

Rotofilt Engineers Ltd.

- → Pusher Centrifuge
- Decanter Solid **Bowl Centrifuge**
- **Automatic pressure Filter**
- **Horizontal Peeler** Centrifuge
- **Vertical Basket** Centrifuge







- Process
- Major features

- Typical Process Cycle
- Working Principle
- Applications
- Materials

► HORIZONTAL PEELER CENTRIFUGE



Process

Horizontal Basket 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. Typical Process cycle click here. Even though the operational method is discontinuous – i.e. solid / liquid separation takes place in specific work steps. Sequentially, the process can be fully automated.

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

• Feeding:

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

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.

Washing:

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

• Re-drying:

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

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.

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Applications

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

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Major features

- Gas-tight up to 0.04 bar overpressure, or
- 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

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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	TME 950	TME 1200	TME 1400
Basket diameter	mm	950	1200	1400
Basket Speed MAX.	rpm	1250	1250	1000
Centrifugal force	g	825	1040	790
Drive	HP	30 (with PLC Controller) / 40	50 (with PLC Controller) / 75	100
Basket Volume	Ltrs.	125	270	450
Filtration Area	m ²	1.08	2.1	3.1

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Automatic pressure Filter

Vertical Basket Centrifuge **