



**Johnson
Screens**

**A brand of
Aqseptence Group**

Radial Spider Lateral System (Patent-Pending)

Applications

- Direct Lithium Extraction (DLE)
- Chemical Processing
- Ion Exchange
- Absorption/Desorption
- Sand Filters
- Granular Activated Carbon (GAC) Vessels

Benefits

- Utilizes more interior volume than other vessel internal options
- Process flow rate can be increased due to increased media utilization
- Less fluid is wasted filling the unused head region
- Vessel size and quantity can be reduced while maintaining capacity and output, resulting in CapEx and OpEx savings
- Uses custom internal flow modifiers for efficient distribution w/ low headloss
- Suitable for new and retrofitted vessels

Features

- Patent-pending Spider Lateral design uses unique pipe based laterals arranged radially around a central hub
- Can be installed at the top and bottom of the vessel and work as collectors and distributors
- The Vee-Wire screens surround a perforated pipe providing strength and a controlled distribution of fluid. The screen slot (opening) size is based on the media size, and can be as small as 0.001" (25 microns)
- The laterals easily bolt into place, requiring no welding for installation
- Manufactured using a range of materials that can withstand highly corrosive environments



Make Full Use of Every Vessel

Lateral distributors and collectors are vessel internals used in the processing of fluids across a variety of applications. The patent-pending design for the Spider Lateral builds on decades of success of other Johnson Screens header lateral systems and introduces angled arms that more closely match the curvature of the vessel head than prior lateral assemblies.

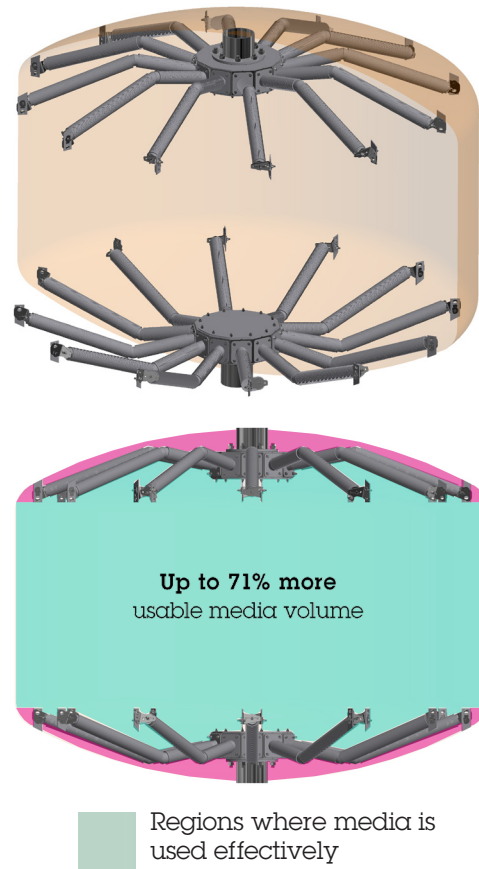
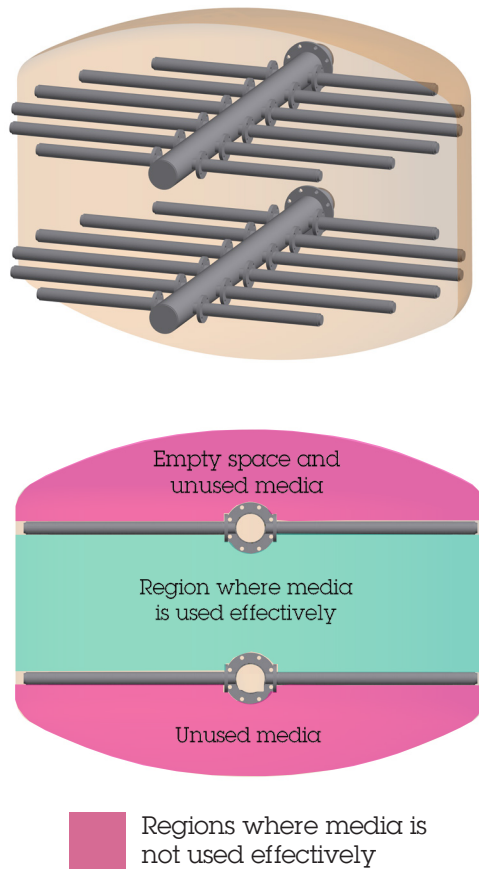
The distributor and collector pipes are designed by Johnson Screens engineers with a unique pipe hole pattern for every project, backed by Computational Fluid Dynamics (CFD) Analysis. The pipes are engineered to maximize usable volume while ensuring an even fluid distribution across the media beds and minimizing the pressure drop of the assemblies.

The Spider Lateral reflects Johnson Screens' commitment to meeting the unique challenges and specifications of every customer and project. Our products are fabricated to withstand highly corrosive environments from a range of materials including 304, 316L, 2205 Duplex, 2507 Super Duplex, C276 Hastelloy®, Inconel® 625, and more. With our industrial knowledge and engineering expertise, the Spider Lateral is an optimized solution for every application.

Header Lateral Assembly (Traditional)

vs.

Spider Lateral Assembly (New)



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