



Wedge HiRes® Column

15cm bed Wedge columns

True Scaled down Model of Industrial Scale Superflo Columns



Sepragen's dedicated process chromatographic engineers and scientists have responded to this scalability problem by designing the WEDGE HIRES® radial column. The WEDGE HIRES® fully exploits the separation capability and high capacity of low cost soft media as well as the faster flow media currently available. It does this without compromising performance in terms of chromatographic separation, efficiency and productivity. WEDGE HIRES® columns incorporate the patented design of the Wedge Columns radial flow design and traditional axial flow column chromatography. This permits simple linear scale-up of your bioprocess from lab scale axial columns to large-scale radial flow chromatographic columns. The Wedge HiRes® columns are Wedge columns with a 15 cm bed depth.

Be it in the Biotech, Plasma, Dairy, Juice or food industries Column chromatography is being extensively used as a tool for extraction and purification of Key components which are in very small in a complex mixtures. However, its application for the production of these molecules / components from crude sources, in commercially viable quantities, has been restricted due to the lack of availability of the right chromatography tools. For example purifying Factor VIII from Plasma or Lactoferrin from Whey or Tanins from Grape fruit juice has been hard to scale up into Industrial scale due to limitations of Axial flow Chromatography. Conventional axial process scale columns are not able to support the low cost and high capacity softer media without resulting in high back pressures, over compacting and curtailed resolution. Further, since the separation has to be optimized continuously as the scale of operation changes, valuable time and resources are sacrificed making chromatography a unviable production process especial when cost is a critical factor.

✓ True Linear Easy Scale-up

✓ Easy Validated Packing method

✓ High Flow Rates

✓ Low Back Pressure

✓ High Productivity

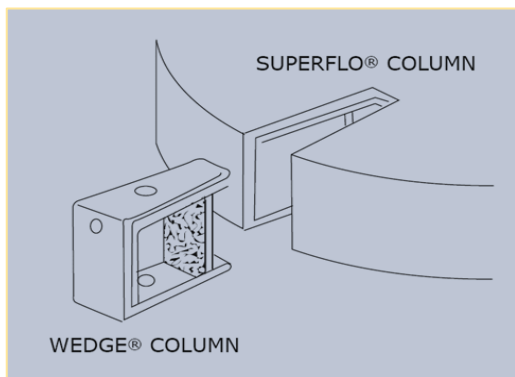
✓ Higher Yields

✓ Superior Distribution

✓ Consistency in Performance

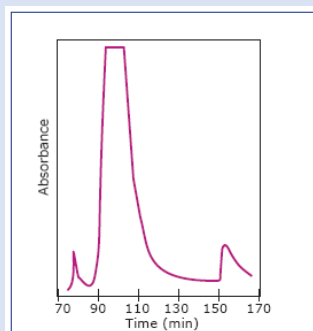


The Wedge HiRes® – A section of the Process scale Superflo Columns



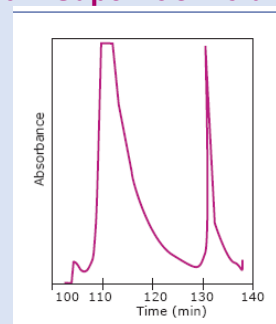
SCALE-UP OF 10 ml WEDGE HIRES® Columns

10 ml Wedge HiRes® Column



Column: 10ml Wedge HiRes® Column
Resin: Fast Flow Sepharose
Load Flow Rate: 0.16 cv/min
Elution Flow Rate: 0.16cv/min
Protein binding: 5.3mg/ml of resin
Buffer: 0.05 M Tris-HCl, pH 7.1
Gradient: 0.25 M NaCl in Tris Buffer

20 L Superflo® Column



Column: 20L Superflo Column
Resin: Fast Flow Sepharose
Load Flow Rate: 0.16 cv/min
Elution Flow Rate: 0.25cv/min
Protein binding: 6.85mg/ml of resin
Buffer: 0.05 M Tris-HCl, pH 7.1
Gradient: 0.25 M NaCl in Tris Buffer



Wedge HiRes® Columns Sizes and Materials

Wedge HiRes® Columns come in various sizes or they can be customized to your specific needs. Our standard Acrylic Wedge HiRes® columns come in sizes 5 mL to 1000 mL with 10 cm bed height. The standard Stainless Steel Wedge HiRes® Columns range in size from 250 mL to 1000 mL with 15 cm bed height. The Stainless Steel Wedge HiRes® Columns come with 10 micron stainless steel frits. Columns exhibit excellent chemical resistance in the range of pH 2-12.

To learn more call: (510) 475-0650
E-mail: info@sepragen.com