

ACID/ALKALI DILUTION SYSTEM

Chemical Industry has a regular requirement of Dilute Acid and/or Alkalis Acids may be Sulphuric Acid, Nitric Acid, Hydrochloric Acid or any other strong Acid. Alkali may be Sodium, Potassium or any other Water dissolving Hydroxide. Why do you need a 'Process System' for Acid or Alkali dilution ?

There are two intrinsic problem with Acid/Alkali dilution such as :

- Exothermicity and
- Corrosivity.

Exothermicity should be dealt with appropriate by creating flow system and cooling (or chilling) so that the temperature do not shoot up and also the cooling (or chilling) medium is used economically.

Corrosivity of these is so complex that the choice of Material of Construction depends upon the concentration. Most Chemical Engineers know the problem specially about Sulphuric Acid. Therefore, economic choice of Material of Construction can only be achieved by designing an appropriate Process System. Both the above criteria, when addressed by an Technical expertise, you get an optimal solution both for CAPEX and OPEX.



Once you understand these problems and are able to collect appropriate data you then need to set your objectives that may be

- Not to cross the maximum allowable Temperature.
- Keep the cost at the lowest.
- Keep the operation simple.

Each System is different. And Mamko has acquired enough insight in this field to give you the best system.