



MÖJJ ENGINEERING SYSTEMS LTD.

**DISTILLERIES**



Pioneering the innovations in Beverage Alcohol, Industrial Alcohol and Fuel Ethanol.

Turnkey capabilities to get best product and reduced steam,  
water and power consumption per liter of alcohol.

**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

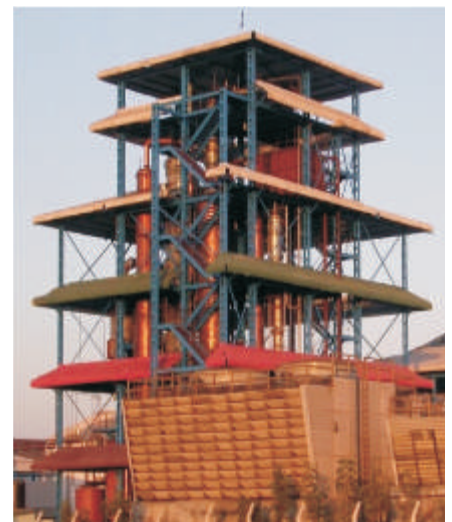
- Maximum yield.
- Multi feed fermentation module.
- Highest alcohol content in fermented wash hence least effluent generation.
- Specially designed educators for better contact between yeast and fermented sugars.
- Maximum conversion efficiency.



## 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**

### 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

 <p><b>Vikas SSKL</b></p>	 <p><b>Ajinkyatara SSK Ltd.</b></p>	 <p><b>Kisan Veer SSKL</b></p>
 <p><b>GIACL</b></p>	 <p><b>PureCircle</b> PureCircle Sdn Bhd.</p>	 <p><b>Daya Claimax Sdn.Bhd.</b></p>
 <p><b>Türkiye Seker Fabrikalari A S</b></p>	 <p><b>Sunypun Organics Ltd.</b> Spectra Group</p>	 <p><b>Indreshwar Shugar Mills Ltd.</b></p>
 <p><b>Vijaynagar Sugar Pvt. Ltd.</b></p>	 <p><b>Laxmi Organic Industries</b></p>	 <p><b>Darrala Sugar Works</b></p>
 <p><b>Shree Satpuda Tapi Parisar Sahakari Sakhar Karkhana Ltd.</b></p>	 <p><b>Vasant Rao Dada Patil Sahakari Sakhar Karkhana Ltd.</b></p>	 <p><b>Radical Bio-Organics Ltd.</b></p>
 <p><b>Haritha Bio Products (P) Ltd.</b></p>	 <p><b>Brahmaputra Biochem Pvt. Ltd.</b></p>	 <p><b>Malbros International Pvt. Ltd.</b></p>
 <p><b>Chhattisgarh Distilleries Ltd.</b></p>	 <p><b>Associated Alcohol &amp; Breweries Ltd.</b></p>	 <p><b>Globus Spirits Limited.</b></p>
 <p><b>Sagar Industries &amp; Distilleries Pvt. Ltd.</b></p>	 <p><b>Rai Bahadur Narain Singh Sugar Mills Ltd.</b></p>	 <p><b>KLJ Plasticizers Ltd.</b></p>
 <p><b>Bhalkeshwar Sugars Ltd.</b></p>	 <p><b>Zanzibar Sugar Factory Ltd.</b></p>	 <p><b>Oasis Distilleries Ltd.</b></p>

# Our Philosophy

We believe 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.

<b>Range of Products</b>	<b>Dryers</b> <ul style="list-style-type: none"><li>• Spray</li><li>• Fluid Bed</li><li>• Flash</li><li>• Rotary</li><li>• Conduction</li><li>• ATFD</li></ul>	<b>Evaporators</b> <ul style="list-style-type: none"><li>• Falling Film</li><li>• Forced Circulation</li><li>• Scraped Surface</li><li>• Wiped Film</li><li>• Natural Circulation</li></ul>	<b>Bio-Technology</b> <ul style="list-style-type: none"><li>• Bio Ethanol Plants</li><li>• Industrial Alcohol Plants</li><li>• Potable Alcohol Plants</li><li>• Fuel Ethanol Plants</li><li>• Bio Gas &amp; Composting</li><li>• Waste Recovery Plants</li><li>• Spentwash Evaporator</li><li>• DDGS Dryer</li><li>• Zero Discharge Plants for Molasses, Grain and Juice Based Distilleries</li></ul>
	<b>Turnkey plants</b> <ul style="list-style-type: none"><li>• Liquid Milk</li><li>• Powder Milk</li><li>• Starch</li><li>• Detergents</li><li>• Instant Coffee Powder</li></ul>	<b>Pollution Control</b> <ul style="list-style-type: none"><li>• Flue Gas Spray Scrubber</li><li>• Wet Scrubber</li><li>• Incinerators</li><li>• Bag Filters</li><li>• Thermal Oxidizers</li></ul>	



**MÖJJ ENGINEERING  
SYSTEMS LTD.**

**ISO 9001:2015**

**MOJJ Engineering Systems Ltd.**

81-B /15, M. I. D. C. Bhosari, Pune - 411 026 (India).

Tel: + 91-20-27120360 / 27122837.

## **Email**

[dryer@mojjpune.com](mailto:dryer@mojjpune.com) | [evaporator@mojjpune.com](mailto:evaporator@mojjpune.com) | [distillery@mojjpune.com](mailto:distillery@mojjpune.com)

## **Website**

[www.mojjpune.com](http://www.mojjpune.com)

## **Branch Offices (India)**

New Delhi | Ahmedabad | Bangalore | Chennai

## **Works (India)**

Unit I : Bhosari, Pune | Unit II : Ranjangaon, Pune | Unit III : Markal (Alandi), Pune | Unit IV : Vatva, Ahmedabad

**Concept to Commissioning**