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# ID50mm DAC Column

The DAC (dynamic axial compression) column adopts latest design by ATL. The piston of column always produces a stable pressure on packing bed which can effectively prevent the collapse and loose of the column bed.

The Characteristic of DAC column:

**Short length, Large inner diameter, Pancake shaped**. The length of the preparative column is similar with the analysis one, about 20cm to 50cm. It is far shorter than the open column which length is always more than 1m. Besides, its inner diameter is 10mm to 1000mm, so there will be no high pressure at high flow rate, the separation cycle of the pure material will be shorter and the yield will be higher.

**Small packing material particle size, Narrow distribution.** We can get higher column efficiency by using 10"20μm spherical porous packing material with narrow pore and particle size distribution instead of the big particle size（40"200μm）irregular one with wide distribution to pack the preparative column. Usually the theory plate can reach 20000 per meter. In suitable condition it can reach 40000 per meter just like the analytical column.

**Packing process.** It is difficult to packing a column more than 50mm by high pressure slurry packing method, in order to pack small particles into larger preparative column evenly, we always use column bed compression technique. As the DAC columns have been applied more each day in preparative chromatography, more and more research is concerned with the DAC performance and reproducibility, the result is the column efficiency is influenced by packing material character, slurry solvent character, pressure etc.

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| ID50mm DAC column | |
|---|---|
| **Dimensions** | 500mm×500mm×1900mm |
| **Weight** | 100kg |
| **Inner diameter** | 50mm |
| **Total column length** | 500mm |
| **Max. bed height** | 300mm"NP 0.3kg packing material; RP 0.39kg packing material)! |
| **Filter** | Material: 316L Pore size: 3~5μm |
| **Distributor** | Two, in piston and column bottom, Material: 316L Distribution mode: Divergent |
| **High pressure seal** | Material: PTFE+316L |
| **Design pressure** | 10Mpa |
| **Operating temperature** | 5~60℃ |
| **Control Panel** | air pressure gauge, oil gauge, regulating valve, Emergency stop switch, Change direction valve, Shut"off valve |
| **Air source** | ≥6bar, output≥0.5$m^3$/min |
| **Column tube material** | 316L |
| **Column bracket material** | 304 |
| **Roughness** | Inner surface Ra≤0.4μm, outer surface Ra<1.6μm |
| **Inlet diameter** | 1/16” |
| **Outlet diameter** | 1/16” |
| **Air inlet diameter** | Φ8 |

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

3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and boby by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Comps etc.

## Reach us @


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