



Lab Agitated Nutsche Filter and Dryer (ANFD)

Rotation

- High torque bidirectional motor
- RPM controller & torque Indicator

Manual agitator up/down

- Effortless Up/Down adjustment of agitator for drying

Agitator mechanical seal

- Vacuum and pressure rated

Standard nozzles

- Slurry inlet/CIP/N₂ Purging, Vent
- Light & sight glass
- Compound pressure gauge

Jacketted vessel and lid

- Material SS 316 / Hastelloy C
- Heating /Cooling jacket for drying and cooling of cake

Filter basket / disc

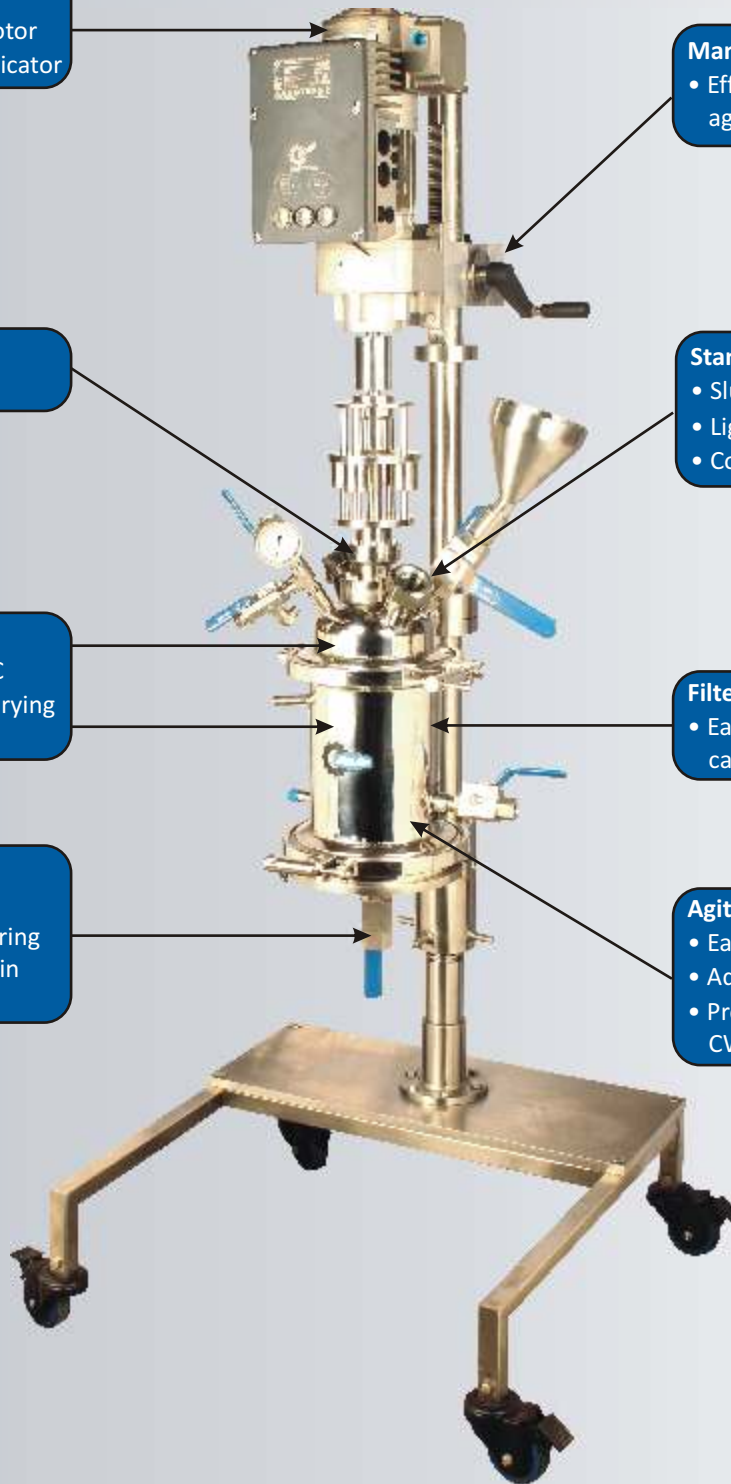
- Easily removable for dry or wet cake collection

Vacuum/filtrate outlet nozzle

- To connect to vacuum pump through vacuum receiver during contact & convective drying in parallel

Agitator system

- Easily removable
- Adjustable height
- Provides smoothing & plowing in CW and CCW respectively



Salient features

- 0.005m² to 0.05m² filtration area
- Removable filter basket/disc size from 5µm to 20µm
- 1 ltr to 10 ltr slurry volume
- Design pressure: -1 to 4 bar
- Design Temperature: - 20 to 150° C
- Materials: SS316, Hastelloy C
- Manual or electric agitation
- Transport & separation process takes place in single unit
- Reduced product exposure as all operation takes place in single unit
- Real-time model-predictive process control for the comparison of different agitation regimes & different operating conditions such as vacuum pressure, nitrogen flow, jacket temperature & cake volume, together with comparison of different solvents
- Vacuum contact drying & through-circulation convective drying possible



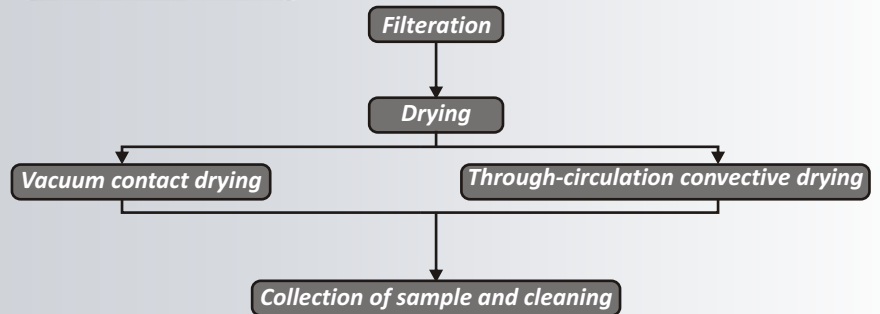
Bench top manual agitated nutsche filter and dryer



Applications

- Pharmaceutical Intermediates
- Food, flavors & fragrance industry
- Edible oil deodorization & deacidification
- Hazardous materials filtration
- Moisture removal & solvent recovery
- Precious metal & other catalyst recovery
- Fine & speciality chemicals
- Polymer devolatilization
- Microsphere separation & purification

How does it work?



Standard specifications

Model*	Filter area	Slurry volume	Cake volume
ANFD 3	0.005 m ²	1 ltr	500 ml
ANFD 4	0.008 m ²	2 ltr	800 ml
ANFD 6	0.018 m ²	5 ltr	2 ltr
ANFD 10	0.05 m ²	10 ltr	5 ltr

*Numeric value indicates diameter of filter in inches

- Vessel design pressure: -1 to 4 bar
- Jacket design pressure: 6 bar
- Design temperature: -20 to 150° C
- Materials: SS316, Hastelloy C
- Surface finish: Ra < 0.8 µm or 400 grit inside/electropolishing
- Material of elastomers: Viton, PTFE, EPDM, Silicon, Kalrez
- Filter disc optional with lid bottom openable in metal ANF

Model no. for enquiry

Model	Material	Rotation
ANFD 3	SS 316-S	Manual-M
ANFD 4	Hastelloy C-H	Motorized-E
ANFD 6		
ANFD 10		

For example a manual 0.005 m² SS316 model will read as ANFD 3-S-M



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