

Chemical Dilution Trough

Water treatment equipment for diluting acids used in cooling towers.

Available Models:

Micro Acid Eddy Max Acid Flow Model #AE-MIC-PVC 250 gpd Model #AE-MIC-CPVC 250 gpd

Macro Acid Eddy Max Acid Flow Model #AE-MAC-PVC 500 gpd Model #AE-MAC-CPVC 500 gpd

Mega Acid Eddy Max Acid Flow Model #AE-MEGA-PVC 750 gpd Model #AE-MEGA-CPVC 750 gpd

*Optional *Closed Trough* design is available in all models.

The "Acid Eddy" chemical dilution trough was designed to significantly extend the service life of cooling tower basins and sump pumps. Because chemicals are nearly twice as heavy as water, they would normally settle to the bottom of the cooling tower. Over time, the chemicals would attack the concrete basin along the structural supports, which will cause premature erosion. This problem can be alleviated by diluting the chemicals with water before they are introduced into the basin.

The "Acid Eddy" dilution trough is raised on the inlet, creating a main current of water and acid downhill. As the acid/water solution flows over a series of baffles, the barriers impede the main current flow, which creates multiple eddies. These eddies then dilute the acid before it enters into the cooling tower. The diluted solution rapidly disperses throughout the basin.



Applications:

- · Sulfuric Acid
- Sodium Hypochlorite (Chlorine)
- · Corrosion Inhibitors
- Cooling Tower Dispersant

Benefits:

- Drastically reduces chemical damage to cooling tower basin
- Protects cooling tower sump pumps
- Reduces downtime of tower for basin repair
- Simple design greatly improves reliability
- More precise chemical control
- Lowers chemical costs by controlling chemical feed rate

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Water Treatment Professionals







Chemical Dilution Trough







Model #	Max Acid Feed Rate	Length End to end	Width (Base of Support Feet)	Trough Weight	Shipping Weight (Crated)	Connections:
*MICRO AE-MIC-PVC AE-MIC-CPVC	250 gpd	55 in.	12 in.	25 lbs	236 lbs. (60" x 21" x 26")	½" PVC FNPT for Water ½" PVDF (Kynar) FNPT for Chemical
*MACRO AE-MAC-PVC AE-MAC-CPVC	500 gpd	90 in.	12 in.	70 lbs	330 lbs (90"x20"x 26")	3/4" PVC FNPT for Water 1/2" PVDF (Kynar) FNPT for Chemical
*MEGA AE-MEGA-PVC AE-MEGA-CPVC	750 gpd	94 in.	12 in.	160 lbs	550 lbs	1" PVC FNPT for Water 3/4" PVDF (Kynar) FNPT for Chemical
*Optional Closed Trough Design Available (ordering example AE-MIC-PVC-CL)						

Flow Monitoring

Chemical overdoses can severely damage a cooling tower system, the use of pH monitoring and acid flow monitors should be considered.

Optional water and acid feed verification flow monitors / meters permit accurate measurement and control of chemical feed systems. Contact Global Treat, Inc. for optional flow monitoring devises.

Available Options:

- ☐ Flow Monitor for simple verification of water or acid flow or no flow
- ☐ Flow Meter to indicate flow via a local indicator and 4-20mA output for water or acid flow.
- ☐ Optional "Closed Trough" Design

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