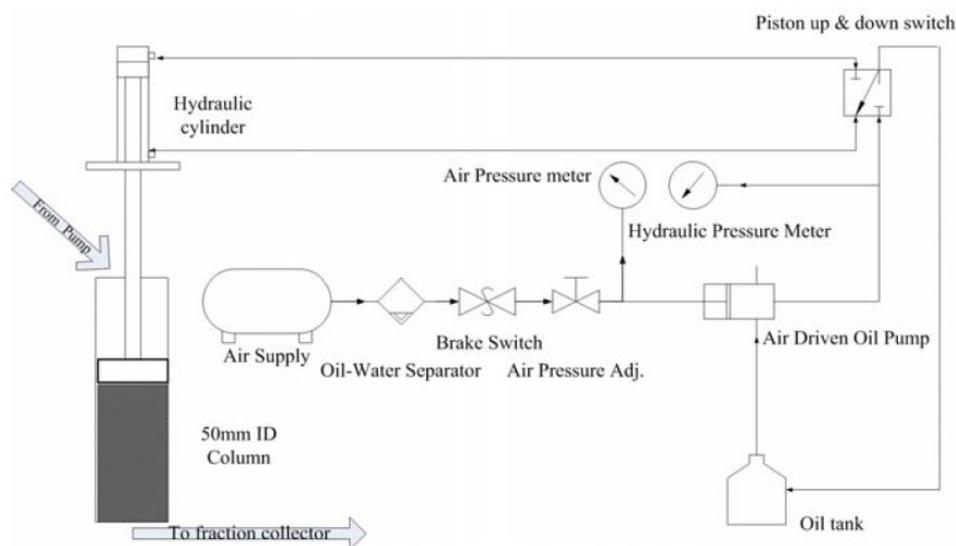


Frequently asked questions for DAC (Dynamic Axial Compression Chromatography Purification Column) column with Answers

1. Basic schematic diagram of the machine System Working principle



2. How machine functions (How column gets packed)

DAC column system the principle is achieved by the up and down movement of the piston to pack column, maintain the column pressure and unloading the column surrounding. The piston equipped with a specially designed ring to allow the piston up and down slide freely, while at the same time maintain a high sealing pressure. The piston motion and pressure can maintain a reliable stable and uniform hydraulic.

The hydraulic cylinder which provides the axial compression is driven by an air driven oil pump actuated with compressed air. By controlling the compressed air pressure, the ultimate hydraulic pressure is fixed. Once the specified hydraulic compression pressure is achieved, the air amplifier pump reaches a "stall" condition and will maintain the hydraulic pressure without continuous operation. The air amplifier pump can be reciprocated rapidly during packing column and then very rarely during using column.

An air supply gives the power source of pressure. There are two choices: you can use a compressed gas cylinder or an air-compressor. If the air-compressor is used, it's possible to select some accessories such as oil-water separator to clean the input air.

3. What type of regulatory documents will be supported

Support for relevant documents such as cGMP and FDA regulations.

4. IQ/OQ/PQ

We can provide IQ, OQ, PQ Documents.

5、 Types of media which can be used, compatibility of solvents

It can be packed with silica gel, C18, C8, polymers and so on. Solvent type can be used are acetonitrile, methanol, water, isopropanol, hexane, ethylacetate and other commonly used reagents

6、 Can the column be packed using another pump having the same capacity, such as Waters 300 ml pump

The packing is accomplished by gas source that drive the hydraulic cylinder. Thus, the pump is unnecessary in packing process. See Basic schematic diagram of the machine.

7、 Scale up support

We can manufacture 50mm DAC, 100 mm DAC, 150 mm DAC, 200 mm DAC, 300 mm DAC, 500 mm DAC, 600mm DAC, 800 mm DAC, 1000 mm DAC, 1200 mm DAC system now. We also can design the special system to meet custom special requirements.