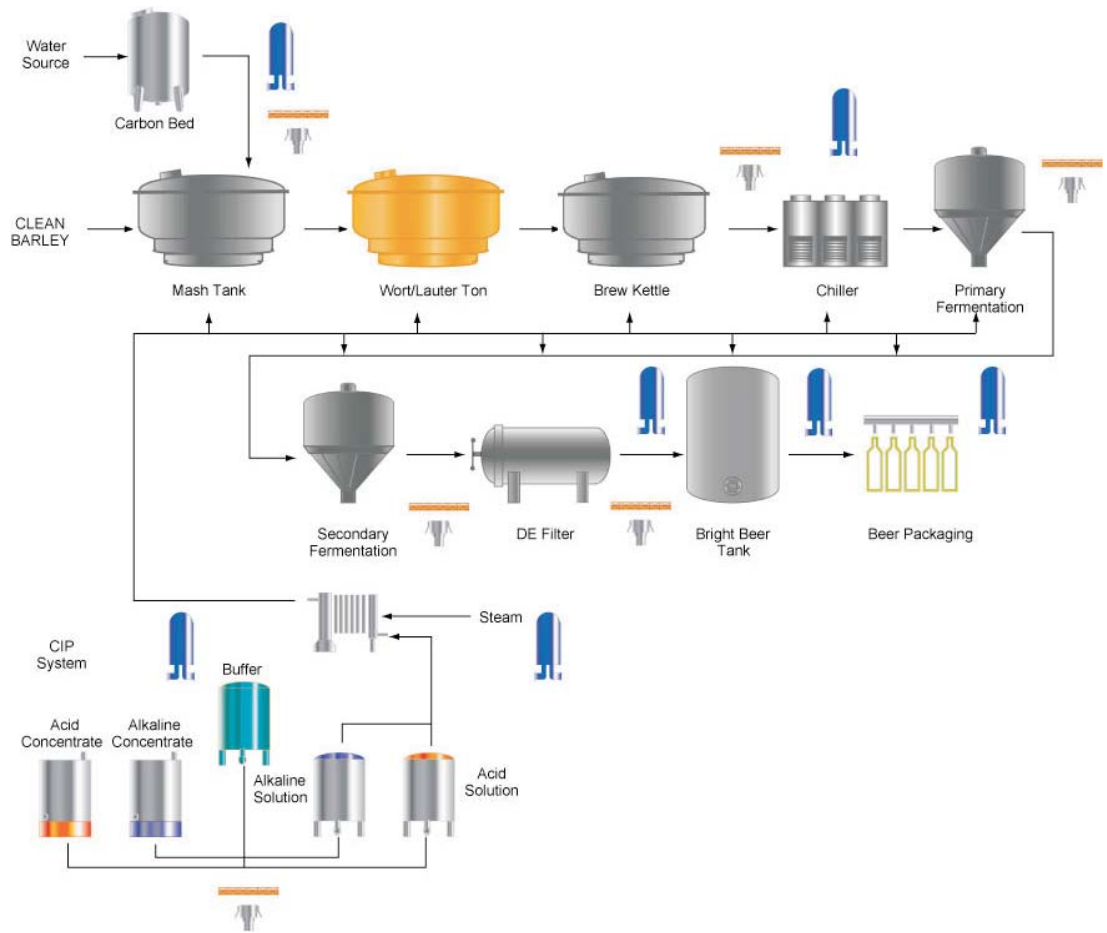




CLASSIC

FILTER & EQUIPMENT LTD

BEER BREWING



PRODUCT KEY

-  Sterile Filter
-  Flexible Hose
-  Fitting

APPLICATION

Barley enters the brewery and is cleaned of dust and other alien material such as stalks, mud, pebbles, etc. It then undergoes a malting process where the grain is steeped in water so that it absorbs water, swells up, and softens. The surplus water is drained and the grain is allowed to germinate over a period of time. The germination period is terminated by a process known as kilning where the grain is heated to dry it out. The roasted malt is then rolled and crushed to crack the cellulose shell. This is called grist. The grist is fed to the Mash Tun where it may be mixed with other sources

Of starch. It is mixed with hot water and cooked for a period of time. Here, starches are converted to sugars. The resulting liquid is called Wort. The Wort is a sweet brown liquid. This liquid is drained from the Mash Tun into the Lauter/Wort Tun. During Lautering, the Wort is strained to remove the wet grain. It is this liquid that goes to the Brew Kettle where hops are added as the Wort is boiling. After this, the spent hops are removed and the Wort is cooled and run into

large fermenting tanks. Yeast is added. The Yeast takes the sugar and converts it to carbon Dioxide and ethyl alcohol. After the fermentation process, the yeast is removed. The beer is run through a diatomaceous earth filter to remove any remnants of the fermenting process. From there, the beer is transferred to a Bright Beer Tank. From the Bright Beer Tank, the beer is sent to packaging in bottles, cans, or kegs.

PROCESS EQUIPMENT APPLICATIONS



Carbon beds are prone to bleeding carbon fines into intermediate product. Classic Filter and Equipment recommends placement of carbon “trap” filters with pleated polypropylene filter elements in the 0.5μ to 2μ range.



Like carbon beds, Diatomaceous Earth filters are prone to bleeding DE. This is often due to worn screens. Classic Filter recommends a 2μ to 5μ polypropylene filter for this application.



Fermentation tanks should be properly vented to maintain clean and sterile air. Classic recommends 0.2μ PTFE membrane filters for this application.



All final product should be filtered before packaging and bottling to insure biological stability. Classic Filter and Equipment recommends a 1μ pleated pre-filter followed by a 0.45μ membrane final filter.



All CIP agents should be purified to remove any contaminants that might compromise the maintenance of a sanitary system. Classic recommends a 1μ pre-filter followed by a 0.45μ micron membrane to keep this system within sanitary specifications.



Any steam utilized as heat exchange medium should be cleaned and purified to remove any liquid or particulate contaminants. This will prevent these contaminants from building up on exchange surfaces and will properly maintain the efficiency of heat exchange surfaces.



There are a myriad of applications for flexible hose and fittings within the Distilled Liquor application. Classic offers a complete line of hose and fitting products for the most demanding sanitary applications.

CLASSIC FILTER AND EQUIPMENT, LTD.

P.O. Box 16486, Fort Worth, TX 76162-0486

Phone: 817-886-0008 Fax: 817-230-4198

www.classicfilterandequipment.com