



GEA RSE 220-01-777

Technical Data | Degumming, neutralization, washing, winterization, fractionation of vegetable oils or animal fats

This separator is designed for use in the edible oil, biodiesel and renewable diesel pretreatment industries. The product is fed into the bowl through a closed-line system with hydrohermetic feed. The light liquid phase (clean oil) is discharged foam-free under pressure by a centripetal pump. The heavy liquid phase (soapstock or gums) is discharged by the GEA finetuner. The separated solids are collected in the solids holding space and are ejected at preset intervals. Partial and total ejections are possible.

The self-cleaning bowl makes the separator suitable for fully automatic cleaning-in-place (CIP).

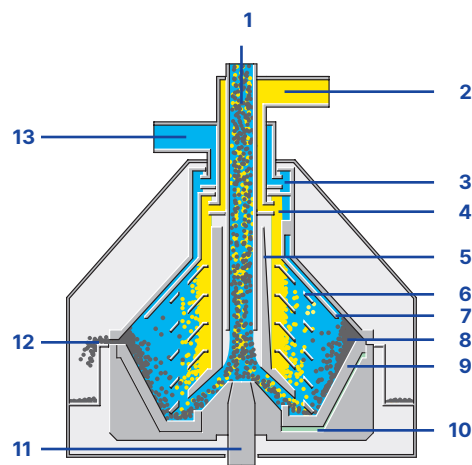
Design features

- Self-cleaning disk-type bowl
- Opening and closing hydraulically by a sliding piston to discharge the collected solids
- Frame made of cast iron

- Separator driven by a 3-phase AC motor designed for operation via frequency converter
- Short spindle drive for quiet vibration-free operation
- Flat belt drive without intermediate clutch
- Automatic lubrication system with suction pipe and oil pan
- GEA finetuner adjustment for optimizing separation zone during operation
- Hydrohermetic feed
- Vapor seal in distributor inlet chamber
- Bowl flush for feeding liquid
- All parts coming into contact with the products and ejected solids made of Cr-Ni-Mo stainless steel
- Bowl gaskets made of NBR or FKM, main bowl gasket made of polyamide or PVDF

Technical Data RSE 220-01-777

Operating principles and constructional features



- 1

Product feed
- 2

Light phase discharge
- 3

Centripetal pump, heavy phase
- 4

Centripetal pump, light phase
- 5

Distributor
- 6

Disk stack
- 7

Separating disk
- 8

Solids holding space
- 9

Sliding piston
- 10

Closing chamber
- 11

Spindle, drive
- 12

Solids ejection port
- 13

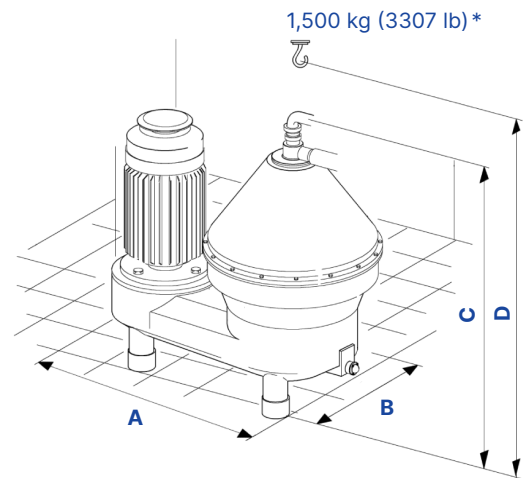
Heavy phase discharge

Capacity	
Water degumming	800 t/d
Acid degumming	800 t/d
Neutralization	800 t/d
Washing	800 t/d
Winterization	400 t/d
Cold refining	400 t/d
Bowl	
Speed	max. 4500 min ⁻¹
Volume	70.0 l
Volume of solids holding space	23.0 l
3-phase AC motor	
Motor rating (at FC)	45 kW (60 hp)
Weights	
Centrifuge, complete	3,240 kg (7,143 lbs)
Bowl	1,000 kg (2,205 lbs)

Standard equipment

- Special 3-phase AC motor
- Foundation frame
- Set of tools
- Set of standard spare parts
- GEA finetuner
- Hydrohermetic feed
- Control unit for automatic program control
- Motor control unit with frequency converter
- Speed measuring device
- Vibration monitoring system

Dimensions in mm (inches)



Type	A	B	C	D
RSE 220	2,210 (87)	2,290 (90)	2,290 (90)	3,000 (118)

*Minimum lifting capacity for removing the bowl

Optional equipment

- Special acid resistant bowl for acidic processes
- Constant pressure valve in the light phase discharge
- Set of special spare parts
- GEA condition monitoring for pro-active maintenance