

# ENGINEERED ALLOY PRODUCTS ZECOR® UNIFLO® ACID DISTRIBUTORS

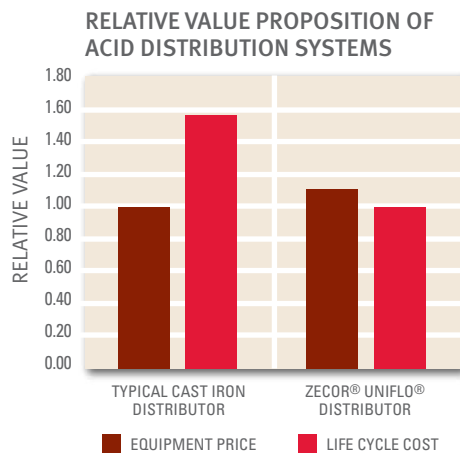
Ensures optimum absorption efficiency, minimum mist generation and maximum service life of downstream equipment.



## MECS® MATERIALS AND PROCESS EXPERIENCE MAKES THE DIFFERENCE

MECS® has been providing the sulfuric acid industry with high performance acid distribution systems for decades. Embodied in the latest design iteration of the UniFlo® distributor are the newest MECS® corrosion resistant alloys – ZeCor®-Z and ZeCor®-310M.

To achieve cost efficiency and reduce gas velocity, MECS® reduces the number of required trough rows in your tower and achieves high absorption efficiency and lower pressure drop. A set of uniquely designed and patented gate assemblies in each trough allows for quick, easy flow adjustment. These adjustments can be made in minutes without changing out orifice plates. The result is a distributor with continuous and extremely uniform acid distribution – with the added benefits of quick set up, flow calibration and faster field installation.



## FEATURES AND BENEFITS:

- Uniform acid distribution for higher efficiency and less pressure drop.
- Enhanced tower performance by eliminating gas channeling and SO<sub>3</sub> slippage.
- Resistant to sulfuric acid corrosion, velocity induced erosion and plugging.
- Lighter weight allows for ease of field installation.
- Adjustable gate assemblies result in fast set up and calibration.
- Open troughs make accurate visual inspection possible.
- Less maintenance results in lower life-cycle costs.
- Available in corrosion resistant ZeCor®-Z and ZeCor®-310M.
- Proven design — hundreds of successful installations world wide.

**MECS®**  
**ZECOR® ALLOY**

Learn more at [www.mecs.dupont.com](http://www.mecs.dupont.com)



The miracles of science™

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## WHY ENGINEERS IN THE KNOW SPECIFY ZECOR® UNIFLO® DISTRIBUTORS

The UniFlo® distributor is lightweight and can be easily installed by plant maintenance personnel. The new wider and deeper trough bodies reduce acid velocities to a minimum, allowing for smooth acid flow. The UniFlo® distributor is available in ZeCor®-Z and ZeCor®-310M to meet specific customer design needs. These alloys exhibit corrosion rates of less than .001 inch/yr (.0254 mm/yr) under normal operating conditions in 93% to 99% strong sulfuric acid. When properly operated and maintained, equipment life of 20+ years is expected.

UniFlo® distributors are designed for distribution patterns of 1.3 to 4 pts/ft<sup>2</sup> (43 pts/m<sup>2</sup>). This allows for complete coverage over the entire tower cross section, including the tower perimeter. This coverage insures optimum tower performance.

To date, MECS® has hundreds of UniFlo® acid distributors installed worldwide and this same UniFlo® design is used in all new MECS® acid plants. High pressure drop, sulfate build-up, gas channeling, mist carryover and SO<sub>3</sub> slippage can all be virtually eliminated by using this high value added technology in your acid plant.



UniFlo® Acid Distributor baffle and gate assembly



[www.mecs.dupont.com](http://www.mecs.dupont.com)

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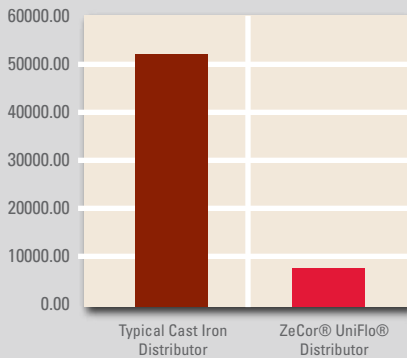
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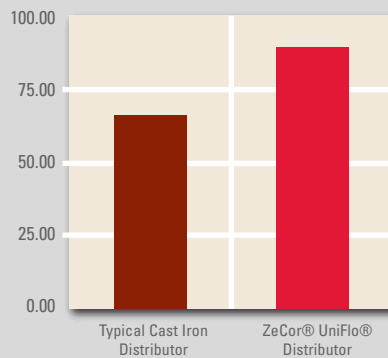
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### COMPARABLE EQUIPMENT WEIGHT (LBS)



22'- 6" (6860 mm) ID tower.

### OPEN AREA IN TOWER (%)



Maximizing open area reduces pressure drop and mist generation.

