



Mixing Liquids Models CTE, TME

If any part of your processing operation requires mixing, then Penberthy circulating tank eductors, also known as in-tank mixers, may provide a low cost alternative over other mechanical methods. These units promote more thorough mixing action than either mechanical mixing or air sparging. The flow pattern is easily controlled and provides more complete integration of substances in a wide variety of viscosities and liquids. Penberthy in-tank mixers are inherently non-clogging, and with no moving parts require little or no maintenance. Slurries containing abrasive solids can wear out mechanical mixer blades, involving constant maintenance and process down time.

*Penberthy Models **CTE** and **TME** in-tank mixers answer the demand for more efficient, low-cost liquid and slurry mixing. These models can be used in numerous applications including: hazardous waste & waste water processing, cooling tower circulation, tank truck agitation, additive infusion, blended solution agitation, plating tank agitation and separation prevention of non-mixable liquids or stratification of dissimilar liquids. Industries that could use eductors include: chemical processing, food processing, electroplating, fertilizer agrichemical processing and petrochemical processing.*

Models Available

CTE, TME



Selection Guide

Fitting these specialized jet pump/tank eductors to your specific situation requires some data that only you can provide. Complete the application form with the required information below, and then contact your Penberthy sales representative to review the final details that will make selection of the correct tank eductor for your specific application an easy job.

MOTIVE:

- Operating Liquid(s) Involved
- Pressure (Available)
- Flow Rate (Volume available)
- Temperature
- Specific Gravity/Viscosity

TANK:

- Tank Size (Dimensions)
- Tank Shape
- Maximum Volume (Total amount to be mixed)

TIME:

- Time required to achieve uniformity (Turnover rate)

OTHER:

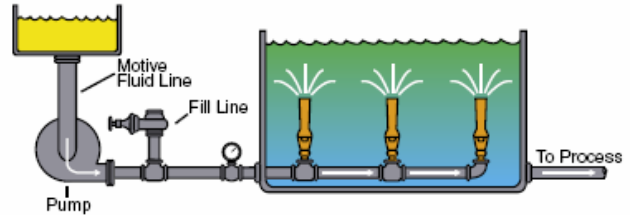
- Solids That Are Involved For Suspension

Model Specifications

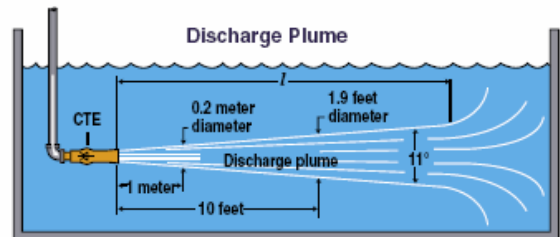
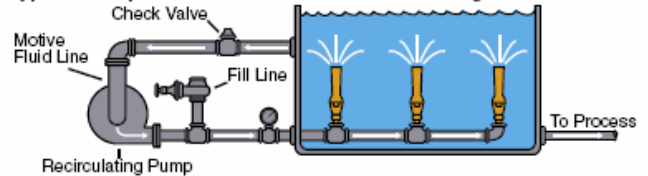
Model	CTE Circulating Tank Eductor	TME Tank Mixing Eductor
Pressure differential of inlet to tank pressure	10-100 psig (70-690 kPag)	10-50 psig (70-345 kPag)
Mixing ratio	3:1	4:1
Max. operating liquid viscosity	up to 2,000 cPs	up to 2,000 cPs

Typical Applications

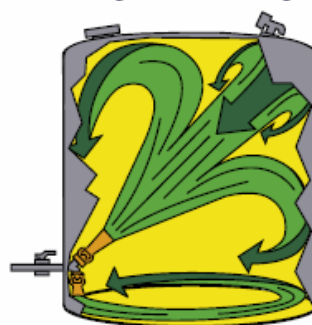
Typical Multiple TME Installation For Mixing Two Liq-



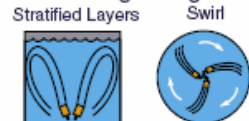
Typical Multiple CTE Installation For Recirculating Tank Contents



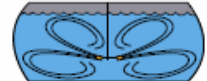
Agrichemical Mixing



Different Mixing Configurations



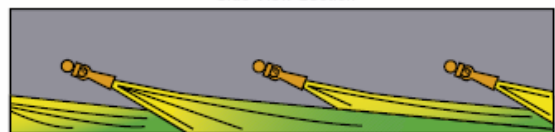
Elongated Tank



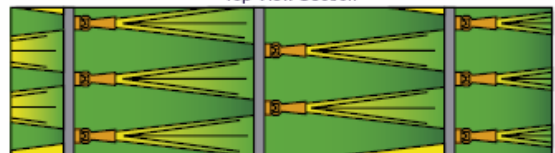
Directional Sweep



Electrocoating Processes
Side View Section



Top View Section



Model Construction Data

Model	CTE		TME	
Sizes Available	3/8"-4"	Standard Materials Cast: Low Lead Bronze, Iron, Carbon Steel, 316 STS	3/8", 1/2", 3/4", 1", 1 1/2"	Non-Metallic: 25% Glass-Filled PP
	4" & up	Fabricated: Carbon Steel, 316 STS		
	3/8"-3"	Non-Metallic: PVC, PP, PVDF (Kynar™)		