

# DACGuard™

## Universal guard for DAC Columns



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited**

An ISO 9001 Certified Company

[www.analyticalgroup.net](http://www.analyticalgroup.net)

**DACGuard™** designed by Analytical Technologies Limited for optimising productivity of chromatography purification. The advantages of using a frit-based Guard Column for a DAC (Dynamic Axial Compression) 100, 150, 200 , 300 , 400 , 800 mm ID column - especially in preparative and process-scale chromatography:

### **Protects the Main Column:**

- Prevents contamination and blockage of the expensive DAC column by trapping particulates, precipitates, and impurities before they enter the main bed.
- Extends column lifespan, saving costs on frequent repacking or replacement.

### **Maintains Consistent Performance:**

- Ensures uniform flow distribution by filtering out debris that could cause channeling or pressure fluctuations.
- Stabilizes back pressure, maintaining optimal separation efficiency throughout long production runs.

### **Easy Maintenance & Replacement:**

- The frit-based guard is modular and easily replaceable, allowing rapid maintenance without disturbing the main column packing.
- Reduces downtime and solvent wastage during cleaning or changeover.

### **High Mechanical Strength:**

- Fabricated from 316L stainless steel, ensuring chemical resistance, pressure stability, and corrosion protection under high-pressure DAC operation.
- Can handle axial compression forces and repeated pressure cycles typical in large-scale chromatography.

### **Customizable Filtration Accuracy:**

- Frits available in 2–3 µm pore sizes (or customized on request) — ideal for protecting high-performance packings while maintaining flow rates.
- Supports clean, particle-free mobile phase delivery to the main column bed

### **Improved Process Reliability:**

- Enhances reproducibility of chromatographic results by preventing contamination-driven variability.
  - Particularly useful for multi-batch purification and continuous production setups.

## Cost-Effective Long-Term Solution

- A small investment compared to the cost of a 100,150, 200, 300,400, 600 and 800 mm DAC column.
- Significantly reduces operational and maintenance costs over time.

## Technical Specifications :

- Material: 316L stainless steel
- The diameter is 200mm, standard 1/4-inch pipe fitting, with a filtration accuracy of 2-3 microns
- The size of a filter packaging box is 30\*30\*15 cm, and its weight is 25 kg.

## Reuseble Frits

Frits made of stainless steel ,which can be cleaned ultrasonically and reused multiple time.



## Our Other Technologies:



## HPLC Servicing, Validation, Trainings and Preventive Maintenance :

**HPLC Servicing** :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

**Trainings** :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

**AMC's/CMC** :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

**Validations** :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

**Instruments** :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



## About Analytical Technologies

Analytical Technologies Limited ( ATL ), is a multinational analytical group conglomerate, leading global manufacturer & exporter of Analytical, Chromatography, Spectroscopy, Biotechnology, Biomedical, Clinical Diagnostics and Material Science & General Laboratory Equipment. Main products includes HPLC, UHPLC, GC, GPC ( Gel permeation chromatography ), IC ( Ion chromatography ), HSCCC, PREP HPLC, Production and Process HPLC Chromatography purification systems, DAC ( dynamic axial compression columns ), HbA1HPLC, Spectrophotometers, LCMS, LCMSMS, GCMS,GCMSMS, ICPMS, ICPMSMS, LCICPMS , LCICPMSMS, MALDI TOF MS, ICPTOF MS , TOC , liquid Particle counters, HpTLC, AAS, FTIR, SEM, XRD, Zeta particle Size Analyzers , MicroGC, XRF, Carbon Sulphur & cHNS analysers, ICPOES, OES, bomb calorimeters, DSC TGA STA THERMAL ANALYSERS, mass spectro leak detectors ( MSLD ), microwave digestion systems , Freeze Dryers , organic and peptide synthesisers, ultrapure water purification systems, etc, & provides Labs setups solutions on turnkey basis apart from various solutions for DSP ( down stream projects ). [www.analyticalgroup.net](http://www.analyticalgroup.net)

## Our Products & Technologies



LCMS



APC



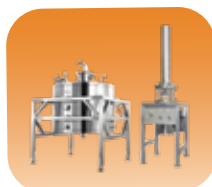
Maldi TOF



Optima Gas  
Chromatograph



Flash  
Chromatograph



DAC  
Column



GCMS  
3068



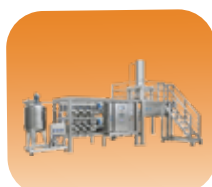
UHPLC



HPTLC



Ion Chromatograph



Production  
HPLC



HPLC



Column



DLS



Water purification  
system

## ▶▶▶ Regulatory compliances



## ▶▶▶ Corporate Social Responsibility

ANALYTICAL FOUNDATION is a Nonprofit Organization (NGO) for the purpose of:



# Analytical Foundation

1. Research & Innovation **Scientist's awards & International Conference visit sponsorship / QC Professional Awards:** Quality life is possible by innovation only and the innovation is possible by research only, hence **ANALYTICAL FOUNDATION** is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research /testing/ publication at [info@analyticalfoundation.org](mailto:info@analyticalfoundation.org)

2. Improving quality of life by offering **YOGA Training courses, Work shops / Seminars** etc.

3. **ANALYTICAL FOUNDATION** aims to DETOXIFY human minds, souls and body by means of Yoga, Meditation, Ayurveda, Naturecure, Health Care, Ara, Events, Camps etc.

▶▶ A portion of profit of **ANALYTICAL GROUP** Company's goes into **ANALYTICAL FOUNDATION** for the aboce noble cause.

## ▶▶▶ Reach us @



 **Analytical**®  
Technologies Limited

### Subsidiaries



Note : Company reserves rights to add/delete/modify the contents / technical specifications of the catalogue without prior notice

HPLC Solutions

MultipleLabs

Infinite Multiplelabs LLP

Analytical Bio-Med

Analytical Foundation (Trust)

**Corporate & Regd. Office:**  
Analytical House, # E67 & E68,  
Ravi Park, Vasna Road, Baroda,  
Gujarat 390 015. INDIA

T: +91 265 2253620  
+91 265 2252839  
+91 265 2252370  
F: +91 265 2254395

E :- [info@analyticalgroup.net](mailto:info@analyticalgroup.net)  
[info@hplctechnologies.com](mailto:info@hplctechnologies.com)  
[info@multiplelabs.com](mailto:info@multiplelabs.com)

W:- [www.analyticalgroup.net](http://www.analyticalgroup.net)  
[www.hplctechnologies.com](http://www.hplctechnologies.com)  
[www.multiplelabs.com](http://www.multiplelabs.com)

Sales & Support Offices:  
across the country :  
Distributors & Channel  
partners World Wide  
USA| UK| Australia| Dubai| Malaysia