



## WHY INDUSTRY LEADERS CHOOSE ZECOR® EQUIPMENT

Controlling corrosion and its negative effects ranks near the top of the list for every sulfuric acid plant owner. Nobody has more experience in the sulfuric acid process than MECS, Inc. (MECS), whose tower and pump tank designs embody decades of learning about what does and does not work in the real world of acid plant operations. The superiority of MECS designs often resides in the fine details that the casual eye just does not notice. These designs, while important, are just half of the story. MECS has an exclusive family of ZeCor® custom alloys formulated to provide long-lasting service against the unforgiving abuse of sulfuric acid. Today's industry leaders choose ZeCor® towers and pump tanks because of this unique combination of proven designs and specialty metal alloys.

MECS tower designs are further complemented by a full offering of other tower internal components—all integrated into a complete system with superior performance. MECS provides UniFlo® acid distributors, a proprietary line of low-pressure-drop ceramic packing materials, low-pressure-drop packing support grids, vortex breakers, strainers and Brink® mist eliminators, which all have been designed to provide the highest absorption efficiency at the lowest pressure drop with the lowest acid mist carryover.



## MECS® ZECOR® TOWERS AND PUMP TANKS

### FEATURES AND BENEFITS OF MECS® ZECOR® TOWERS AND PUMP TANKS

*MECS high-performance design has surpassed the acid industry's use of traditional brick-lined equipment and has many advantages.*

#### Advantages for all plants:

- Less on-site construction
- Less dependence on outside suppliers
- Easier to maintain and service
- Smaller footprint and/or higher throughput and absorption efficiency
- Complements other MECS tower technologies, including UniFlo® distributors, Super Saddle™ packing systems, ZeCor® support grids and Brink® mist eliminators

#### Advantages for replacements in existing plants:

- Much shorter installation schedule
- Greater project control
- Lower installation cost

#### Advantages for new plants:

- Lower foundation and energy costs
- Promotes lower sulfates and cleaner operation



# MECS® ZECOR® TOWERS AND PUMP TANKS

## ZECOR® ALLOYS PREFERRED OVER BRICK-LINED TOWERS

The traditional method of constructing acid towers has been with the use of brick-lined carbon steel shells. For years, the brick linings were thought to have been the best alternative to preventing corrosion—until the ZeCor® family of alloys was developed. MECS process technology allows for the towers to be made smaller and much lighter than conventional brick-lined towers. As a result, foundation engineering and material costs are lower. A scheduling bonus is achieved as well, since plant shutdown and field construction time is significantly shortened.

Since no brick is used in the ZeCor® tower systems, damage to acid pumps from dislodged whole bricks, mortar globs, brick chips and other related foreign object debris is totally eliminated. In addition, the use of ZeCor® towers improves acid quality by lowering the iron content and minimizing the levels of sulfate normally found in the strong acid circuit. Fewer sulfates mean cleaner acid towers that operate at higher efficiencies and require less downtime due to maintenance. ZeCor®-Z and ZeCor®-310M towers and pump tanks provide you with the industry benchmark of top-quality fabrication for your acid plant.

The ability of our engineers to fully understand the operation and performance of the entire acid plant allows MECS to design, fabricate and provide you with the most cost-effective solution to meet your sulfuric acid tower and pump tank needs.



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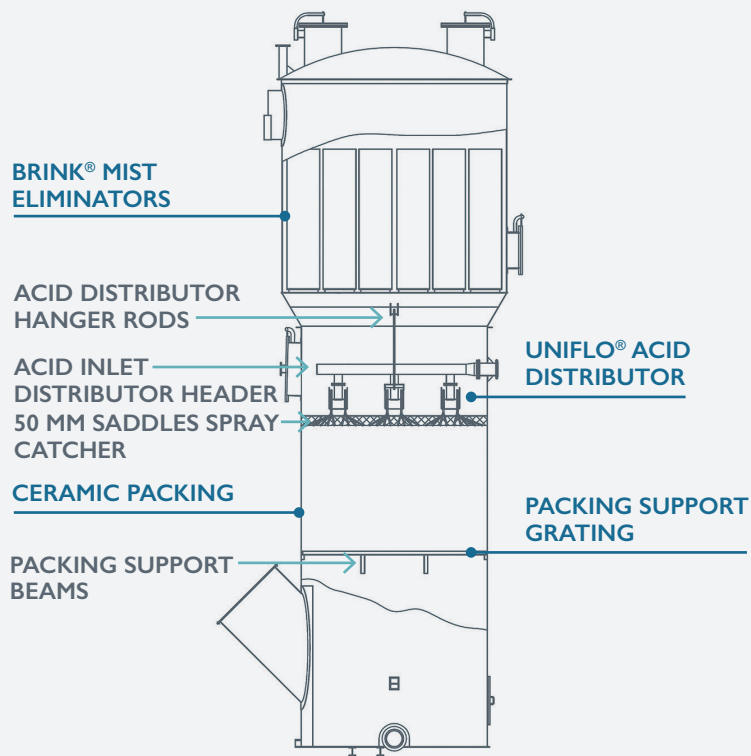
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## ZECOR® TOWER ELEVATION



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