



*Shaping the plants of future..*

# POWER TO LEAD ETHANOL INDUSTRY....

**KBK Chem-Engineering Pvt. Ltd.,**

ISO9001:2015 Certified Company from Pune- India

KBK has involved more than a decade through a technologically driven Team of brilliant Engineers in pursuit of excellence, offering Distillery and Fuel ethanol Solutions to Our Costumers.

KBK is a Group company of Shree Renuka Sugars Ltd.(SRSL) having a turn over of - 28,160 Million (600 US Million Dollars) and is one of the fastest growing sugar companies in India and One of the largest sugar production company in the world, with five Distilleries with total ethanol capacity of 9,30,000 Liter/Day, 9 Sugar Factories with capacity of 35,000 TCD and having India's largest sugar refinery facility with total capacity of 4,000 TCD and generates 143 MW co-gen power.

KBK has accomplish many EPC projects of Distillery, Fuel ethanol, chemical process plant with its Indigenously Developed K-Super Technology & world-class manufacturing facilities comprising complete project management, Engineering, Manufacturing, execution for various prestigious national & International clients spread across the world.

Sugar  
Ethanol



Shree Renuka Sugars Ltd.

## EPC Solutions for Distillery, Ethanol & Effluent treatment Plants.

KBK offers supply of EPC plants Including land Development, Civil work, Structure, Process Plant, Evaporation, Bio - Gas, Bio-Composting, Boiler, Turbine etc under one roof. Multiple feed stock plant (Sugar cane Juice, Molasses, Grains, Cassava), Multiple Products in same plant (RS & EQRS, ENA, Ethanol), Bio-Gas for Energy Efficiency, are some of the key services provided by KBK.

- Innovative "K Super" Technology Ensure Energy Efficiency, Results in Lower Cost of Production, Maintains clean green environment, low water consumption with improved product quality.
- We supply Rectified spirit plant, Extra Neutral Alcohol Plant, Ethanol Plants, Ethanol chemical Plant.
- With the help of Technology Up-Gradation-R & D achieved 1:2 Lit/Lit effluent generation against industry standards 1:10 Lit/Lit, with 30%-35 % recycle of raw spent wash.
- West water/Spent Wash treatment systems include - Evaporation includes integrated & Stand Alone - Falling and Force Circulation Evaporation, Bio-Gas as supplementary fuel, Bio-Composting as fertilizer, and condensate polishing unit for treatment of process condensate.
- KBK Deliver Timely Executed Projects right from Concept to commissioning.

## Financial Capability

- KBK a Shree Renuka Sugars group company with ` 28,160 Million Group turn over (600 Million USD) & 1300 Strong Man power Base.
- SRSL Capital infusion dedicated to R & D development & company growth.
- Credit rating, working capital provided by banks.



- **Fermentation**  
Batch/ Feed Batch/ Semi Continuous/ Continuous Fermentation
- **Distillation**  
Multipressure Vacuum Distillation with Energy Integration.
- **Evaporation**  
Falling Film and Forced Circulation Evaporation to concentrate sugar cane juice or Spent Wash to Desired Brix level.
- **Dehydration**  
Molecular Sieve Dehydration Technology Based on "Pressure Swing Adsorption Process" Generates 99.90 % Fuel Ethanol.
- **Chemical Process Industry**  
EPC Solutions for Ethanol Based Product chemical Industry like Ethyl Acetate, Acetic Acid & Butyl Acetate.
- **Wast Water / Spent Wash Management**
- **Spent Wash Recycle**  
30-35% Spent Wash Recycle in molasses operation mode and up to 70% in cane juice operation mode
- **Integrated Evaporation**  
Without Additional Steam.
- **Bio-Composting**  
Anaerobic and Aerobic Bacteria together Convert Residual Organic Present in Spent Wash into Valuable Bio-Fertilizer.
- **Bio Gas**  
Anaerobic Bacteria Converts COD & BOD of Spent Wash into Bio-Gas, Rich in Calorific Value to be Used as Boiler Fuel Leading to CDM Benefits
- **DDGS Dryer**  
Concentrating Grain base distillery spent wash up to 90 % solid content suitable for farm animals feed.
- **Condensate Polishing Unit (CPU)**  
Condensate from Evaporation plant and waste water from distiller plant again recycle back process.



Fermentation  
Distillation  
Evaporation  
Dehydration  
Bio Gas

## K Super Technology

KBK's pioneering development activities have resulted in the evolution of the innovative, indigenous "K-Super" technology, with continuous technology Up-Gradation and R & D getting best results Day by day. Not only does it offer cost advantage but also results in

- Maximization of Efficiency
- Reduction Of Effluent at Source
- Reduction of Spent Wash from 1:10 Lit/Lit to 1:1.5 Lit/Lit of Alcohol
- More Profit and Less Spent wash

## Quality Assurance through Manufacturing Excellence



Every Growth & development has the backbone of quality, KBK is an ISO 9001:2008 certified company and ASME "U" stamping, National Board of Inspectors Certificate for "NB" Stamping, National Board of Inspectors Certificate for "R" Stamping where we manufacture as per National and International Codes Like ASME, TEMA, DIN, BIS IS etc.

KBK has fully equipped facilities which has the capacity to manufacture 35 Plant per year and has 100 % in house fabrication capabilities. The set-up is managed by experienced engineers and skilled techniques which make it possible to meet the requirement of high quality workmanship and precision at par with the international standards.

KBK commits to give superior quality which makes it obligatory in manufacturing process to undergo various quality checks

## Track Record



- ◎ Largest supplier in Asia & Africa for EPC Ethanol & Distillery plant with 50% market share ~ Builder of Largest Ethanol / ENA & Ethyl Acetate Plant in India & Abroad.
- ◎ Executed 55 projects right from concept to Commissioning & EPC projects in record time.
- ◎ Supplied EPC plants in 8 different countries with hands on experience of local & international design and building codes.
- ◎ Hands on Experience of all feed-stocks like Cane-Juice, Grain, Corn, Cassava, Cane juice & Molasses and multi raw material/ products plants.



# KBK Infra Structure

- State of the Art Modern Engineering Office fit For 300 Experienced Engineers
- Engineering softwares for 2D & 3D plant modeling, Projectscheduler & Process Design simulators, piping system engineering etc.
- In-House EPC capability for 35 distillery / Ethanol plants every year.
- We are Group Company of Shree Renuka Sugars who owns 8 large modern sugar factories with 150 MW Power generation Per Day.

## After Sales Services for Optimized Operations

With the collective experience and strong backing of commissioning and service department with team of 75 Site Engineers and Coordinators, KBK has high standards of after sales services right from the days of its Inspection. All the site issues are sorted out by Highly Qualified and Experienced engineers on field in India & Abroad. KBK Provide Personnel training, Technical support & Remote supervision to our customers.

## International Presence

KBK has its presence globally. With its successful implementation of EPC projects around the globe, KBK has proved its capabilities in terms of research and development, Indigenous K-Super Technology and State-of-the-Art manufacturing facilities.



**KBK CHEM-ENGINEERING PVT LTD**  
(A group company of Shree Renuka Sugars Ltd.)

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