

# MÖJJ ENGINEERING SYSTEMS LTD.

ISO 9001:2015

## **DISTILLERIES**











A MÖJJ Group Company



www.ceeindia.com

Excellence through Innovation

## MOJJ ENGINEERING WITH DEDICATED TEAM OF TECHNICAL PERSONNEL OFFERS TURNKEY SOLUTIONS WHICH INCLUDES

- 1) Alcohol plant based on Multi feed stock like Sugar Cane Molasses, Beet Molasses, Grain (Maize, Broken Rice, Sorghum, Jawar, Bajara), Sugar Beet, Cane Juice, Sweet Sorghum Juice, Cassava etc.
- 2) DDGS Dryer.
- 3) Spent wash / Thin stillage evaporators.
- 4) Fuel ethanol plant.
- 5) Cellulose plant.



45 KLPD Molasses Based Distillery with Multiple Effects Evaporator for 60% Conc. of Spent Wash



60 KLPD Grain Based Distillery



30 KLPD Molasses Based Distillery

#### 1 FERMENTATION SYSTEM

#### Highlights

- Maximum yield.
- Multi feed fermentation module.
- Highest alcohol content in fermented wash hence least effluent generation.
- Specially designed educators for better contact between yeast and fermented sugars.
- Maximum conversion efficiency.





#### **2** DISTILLATION SYSTEM

#### Highlights

- Best quality of alcohol due to optimized scheme of distillation.
- Multi pressure distillation operates under vacuum and at low operating temperatures which avoids hard scale formation, and unwanted impurities like carbamates.
- Improved steam economy by cascading columns under vacuum and pressure.
- Optimum utility consumption.
- Axial flow pump at stripper column bottom to eliminate cleaning down time.







#### 3 DDGS 'COMBI DRYER'

#### Highlights

- Dryer vapours integrated with stillage evaporator.
- Concentrated stillage is fed to DDGS dryer to recover valuable products.
- Internals designed for uniform distribution of wet cake and maximum exposure to heat transfer area.
- Heat transfer area optimally designed to consume complete concentrated stillage.
- Higher thermal efficiencies.
- · Low energy consumption.
- · Low maintenance and operating cost.



ROTARY DRYER FOR DWGS (Bangladesh)

#### **4** EVAPORATOR FOR SPENT WASH & THIN STILLAGE CONCENTRATION

#### Highlights

- Special and proprietary design of integrated and standalone evaporators to achieve required end results.
- Superior plant design based on years of experience.
- Selection of configuration to avoid scaling hence low down time and low CIP chemicals requirement.
- Plant operates to achieve desired concentration of product which can be used for incineration directly or can be used for composting, fertilizer etc.
- Special design for Biomethanated spent wash concentration (Patent Pending).







#### **5** FUEL ETHANOL PLANT

Mojj is driven by a passion to excel, a commitment to redefine industry benchmarks. Our fuel ethanol plants are based on molecular sieve technology.

#### Highlights

- Choice of two or three bottle pressure swing adsorption enable smoother transition and longer sieve life.
- · Lowest utility consumption per litre of fuel alcohol.
- Maximum alcohol yield (Typical loss less than 0.03%).
- Moisture content up to 0.1% v/v.
- Component design and selection to guarantee extensive service life.
- Fully automated with PLC / DCS based system.
- Customized design and plant layouts to suit all customers' requirements.













#### **DISTILLERY PLANT SUPPLIED BY US**



30,000 LPD Molasses Based Two Plants



45,000 LPD Molasses Based Plant



1,30,000 LPD Molasses Based Plant



30,000 LPD Molasses Based Plant



30,000 LPD Molasses Based Plant



50,000 LPD Juice Based Plant



80,000 LPD Grain Based plant



30,000 LPD Upgraded to Grain Based plant



35,000 LPD Molasses Based Plant

#### **OUR VALUABLE CUSTOMERS**

Shri Gurudatt Sugars Ltd.	Sadguru Sri Sri Sadguru Sri Sri SSKL.	Shree Narmada KUSM Ltd.	DCM SHRIRAM Daurala Sugar Works	The Malegaon SSKL.
Indreshwar Sugar Mills Ltd.	Vikas SSKL.	Ajinkyatara SSKL.	Dwarkadhish Sakhar Karkhana Ltd.	Utopian Sugars Ltd.
PureCircle PureCircle Sdn. Bhd.	Kilimanjaro Biochem Ltd.	Kibos Distillers Ltd.	TÜRKŞEKER Türkiya Geker Fadrikaları A. S. Turkiya Seker Tabrikaları A. S.	Zanzibar Sugar Factory Ltd.
Premier Organics Pvt.Ltd	SUNYPUN ORGANICS LIMITED Sunypun Organics Ltd. Spectra Group	DVP GROUP Dharashiv Sakhar Karkhana Ltd.	Shree Pandurang SSKL.	Kisanveer Satara SSKL.
Bio thanol india Ltd.	Samarth SSKL.	Vijayanagar Sugar Pvt. Ltd. Vijaynagar Sugar Pvt. Ltd.	Bhaurao Chavan SSKL.	Bhalkeshwar Sugars Ltd.
Shree Satpuda Tapi Parisar SSKL.	Rai Bahadur Narain Singh Sugar Mills Ltd.	GIACL Gangamai Industries & Constructions Ltd.	Laxmi Organic Industries	Vasantrao Dada Patil SSKL.
Radical Bio-Organics Ltd.	Haritha Bio-Products Pvt. Ltd	Baghauli Sugar Baghauli Sugar Ltd.	Chhattisgarh Distilleries Ltd.	Oasis Distilleries Ltd.
Malbros International Pvt. Ltd.  Malbros International Pvt. Ltd.	Associated Alcohol & Breweries Ltd.	Brahmaputra Biochem Pvt. Ltd.	Forest Falcon Distilleries Ltd.	Globus Spirits Ltd.
KE RESAR ENTERPRISES LIMITED	Sagar Industries Distilleries Pvt. Ltd.	GROUP NV Group	Daya Claimax Sdn. Bhd.	KLJ Plasticizers Ltd.

### Our Philosophy

We belive and recognize the basic fact that each customer has his own specific and not so specific needs to be catered to, requirements to be met and problems to be solved. We therefore strive in giving our services suited to these specific and peculiar needs of our customer. This calls for understanding these needs and transferring them into an engineering solution. No aspect of a plant is too minor to be ignored and no process requirement too complex to be met.

# Range of Products

#### **Dryers**

- Spray
- · Fluid Bed
- Flash
- Rotary
- Conduction
- ATFD

#### **Evaporators**

- Falling Film
- Forced Circulation
- Scraped Surface
- Wiped Film
- Natural Circulation

#### **Bio-Technology**

- · Bio Ethanol Plants
- · Industrial Alcohol Plants
- Potable Alcohol Plants
- Fuel Ethanol Plants
- Bio Gas & Composting
- Waste Recovery Plants
- Spentwash Evaporator
- DDGS Dryer
- Zero Discharge Plants for Molasses, Grain and luice Based Distilleries

#### **Turnkey plants**

- Liquid Milk
- Powder Milk
- Starch
- Detergents
- Instant Coffee Powder

#### **Pollution Control**

- Flue Gas Spray Scrubber
- Wet Scrubber
- Incinerators
- Bag Filters
- Thermal Oxidizers



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