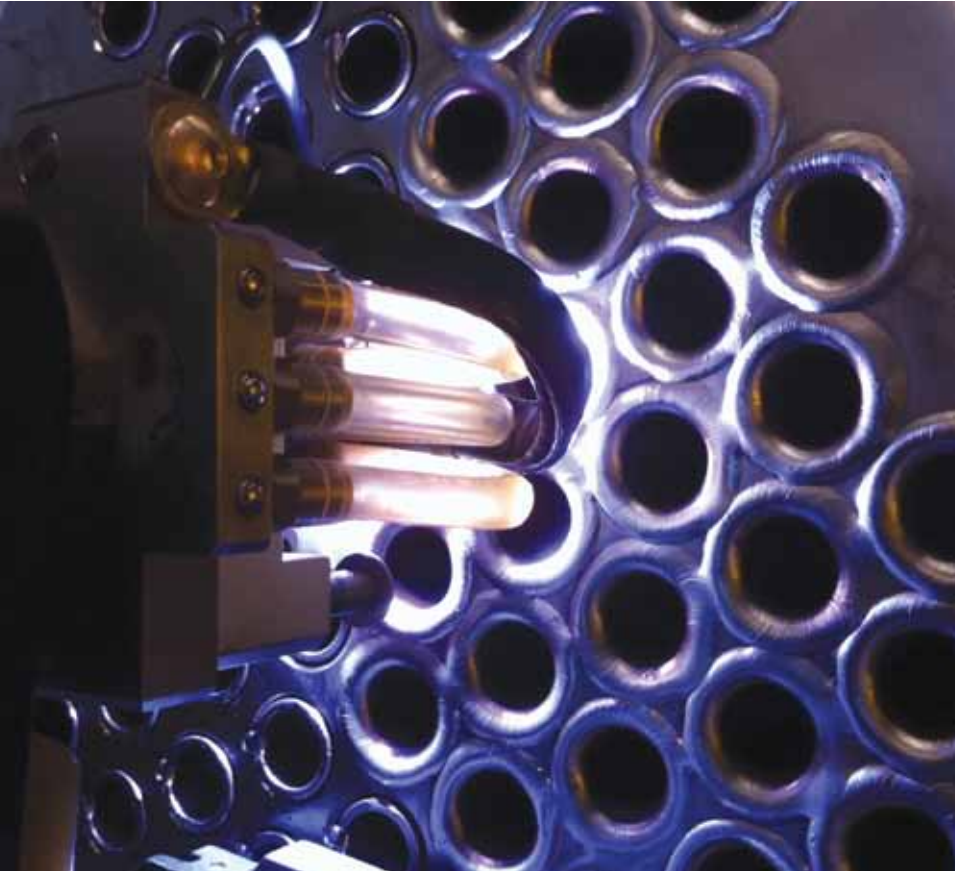


MECS® ACID COOLERS ZECOR®, ANODICALLY PROTECTED AND SEA WATER



ZeCor® materials of construction and robotic weld uniformity assures trouble free reliability and long service life.

MATERIALS SCIENCE, DESIGN AND EXPERIENCE DEFINE MECS® ACID COOLERS

MECS® provides a full range of Acid Coolers in ZeCor®-Z, a high performance MECS® alloy. When constructed of other alloys, MECS® Acid Coolers employ the FilmGARD 5 anodic protection system to control corrosion.

Every MECS® Acid Cooler is custom designed and fabricated to your acid plant's specific application. Materials of construction are selected according to process conditions to maximize the effective life of the acid cooler and to minimize life cycle costs as well as avoiding unscheduled maintenance shut downs. MECS® Acid Coolers are robustly designed and built to deliver the highest reliability. Every MECS® Acid Cooler meets or exceeds the TEMA "C" and ASME standards for heat exchanger and pressure vessels. Seasoned acid plant engineers rely on nearly four decades of MECS® Acid Cooler design/build experience. Only the highest quality materials and craftsmanship are acceptable in these critical sulfuric acid processes and MECS® delivers.

FEATURES AND BENEFITS:

ZECOR®-Z COOLERS

NO ANODIC PROTECTION REQUIRED

- Constructed using MECS® ZeCor® high performance alloys for long cooler life
- Simple operation and low maintenance
- Corrosion rates demonstrated at less than 1 mpy (.025 mm/year)

ANODICALLY PROTECTED ACID COOLERS

- Employs FilmGARD 5, the newest and most advanced anodic protection system to reduce corrosion rates in ferrous metal coolers
- Allen-Bradley* controls and a single Power-Pac for high reliability in heavy duty use

SEA WATER COOLERS

- Constructed using high performance alloys which offer outstanding resistance to sulfuric acid and the high chlorides found in sea water
- Tube to tube sheet stress corrosion cracking due to high chlorides is virtually eliminated

*Allen-Bradley is a division of Rockwell Automation

HEAT EXCHANGERS

Learn more at www.mecs.dupont.com

MECS® ACID COOLERS ZECOR®, ANODICALLY PROTECTED AND SEA WATER

MECS® QUALITY STARTS AT THE MOLECULAR LEVEL

The ZeCor® family of corrosion resistant alloys has established the world's standard for proven performance in sulfuric acid service. The MECS® quality commitment to you: We constantly strive for the optimum design to maintain the delicate balance between performance and cost that will give you the best overall solution to your acid cooling and corrosion resistance requirements.

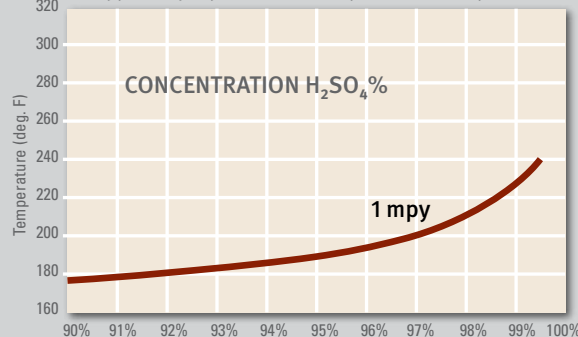


ZECOR®-Z PROPERTIES

PHYSICAL PROPERTIES	MECHANICAL PROPERTIES
Density = 0.275 lb/in ³	Min. Yield Strength (0.2% offset) = 37.0 ksi
	Min. Ultimate Tensile = 78.0 Ksi
	Min. Elongation = 30%

ZECOR®-Z ISO CORROSION CURVE

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



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TECHNICAL SUPPORT AND SPARE PARTS

Technical service is available to all of our customers through our marketing and technical services department. Assistance for start-ups and turnarounds, training, and maintenance service is also available. Spare parts for all of our Acid Coolers and Filmgard systems are shipped with short lead times and critical parts are stocked for immediate shipment. As a technology-based company, our strength lies in providing you the best products and services available.

MECS® SULFURIC ACID EXPERIENCE — UNMATCHED WORLD WIDE

Since 1925, MECS® has offered process technology and high performance products for the sulfuric acid industry. MECS® overall acid plant design and construction experience combined with extensive corrosion R&D and workability testing has led to material improvement breakthroughs for the acid industry. To assist you in choosing these proven and reliable anodic protection technologies for your acid cooler, MECS® has sales and engineering offices world wide that can help you specify the MECS® Acid Cooler best suited to your needs.

MECS® Acid Coolers is a member of the MECS® family of Heat Exchanger product technologies.