



Industrial Solutions

Application Areas



Environment

Polat decanters are used in thickening and dewatering processes in Urban Waste Water, Drinking Water and Industrial Treatment Facilities. Dewatering of the sludge produced in urban and industrial applications significantly reduces the costs of sludge disposal without harming the environment.



Mining

POLAT MAKINA's quality equipment provides the best solution for many applications: increasing productivity and efficiency producing the final product to the highest quality. Polat has cutting edge technology to use industrial applications such as boron and baryte mineral mining, coal tailings and tunnel works sludge control.



Oil

POLAT MAKINA's detailed and intensive engineering supported by a comprehensive R and D programme, ensure that the equipment is built to the very highest quality and environmental standards. In demanding area of applications, such as refineries and oil wells, the Polat decanter centrifuges and separators give an automated and reliable process solution which can be suitable to continue the operation with excellent control.



Food

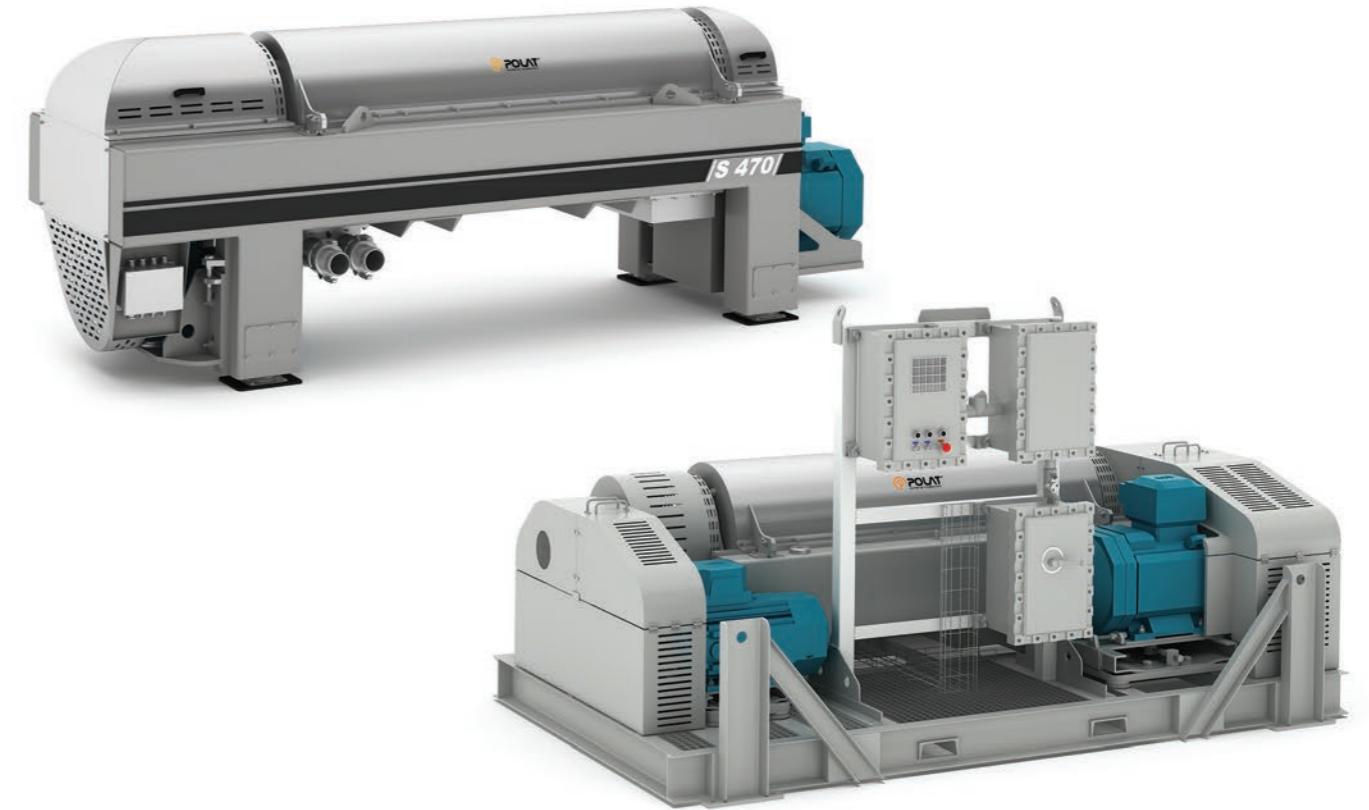
Food producers need machines to meet their expectations of qualities and comply with food equipment legislation. Polat's horizontal and vertical centrifuges (decanter and separators) are used especial in food and drink applications such as fruit juice and drinks, vegetable oils, alcoholic beverages, starch and yeast. In the food industry, where hygiene is the initial and the most important Polat's products give the ultimate security and peace of mind.



Industrial

The main propose of solids liquids separation in industry is to recycle valuable raw materials from productions waste with the lowest investment and commissioning costs and to remove non-renewable waste without harming the environment. In this context at rendering facilities, sugar refineries, the chemical industry, dewatering of animal fertilizers, maritime waste and biodiesel applications, the best outcome is achievable with Polat decanters.

Petroleum Application Solutions



These decanters are designed for feed material which has to be separated into two liquid phases and a solids phase. Separating a feed material into a solid phase and two liquids of different densities in a single operation, with one machine, simplifies the process and reduces equipment costs and space.

Areas of application for decanters and separators in the oil industry:

- Processing the crude oil to separate it from sand and water
- Processing the sludge from the bottom of crude oil storing tanks
- Slop oil processing
- Oily sludge processing in oil refineries
- Recovery of oil and water from oil collection or drying beds
- Purification of fuel and engine oils by removing water and sludge particles

Advantages of using Polat decanters and separator machinery in the oil industry:

- Special design complying with general fire and explosion protection standards (ATEX Certificated)
- Maximum protection against extremes of temperature
- Extra protection against corrosive and hazardous materials
- Maximum operator and environmental safety standards compliance
- Ensuring compliance with guaranteed performance specifications
- Fully automated control systems for unmanned automation
- Remotely controllable with PLC and SCADA,
- Cleaner environment, low space requirement, low odour, low aerosol emissions and low life cycle cost

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

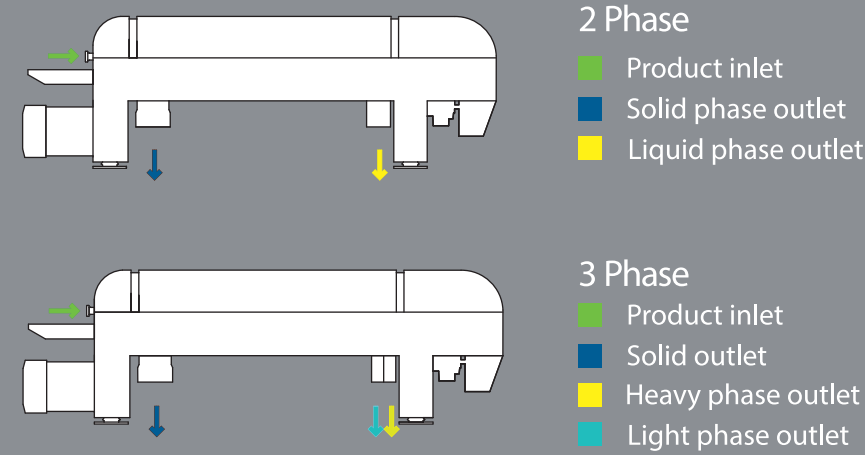
- Greece
- Morocco
- Italy



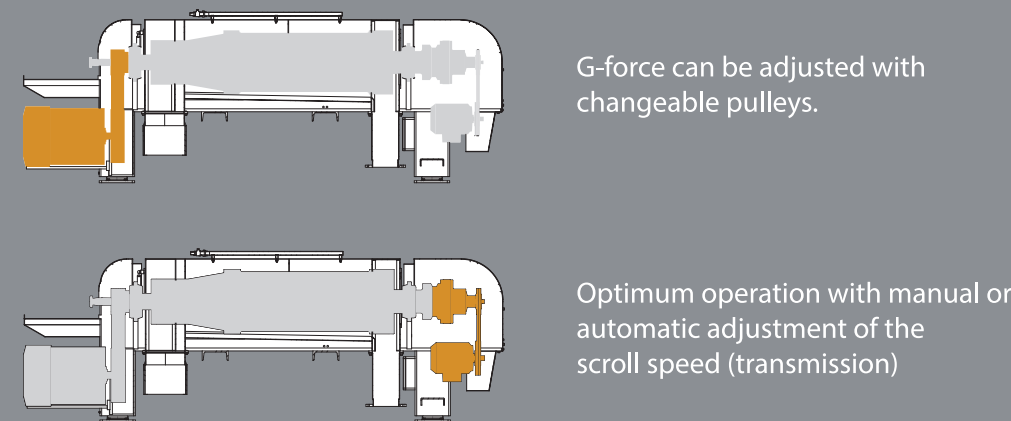
Exported Countries

- | | | | | | |
|-----------------|---------------|-----------------|------------------|---------------|--------------------|
| 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 | |

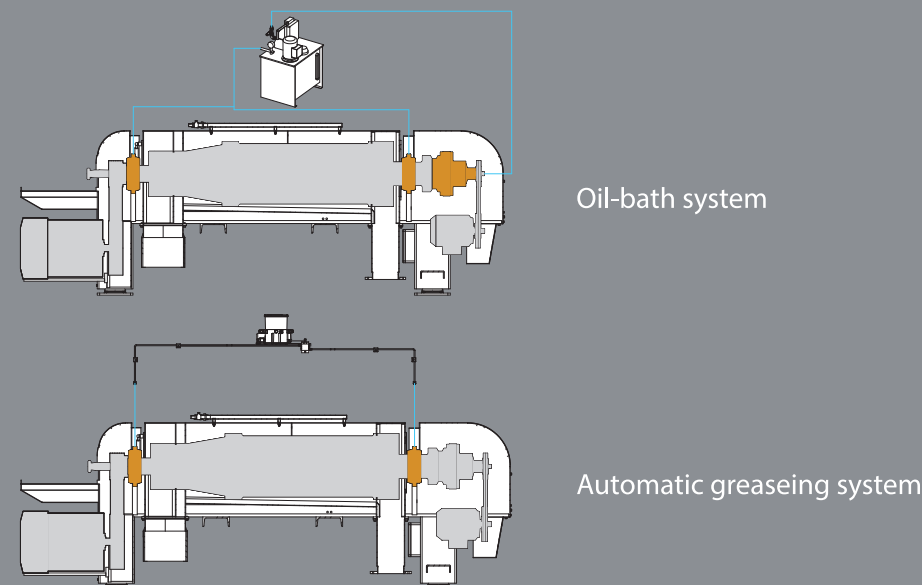
Product Inlet and Solid & Liquid Outlet



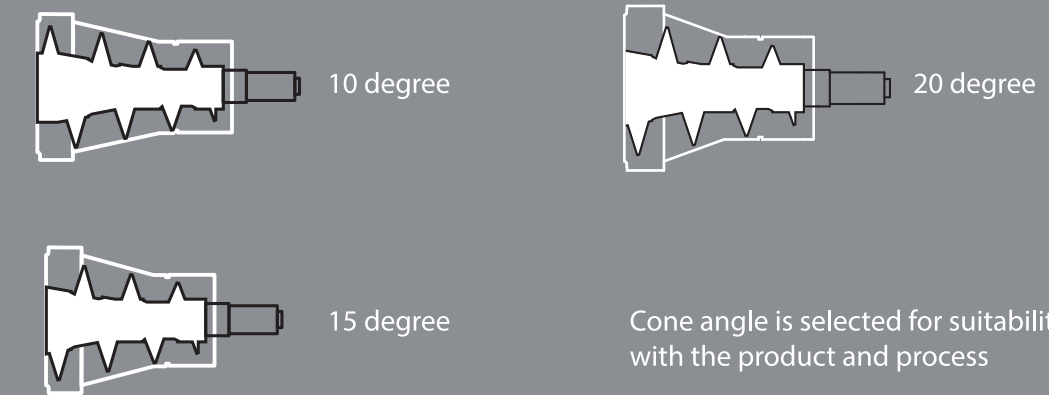
Drive & Transmission



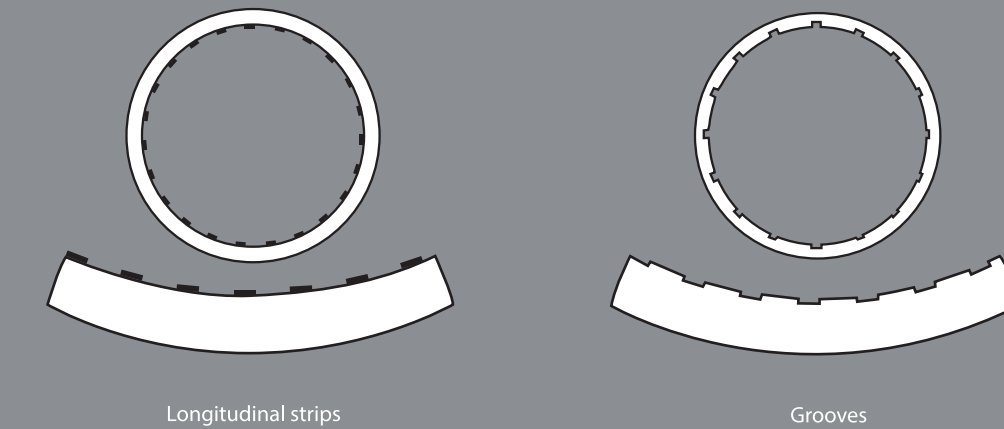
Lubrication



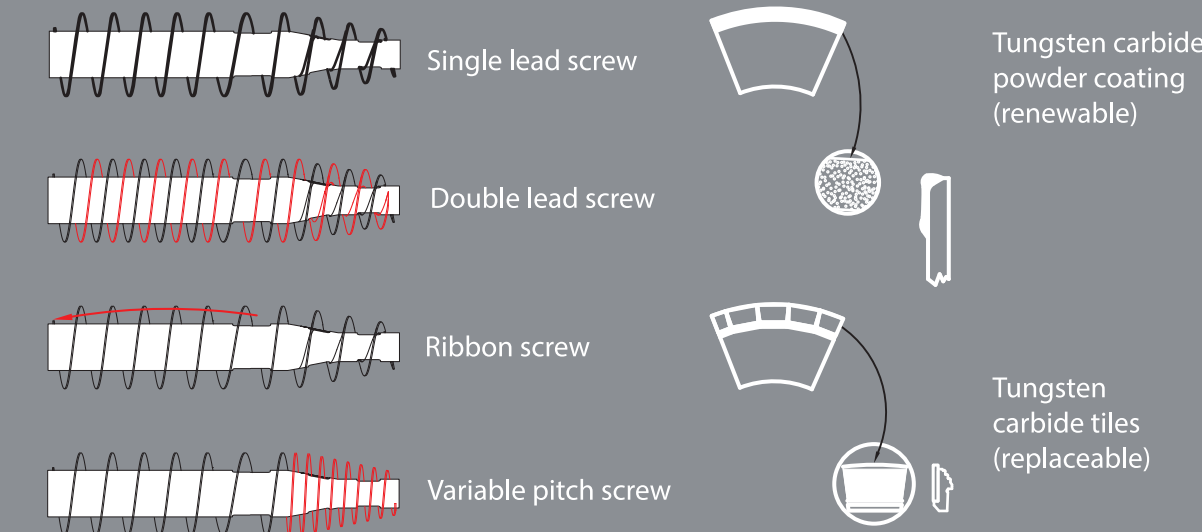
Conical Section



Cylindrical Section

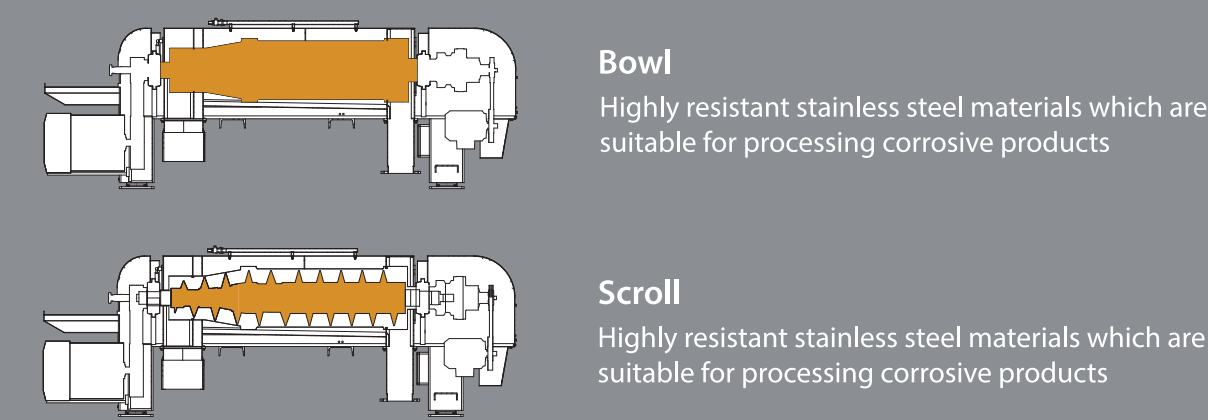


Scroll

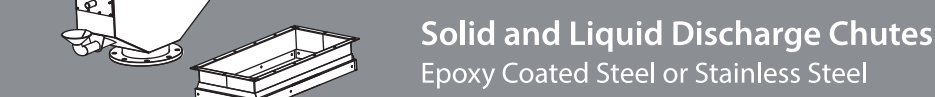
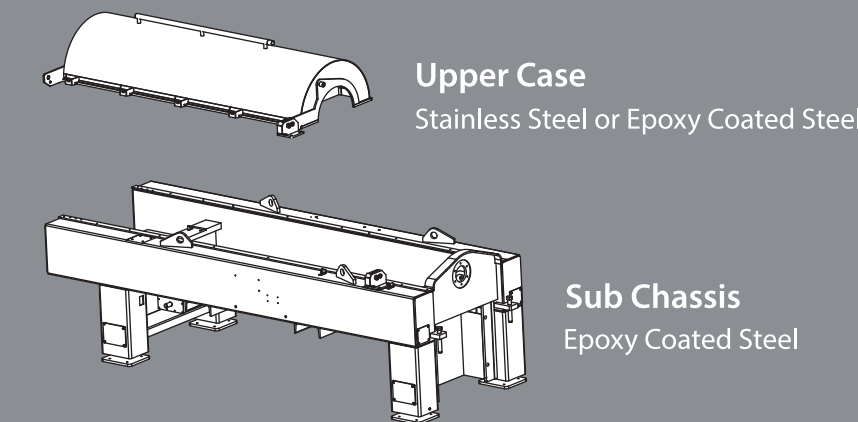


Materials

Rotating Parts



Casing



Product Features

Product Contact Surfaces

Special finishes meeting the needs of different processes

Surface Protection

High protection against corrosion
High resistance against chemicals

Field Applications

Environments

Secure area applications
Hazardous area applications (ATEX Zone 1 / ATEX Zone 2)

Project

Fully equipped mobile units
Turn-key projects in the field

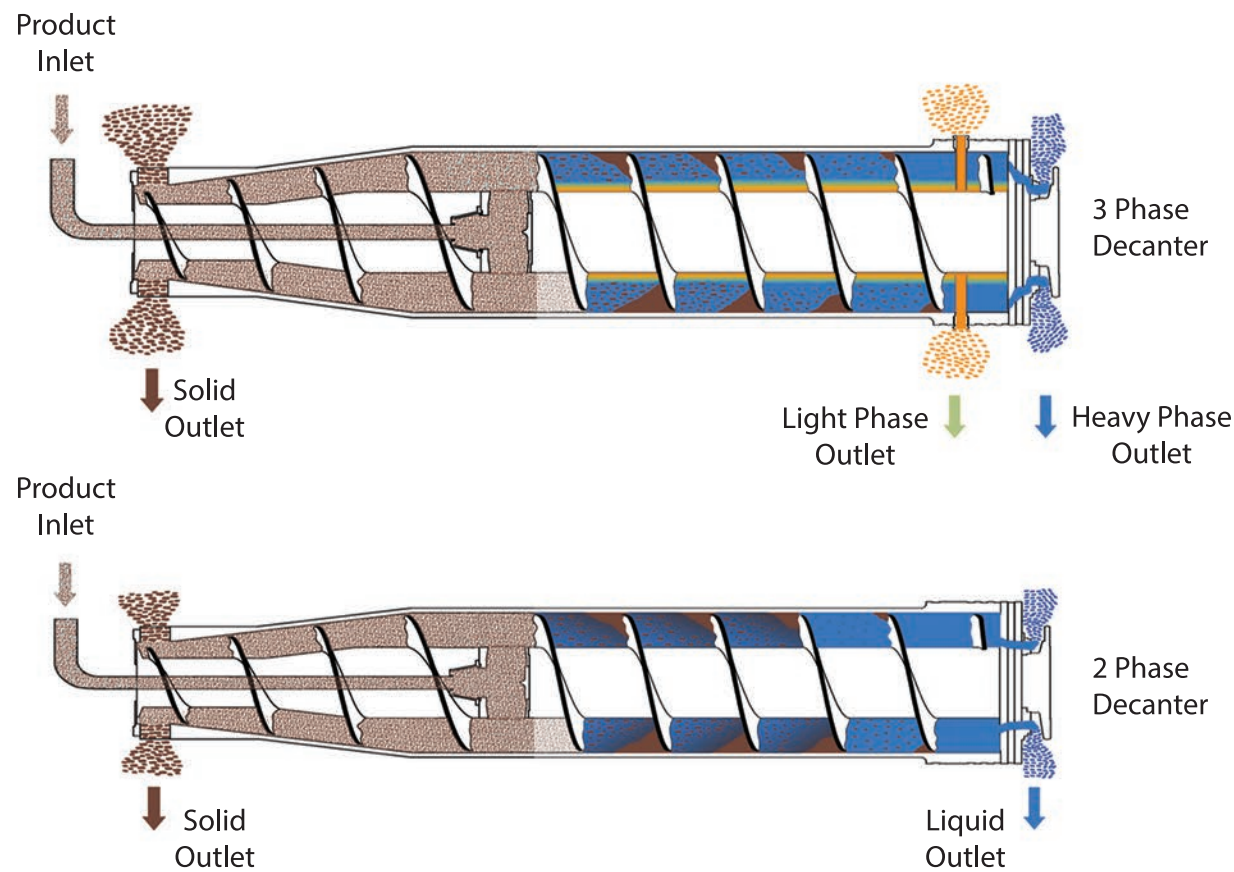
Optional Features

- Sampling**
Liquid sampling points in systems requiring regular monitoring.
- Manometer**
Pump dry run and cavitation protection and machine protection systems.
- Macerator**
Reducing large solids to small particles and deal with rags to protect downstream machinery.
- Cyclone**
Removes gas, vapour and odour from liquid phase output.
- Stripper**
Removes cake solids safely from the cake discharge area.
- Screw Conveyors**
Transports cake from the decanter to stock or loading area.
- Control Panel**
Optimum machine monitoring and full control including safety features and control of auxiliary equipment.
- SCADA**
Central control and data collection system integration.
- Cleaning**
Machine cleaning with centrate as an alternative to clean water.
- Solid Exit Latch System**
Prevents out-of-specification sludge from contaminating the dry product.
- Transmission**
Maximum efficiency and control with different scroll drive transmission types.
- UPS**
To stop our machine safely in case of sudden power cut by cleaning.
- Balancing Tank**
Ensures the temperature and the solids content at desired levels which fed into the decanter.
- Exproof**
In environments which is explosive and/or flammable, protecting against explosion and combustion.
- Feed Pump**
Variable speed product feeding systems for the centrifuge.
- Polymer Preparation Unit**
Polymer preparation and dosing systems.
- Remote Monitoring**
Remote access and intervention to the control panel that controls the decanter or system.
- Lubrication**
Manual or automatic grease lubrication as well as oil-bath gearbox or recirculation lubrication system.
- Replaceable Wear Components**
Comprehensive range of replaceable wear parts is available for all parts of the machine.
- Containerised System**
Portability for working in different locations and temporary use.
- Flowmeter**
Product flow and capacity monitoring with instantaneous and totalized product measurement.

Product Inlet and Solid & Liquid Outlet



Our **S series** centrifuge decanters are used in the environment, mining, food and industrial sectors. They are designed as a double drive system with VFD. The fully adjustable differential speed of the scroll and adjustable pool depth allow for optimum control of the final product quality.



Model	Ø Bowl (mm)	L / D	Maximum Blow Speed (rpm)	Main Motor (Kw)	Scroll Drive (Kw)	Drive System	Dimensions (mm)	Weight (Kg)
S200	200	4,23	Max. 5500	5,5	2,2	VFD	555*2000*680	500
S300	300	4,18	Max. 4500	15 - 18,5	4	VFD	850*2700*995	1160
S350	350	4,28	Max. 4200	22 - 30	5,5 - 7,5	VFD	1068*3250*1100	1850
S430	430	4,27	Max. 3500	37 - 45	7,5 - 11	VFD	1340*3890*1350	3500
S470	470	4,20	Max. 3300	45 - 55	7,5 - 15	VFD	1340*4070*1450	4700
S530	530	4,20	Max. 3000	55 - 75	11 - 15	VFD	1483*4690*1594	5475
S570	570	4,22	Max. 2800	75 - 90	11 - 22	VFD	1550*4970*1685	6250
S670	692	4,07	Max. 2300	90 - 132	22 - 37	VFD	1880*6190*1965	10980
S770	770	4,23	Max. 2100	132 - 200	37 - 55	VFD	2050*6965*2144	14980

* Measurements may vary depending on configuration.

365 days 24/7 comprehensive service



A fast service that reducing downtime to zero?

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 services is provided for supplying of original spare part and trouble-free changing fields.

WE KNOW THE VALUE



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