ECOLOGICAL CONTINUOUS SYSTEM OLIVE OIL MACHINERIES

From nature to you, healthy and high quality service













Founded in 1978, KOCAMAZ Machinery has become a well-known brand in Turkey with its extensive dealer network and the end users it has achieved worldwide. After the investments made on R&D and product developments, it has expanded its product portfolio to address 3 different sectors.

Today, in the new production plant with 3.000 m² open area and 3.000 m² closed area, KOCAMAZ continues to its production of machineries and turnkey projects special to the processes with various production advantages, and serves to "olive oil, agriculture and animal husbandry and furniture" industries in accordance with the international conformities.





OUR VALUES

We work to give our customers the highest quality and satisfaction.

We value the satisfaction and stability of our employees. We target long-term and sustainable success. We do our work on the basis of tolerance and trust.

OUR GOAL

Our goal is to become a global brand and develop our own methods in our own expertise continuously in order to increase the effectiveness and efficiency of our company in the international markets.

R&D

We direct our R&D studies in accordance with the requests and feedbacks we receive from our customers.

QUALITY POLICY

We manufacture environmentally sensitive and user friendly machineries by using developing and up-to-date technologies and provide after sales service to our customers.

AFTER SALES SERVICE

In line with our customers' requests, we give after sales service both domestic and abroad. Besides making necessary tests of our machineries in the field, we give technical training to our customers after the installation. We work solution oriented and give continuous support to our customers.





ECOLOGICAL CONTINUOUS SYSTEM OLIVE OIL MACHINERIES



The continuous system as the latest technology used in the world means is a system consisting of series of the equipment.

The system operation requires an indoor production area to be established on a field of approximately 200 m². The power supply of 100 kW and the water supply of 1 ton per hour for the system operation should be used in the plant for this latest technology. Once such requirements of the system are ensured, our company shall execute all necessary works for the machinery installation, electrical and water connections and the initial start up.

The olives to be taken into process for the olive oil extraction shall be put into the bunker of the transport conveyor. The olives transferred through this conveyor are separated from the leaves then transferred to the washing unit. Following such washing process, the olives are transferred to the crushing unit through the crusher elevator. Such crushing process makes the olives in the form of semi-pulp then those products are transferred into the malaxing unit located under the crusher through the spiral mechanism. Then the kneading process starts up at 30-35 C degree for 35-45 minutes in order to make the product ready for oil extraction. Once the completion of the kneading process, the products are taken from the malaxing group by using the pulp pump and transferred to the decanter unit. In the course of such transferring process, the water is poured out in amount of 500-700 liters per hour. The amount of the water to be added shall be adjusted by using the flux meter. Such olive pulp in the decanter unit is separated into solid and liquid phases depending on those created centrifuge forces. Then, the particles are eliminated by using the vibration sieve. The oil is sent to the resting tank and the wastewater is conveyed out by means of wastewater and oil pumps.

Through horizontal and vertical residue spirals, the residue is sent out of the system. The olive oil is transferred from resting tanker to the separator unit in order to be removed from the water and small particles. Wastewater is sent out and refined oil is carried to oil tray pump from the separator unit. The refined oil is carried to the tray it shall be kept or floated. The operation of the whole system is controlled by electrical remote control panel. The hot water requirement of the system is met by residue tray.

ECOLOGICAL CONTINUOUS S	YSTEM TECHICAL FEATURES
Capacity	2.950-3.335 kg/h olive
Installed Capacity	94 kW
Electric Consumption	34 - 46 kW/h
Water Consumption	950 - 1.050 lt/h







ZYM OLIVE WASHING UNIT

The olive-washing unit is completely made of AISI 304 stainless steel in accordance with the food instructions. The olives carried by olive carrying conveyor are spread on the surface with the help of a special design vibrant distribution system. The air passages on the surface discharge the leaves at the bottom out. The materials such as stone, ramification, etc. that come to the reservoir together with the olives sink to the bottom of the water at specially curled reservoir and after the machine stops, they are discharged out with the help of a spiral. The olives washed in the washing reservoir come to the vibrated sieve located at the front side and poured into the feeding screw bunker after separating from water. Thanks to pump, the circulation of water in washing reservoir is recognized regularly. Water filling reservoir is composed of two sections in order that the materials inside water such as mud, etc are prevented from damaging the pump.

TECHNICAL FEATURES		
Capacity	4.500 kg/h	_
Material	AISI 304 Stainless Steel	
Sheet Metal Thickness	2.5 mm	
Water Capacity of Reservour	1000 kg	
Vibrating Engine Power	0.18 kW	
Pump Engine Power	1,1 kW	
Aspirator Engine Power	2.2 kW	
Dimensions (W x L x H)	1.540 x 3.297 x 1.960 mm	
Weight	380 kg	

ZBT-5 OLIVE CARRYING CONVEYOR

Olive carrying conveyor is designed completely in accordance with the food instructions. The chassis and bunker of the conveyor line are manufactured from AISI 304 stainless steel. Tightening system of conveyor line is carried out with a screw and discharged from the front side by the coupled redactor engine. Line rubber has 40 cm width and manufactured from PVC material with 3 mm thickness in a spiked and "C" shape conforming to the food instructions

TECHNICAL FEATURES	
Capacity	4.000 kg/h
Carriage Conveyor Material	AISI 304 Stainless Steel
Conveyor Line Drum	St 37 Steel
Pallet Material	Pvc
Bunker Material Thickness	2 mm
Drive	Geared
Carrying Speed	40 m/min.
Engine Power	1.1 kW
Bunker Capacity	0.62 m³
Dimensions (W x L x H)	1.360 x 5.800 x 2.740 mm
Bunker Dimensions (W x L x H)	1.360 x 1.400 mm
Weight	320 kg









ZKM CRUSHER

Crusher unit is used for crushing the olives and uncovering oil sections. The crusher has hammers and sieves that have active mechanism. Crusher sieves are manufactured from hardened steel; sieve and inner bunker are manufactured from AISI 304 stainless steel.

TECHNICAL FEATURES		
Capacity	3.000 - 4.000 kg/h	
Body Material	GG 22 Foundry	
Entrance Bunker	AISI 304 Stainless Steel	
Number of Hummer	4	
Hummer Running Speed	3.000 rpm	
Sieve Hole Dimension	6 mm	
Sieve Engine Power	0.75 kW	
Main Engine Power	22 kW	
Weight	516 kg	
Dimensions (W x L x H)	760 x 1.420 x 2.490 mm	

ZKE CRUSHER ELEVATOR

The Crusher Elevator Unit is used for carrying the olives washed in the washing unit to the crusher unit. It consists of a bunker; a spiral and a redactor engine, which makes the spiral operate. Crusher elevator is manufactured from AISI 304 stainless steel in accordance with the food instructions.

Capacity	5.000 kg/h
Body Material	AISI 304 Stainless Stee
Tray Sheet Thickness	2 mm
Transmission Speed	14 m/min.
Engine Power	1.1 kW
Tray Dimensions (W x L x H)	900 x 900 mm
Weight	186 kg





ZML-6 MALAXING UNIT



Capacity	6.000 lt
Material	AISI 304 Stainless Steel
Spiral Material	AISI 304 Stainless Steel
Sheet Metal Thickness	3 mm
Section Dimensions (W x L x H)	650 x 2.500 x 720 mm
Composite Spiral Runing Speed	22 rpm
Number of Reducers	6
Engine Power	2.2 x 6 = 13.2 kW
Weight	3.120 kg

Malaxing unit is used to increase the percentage amount of oil by mixing the olive paste and each malaxing section operates independently. The olive crushed in the crushing unit is distributed to the requested section in the form of olive paste thanks to the spiral and lever handles. The olive paste is mixed with the help of the special spiral, which is inside the malaxing unit, this process is important for the following solid-fluid segregation. The hot water, which is circulated thanks to the water jackets inside the malaxing unit can be adjusted to the desired heat. Malaxing unit is completely manufactured from AISI 304 stainless steel in accordance with the food instructions. Optionally, it is possible to produce the paste in quantity of 750 and 1000 Kg.





ZDK-80 DECANTER





Decanter is used to decompose the residue, water and the olive oil on based of respective specific gravities as a result of the centrifuge forces by pressing the paste in the tank at high speeds. A peeling off system was developed in the front side in order to prevent the accumulation of the residue on surfaces once exited from the drum. Main chassis of decanter drum is made of steel St 37. Each surfaces of decanter became in contact with the olive paste is produced out of stainless steel AISI 304 conforming to the food regulations. Decanter was designed to be operable at two and three phases. The residue, wastewater and the oil are extracted from decanter at three phased systems and the residue & oil from decanter at double phased systems (ecologic systems).

ZDK - 60 DECANTER	TECHNICAL FEATURES
Ecologic Features	1,920 - 2,200 kg/h
Three Phased Capacity	2.073 - 2.376 kg/h
Drum Diameter	470 mm
Drum Length	1.670 mm
Engine Power	22 kW
Max. Running Speed	3,000 rpm
Dimensions (W x L x H)	1.620 x 3.390 x 1.800 mm
Weight	2.703 kg

ZDK - 80 DECANTER	TECHNICAL FEATURES
Ecologic Features	2.650 - 3.050 kg/h
Three Phased Capacity	2.850 - 3.280 kg/h
Drum Diameter	470 mm
Drum Length	2.080 mm
Engine Power	30 kW
Max. Running Speed	3.000 rpm
Dimensions (W x L x H)	1.620 x 3.800 x 1.800 mm
Weight	3.150 kg







ZSP-35 SEPARATOR

Separator is used for separating the olive oil form water and operates with centrifuge system. The external body of the separator is made of GG 20 foundry material. All the surfaces the olive oil contacts are made of AISI 304 stainless steel in accordance with the food instructions. Separator unit manufacturing is realized under careful manufacturing conditions without passing over the details in our modern machinery manufacturing area by our experienced experts.

Capacity	3.500 kg/h
Drum Running Speed	5.100 rpm
Engine Power	11 kW
Blusting System	Semi Automatic
Dimensions (W x L x H)	1.100 x 1.150 x 1.650 mm
Weight	1.150 kg







ZDT RESTING TANK

The oil coming from the vibration sieve is conveyed to the resting tank then the resting tank transfers the product to the separator enabling the product to be separated from foreign substances.

TECHNICAL FEATURES	
Capacity	228 lt
Material	AISI 304 Stainless Stee
Dimenisions (W x L x H)	500 x 1.180 x 2.450 mm
Weight	106 kg



ZYK PUMPING OIL VESSEL

The pumping oil vessel is used to pump the oil coming from the separator to the division where it would be stored through the pump installed on the top part of the vessel.

TECHNICAL FEATURES	
Capacity	100 lt
Material	AISI 304 Stainless Steel
Pump Type	H-44
Dimenisions (W x L x H)	465 x 1.050 mm
Weight	36 kg







ZHP PULP PUMP

The pulp pump is consisting of the reducer engine, middle spiral and the pump. It is used to convey the pulp to the decanter. It is made of stainless steel AISI 304 conforming to the food regulations.

TECHNICAL FEATURES		
Capacity	4.000 kg/h	
Running Speed	125 rpm	
Acceleration	Reducer motor	
Helix Material	AISI 304 Stainless Steel	
Engine Material	AISI 304 Stainless Steel	
Engine Power	2.2 kW	
Length and Diameter	1.600 x 130 mm	
Weight	84 kg	



ZDM FLUX METER

This product is used to provide the decanter with the water flow continuously at the same level. It is easily readable how much water is ensured per hour through the indicator installed on the flux meter.

TECHNICAL	. FEATURES	
Capacity	800 - 1.000 kg/h	

ZYP OIL PUMP

This unit is composed of two pumps. One of them is used to pump the oil coming from the vibration sieve to the resting tank; the other one gets the water from the vibration sieve and disposes of.

TECHNICAL FEATURES	
Capacity	1.650 lt/h
Engine Power	0.75 kW
Engine Material	AISI 304 Stainless Steel
Weight	20 kg





ZKP ELECTRICAL BOARD





The electrical board is used to control the whole system. Every component of the electrical systems is involved in the main board. The body is made of steel St 37 steel. Siemens branded automation components are used.

TECHNICAL FEATURES	
St 37 Steel	
Siemens	
60 x 1.800 x 120 mm	
168 kg	







ZKP RESIDUE TRAY

Residue tray is used in order to supply hot water for the system. The body of the tray is manufactured from St 37 steel and the residue combustion oven is manufactured from GG 20 foundry material. The remote controller panel is controlled by thermostat and installed on the tray. Oven fuel feeding is ensured by the transfer of the dry residue in the residue bunker to the combustion room with the help of a spiral automatically.

TECHNICAL FEATURES	
Capacity	150.000 kcal/h
Water Capacity	500 lt
Body Material	St 37 Steel
Residue Combustion Oven	GG 20 Foundry
Max. Heat	80°C
Fan Engine Power	0.37 kW
Helix Engine Power	0.55 kw with Reducer
Dimensions (L x W x H)	1.700 x 2.270 x 1.820 mm
Weight	1.046 kg

ZEJ HEAT EXCHANGER

This unit provides water for the system without wasting the water in the tray, but by heating the water coming from the network at 30-35 Celsius degrees.

TECHNICAL	TECHNICAL FEATURES	
Heat Exchanger Type	With Plate and Gasket	
Plate Material	AISI 304 Stainless Steel	
Operational Heat	30 - 35°C	







ZYE HORIZINTAL RESIDUE SPIRAL

The horizontal residue spiral is used to convey the residues coming from the decanter to the vertical residue spiral. The body is made of steel St 37 and the spiral is produced out of stainless steel AISI 304.

TECHNICAL	TECHNICAL FEATURES	
Capacity	4,000 kg/h	
Body Material	ST 37 Steel	
Helix Material	AISI 304 Stainless Steel	
Engine Power	1.1 kW	
Conveyance Speed	9 m/min	
Dimensions (W x L x H)	320 x 4.000 x 320 mm	
Weight	164 kg	

ZDE VERTICAL RESIDUE SPIRAL

The vertical residue spiral is used to dispose of the residues coming from the decanter out of the plant. The length of the vertical residue spiral varies depending on the capacity of the olive oil plant.

TEKNÍK ÖZ	TEKNİK ÖZELLİKLERİ	
Capacity	4.000 kg/h	
Body Material	ST 37 Steel	
Helix Material	AISI 304 Stainless Steel	
Engine Power	1.1 kW	
Conveyance Speed	14 m/min	
Dimensions (W x L x H)	450 x 5.520 x 3.500 mm	
Weight	220 kg	







ZYA LEAF ASPIRATOR

The leaf aspirator is used to decompose and disposed of the leaves of olives. Two separate fans are involved in the olive conveyor band and washing unit. The air pressurized at high-level sucks and disposes of the leaves among the olives.

TECHNICAL	TECHNICAL FEATURES	
Capacity	60 m³ / min.	
Material	AISI 304 Stainless Steel	
Sheet Thickness	2.5 mm	
Dimensions (W x L x H)	600 x 830 x 450 mm	
Engine Power	2.2 kW	
Weight	45 kg	



ZVE VIBRATION SIEVE

The vibration sieve is used to separate the residue particles existing in the water and oil conveyed from the decanter. The vibration sifting is produced in two parts; one of those is used to separate the residue particles in the oil and the other is for the separation of the residue particles in the water then those separated particles are disposed of through the residue spiral. The vibration sieve is made of stainless steel AISI 304 conforming to the Food Regulations.

TECHNICAL FEATURES	
Material	AISI 304 Stainless Steel
Vibration Engine	Ital Vibras - MVSI 3/300-S 90
Sieve Hole Diameter	1 mm
Engine Power	0.75 kW
Dimensions (W x L x H)	750 x 1.500 x 750 mm
Weight	106 kg











