GMM Pfaudler’s Mavazwag® Agitated Nutsche Filters and Filter Dryers (ANF and ANFD) are designed and manufactured with state-of-the-art technology from Mavag AG, Switzerland. Mavazwag® ANF and ANFDs are versatile and maintenance free, performing most effectively in Pharmaceutical and Chemical industries where solid washing and solid-liquid separation is required.

All operations of an ANF and ANFDs are performed in an enclosed system, ensuring product quality, product consistency and operational safety.

Our ANF and ANFDs are also available in GMP/Sterile designs, which adhere to CIP/SIP requirements.

GMM Pfaudler’s Mavazwag® ANF and ANFDs are available in Stainless Steel, Hastelloy and Special Alloys.

For extremely corrosive applications, GMM Pfaudler can offer ANF and ANFDs in Glass Lined construction.

GMM Pfaudler offers Pilot ANFD for on-site test work, enabling the user to gain valuable experience and gather reliable process data at the same time.

Our engineers welcome the opportunity to assist you in selecting the right ANF or ANFD and then optimizing it for your process conditions.
KEY FEATURES

Boltless Design
- Designed to ensure boltless construction
- No bolts, no dead zones and hence no product accumulation
- Eliminates chance of contamination
- Quicker process validation during product changeover

Multifunctional Design
- Unique filter plate design allows interchangeability of filter media without changing the base
- Flexibility for multiple products and campaigns in the same equipment

Agitator
- Hollow agitators made from heavy sections making them suitable for both solids and liquids
- Blade design improves mixing, heat transfer and facilitates uniform temperature distribution
- Low angle blade profile ensures cake smoothening
- Agitators available in both 2 blade and 3 blade design, 3 blade agitators can reduce the drying time by up to 30%

Filter Base
- Bayonet type design available as an alternative to C clamp design.

Main Vessel
- Designed and manufactured according to ASME Sec. VIII Div. I.

Shaft Seals and Bellows
- Stuffing box
- Single/Double

Side Discharge Valve
- Hydraulically operated valve with metal to elastomer sealing allows for a pressure tight shut-off after each product discharge
- Fully automated, sealing surfaces do not require cleaning after each discharge
- Specially designed metal to metal sealing is available as an option with self-locking arrangement to prevent loss of batch in case of hydraulic failure

Side Discharge Port
- For contained discharge of the product a side discharge port can be provided which can be integrated with an isolator.

Online Sampling
- The Online sampling valve is provided to take samples under vacuum, without stopping the agitator/process.

Material of Construction
- Stainless steel
- Hastelloy and other exotic materials
- Glass Lined construction upto 5m²

Control Panel and Automation
- Hydraulic power pack with electrically operated flame proof solenoid valves.
- Local control panel with electrical and hydraulic safety features.
- Control panel with PLC is available as an option.
SPECIAL DESIGN FOR STERILE PRODUCTS AND MOBILE UNIT FOR CONSTRAINED AREAS

Process Advantages

- Processing of concentrated suspensions
- Cake filtration
- Cake washing and cake purification
- Extraction of active agents from organic solids
- Filtration plants with product and solids processing
- Filter-dryer plants with solvent recovery unit
- Filter systems for sterile applications with integrated CIP-system
- Integrated plants with reaction, filtration and final drying stages
- Pre-assembled, PLC-controlled systems in modular design
- Environmentally safe, totally enclosed systems
- Reliable, proven filter design and construction
- Construction materials for a wide application range
- Optimized filter media selection to meet specific product and process requirements
**Features**

- High Pharma finish confirming to cGMP norm
  specially designed double mechanical seal with metal bellows
- Tri clover connections instead of flanged nozzles
  CIP and SIP designs available

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<th>Max. cake volume ltrs.</th>
<th>Diameter D mm</th>
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MAVAZWAG® AGITATED NUTSCHE FILTERS & FILTER DRYERS