

An ISO 9001:2015 COMPANY




Peeler centrifuge operates on the principle of centrifugal force to separate solids from liquids by density difference.

The high rotation speed provides high centrifugal force that allows the suspended solid in feed to settle on the inner surface of drum. The washing processes are performed at the same rotational speed and in same centrifuge vessel.

The unique feature of Peeler Centrifuge Horizontal Peeler Centrifuge is the constant basket speed which allows all operations like feeding drying discharging to be carried out at full basket speed.

Rotofilt Peeler centrifuges are offered both in the batch and continuous centrifuge processes. This process are determined to achieve maximum removal of solid from liquid that may be required to be as pure as possible and can not be easily separated by differences their densities.

Horizontal Discontinuous Separation

Peeler | Centrifuge

Application

Horizontal peeler Centrifuges are successfully used in Food Stuff, Pharmaceutical, Plastic, Organic & Inorganic Chemicals Industry for separating solids from solid liquid slurry with 5 to 50% solids contents and particle size ranging from 2 microns to 10 mm. Products which are difficult to filter or decant can be easily separated using Peeler centrifuge.

Peeler Centrifuge is used for:

AlumiAmino acids, benzoic acid, benzene, hexachloride, calcium hypo chloride hexachlorocyclohexane insulin, potassium bisulphate, sodium perborate, penicillin, sulphur, starch, etc.

Process

The unique feature of Horizontal Peeler Centrifuge is the constant basket speed i.e. all operations like feeding, drying discharging etc. are carried out at full-basket-speed. The sequence of Operations can be (either semi or fully automatically) controlled by Electro-hydraulic control panel / PLC controller.

Typical Process Cycle

1 Feeding

The Suspension is fed from the Storage tank to the basket rotating at full operational speed

2 Removal of mother liquor

Under the influence of the centrifugal force the Liquid is drained from the solids, through filter elements (usually filter cloth). The solids are collected as 'cake' in the basket.

3 Washing

If required, in order to remove the traces of mother liquor washing facility can be provided to thoroughly wash the solids during separation.

4 Re-drying

After giving wash or other treatment solids are further allowed to dry.

5 Discharging

Solids are 'peeled' off by means of full-basket-width scrapper and is discharged through chute in front cover of the machine or conveyed by discharged screw.

Design Features

- Gas-tight up to 0.04 bar overpressure,
- Labyrinth shaft seal
- Automatic heel cake adjustment
- Oil-lubricated bearings
- Solids discharge by chute or by screw conveyor
- Drive: electric motor and V-belts, or with hydraulic drive with variable or constant speed
- Automatic and manual operation with either microprocessor or pneumatic controller
- Explosion proofing and safety devices
- Separation of Drive area / Process area
- Removal of shaft from the rear
- Easy cloth changing
- Through wall construction

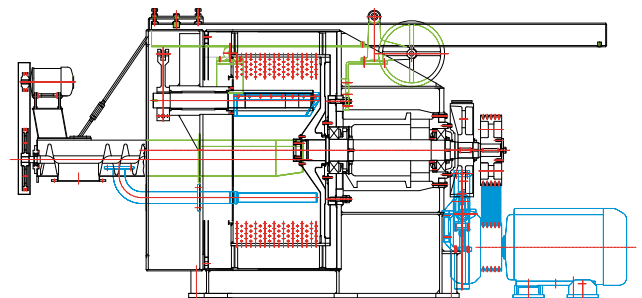
Working Principle

- Batch operation
- Fixed or variable speed
- Feed controlled by filling valve
- Filling by gravity or pump
- Basket filling monitored by filling level controller
- Intensive cake washing is possible with a variety of fluids
- Cake removal by hydraulically powered scraper over full basket width

Materials

Standard machines:

Contact parts in stainless steel / coated or contact parts with non-coatable parts in Hastelloy C other materials on request.



Model No.	Unit	TME900	TME1000	TME1200	TME1400
Basket diameter	mm	800	1000	1200	1400
Basket Speed MAX.	rpm	1200	1200	1050	1000
Centrifugal force	g	640	800	735	790
Drive	KW	18.5	30	55	75
Basket Volume	Ltrs.	70	110	180	450
Filtration Area	m ²	0.9	1.1	1.50	3.1



Rotofilt Engineers Ltd.

Plot No. 102, Phase I, Opp. Torrent Sub Station, G.I.D.C., Vatva, Ahmedabad-382 443 India.
Tel.: +91 79 2589 9601 To 605 • Fax : +91 79 2589 9607 / 8 • Email : rotofilt@rotofilt.com, mktg@rotofilt.com • www.rotofilt.com

Subject to Revision • All Rights Reserved