MECS® developed the ZeCor® family of alloys for superior corrosion resistance in a wide range of sulfuric acid concentrations, temperatures and specific applications.

**Advantages/Benefits:**

- The mechanical corrosion properties of ZeCor Alloys allow for a versatile mix of fabricated acid plant components.
- ZeCor Alloys can be easily welded and repaired by trained on site plant personnel.
- Proven welding process that uses ZeCor filler wire. Welds are qualified to ASME code, section IX procedure and maintain full corrosion resistant properties throughout.
- ZeCor Alloys are available in a variety of thicknesses allowing for customized equipment designs to accommodate differing corrosion requirements.
- Lower total installed project cost and life cycle maintenance cost.
- MECS process knowledge and experience combined with the corrosion resistant properties of ZeCor Alloys will assure the best design for your acid plant application.

ZeCor towers and pump tanks can be shop fabricated prior to plant shutdown and staged on site for insertion of Brink mist eliminators, UniFlo acid distributors and tower packing.
ZeCor® Alloy

Corrosion Resistant High Performance Metals

ZeCor packing supports are designed with more than 80% open flow area resulting in excellent gas distribution.

Standard and custom fabricated ZeCor pipe fittings in various sizes are readily available for acid piping systems from MECS.

"MECS ZeCor ASME code rated Acid Cooler"

A variety of acid plant maintenance and process items can be fabricated from ZeCor corrosion resistant high performance alloys.

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ZeCor®-Z PROPERTIES

<table>
<thead>
<tr>
<th>PHYSICAL PROPERTIES</th>
<th>MECHANICAL PROPERTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density = 0.275 lb/in³</td>
<td>Min. Yield Strength</td>
</tr>
<tr>
<td></td>
<td>(0.2% offset) = 37.0 ksi</td>
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<tr>
<td></td>
<td>Min. Ultimate Tensile = 78.0 KSI</td>
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<tr>
<td></td>
<td>Min. Elongation = 30%</td>
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</tbody>
</table>

ZeCor®-Z ISO CORROSION CURVE

1 mpy (1 mil per year = .001 inch/yr = .0254 mm/yr)

ZECOR COMPONENTS

MECS offers a complete line of major components and maintenance upgrade accessories fabricated from ZeCor Alloys, including:

• Towers
• Piping Systems
• Acid Coolers
• Packing Support Grids
• Nozzle Sleeves
• Outlet Sleeves
• Orifice Plates
• Pump Tanks
• Uniflo Distributors
• TowerGard Mesh Pads
• Inlet Acid Strainers
• Outlet Acid Strainers
• Vortex Breakers
• HRS Equipment

These components can be fabricated from any of these high performance metals, which include ZeCor-Z, ZeCor-310M, ZeCor-310MT, ZeCor-C, ZeCor-CL and ZeCor-CL29. They are available exclusively from MECS.

www.mecsglobal.com

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