



Separator

Application Areas

Food and beverage

We offer separation solutions for all types of food and beverage. POLAT centrifugal separators are applied in separation of fruit or vegetable juice, processing of wine and separation of edible additives in line with hygienic standards.

Recycling

We play an effective role in treatment and recovery of process waters and industrial fluids, in recycling of polymers and conditioning of water base mud.

Animal products

Centrifugal separators help to remove water, waste and solid contamination at fish or meat processing facilities and oil factories, thus allowing to offer high-quality products.

Chemical

We offer solutions for various chemical industries for purification of intermediate products and final products and for recovery of waste products. Our centrifugal separators are widely used in processing metals, minerals and non-conventional fuels (e.g. biodiesel, ethanol) products in the pharmaceutical and biotechnology industry.

Environmental

We have invested heavily on research and development for many years on treatment and recovery of industrial process water. Centrifugal separators from the POLAT technology, which offers a wide range of products, allows recovery of industrial and process waters and solid and liquid waste, bringing environmental and economical advantages.

Mineral fuel and engine oil

We offer technological solutions for cleaning and improving mineral oils, industrial or environmental oils, tank bottom residue and bilge waters and for cleaning and treatment of mineral oils and fuels.

Oleochemical

We contribute in recovery of all types of waste and vegetable oils in manufacturing plants for vegetable oils and their derivatives.

Milk and dairy products

Our machines are used in separation processes, thermal processes and clarification of waste in milk and dairy industry. Polat Machine's cream and cleaning separators have been designed to obtain high-quality products through rapid and precise processing. With Polat Separators you can get milk cream, skimmed milk and cleaned milk separated from unwanted particles.



In 5 continents Exportation to 35 countries

Group companies in 3 countries
Dealership, distributorship and agency in 10 countries.

Dealer & Distributor & Agency

Tunisia
Jordan (Middle East)
Algeria
Belgium
Slovakia
Russia
Ukraine
Germany
United Kingdom
Spain



Group Companies

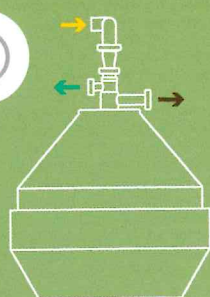
Greece
Morocco
Italy



Exported Countries

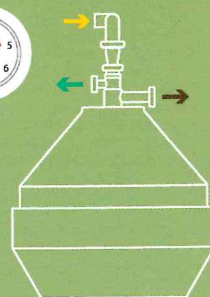
- | | | | | | |
|-----------------|---------------|-----------------|------------------|---------------|--------------------|
| 1• U.S.A. | 7• Belgium | 13• Romania | 19• Algeria | 25• TRNC | 31• Azerbaijan |
| 2• Saudi Arabia | 8• Slovakia | 14• Russia | 20• Georgia | 26• Syria | 32• India |
| 3• Greece | 9• Kazakhstan | 15• Nicaragua | 21• South Africa | 27• Iraq | 33• Germany |
| 4• Italy | 10• Ukraine | 16• Switzerland | 22• Lebanon | 28• Iran | 34• United Kingdom |
| 5• Tunisia | 11• Albania | 17• Libya | 23• Palestine | 29• Australia | 35• Spain |
| 6• Morocco | 12• Sudan | 18• Qatar | 24• Egypt | 30• Jordan | |

Options



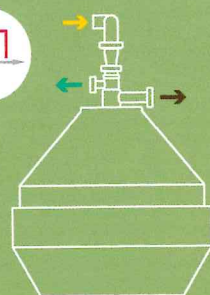
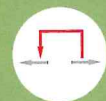
Back pressure valve

It helps to regulate back pressure on outlet lines



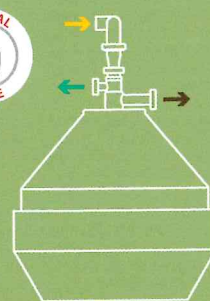
Separator feed

It helps to operate at low feeding pressure



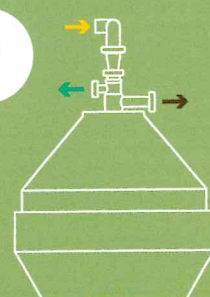
Standardization kit

It helps to regulate the fat ratio in the product coming out of the separator



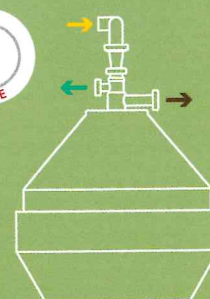
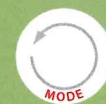
Manual solid discharge

It helps to manually conduct separator explosion process



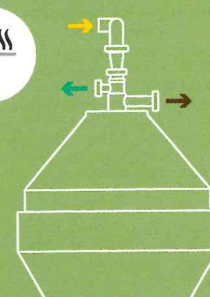
Filtering unit

It prevents feeding large solid materials in the supplied product into the separator



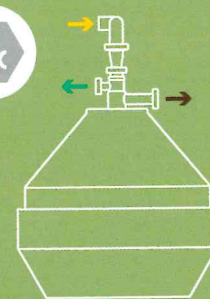
Automatic solid discharge

It helps to automatically conduct separator explosion process

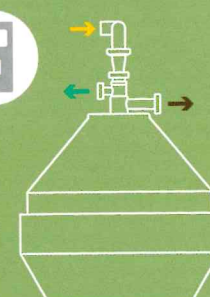


Heating system

It helps to regulate the temperature of the fed product

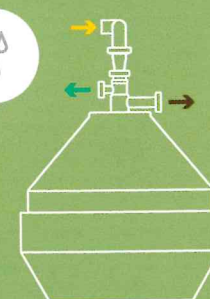


Exproof



Control panel

Optimum monitoring and operation with machine, safety equipment and other auxiliary equipment



CIP cleaning

Compliance with CIP cleaning system

Specifications

Materials

Rotating parts	Lower drum	High resistance stainless steel
	Upper drum	
	Dishes	
	Main shaft	Stainless steel or other alloys compliant to product and applications

Shield	Upper cover liquid and solid outlet chambers	Stainless steel / aluminum
	Lower body	Stainless steel coated sphero casting or sphero casting

Wear protection	Drum / moving parts	Resistant to high corrosion Chemical compliant
	Solid outlet slots	

Sealing	Drum, moving parts	Resistant to high corrosion Chemical compliant
---------	--------------------	---

Lubrication

Automatic lubrication	Oil bath / lubrication with centrifuging
	Cooling system

Movement system	Gear system
-----------------	-------------

Configuration

Installation area	Safe zone
	Dangerous atex zone 1 / atex zone 2

Layout	Turn-key systems
	Stainless or carbon steel chassis, equipped with control panel and auxiliary units
	Separator stainless and carbon steel elevation bar
	Vibration dampener and fixing equipment are available in non-chassis separators

Semi-automatic discharge



Semi-automatic separators are available with the following configuration.

A-Non-chassis base version
B-Stainless or carbon steel chassis
C-Turn-key projects

Models	Width (mm)	Length (mm)	Height (mm)
PMS 305	780	940	1250
PMS 405	1020	1050	1480
PMS 505	1160	1220	1640

*Dimensions may vary according to the configuration.

Automatic discharge



Automatic explosion separators are available with the following configuration

A-Non-chassis base version
B-Stainless or carbon steel chassis
C-Turn-key projects

Models	Width (mm)	Length (mm)	Height (mm)
TX 3	880	1148	1337
TX 4	1119	2330	1784
TX 5	1297	2579	2034
TX 5L	1297	2579	2034
TX 6	1000	2572	2181
TX 6L	1000	2572	2181
CX 3	880	1148	1337
CX 4	1104	2414	1822
CX 5	1262	2660	2080
CX 6	1000	2589	2451

*Dimensions may vary according to the configuration.

Solid discharge configuration

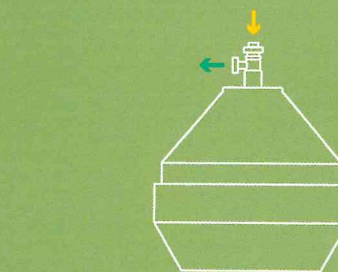
Semi-automatic	Automatic
Solids start to accumulate from the inside of the drum towards the outside during machine operation In semi-automatic discharge system, this solid is discharged manually using a tap kit	Solids start to accumulate from the inside of the drum towards the outside during machine operation In automatic discharge system, this solid is discharged manually using a tap kit

Dishes

Cleaning	Polishing (separator)	Concentration
Separation of suspended solid particles from liquid phase	Separation of heavy liquid from main light liquid. Creation of purified light liquid through simultaneous separation of suspended solids	Separation of suspended solids from heavy liquid. Creation of purified light and heavy phase through simultaneous separation of suspended solids

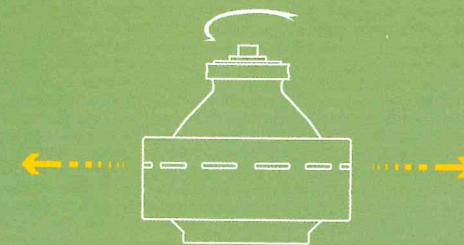
Specifications

Plain dish



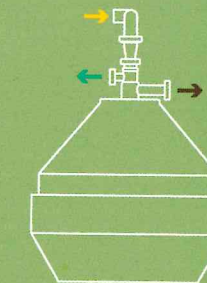
Single liquid phase

- Fed product
- Obtained product under pressure



Separation of solid particles from liquid phase

Perforated dish



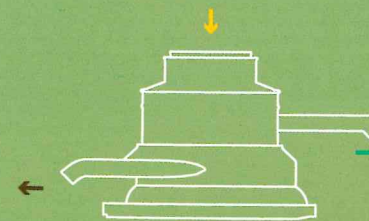
Double liquid phase

- Fed product
- Light phase under pressure
- Heavy phase under pressure



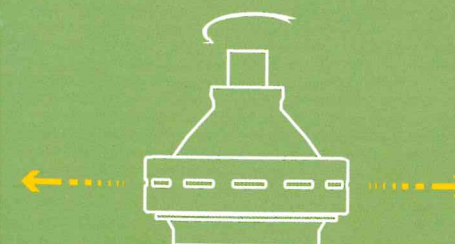
Separation of suspended solids from main heavy liquid
Creation of purified heavy liquid through simultaneous separation of suspended solids

Slotted dish



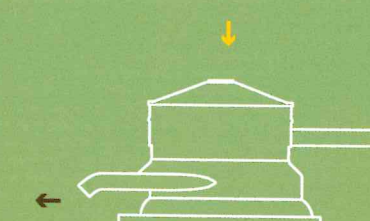
Open feed

- Fed product
- Free outlet of light phase
- Free outlet of heavy phase



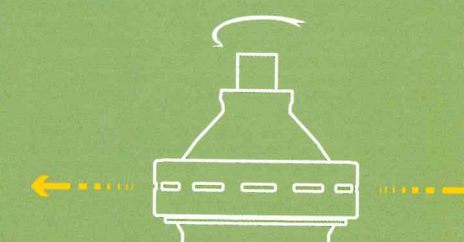
Separation of heavy liquid from main light liquid
Creation of purified light liquid through simultaneous separation of suspended solids

Slotted dish



Closed feed

- Fed product
- Free outlet of light phase
- Free outlet of heavy phase



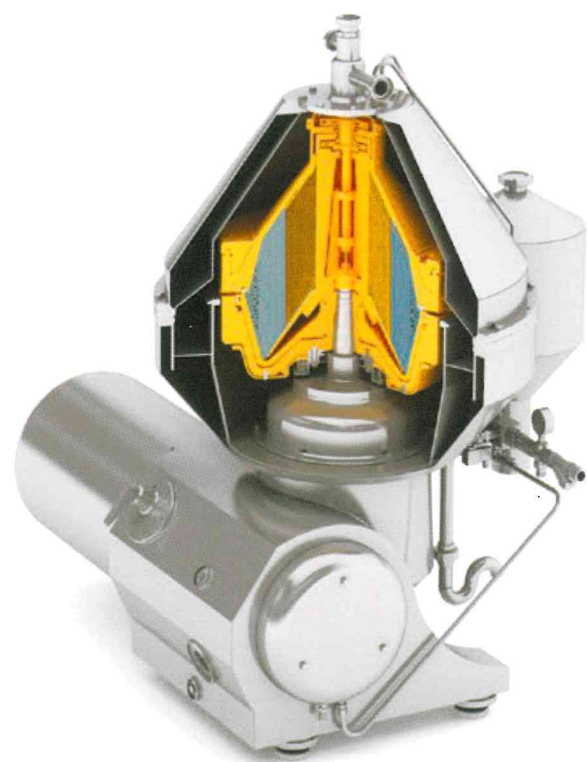
Separation of heavy liquid from main light liquid
Creation of purified light liquid through simultaneous separation of suspended solids



POLAT Machine's separators are designed to offer 24h operation in compliance with CIP system, with a capacity to address the requirements of customers.

POLAT Machine's separators are equipped with an automatically cleaning disc drum. In time ranges adjusted by using control panel, contaminations in the drum are discharged with movable drum. Drum movements are controlled by operation water controlled by solenoid valves.

The drum is manufactured from high-quality stainless steel with high mechanical resistance and high wear protection using the cutting edge technology. The product enters and exits drum via closed tube system. Entrance and exit joints of separator are conformed to DIN 11850 and ISO 2037 standards. All parts contacted to the product are completely produced from stainless steel.



Upper and lower covers of the drum, mud tank and cyclone placed on a cast body are manufactured from stainless steel and their design ensures sound insulation. The engine has a stainless steel shield, and protected with a thermal protection system.

Inverter available in 3-phased engine control panel works with speed control. All controls of the separator are managed by programmable power and PLC control panel.

The PLC control panel is also made of stainless steel. A touch screen in which the drum rotation rate, separator electrical flow, exploitation time range and remaining time for unloading can be observed is available on the control panel.

Furthermore, it is equipped with stainless steel manometers indicating the cream and milk output pressures and allowing to set these pressures.

365 days 7/24
excellent service



A fast service that reduce downtime to zero?
it is possible for us...

Let's say, the most important preference criteria for you is fast service and spare part solutions.

Don't worry, you are in the right place.

Polat Service Department provides a wide range of service without making distinctions between small and big machines.

Upon demand, periodic controls of process performance and mechanical conditions in customers' operations with service contracts and a flawless service is provided for supplying of original spare part and trouble-free changing fields

WE KNOW THE VALUE

**POLAT MAKİNA SAN. VE TİC. A.Ş.**

Polat Makina İstanbul Office
Şerifali Mah. Alptekin Cad.
Söyleşi Sk. No:31 Ümraniye - İstanbul / TÜRKİYE
T: +90 216 540 50 25 - 26 F: +90 216 540 50 27
industrial@polatas.com.tr

POLAT MAKİNA SAN. VE TİC. A.Ş.

Astim Organize Sanayi Bölgesi
AYDIN / TÜRKİYE
T: +90 256 231 04 73 (4 Hat) F: +90 256 231 04 78
polat@polatas.com.tr - satis@polatas.com.tr

