



# CombiFerm™

**BEST OF BOTH**

Fermentation Systems  
Continuous & Synchronous

Does your fermentation process get stuck because of variation in feedstock composition?

Do you get variation in fermentation efficiency if you shift to another feedstock?

If the answer is yes, then you need to employ CombiFerm™ – advanced fermentation technology in your ethanol plant.





Ethanol producers are constantly challenged by variation in feedstock quality, volatility in feedstock cost and a need to improve profitability. CombiFerm™ is an advanced fermentation technology which uses a specially isolated XP<sup>+</sup> (high productive) yeast. It can handle variations in feedstock composition as well as multiple feedstock without any loss in efficacy. It is designed to ensure optimum yeast growth resulting in consistent fermentation process, delivering higher alcohol yield.

CombiFerm™ fermentation technology is developed to get the best of both- continuous and synchronous - fermentation technologies prevalent in the market.

CombiFerm™ is suitable for greenfield and brownfield distilleries using sugary feedstocks.

CombiFerm™ can be integrated with an existing fermentation plant operating on continuous, batch, fed-batch or synchronous mode for through-put enhancement and consistent performance.

CombiFerm™ is a scientifically designed Fermentation Technology which has been put through rigorous trials.

**Certification** ASME, TUV, CE, CCODE, ISO 9001 or any other global standards are required.



### Benefits :

- The Extra Productive XP<sup>+</sup> yeast strain delivers high ethanol concentration (titer) in fermented mash between 10-15% v/v, enhancing profitability of a distillery/ethanol plant. It can be offered in an existing distillery with the same results.
- The hygienically designed process eliminates risk of contamination and ensures that the plant runs are uninterrupted. It delivers excellent congener profile for beverage alcohol, neutral or fine spirit
- CombiFerm™ can operate with higher recycle streams (ZSD compliance), thereby reducing freshwater footprint.
- CIP usage is reduced by 30-35% against conventional fed-batch process.

Praj Worldwide

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