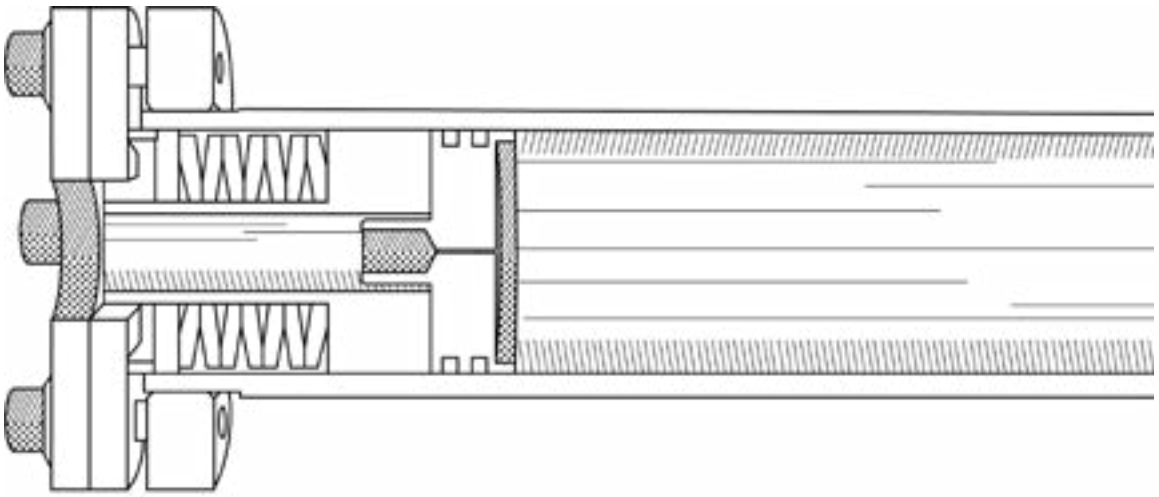
Dr. Maisch

Any Column, Any Size, Any Media

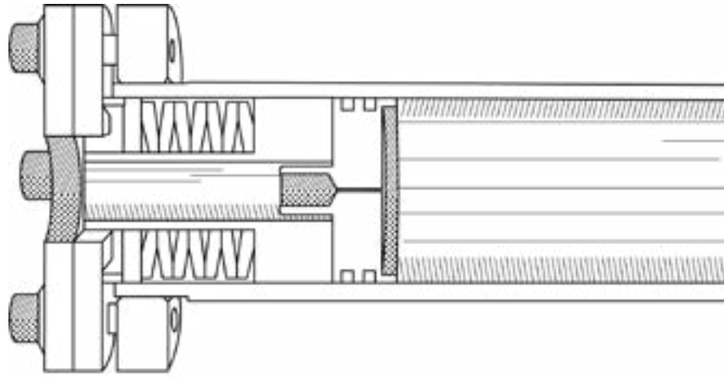


LONGLIFE

用于制备的弹簧柱

MADE BY DR. MAISCH

CONTENT



LONGLIFE
MADE BY DR. MAISCH

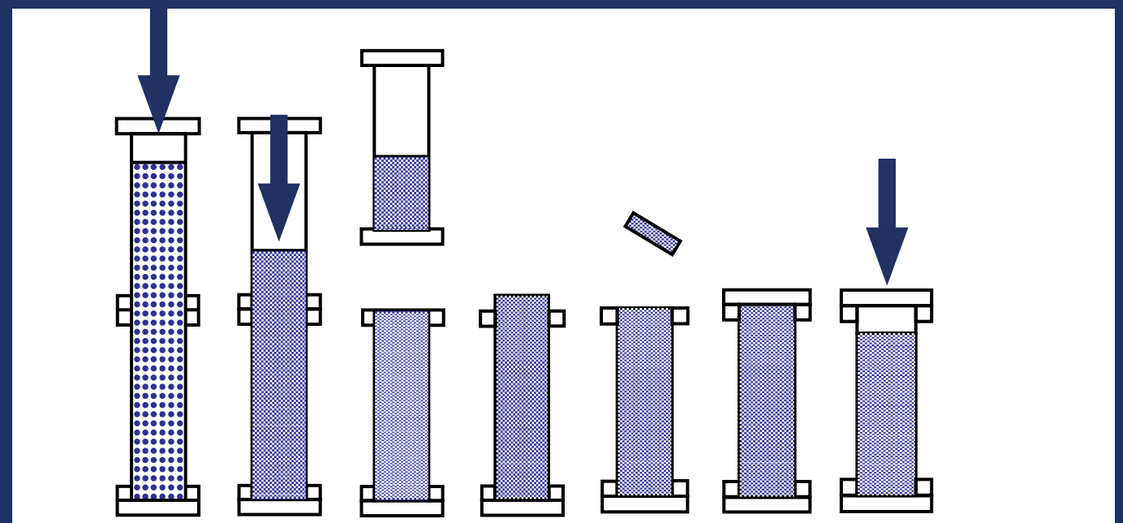
来自欧洲最大的高效液相色谱柱制造商之一

柱装填技术

通过溶剂流动进行装填
轴向压缩-活塞装填

DAC – **D**ynamic **A**xial **C**ompression

SAC – **S**tatic **A**xial **C**ompression



长寿命

固定床柱装填存在的内在问题

SAMPLES

-需要消耗过多的填料

-压力释放后填料会进一步损失

- 装载能力较低
- 效率较低

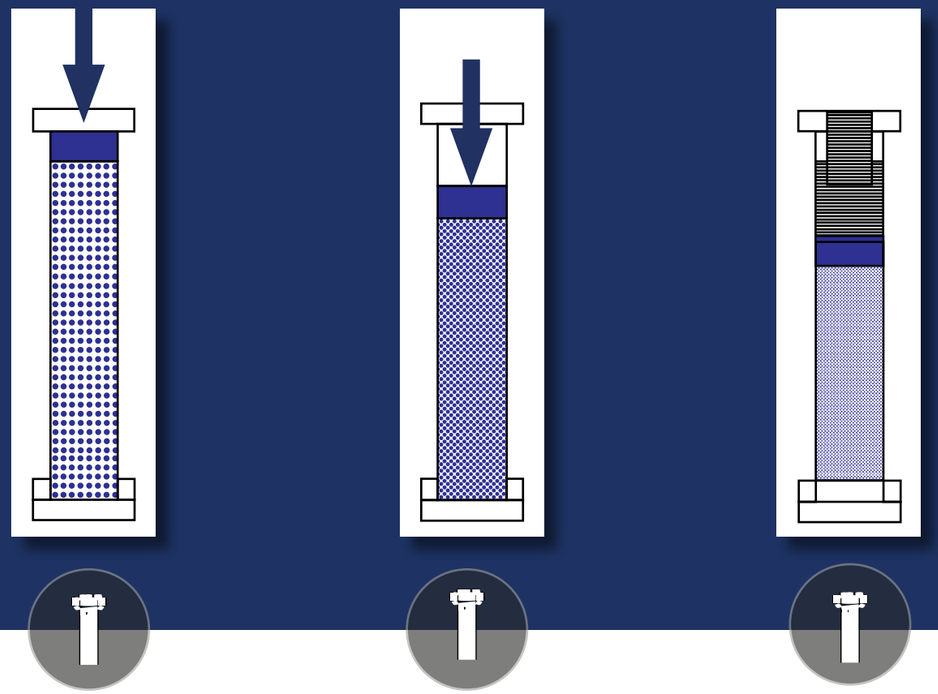
-压力释放时可能床层破裂

-在流动压力填料下，由于沿塔长度的压力下降而导致的床填料密度不均匀

-在使用过程中形成空隙的可能导致寿命下降。

轴向压缩——活塞填装

轴向压缩克服了这些问题：



不需要多余的填料或导致填料损失

活塞释放压力时：

填装过程中，内部填料颗粒受力均匀。

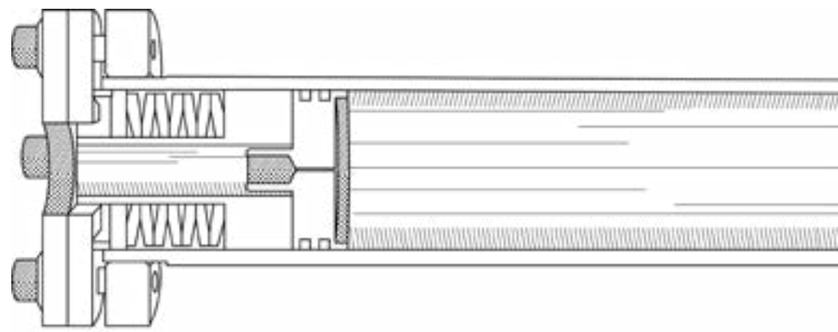
活塞压力不释放时：

- 不破坏床层
- 填充密度一致
- 不形成空隙
- 增加色谱柱的寿命

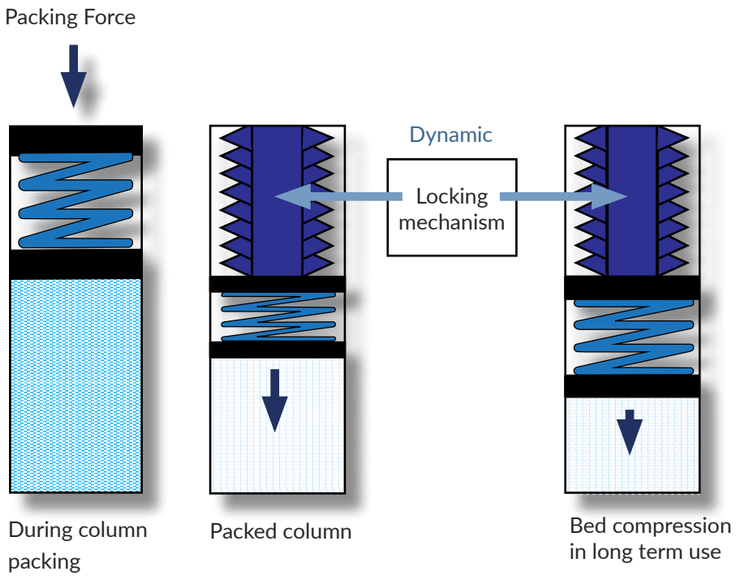
长寿命

长寿命柱硬件

- 获得专利的高级制备硬件
- SAC和DAC模式通用
- 适用于 SFC
- 极高的性能和使用寿命



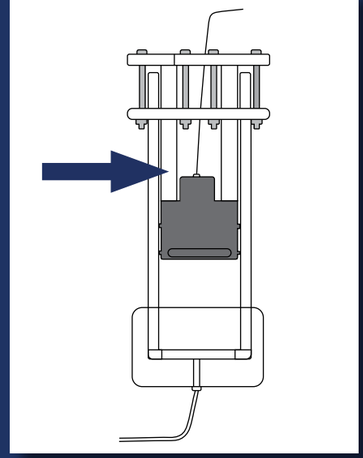
长寿命技术是基于MODCOL弹簧柱原理

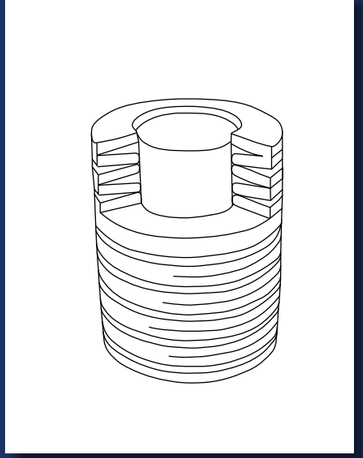


- 填料储罐用于容纳稀浆。
- 填料储罐在填充完柱后移除，以尽量减少填充柱的总硬件长度。
- 活塞留在柱中。
- 压力没有释放。

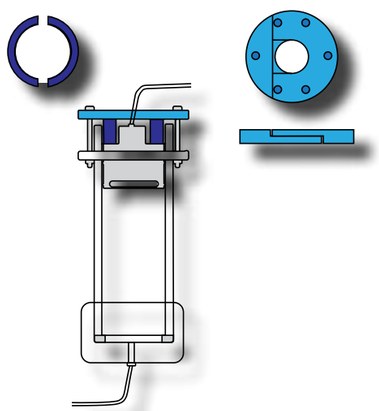
获得专利的长寿命原理

填充柱的床层长度可以通过使用halb-tube柱插件来控制





可以插入垫圈弹簧单元代替静态垫片，用于动态轴向压缩机机制



专利的立柱法兰端板特殊设计，无需拆卸活塞和释放填料压力即可关闭立柱。

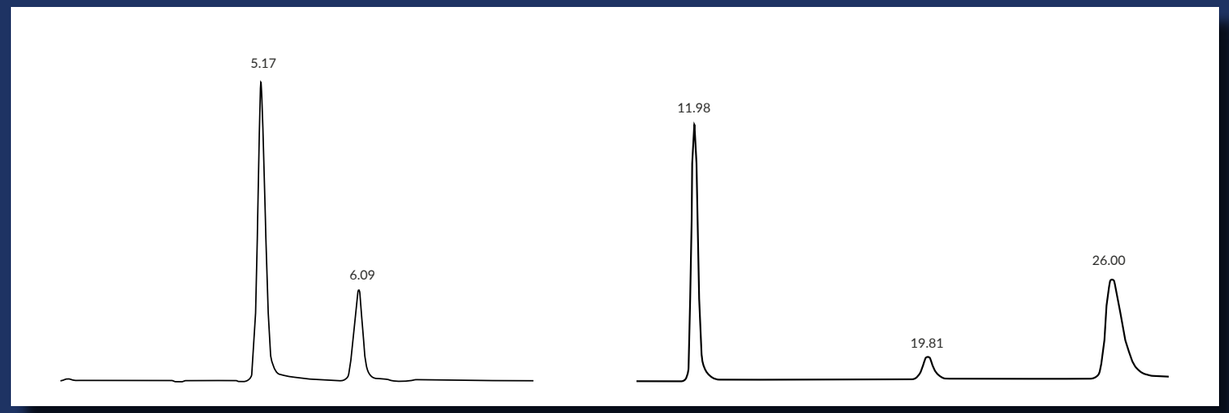
Patent No: DE202018001788

DE202016000500111

长寿命

CHIRAL REPROSIL MEDIA

ReproSil Chiral-MIA,
5 µm, 250 mm L x 30 mm ID



ca. 90,000 N/m

TEST CONDITIONS

Mobile Phase: Heptan/IPA 85/15
Flow Rate: 30 ml/min
Temperature: Ambient
Pressure: 34 bar
Detector: UV @ 229 nm
Sensitivity: 0.5 mV

Description:

Packing Material: ReproSil Chiral-MIA, 5 µm
Length: 250 mm ID: 30 mm
Shipping Solvent: Mobile Phase
Maximum Pressure: 130 bar
Hardware Type: LongLife
Frit: 2 µm
pH Range: 2.0 - 8.0

ReproSil Chiral NR,
8 µm, 260 mm L x 50 mm ID

ca. 60,000 N/m

TEST CONDITIONS

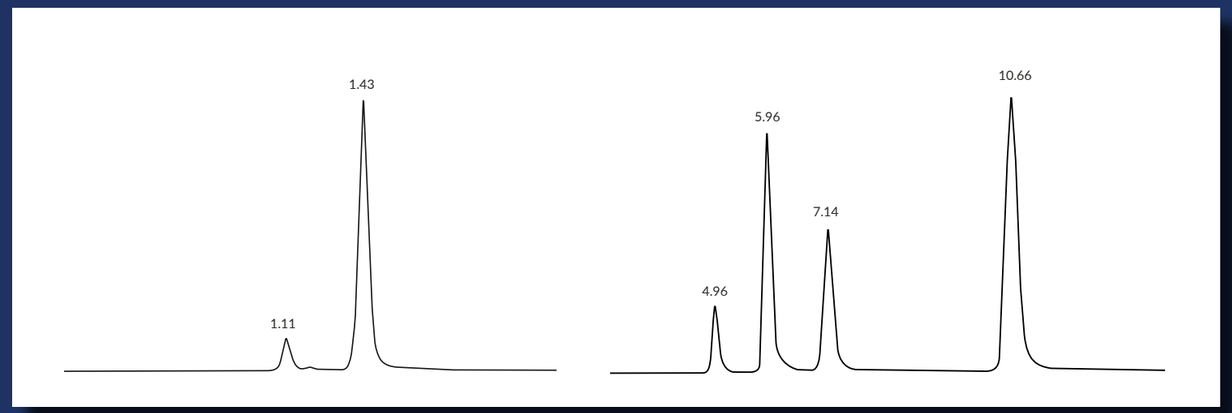
Mobile Phase: Heptan/IPA 85/15
Flow Rate: 60 ml/min
Temperature: Ambient
Pressure: 12 bar
Detector: UV @ 254 nm
Sensitivity: 0.6 mV

Description:

Packing Material: ReproSil Chiral-NR, 8 µm
Length: 260 mm ID: 50 mm
Shipping Solvent: Mobile Phase
Maximum Pressure: 250 bar
Hardware Type: LongLife
Frit: 2 µm
pH Range: 2.0 - 8.0

OTHER MANUFACTURERS MEDIA

Zorbax SB-AQ,
5 µm, 70 mm L x 30 mm ID



ca. 80,000 N/m

TEST CONDITIONS

Mobile Phase: MeOH/H2O 85/15
Flow Rate: 30 ml/min
Temperature: Ambient
Pressure: 24 bar
Detector: UV @ 254 nm
Sensitivity: 59.8 mV

Description:

Packing Material: Zorbax SB-AQ, 5 µm
Length: 75 mm ID: 30 mm
Shipping Solvent: Mobile Phase
Maximum Pressure: 210 bar
Hardware Type: LongLife
Frit: 2 µm
pH Range: 2.0 - 8.0

Peak 1: Uracil
Peak 2: Toluene

Luna C18 (3)
10 µm, prep 250 mm L x 70 mm ID

ca. 40,000 N/m

TEST CONDITIONS

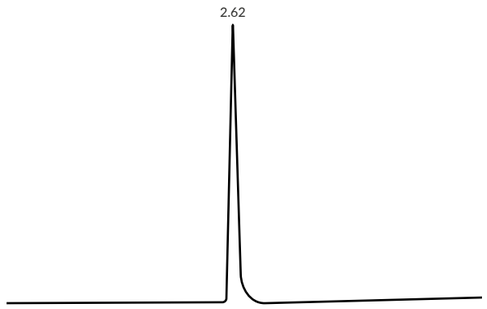
Mobile Phase: MeOH/H2O 85/15
Flow Rate: 120 ml/min
Temperature: Ambient
Pressure: 10 bar
Detector: UV @ 254 nm
Sensitivity: 1.8 mV

Description:

Packing Material: Luna 100 C18(3), 10 µm
Length: 250 mm ID: 70 mm
Shipping Solvent: Mobile Phase
Maximum Pressure: 100 bar
Hardware Type: LongLife
Frit: 2 µm
pH Range: 2.0 - 8.0

3 µm MEDIA FOR ACHIRAL SFC

Reprospher 100 2-EP,
3 µm, 100 mm L x 50 mm ID



ca. 90,000 N/m

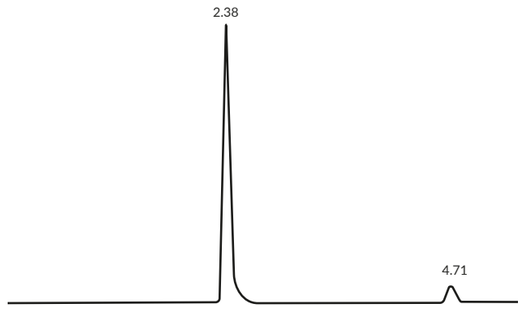
TEST CONDITIONS

Mobile Phase: MeOH/H2O 85/15
Flow Rate: 60 ml/min
Temperature: Ambient
Pressure: 85 bar
Detector: UV @ 254 nm
Sensitivity: 21.1 mV

Description:

Packing Material: Reprosher 100 PEI 3 µm
Length: 100 mm ID: 50 mm
Shipping Solvent: Mobile Phase
Maximum Pressure: 200 bar
Hardware Type: LongLife SFC
Frit: 2 µm
pH Range: 2.0 - 8.0

Reprospher 100 PEI,
3 µm, 100 mm L x 50 mm ID



ca. 110,000 N/m

TEST CONDITIONS

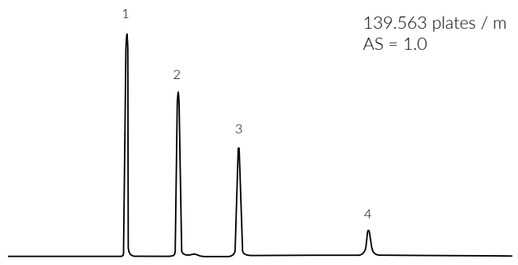
Mobile Phase: MeOH/H2O 85/15
Flow Rate: 60 ml/min
Temperature: Ambient
Pressure: 120 bar
Detector: UV @ 254 nm
Sensitivity: 58.7 mV

Description:

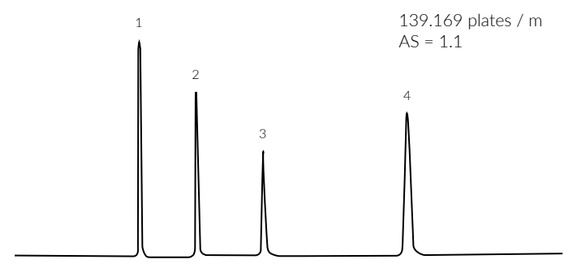
Packing Material: Reprosher 100 PEI 3 µm
Length: 100 mm ID: 50 mm
Shipping Solvent: Mobile Phase
Maximum Pressure: 200 bar
Hardware Type: LongLife SFC
Frit: 2 µm
pH Range: 2.0 - 8.0

HIGH RESOLUTION PREP CHROMATOGRAPHY PREP COLUMN PERFORMANCE WITH 3 µm PARTICLES

UP-SCALE



250 x 4,6 mm



250 x 50 mm

1 - Uracil 2 - Phenol 3 - N,N-Diethyl-M-Toluamide 4 - Toluene

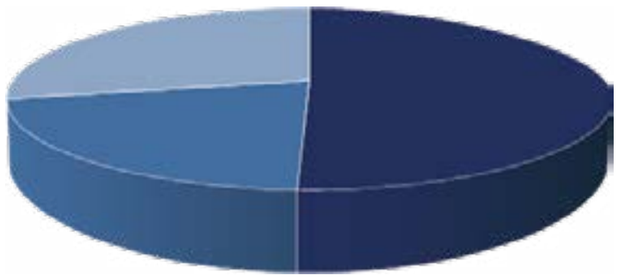
BENEFITS OF LONGLIFE

DR. MAISCH

- Packed by piston
- Flexible bed length
- DAC and SAC mechanism
- Packing and repacking service
- Available column ID - 25, 30, 40, 50, 70
- Scalability to > 150 mm ID -Using ModCol column / Multipacker

保存每一列和重新包装

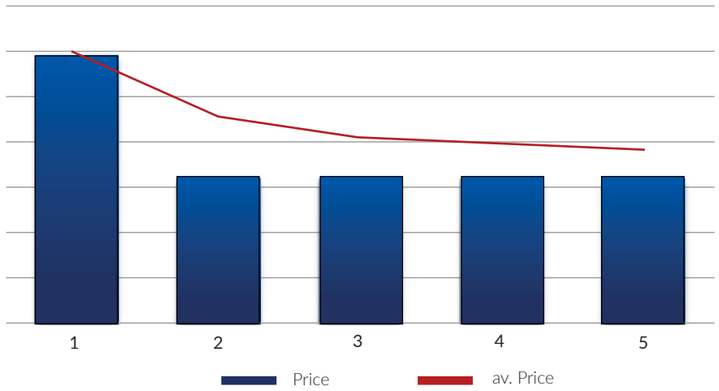
通常列硬件表示列值的重要部分：



- Hardware: 50 %
- Packing Serv: 20 %
- Media: 30 %

长寿命包装的resil - pur Basic-C18 10µm；250 × 50毫米

节省多次重新包装的长寿命硬件。



SUMMARY

01

性能和稳定性非常高！
列尺寸更短与MoDcol相比。

02

技术:
填料与MoD-col类似，但填料后储层与色谱柱分离。

03

活塞停留在柱上

04

只能安装在 Dr. Maisch HPLC

05

选择使用具有相同包装的MoDcol列技术，如果感兴趣的自包装或直径> 70毫米

06

LongLife在DAC和SAC模式下可用：25、30、40、50和70毫米内径

www.dr-maisch.com

Dr. Maisch

Any Column, Any Size, Any Media

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