



PROCESS-SCALE CHROMATOGRAPHY

# Bio-Rad® MainFrame™ Lifting Accessory

- Ideal where space is limited
- Simple to operate and maintain
- Compatible with current and planned column designs
- Strong stainless steel 304 construction
- No hydraulic system required

## Hoist-Free Lifting for Bio-Rad Process Chromatography Columns

The Bio-Rad MainFrame lifting accessory enables hoist-free operation of chromatography columns. It is a separate and movable device that can be used to lift and disassemble any Bio-Rad process chromatography column for media transfer, column inspection, maintenance, and cleaning. The column adaptor or column tube can be lifted easily using the existing actuator of the adjustable height adaptor, without the need for a separate appliance. Users, such as contract manufacturers, who often perform routine procedures will find the Bio-Rad MainFrame accessory indispensable. The Bio-Rad MainFrame accessory is recommended for every column from pilot to manufacturing scale.

The Bio-Rad MainFrame device is available in four sizes based on column diameter and is compatible with all existing and planned Bio-Rad process chromatography column designs. If the user wishes, the electrical cabinet of the piston motor can be mounted on the Bio-Rad MainFrame accessory.

Compared with a hydraulic system embedded on a column, the Bio-Rad MainFrame accessory provides a safe and ergonomic way to remove part of a column and perform operations such as reslurrying a packed bed or replacing a filter. The accessory can be detached from the column so that cleaning and storage can be accomplished outside the cleanroom.



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## General Handling

To operate the Bio-Rad MainFrame lifting accessory with a column, the central screw must be attached to the frame by the lifting nut. Then the central screw can be actuated by the existing packing motor or by the manual gear box so that the column cover moves up or down. When the set of spacers is used, the adaptor can be removed completely from the column tube. Without the spacers, you can lift the cover and the column tube to access the bottom plate for maintenance or inspection.

The height of the Bio-Rad MainFrame lifting accessory is always compatible with normal door height. For example, the height of the Bio-Rad MainFrame accessory is less than 2.2 m for a column with a 1,200 mm diameter and a 600 mm process tube length. All lifting accessories are manufactured from stainless steel 304.

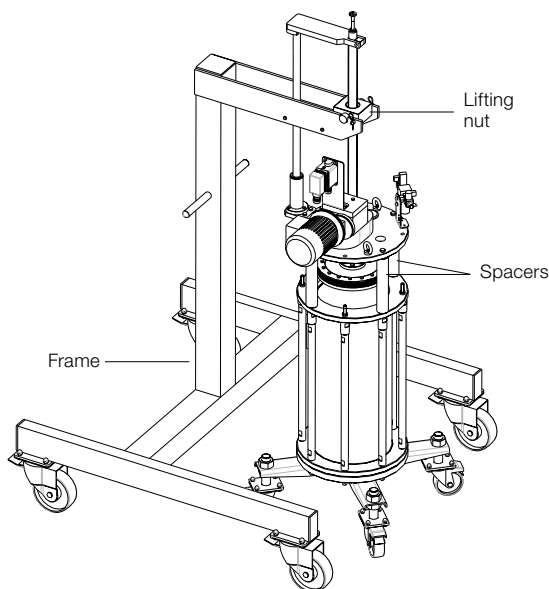
Preparation and lifting can be performed on the factory floor with no need for a lifting platform for personnel.

## Specifications

Bio-Rad MainFrame Size	Dimensions (L x W x H), mm
Bio-Rad MainFrame 450	1,170 x 1,210 x 1,600*
Bio-Rad MainFrame 1,000	1,450 x 1,800 x 2,200*
Bio-Rad MainFrame 1,400	1,850 x 2,420 x 2,200*
Bio-Rad MainFrame 2,000**	2,150 x 3,020 x 2,475*

\* Bio-Rad MainFrame accessory height given for chromatography tube height of 600 mm.

\*\* Customized Bio-Rad MainFrame accessories are available for other column sizes.



**Bio-Rad MainFrame lifting accessory and Bio-Rad® EasyPack™ column.** The lifting accessory consists of a passive frame, a lifting nut, and a set of spacers.

### Compatibility of Bio-Rad MainFrame Lifting Accessory and Columns of Different Diameters

	Bio-Rad Process Column Nominal Internal Diameter, mm										
	200	300	350	400	450	600	800	1,000	1,200	1,400	>1,400
Bio-Rad MainFrame 450	YES										
Bio-Rad MainFrame 1,000						YES					
Bio-Rad MainFrame 1,400									YES		
Bio-Rad MainFrame 2,000											YES

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