



WFI Generation System

Multiple Column Distillation Plant

Applications



Generation Storage, Monitoring and Distribution system for purified water



Blood Plasma



Syrup and Suspension



Cream, Ointment, Lotion, Gel and Suppository



Insulin



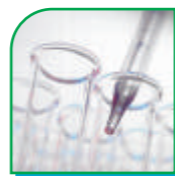
Vaccines



Parenteral Formulation Compounding



Hi Potent drugs, Cytotoxic, Anticancer, Hormones and Steroids



Biotech Modules Superskid

Global Presence

- Algeria
- Canada
- Egypt
- Ghana
- Iran
- Iraq
- Jordan
- Nigeria
- Romania
- Russia
- Saudi Arabia
- Sudan
- Syria
- Turkey
- USA



Pharma Access offer you the multiple effect distillation plant for generation of Water for Injection and the pure steam generator for all Pharmaceutical and allied industry, pyrogen free pure water is vital for almost all production activities. Moreover with high standards of quality specified by US and UK Agencies, generation of WFI (water for injection) has become a critical process that needs careful and continuous process monitoring and control.

On the same lines, all pharmaceuticals manufacturing and packaging activities that include sterilisation and disinfection processes, are in need of continuous supply of pure steam that when condensed will meet standards same as those specified for WFI.

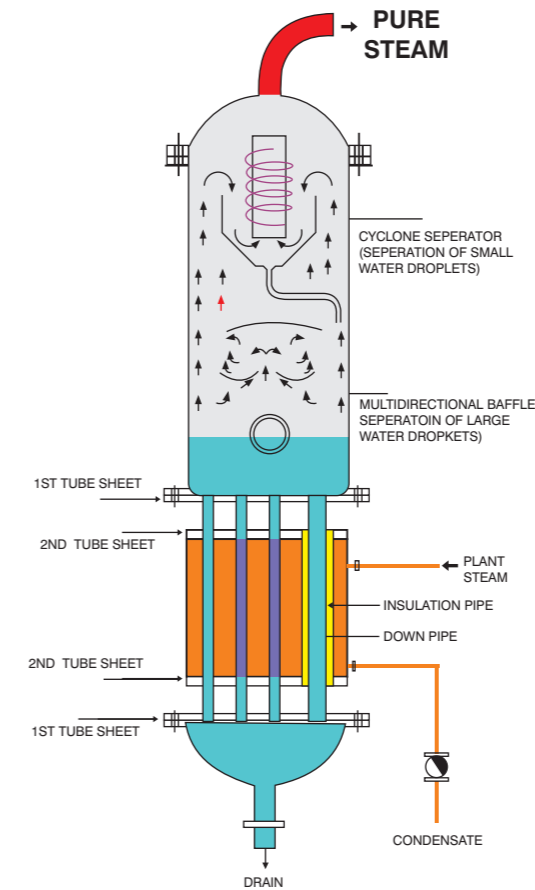
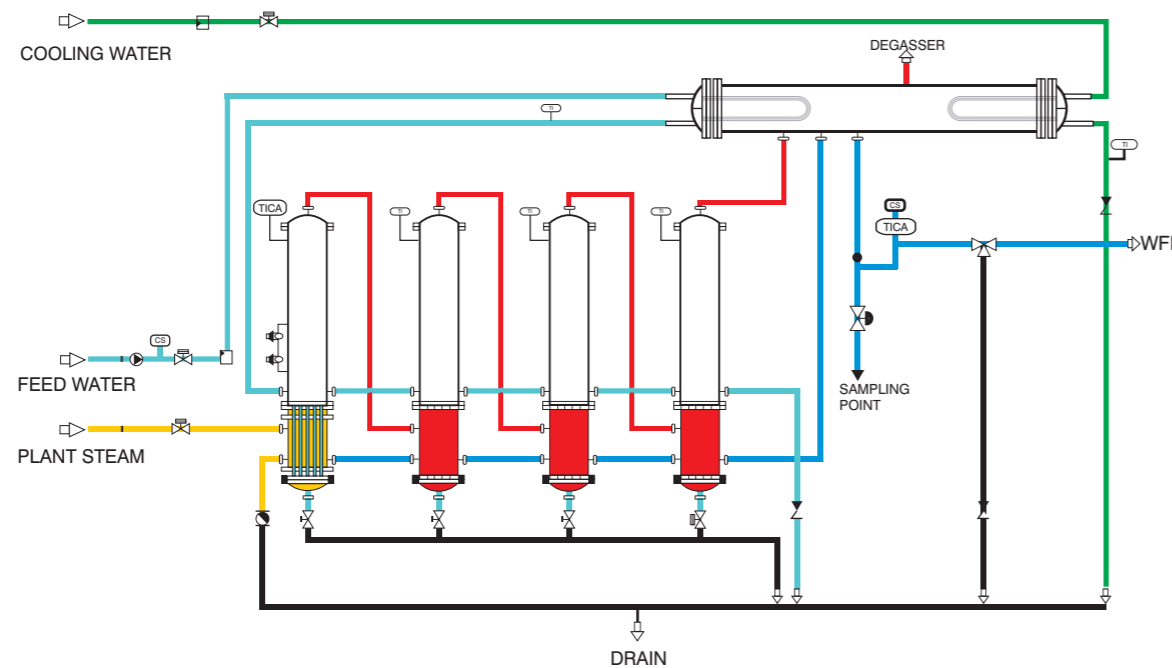
Our Multi Column Distillation Plant are fully compliant with GAMP, cGMP regulations and the latest FDA requirements.

Multiple Column Distillation Plant

Water for Injection is used as a medium for majority of sterile preparations. Which has to match the highest specifications as per the international standards.

The WFI generation system is built to high sophistication level and strict process control to maintain WFI chemical parameters within the permissible limits.

Our WFI GENERATION SYSTEM meets all of these demands with simplicity and style. We ensure careful construction to prevent any stagnation of water within the unit in terms of dead leg areas and accurate instrumentation system that controls the parameters of the generated WFI within permissible limits. With this our system meets all specifications as laid down by USFDA & UKMCA



The distillation is implemented via a double punch pyrogen separation system. First punch is delivered by multidirectional baffles. The steam generated from the first column is made to pass a torturous path through multidirectional baffles where pyrogen particles and droplets separate and are guided to the end of the column.

The second punch is delivered by a centrifugal type cyclone separator high up in the column, here the vapour is guided through a narrow circular channel where it begins to rotate. The vapour flow subjects the pyrogen impurities and droplets to a high centrifugal force thereby dislodging them from the vapour steam these droplets are removed by means of blow down valves at the bottom of the columns.

The distillation units are connected in series into a multiple effect system and external energy is required at the first column only, since generated steam at each column is supplied to the subsequent column.



The generated steam vapour of the last column & the almost condensed steam distillate (2nd column onward) is led to the over head cooling heat exchanger, where it is cooled by the water to generate WFI.

User-friendly operator interface to allow the easy visual inspection of the cycle monitoring and control.

Sampling of WFI: The generated WFI can be provided with a collection mechanism for detailed chemical analysis

Online printing of relevant parameters of the process is provided for process documentation

Generated pure steam when condensed will generate WFI meeting microbiological standard