

The need for pH

- **Agriculture/Hydroponics** : Proper soil pH ensures crop yield and growth.
- **Boiler/Cooling Towers** : Maintaining optimum pH level in boilers of thermal power plants to avoid corrosion and improve energy/power efficiency.
- **Chemistry** : pH measurement is essential for control of chemical reactions, in the course of production of chemical products, be it fertilizers, plastics, electronic industrial materials such as semiconductors, glass or cements.
- **Sewage Treatment** : Successful treatment depends on pH control throughout the process.
- **Industrial Process** : Petrochemical, paper and pulp, food and beverage, refining, power generation, pharmaceutical, semiconductor, automotive, steel and metal processing; all require pH measurement and control for product quality and efficiency.
- **Environmental** : pH monitoring and control are critical to the continuation and quality of all plant and animal life. Local government enforces restrictions of untreated waste water being discharged and requires each factory to treat its waste water to conform to designated water quality standards..
- **Research & Development** : Medical and industrial laboratories involved in all aspects of research and development require pH measurement.
- **Paper & Pulp** : pH is controlled in the process of digestion, bleaching, creating of pulp to manufacture of finished paper material products.
- **Oil Refining** : pH measurement in the desulfurization process.
- **Electroplating** : Control of pH is applied to plating, etching of metal surfaces and manufacture of batteries.
- **Fish/Shrimp Farming** : Good pH balance of water quality ensures survival and growth of cultured fishes/shrimp. Determining pH is vital when selecting location for these field farming so as to avoid abnormality in fishing grounds and hatcheries.
- **Food & Beverage Manufacturing** : Monitoring of pH is important as the action of enzymes is affected by pH during production of food like bread, liquor, beer, cheese and milk products.
- **Printing** : Adjustment of pH affects dryness of ink, colour tone and colour definition of photographic printing/offset printing.
- **Beauty Salons** : For achieving beautiful hair styles, pH is regulated in cold-waving liquid according to hair type and wave. Maintaining balanced pH of skin is essential for person's well-being.
- **Swimming Pools** : Control of pH and residual chlorine concentration are important parameters to disinfect any E-Coli bacteria and prevent skin irritation.
- **Drinking Water** : Rigid purification standards depend upon pH measurement and control.
- **Textiles/Dyeing** : Proper pH level is maintained in process of dyeing as permanence and processing speed depend on the pH of dye bath.