



CONSULTANT • TURNKEY PLANT SUPPLIER • PROCESS CHEMICALS

Turnkey Distillers Corn Oil plants for grain ethanol distilleries

From feasibility to commissioning, plus the emulsifiers, demulsifiers, dosing systems and oil marketing that keep your plant profitable.

DCO consultancy

Turnkey DCO plants

Demulsifiers

Emulsifiers

Dosing & telemetry

Oil marketing

Smarter Chemistry. Faster Separation. Better Recovery.

2.88 TPD

corn oil from a 110 KLPD distillery*

~4.5 months

indicative payback on plant investment*

No effluent

closed system with minimal extra utilities

ONE PARTNER, END TO END

Consultancy, turnkey plants and process chemicals

We study your stream, build the plant, supply the chemistry and help you sell the oil, with one team accountable for results.

01**Consultancy**

Feasibility studies, syrup and oil-droplet analysis, process audits and troubleshooting to find where oil is lost and how much you can recover.

02**Turnkey DCO plants**

Process design, equipment supply, erection, commissioning and operator training for a plant integrated with your distillery.

03**Emulsifiers & demulsifiers**

Formulated chemistry for emulsion breaking and stability, with dosing systems, telemetry and technical support.

WHY A DCO PLANT

A second revenue stream from the grain you already process

Distillers Corn Oil is a valuable co-product of ethanol production. A DCO plant recovers it from the stillage syrup without changing your existing process or adding feedstock.

Additional revenue

Sell recovered corn oil while ethanol production carries on as before, improving resource use and profitability.

Better DDGS

Removing oil produces reduced-fat DDGS that better suits the nutritional needs of many livestock diets.

Growing demand

As industries move to renewable inputs, DCO has become a sought-after co-product in domestic and international markets.

Future potential

India's maize output grew from about 12.4 Mt in 2000 to an estimated 43–55 Mt in 2025, and is projected to reach 55–60 Mt by 2030.

WHERE DCO GOES

Animal feed

A high-energy ingredient for livestock and poultry diets.

Biodiesel

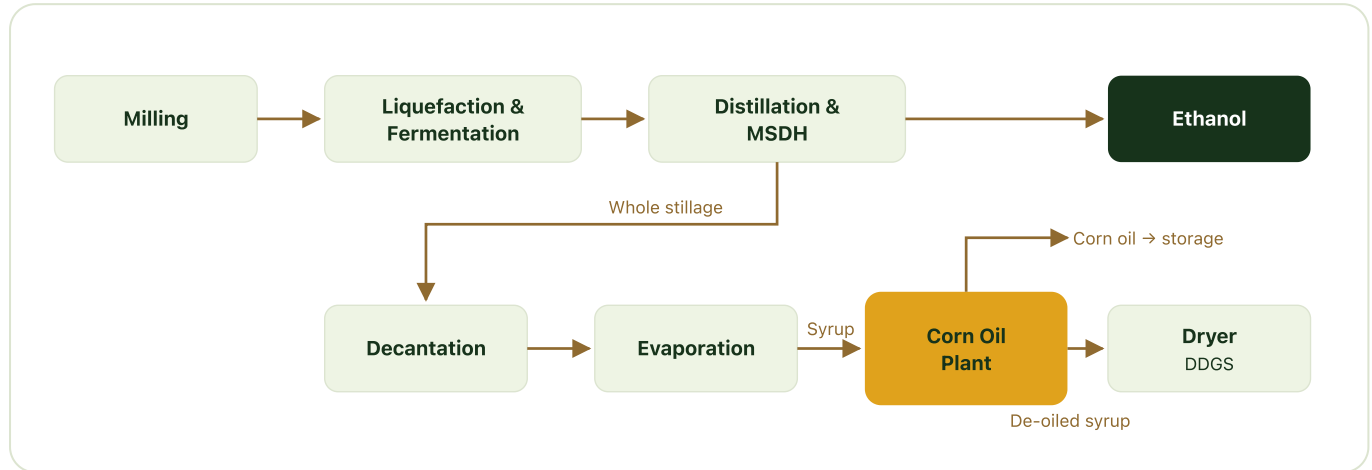
Triglycerides converted to biodiesel and renewable diesel.

Industry

Oleochemicals, paints, inks, soaps, surfactants and emulsifiers.

INTEGRATION & PROCESS

Fits between your evaporator and dryer



BUILT FOR INDIAN MAIZE

Why pretreatment matters

Indian maize has more crude fibre and less fat than US corn. That raises syrup viscosity, lowers alcohol concentration and brings wax into the oil. Our process and chemistry are tuned for it.

COMPOSITION, %	INDIAN	US
Starch	60	64
Fats / oil	3	4
Crude fibre	13.5	8.5
Moisture	13-18	14

Equipment we supply

- Reactor with agitator, syrup preheater
- Dosing system: tank, agitator, pump
- Disc-stack oil separator
- Oil collection, cooler and filters
- Slurry tank, day tanks and bulk storage

ROI EXAMPLE · 110 KLPD DISTILLERY

Syrup after evaporation	~96 m ³ /day, 3% oil
Oil produced	2.88 TPD
Oil price / chemical cost	₹100 / ₹8 per kg
DDGS value lost	₹25 per kg oil
Net earnings	~₹1.93 lakh/day
Plant investment	₹255 lakh

**~133 operating days
payback**

Indicative, before other operating costs. Actual results depend on feedstock, syrup oil content and plant conditions, confirmed by syrup analysis.

WHAT DRIVES OIL RECOVERY

Raw material quality

Free oil in syrup

Emulsion breakers

Temperature

Reaction time

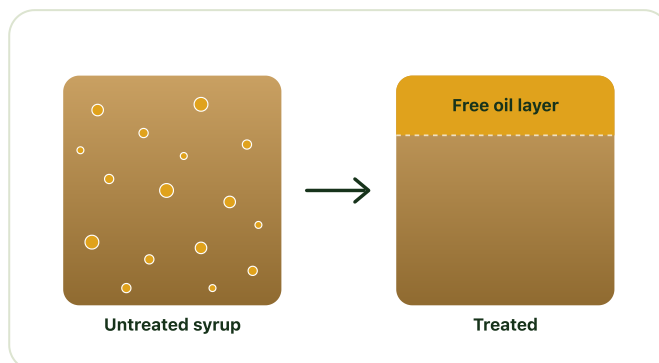
Intensive mixing

DEMULSIFIERS

Break the emulsion, free the oil

Our demulsifiers are engineered for the emulsion-breaking challenges of distillery syrup. They work at optimised injection points and temperatures to speed separation and cut residence time.

- Formulations tailored to your emulsion
- Shorter residence time, higher throughput
- In-house droplet analysis and absorbency testing
- Reliable dosing, telemetry and operator training



EMULSIFIERS

Stable, consistent blends

Emulsifier formulations for industrial processes that need oil and water phases to stay blended, matched to your oil phase, water quality and temperature and confirmed by lab trials before supply.

HOW WE SELECT CHEMISTRY

Tested on your stream

Every recommendation starts with a sample. Droplet analysis and bench trials show which formulation and dose work, so you pay for results, not trial and error.

01

Higher oil yield

More corn oil from the same syrup stream.

02

Less residence time

Faster emulsion breaking, higher throughput.

03

Consistent output

Stable recovery with controlled dosing.

TALK TO US ABOUT YOUR PLANT

Get a free syrup analysis

Send us a sample of your syrup stream. We'll recommend a formulation and dosage, and estimate how much oil your plant can recover.

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