

For Chemical

Pharmaceutical

Petrochemicals

Agrochemical

Fine Chemicals

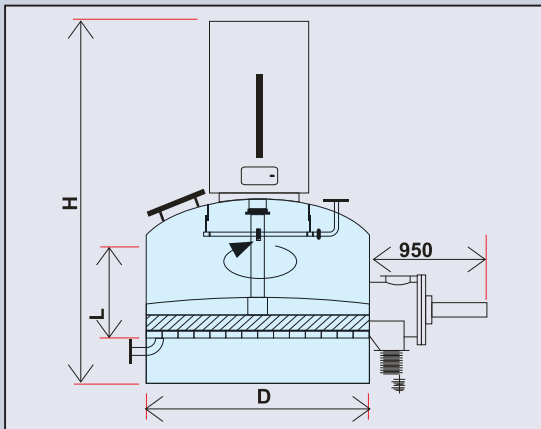
 **System  
Engitech Pvt. Ltd.**

AN ISO 9001 : 2008 Company

# Agitated Nutsche Filter Dryer



## Standard Models



Model No	Filter Area m <sup>2</sup>	Working Vol	Max.cake Vol	Vessel Size		Over All Height(H)	Motor HP	
				Dia(D)	Length(L)		Filter	Dryer
P1	0.25	200	75	600	750	2500	2.0	2.0
P2	0.50	350	150	800	750	2900	2.0	3.0
P3	0.75	500	225	1000	750	3000	3.0	5.0
SE1	1.13	850	450	1200	750	3150	5.0	7.5
SE2	1.75	1300	700	1500	750	3200	7.5	7.5
SE3	2.50	2500	1000	1800	1000	3550	10	12.5
SE4	3.40	3500	1400	2100	1000	3650	12.5	15
SE5	4.90	5000	2200	2500	1000	3700	15	20
SE6	5.70	6000	2570	2700	1000	3750	15	20
SE7	7.00	7000	3100	3000	1000	3800	20	20
SE8	9.60	10000	4000	3500	1000	4200	25	30
SE9	12.50	13000	5500	4000	1000	4500	25	30

Agitated Nutsche filter is a closed vessel designed to separate solid and liquid by filtration under pressure or vacuum, due to closed vessel operation product becomes odor less, Contamination free, high purity. use of hydraulic system makes equipment of trouble free Operation. wet cake can be reslurried and washed thoroughly with water or solvents. The Discharge of wet cake is automatic. drying of wet cake is also possible when drying Features are incorporated. From this equipments we can do crystallisation, filtration, extraction, washing and drying. we can eliminate chain of conventional machines for filtration and saving of power, labour, space and idle time. It can be used in chemical, pharmaceutical, Agro chemical, fine chemical and food industries.

## Construction

Agitated filter is a cylindrical vertical vessel with a plain filter media at the bottom With specially designed agitator moving up ward and down ward as the necessity of the process. The movements of agitator are,

- Clockwise movements fills the cracks and pressing during filtration.
- Anticlockwise movements for reslurrying when washing and for automatic discharging.
- Hydraulic system is mounted for the up ward and downward movement of agitator and for discharge port opening and closing.
- Washing header is provided for washing of the wet cake inside the vessel.

## Filter

- Different designs are made to suit application for chemical, pharmaceutical Industries from SS316, SS304, hastalloy and rubber lined.
- Filter media is selected as per specific process requirements.
- Detachable filter dryer can also be available to ease changing of Filter Media for various product.

## Process Advantages

- Toxic and hazardous material can be processed. - Product purity ma. intained - Sterilizable unit available
- Product can be washed thoroughly and economically with solvents.
- Blending of product possible before discharging. - Almost complete discharge possible.
- Ease of material handling and avoid wastage of costly material during handling.
- Large quantities can be processed faster than the conventional system.
- The options available in the equipment are categorized as under.

## Vessel Design Options

- A. Top head shell and bottom welded const.
- B. Bottom part with filter medium detachable and trolley mounted It can be lowered by Hydraulic cylinder provided for changing filter medium.
- C. Drying version with heated filter plate, heated shell and or heating in hollow shaft with blades. the drying verison is available in both welded and detachable construction dust arresting system is provided with dryers.
- D. Material of construction available are SS316, SS304, hastalloy, alloy 20, MSRL.

## Options In Accessories

- (A) Standard models are fitted with push button/lever operated control panel complete Automation with PLC is also offered.
- (B) Different grades of gaskets: rubber, PTFE
- (C) Shaft sealing with stuffingbox having non asbestos/gland packing, Mechanical seal with SS316 Bellow.
- (D) Fixed or variable speed of agitator.
- (E) Different filter medium woven filter cloth, sintered multi layered wire mesh type.
- (F) Vessel mounting on legs or hanging on lugs.

