

Molecular Sieve Laterals

Low capital cost internal sieve lateral upgrade package improves efficiency

Since our inception in 1995, ICM has made it our mission to sustain agriculture through innovation by engineering, building, and supporting the industry's most successful ethanol plants.

We're committed to the long-term success of bio-based renewable fuels, and we've developed a menu of nearly three dozen products and services tailored specifically to benefit the ethanol industry, including our Molecular Sieve Internals Upgrade that will help improve your plant's efficiency through smart engineering.

Easy to operate; eliminates bed upsets

ICM's engineers have been hard at work developing production-focused solutions for the ethanol industry. Along with exciting innovations like our Plant Optimization Services and an Advanced Process Control system developed specifically for the ethanol industry, our Molecular Sieve Internal Upgrade was developed to simplify plant operation.

Benefits of this sieve modification include:

- Simplified bead addition requiring no downtime
- Increased safety; elimination of bed upsets and top screen upsets
- Reduced bead attrition rate through longer cycles and less bead crushing
- Fewer annual equipment cycles result in less valve wear, reducing maintenance costs
- Extension of sieve bottle lifespan through longer cycle times
- Potential dehydration capacity increase without the incorporation of additional vessels
- Process cycle reduction lowers steam usage, lowering natural gas energy costs
- Reduced maintenance costs due to less dusting and bead migration during regen

If your mole sieves are not pressure limited, there is a potential for:

- Capacity increase (plant specific)
- Increased production rate (plant specific)

We recommend that facilities considering this technology take advantage of our Plant Optimization service to analyze the specific benefits your plant will be expected to achieve.

Proven, affordable technology

Manufactured in-house to maintain consistent and reliable quality control, our upgrade package is comprised of three main components:

- Sieve bottle distribution system
- Online sieve bead addition system with additional beads
- Isolation hand valves

This system is designed by the same engineers who design our plants, and it can be delivered and installed in as little as 3 weeks.

Turnkey service available

We also offer:

- First break and header removal
- Bead installation
- Sifting and vacuum services
- Crane rental and installation labor

We welcome the opportunity to work together to develop the best solution for your plant.





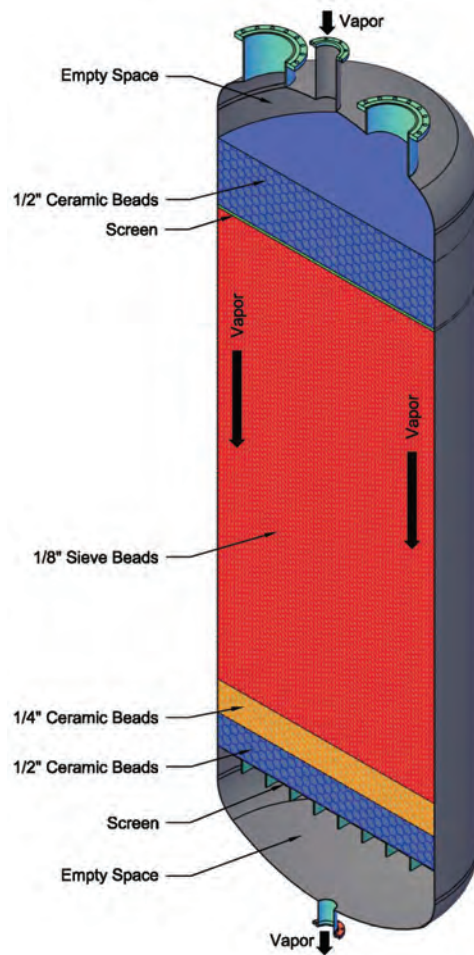
New opportunities

Contact us for pricing!

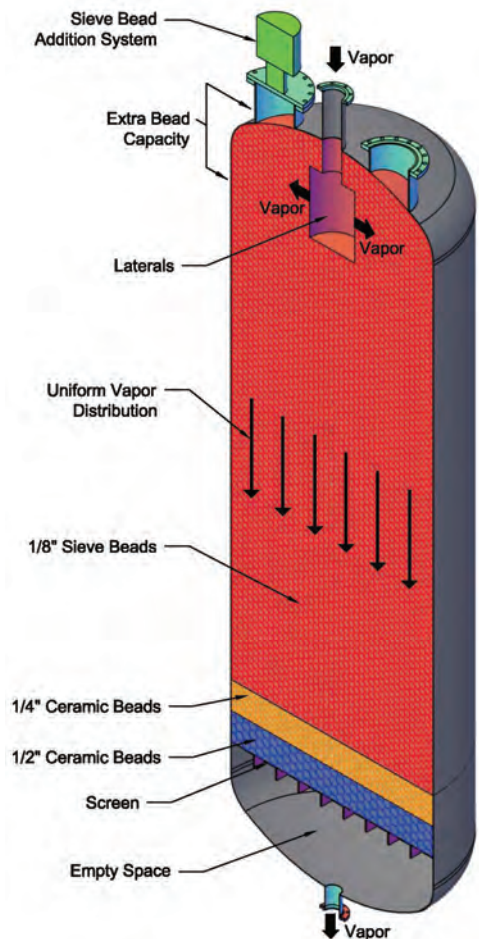
Our professional service representatives are happy to assist you in identifying how this system can benefit your plant.

Learn more about ICM's Molecular Sieve Upgrade Package or the other products and services ICM offers to meet your plant's needs! Call our Customer Service department today.

877.456.8588



Original Design



Retro-fit

This design combines the performance benefits of the modification with the cost savings realized by utilizing existing equipment and reducing installation downtime. The design allows you to add beads to top off your bottles while your plant is online. It also eliminates potential bed upsets that can occur with the layered design.



the *energy* of innovation™

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