

# STANDARD UNITS

## AGITATED GLASS NUTSCHE FILTER/ PEPTIDE SYNTHESIZER



Agitated Glass Nutsche Filter is a closed vessel designed to separate solid and liquid by filtration under vacuum. The closed system ensures odourless contamination free and non-polluting working conditions maintaining product purity and hygiene. Agitated Nutsche Filters are extensively used in Herbal products, Chemical product development, kilo lab operation, pharmaceutical manufacturing, agro chemical and the food industry.

### GENERAL DESCRIPTION

A typical unit consists of a dish shape vessel with a perforated plate. The entire vessel can be kept at the desired temperature by using a mixer / agitator and jacket. It's completely leak-proof for vacuum or pressure service. The base plate is having arrangement of bolting bar to hold the filter cloth. Suitable nozzles can be provided including Manhole and Side discharge nozzle. PTFE Lined Stirrers are used for Agitator shaft and solid PTFE blades are used to take high torque generation during solid discharge and re-slurring operation. Drive assembly consist of Motor with VFD, Mechanical Seal is provided for vacuum application. Borosilicate Glass Vessel with different nozzles, Manual/Hydraulic system is provided for movement of agitator as well as bottom plate. PTFE Filter Support Plate.

### PROCESS STEPS OF AGITATED NUTSCHE FILTER WITH AGITATOR:

- 1) Filtration.
- 2) Washing of Filter cake.
- 3) Repeat mix or washing of the cake.
- 4) Convection drying of the cake.
- 5) Smoothing with compression of the cake
- 6) Discharge of the wet or dried cake.

### ADVANTAGES OF GLASS NUTSCHE FILTER

- Vacuum filtration possible.
- Glass being transparent, offers visibility of processes.
- Inert gas atmosphere can be maintained.
- Minimal contamination of the cake.
- Very high solvent recovery.
- Solvents are closed systems, so no toxic vapors are let off in the atmosphere.
- Personal safety is maintained, and heat transfer surfaces can be provided to maintain filtration temperature.

Goel offer Glass ANF from 2 L to 300 L for Kilo Lab Operations with and without jacket, with and without stirrer.



Cat. Ref.	Working Vol (ltr)	Filter area (m <sup>2</sup> )	Vessel Dia	Vessel height	Moter Capacity HP
ANFD10	10	0.03	225	300	0.25/0.5
ANFD20	20	0.06	360	325	0.5
ANFD50	50	0.12	400	450	0.5
ANFD100	100	0.16	450	700	0.5
ANFD200	200	0.31	600	775	1
ANFD300	300	0.31	600	1150	1