



INDUSTRY 4.0 MICROBREWERY

2022-23

Technology: Automated Beer Microbrewery

Overview: Beer is made from fermentation of grain along with hops and yeast. The technique of making beer is beer brewing. Our Industry 4.0 Microbrewery offers automated beer brewing system. The system can brew IPA, Lager, Cider, Wheat Beer, Stout etc.

The system reduces the need of specialised human resource while maintaining the quality and reliability.

Designed in The Netherlands,

INTRODUCTION

Microbreweries can brew various types of beer in the same equipment. These can be stored for many days in a restaurant or a bar to be served.

Craft beer has an advantage of better quality, smooth flavour and very lower operating cost for making beer.

Making of beer would cost around €0.20 per litre



BARLEY



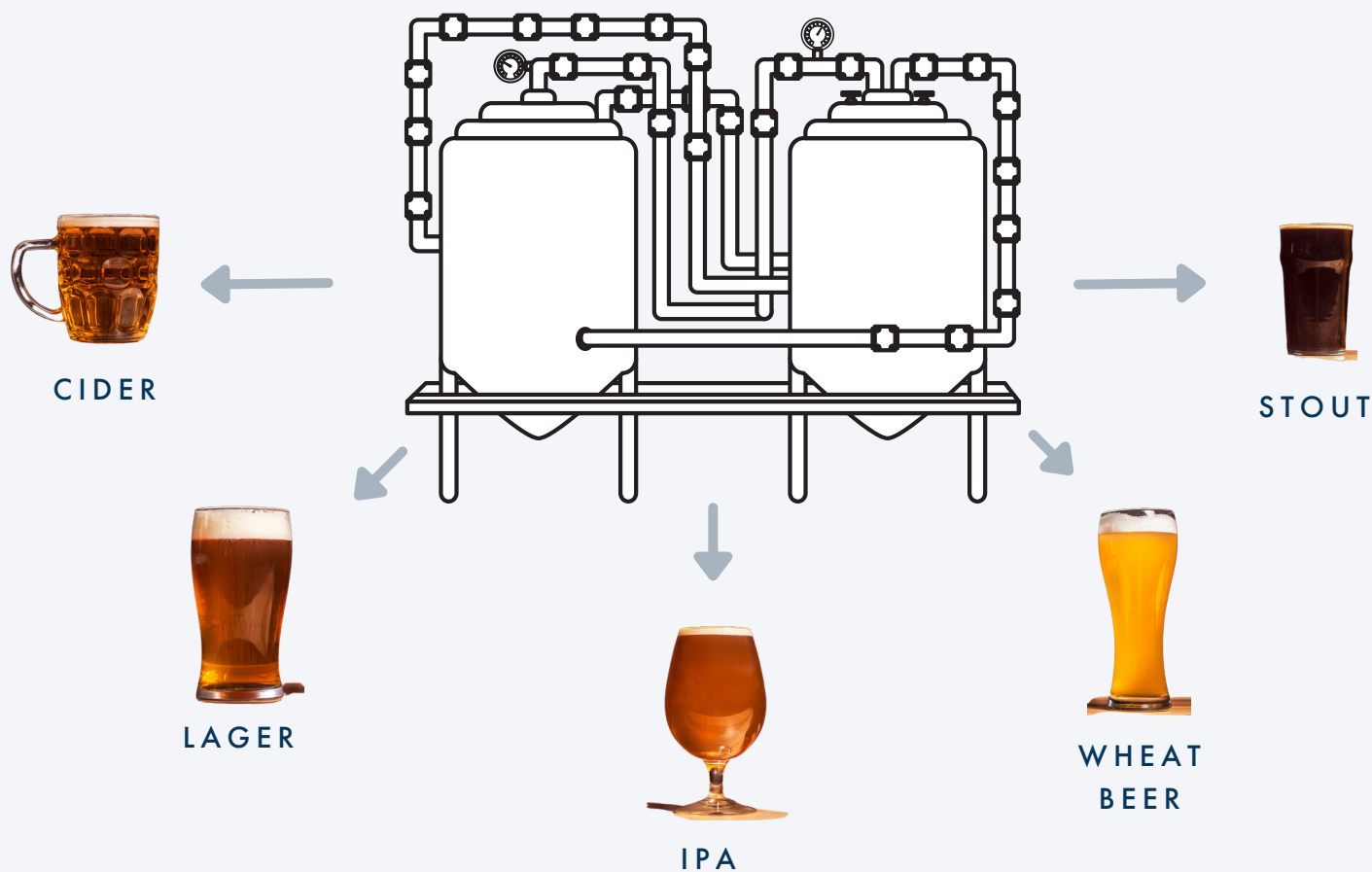
HOPS



WATER



YEAST



STAGES OF BEER BREWING IN SHORT

Stage 1



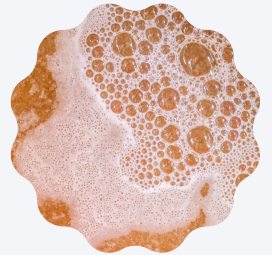
BARLEY

+



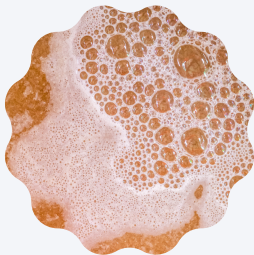
WATER

=



WORT

Stage 2



WORT

+



HOPS

=



BEER

Stage 3



BEER

+



YEAST

=



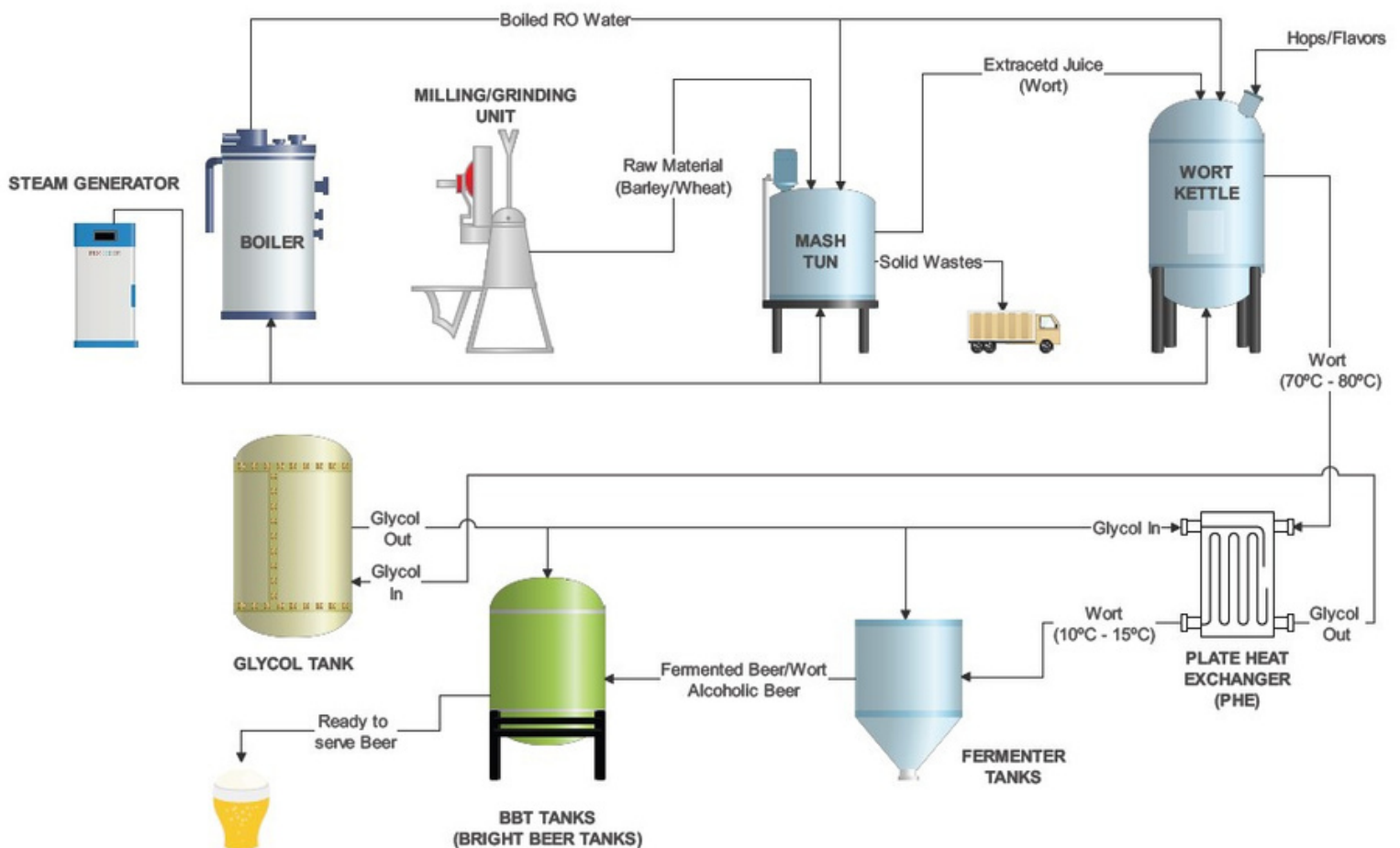
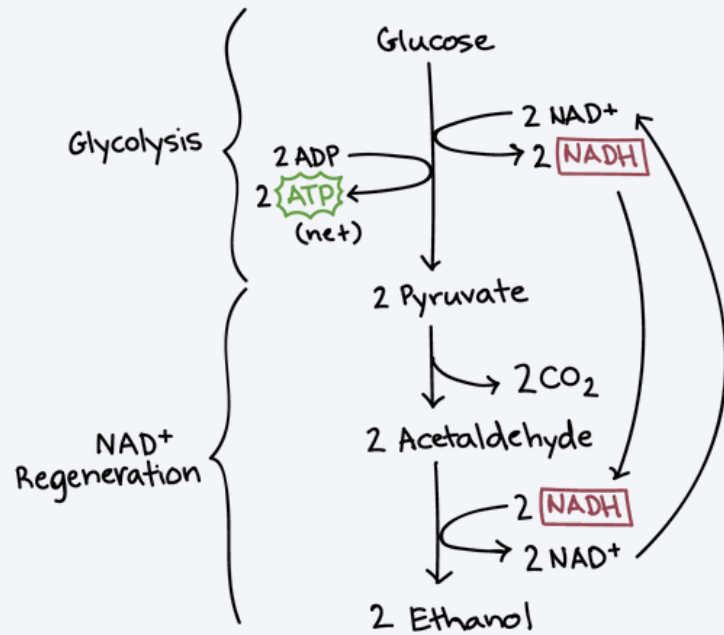
BRIGHT BEER

BIOCHEMICAL PROCESS

Fermentation is the process by which yeast converts the glucose in the wort to ethyl alcohol and carbon dioxide gas giving the beer both its alcohol content and its carbonation.

To begin the fermentation process, the cooled wort is transferred into a fermentation vessel to which the yeast has already been added. If the beer being made is an ale, the wort will be maintained at a constant temperature of 68 F (20 deg C) for about 10 days.

Since fermentation produces a substantial amount of heat, the tanks must be cooled constantly to maintain the proper temperature.



KEY FEATURES



Complete sturdy structure and weather proof design



Energy Efficient Design due to smart control



Fully Automated PLC Controlled Plant



Completely in house design of plant providing reliable after sales support



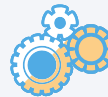
Safe design with all electronic sensors and redundant control systems



High Reliability due to Stainless Steel Grade 304 Piping



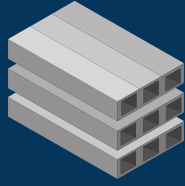
SCADA integration (Optional)



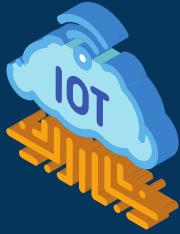
Use of state of the art quality equipment like Siemens PLC, Festo Valves and fittings, SS 304 Piping, Honeywell sensors



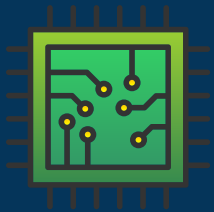
ADVANTAGES



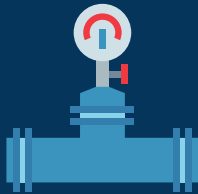
Food Grade 304L Stainless Steel and Piping



Internet of Things Enabled



Siemens PLC Based Automation



Pneumatic Controlled Butterfly Valves



Temperature Sensors Integrated with PLC



Pressure Sensors Integrated with PLC

FINSEN RITTER MICROBREWERY PLANT VS OTHERS



DESIGNED IN THE NETHERLANDS



VERY LOW DOWN TIME WITH FOOD GRADE SS 304



FOOD GRADE 304 STAINLESS STEEL AND PIPING



INDUSTRY 4.0 ENABLED



FINSEN RITTER

OTHERS



IN HOUSE TECHNOLOGY WITH PNEUMATICALLY CONTROLLED VALVES

EXTERNALLY DEPENDENT



SELF MONITORING

USE OF MAN POWER TO MONITOR



40+ FLAVOURS TO CHOOSE FROM

NO SUCH SUPPORT



INTERNET OF THINGS ENABLED

NOT ALWAYS PRESENT

OUR INDIAN CORPORATE CLIENTS



IMPETUS



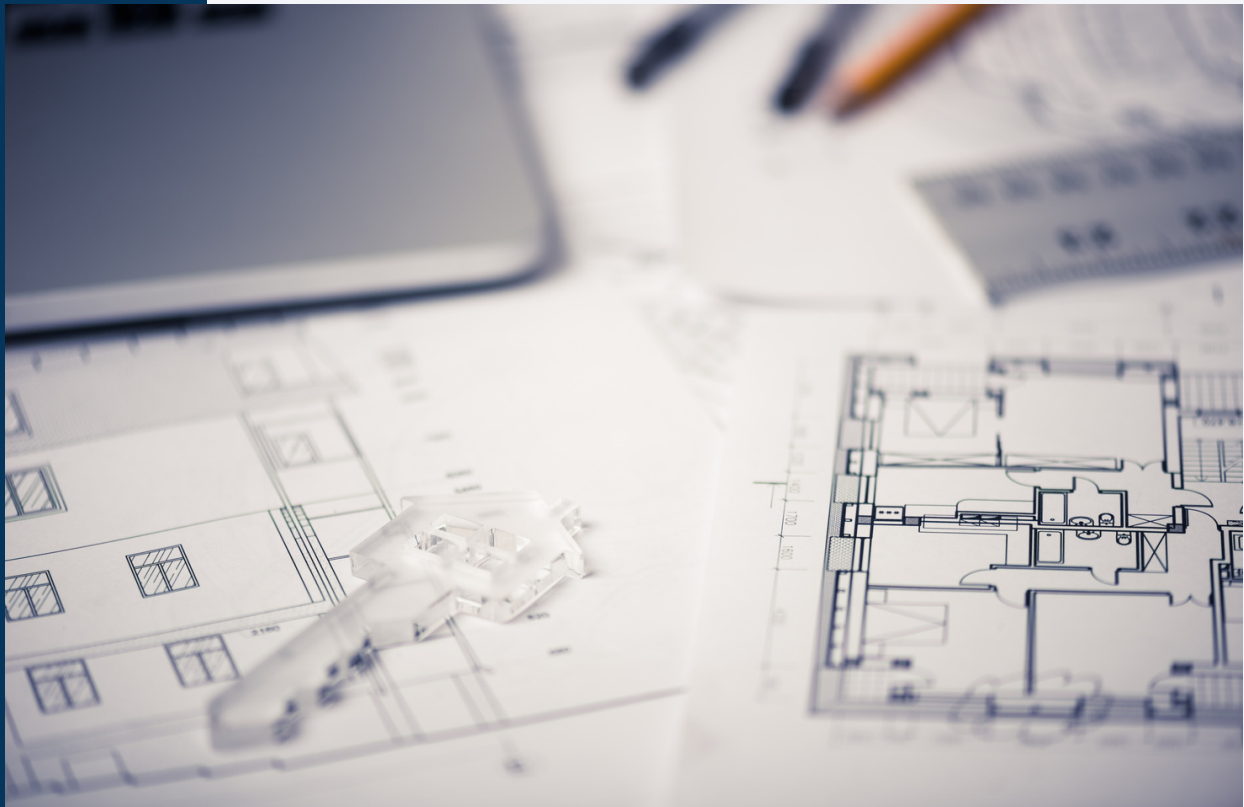
ABOUT THE COMPANY

WE SPECIALISE IN INDUSTRIAL TURNKEY SOLUTIONS. WE HAVE DEVELOPED OUR IN-HOUSE TECHNOLOGIES IN THE DESIGN, SUPPLY, INSTALLATION AND TESTING OF CHEMICAL AND GAS PLANTS.

WE HAVE BUSINESSES IN EUROPE AND INDIA. OUR DESIGN CENTRE IS IN AMSTERDAM, THE NETHERLANDS AND THE MANUFACTURING CENTRE IN INDIA.

WE HAVE EXPERTISE IN OXYGEN, NITROGEN, HYDROGEN, ANA, UVGI EQUIPMENT, WATER TREATMENT, BREWING EQUIPMENT, SOLAR POWER PLANT, MILK CHILLER PLANTS, CHLORINATION PLANT, BIOGAS PLANT, BIO CNG PLANT, NOISE MONITORING DEVICES ETC

WE FOLLOW THE STATE OF THE ART INDUSTRY 4.0 STANDARDS ACROSS ALL OUR EQUIPMENT AND PLANTS DELIVERING THE BEST OF EQUIPMENT TO OUR CLIENTS.



**THANK YOU, AND
WE LOOK FORWARD
TO WORKING WITH
YOU.**

Registered Address (EU)
Finsen Ritter Technologies EU BV
Kabelweg 57
1014 BA, Amsterdam
KvK-Number 85599956
+31 622633280

For more information visit:
www.finsenritter.com

Email us: contact@finsenritter.com

