

# **BRINK® AUTODRAIN<sup>™</sup> FIBER BEDS** FOR SULFURIC ACID PLANTS



## AUTODRAIN<sup>™</sup> EFFECTIVELY DRAINS ACID FROM BRINK<sup>®</sup> MIST ELIMINATORS WITHOUT THE USE OF EXPENSIVE AND COMPLEX SEAL LEG PIPING SYSTEMS.

### **NEW INSTALLATIONS**

With Brink® AutoDrain™, seal legs, seal cups and complex drain piping are not required for hanging fiber bed mist eliminators. Significant initial cost reduction and life cycle maintenance cost reductions will result AND the project schedule can be shortened. Additional value can be realized eliminating the hanging mist eliminator seal system design: deletion of stainless steel piping, reduced field labor for installation, enhanced safety and no need for future seal system inspection or maintenance repairs. In addition, plate and vessel savings from a smaller diameter tower design may be realized, should that option be pursued.

### **EXISTING PLANTS**

All of the "NEW INSTALLATIONS" benefits (above) can be realized, except the option for smaller tower design. In addition, for new Brink<sup>®</sup> element replacement in existing facilities, the extra height available can allow for longer functional process length on the Brink<sup>®</sup> AutoDrain<sup>™</sup> elements, resulting in de-bottlenecking opportunities. Lower pressure drop and/or increased plant rates may be realized. Fast track turnarounds can be achieved due to less field work required.

### **RETROFIT/RE-PACK**

All of the "EXISTING PLANTS" benefits (above) can be realized. Modification to element screen cages and the addition of proprietary embedded drainage devices will be installed to incorporate the Brink<sup>®</sup> AutoDrain<sup>™</sup> design during an element re-pack. The retrofit elements will operate like new Brink<sup>®</sup> AutoDrain<sup>™</sup> mist eliminators without the need for filling seal cups, materials and labor for seal cups and/or drain piping.

# FEATURES AND BENEFITS:

- NO element seal legs a much less expensive and faster installation
- NO seal cups or routing of seal leg piping to troughs
- NO need to establish a seal prior to start-up — seal is established automatically
- NO handling of hazardous process liquids to charge seal cups
- Safer and faster to inspect tower internals below the tube sheet
- Safer and faster plant start-ups
- Eliminate seal leg failures, a major source of maintenance headaches
- An optional feature offered on Brink<sup>®</sup> XP and ES hang down elements



MECS BRINK®

Learn more at www.mecsglobal.com

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# **INNOVATIVE ENGINEERING**

MECS° leads the world in mist eliminator technology and is dedicated to continuous improvement and fiber bed research and development. Brink° fiber beds are designed to remove virtually any type of mist from any gas stream. Unlike other mist collection technologies, Brink° fiber beds excel at collecting sub-micron sized aerosol mists – the most difficult particle sizes to effectively capture.

MECS<sup>®</sup> welcomes the opportunity to perform analyses of your particular application, to determine the economic viability of AutoDrain<sup>™</sup> for new installations and retrofits, to existing sulfuric acid plant.

# SEAL LEG SYSTEM VS. AUTODRAIN™\*

## COST COMPARISON - TIME AND MONEY

	SEAL LEG SYSTEM	<b>AUTODRAIN</b> <sup>™</sup>
MATERIALS	\$100K	\$0
LABOR	\$100K	\$0
(PIPE, FITTINGS, DESIGN AND FIELD INSTALLATION)		
SCHEDULE	+2 DAYS	SAVES 2 DAYS
INSPECTION	@ MAJOR TURN AROUNDS	NOT REQUIRED

\*FOR A 3000 TPD PLANT – 50 ELEMENT FAT

# **REDUCED EMISSIONS WITH AUTODRAIN**<sup>®</sup>



\*ACTUAL EMISSION LIMIT DEPENDS ON LOCAL REGULATION

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