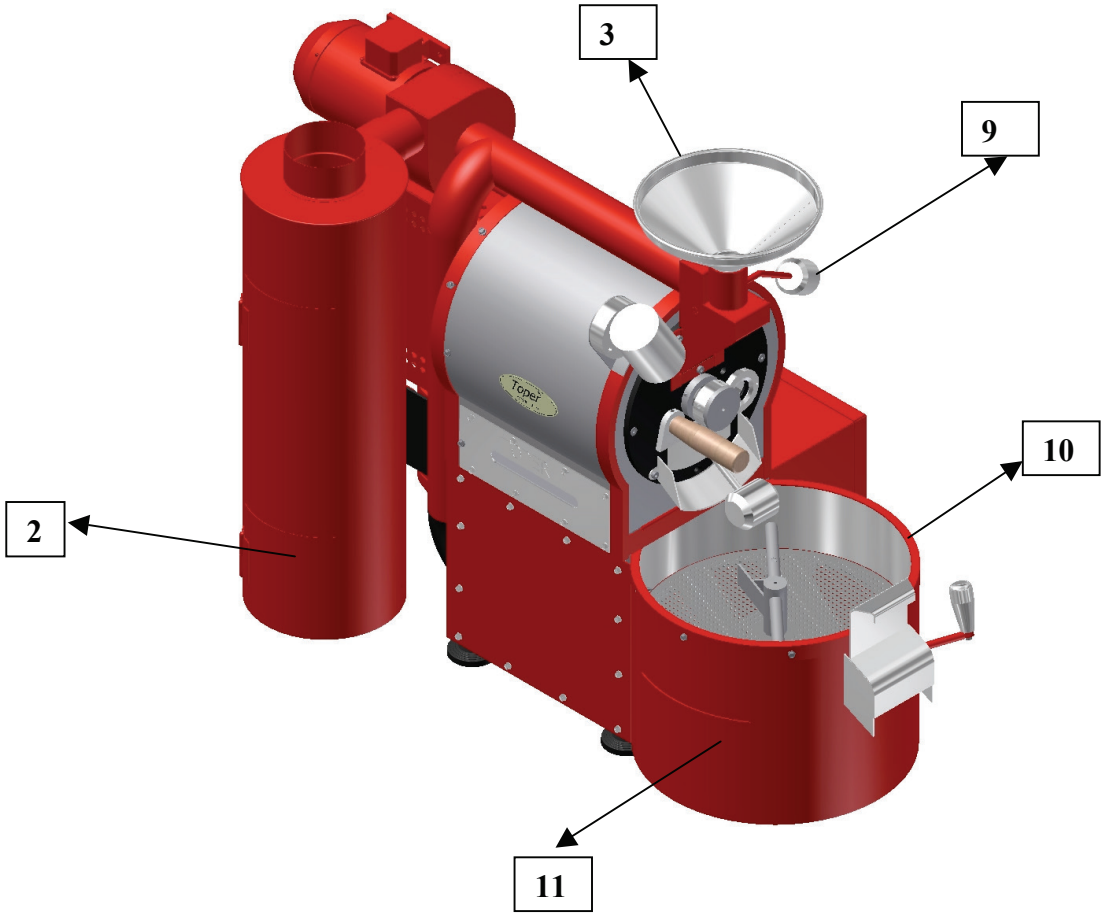
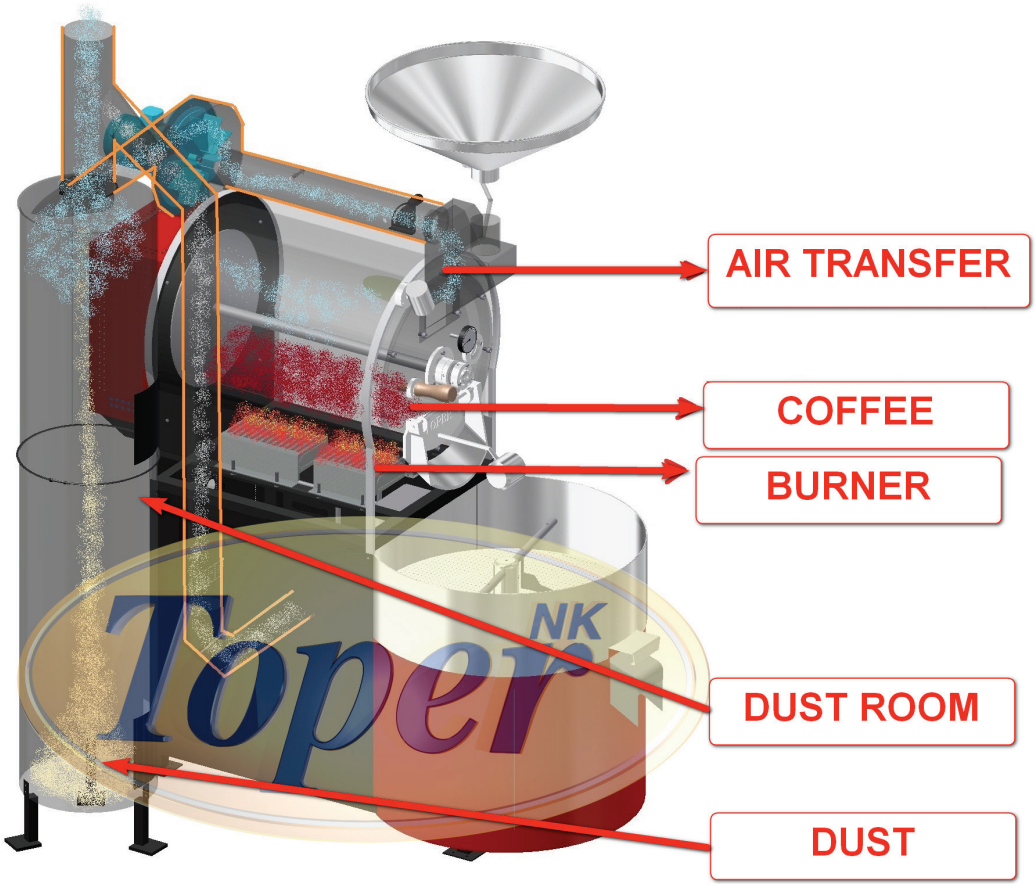


Figure 3

CURRENT PARTS OF THE MACHINE

1- **ELECTRICAL CONTROL PANEL:** It's used for controlling all the electronic components by managing this electrical panel.
2- **CHAFF COLLECTOR GATE VALVE:** It's used for cleaning inside the Chaff Collector.
3- **GREEN BEAN HOPPER:** It's used for feeding green beans to send them all from top of the Roaster on top inside through Roaster Drum.
4- **CHAF COLLECTOR:** It helps to collect all the dusts and chaffs which are arised during roasting progress from inside the Drum and all these materials preserved inside this Chaff Collector without sending any of them to outside by exit pipes.
5- **BURNER:** It's heating source for roasting beans which gives enough heating to roast coffee beans.
6- **THERMOCOUPLE:** It helps to measure current drum temperature.
7- **SAMPLER SPOON:** It's used for checking the roasting results during coffee roasting progress by taking some sample beans from inside the drum.
8- **VIEWING WINDOW:** It's used for checking the roasting results during coffee roasting progress by having a look from the front of the drum.
9- **GREEN BEAN INLET VALVE:** It's the mechanism which helps you to let the green beans sent from Hopper on top through inside the drum.
10- **COOLING MIXER:** It's is used for roasted bean cooling. In this process also chaff and dust will be removed and cleaned from roasted beans.
11- **COOLING MIXER LID:** This Lid is used for cleaning inside the Mixer.
12- **EXHAUST EXIT PIPE:** This is the pipe which connects Exhaust and Chaff Collector.
13- **DRUM DISCHARGING VALVE:** It helps to discharge roasted beans from drum inside to Cooling Mixer.
14- **EXHAUST VALVE:** It helps to adjust current suction of the Blower. You can heat the drum up easier if you switch this valve off completely. Additionally you can get different flavors if you switch it off like 2 minutes before you switch of the Burner for discharging the beans.
15- **DIGITAL THERMOSTAT:** It's used for arranging current temperature for machine. This is the electronic component which checks the current temperature accordingly and keeps it at the same set value upon your request.
16- **ON / OFF BUTONS ON CONTROL PANEL:** They are used for switching on / off mode for the Motors and Burner which is in use on the main system.
17- **COOLING VALVE:** It helps to control suction process during cooling progress on mixer.
18- **LAMP:** It helps you to check the real color of the beans while checking with the sampler spoon

WORKING PRINCIPLES OF TOPER ROASTER



- Fill the green bean hopper by proper kgs with the batch capacity
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- The roasting process occurs inside the drum.
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- The beans taken out to the cooling tray after roasting
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- You may roast another batch when your previous roasted coffee in the cooling tray.
- Enjoy your roast!

Below you can find a table for different coffee beans in different roasted color results from all around the World in different origins.
Also please note that there are still many different colors available in roasting results in between any two different color ranges on the table below.

Coffee Bean Colors Table

Attention : Only color number #1 is raw coffee bean which is unroasted. All the other specified numbers are shown as roasted coffee beans in different colors.

- You can roast all the different coffee bean origins and speciality coffee Beans from around the World in different color selections by using Toper Roasting Machines.
- You can roast with Toper Machines in different color ranges as you can see on the table above.
- You are able to get even roasted Beans results everytime you roast your raw coffee Beans. By this mean you do not need any color sorting machines.
- You will always get full customer satisfaction because of that you will always be able to roast in a standard way and quality in roasting results with your Toper Roasting Machine.

Toper NK COFFEE ACADEMY

With our experience for over half a century and knowledge of coffee roasting and grinding in 132 countries in 5 continents, following the ones in Canada, Taiwan and China, we take the first coffee school of Turkey, Middle East and Africa with official SCAE education into use of baristas, coffee professionals and everyone who set his heart on coffee.

When you purchase a Toper Roasting Machine, you are entitled to have a free course on “Roasting Level 1” which will be given by our SCAE Authorized Trainers.

SPECIALITY COFFEE
ASSN. OF EUROPE
AUTHORISED TRAINER
2013-2016

What You Will Gain If You Prefer Toper Product ?

1- Our machines are user friendly compared to other machines. It does not require a Professional user as hiring cost of a Professional is big cost. With respect to country conditions helps to gain 50-60% from labour cost.

2- Best quality raw materials are used for production of our all machines to serve for long years without causing any trouble to users. Machines run without any trouble unless deliberate harm made to machine. Our machines help to gain 5-10% from servicing and spare part cost compared to other machines.

3- Unless user's deliberate fault, it is protected to cause injury to user by security systems. Our machines help to gain 2-5% from user efficiency.

4- Our machines are assured to consume low electric. By automatic digital control system, heat insulation, heat transfer, electric wastage is prevented. Our machines help to gain 30% from electric consumption saving.

5- When electric motors are chosen, low electric consuming and long year lasting motors are preferred. The system of the machine prevents motors to run at the same time and only let motors to step in when necessary. This helps to gain 10-30% from electric consumption.

6-Toper brand products and their designs are reason of accumulation of long year's experiences, follow ups of improving technology and knowledge of R&D departments of some universities. Machine designs are to prevent occupying redundant place in the work shop. It helps to gain 5-10% from space in the working area.

7- For the newly building plants or already built plants we provide special support with preliminary planning, placement activities. With help of 3D designs we can estimate where most efficient machine will run. By these 3D designs you can see how machine will be before purchasing. Regarding to customer demand we can make changes to machine design, place of control panel over the machine, colour and body type. Machines and projects can be produced with your special requirements.

8- Coffee roasted with Toper technique can gain all its characteristics while roasting. Thousands of aromatic components in the coffee can be formed in accordance to your desire. Same quality production is assured. Provides roasting different types and specialities of coffee as your wish. The final products are accepted and desired from your customers. You can not find that opportunity in other firm's products.

9- Applying Thermal Transfer system to coffee and revealing its magical aroma needs care. With respect to importance of situation, loss can occur if much heat is applied to coffee, Toper's speciality is to prevent loss. Although other brands' loss percentage is 20%, it is 14% with Toper. The gain in coffee quantity is 6%.

10- Our machines are environment sensitive too. The occuring dust while roasting coffee is collected by Chaff Collector in order to let them to environment through ducking. Assures more clean environment.

11- The electric security systems of machine automaticaly switches off the machine in conditions of electric cut offs, electric pressure abnormality and any other emergency conditions. No damage may occur as the fire is prevented beforehand.
12- In condition of electricity cut, there is a manuel unloading system for drum to discharge coffee from drum before it gets harm.
13- Toper Company is a supplier of UN Global Marketplace Organisation.
14- Toper Company manufactures in a World Standart which we have a variety of Quality and Production Certificates. Here are some of our specific Certificates:
ISO 9001:2008, CE, Ghost, ETL, CSA, UL.
15 – Toper Family does not have customers as we have Friends from all over the World. Our main goal is providing best service when our Friends need with our Quality Machines which we are always ready to serve and support them as possible as we could do. Our Friends from 132 different Countries all over the World is one of the most important richness for Toper Company.

Best Regards,
Ramazan Karakundakoglu
General Manager