

# Recovery and Purification Systems for the Biodiesel Industry



**F**or over 30 years, the Solvent Recovery Division of MEGTEC Systems has supplied process design and equipment to the pharmaceutical and chemical industries for the recovery, recycling, purification and separation of solvents. We offer this expertise and knowledge to the owner-operators and technology providers of biodiesel plants.

*The bottom line is process knowledge*

# Recovery and Purification Systems for the Biodiesel Industry



Biodiesel Plant Process Systems



Biodiesel Plant Services for Operating Plants

## MEGTEC Can Design and Supply Systems for the following Processes:

- Methanol recovery in excess of 99%
- Methanol scrubbing
- Biodiesel purification to ASTM standards
- Crude glycerin purification

## Design and Supply of:

- Distillation columns
- Evaporators
- Liquid extraction and wash columns
- Scrubbers and absorption towers
- Adsorption (activated carbon) vessels
- Liquid dryers

## For Owners and Operators of Biodiesel Plants, we Offer a Multitude of Services:

- Process optimization to increase production
- Process design for plant expansions
- Process and equipment troubleshooting of individual unit operations

## Our Services to Existing Plants Include:

### Process

- Process reviews – design versus actual operations
- Troubleshoot operating problems
- Feasibility studies for plant expansions

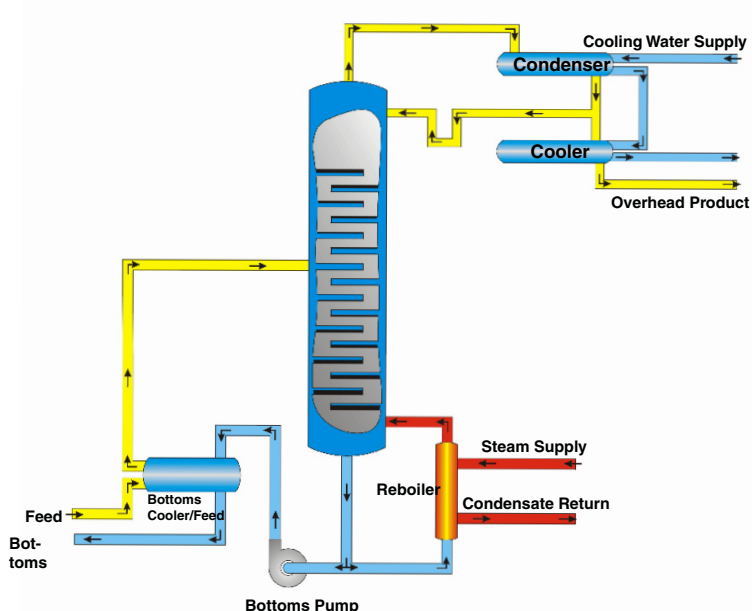
### Mechanical

- Troubleshoot mechanical and maintenance problems
- Upgrade, expand or replace process equipment
- Provide spare parts, training of operators and maintenance personnel

### Controls

- Troubleshoot instrument problems
- Upgrade PLC control systems, distributed control systems (DCS) and SCADA packages
- Provide instrument calibration and off-site monitoring of system operation
- Upgrade field instrumentation

*We are applying this wealth of knowledge and experience in process and equipment design to the Biodiesel Industry. Our area of experience include Distillation, Extraction, Adsorption, Absorption and other processes common to the Biodiesel Industry.*



Distillation System



Single Source for System Components



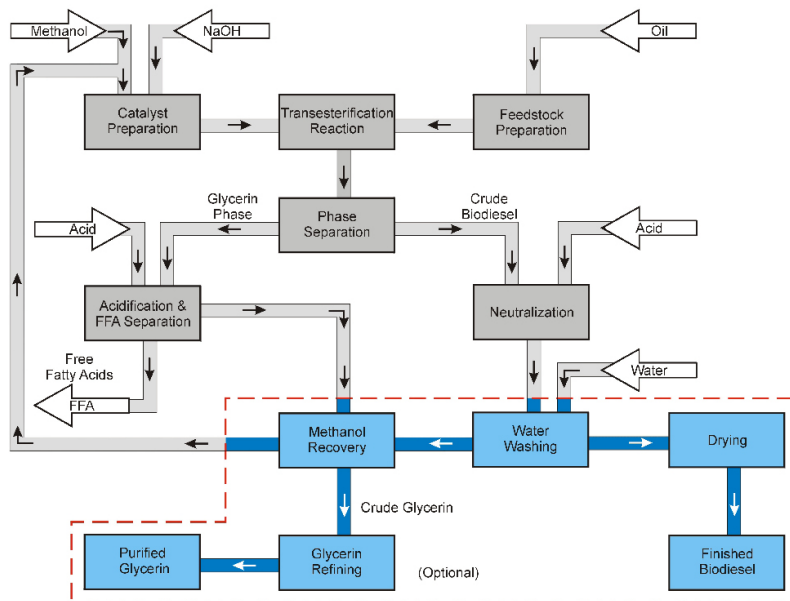
Company History and Background

**MEGTEC can Provide Design and Supply of Individual Components as well as Complete Skid-mounted Systems Based on Customer Requirements:**

- Project management
- Process design (flow diagrams, equipment specifications, P&IDs)
- Mechanical designs (detailed piping, structural and component fabrication drawings)
- Instrumentation and controls system design
- Turnkey installation services
- System or component fabrication
- System startup, operator and maintenance training

**For Over Thirty Years the Solvent Recovery Division of MEGTEC Systems has been a Leader in Supplying Systems to Separate, Purify and Recover Organic solvents for recycle and reuse. Our systems are Installed and in Operation Around the Globe in Many Industries Including:**

- Chemical Manufacturing
- Pharmaceutical manufacturing
- Semiconductor and electronics
- Gravure printing
- Paper, film and foil coating





# Recovery and Purification Systems for the Biodiesel Industry

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March 2007

- Process equipment and systems for new biodiesel plants
- Troubleshooting, performance optimization, equipment revamp and upgrade in operating biodiesel plants
- Expertise in methanol recovery using evaporation and distillation, biodiesel purification using extraction, vacuum distillation, and glycerin purification using carbon adsorption
- Project management, process, mechanical and control system design, system fabrication, startup, training and performance monitoring
- After sales services including extended warranties, remote monitoring, maintenance and service contracts and spare parts supply

MEGTEC brings together a strong history of innovation and customer service from the world's leading suppliers. Our single-source solutions have been enhanced through acquisitions that bring unique specialties and advanced technologies to our product and service offerings, benefiting customers across the globe.

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