

We collaborate with industry suppliers to develop both conventional and unique solutions to gain our clients the competitive edge they seek.

Our services include:

- Mass & Energy Balances
- Equipment Sizing
- Equipment Specifications
- Process Flow Diagrams
- Piping & Instrumentation Diagrams
- Process Design
- Process Simulation
- Pre-Start up Validations
- Energy Studies
- Start-Up Service
- System Troubleshooting
- Process Safety Management
- Fluid Flow Optimization
- Environmental Compliance Studies
- Capital Cost Estimates
- Constructability Design
- Design for Maintainability



OPTIMIZING PLANT EFFICIENCY

Process Design & Energy Solutions



ADF Engineering

Miamisburg, OH
Omaha, NE
Memphis, TN
Mulberry, FL

A Full-Service Engineering and Consulting Firm

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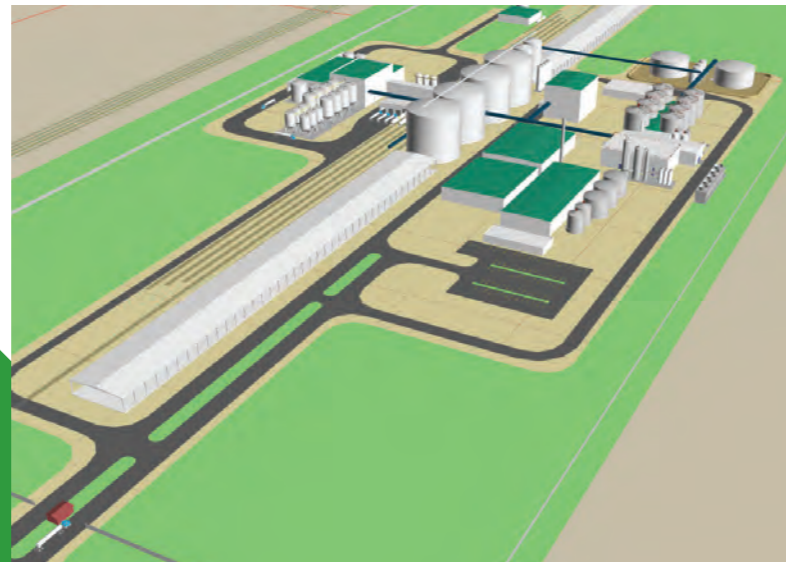
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A Full-Service Engineering and Consulting Firm
Serving The Renewable Fuel Industry



Ethanol, Biodiesel and Alternative Fuel Plant Design and Process Engineering



Let ADF Engineering, Inc. design your next plant modification to optimize process productivity, efficiency and ROI!



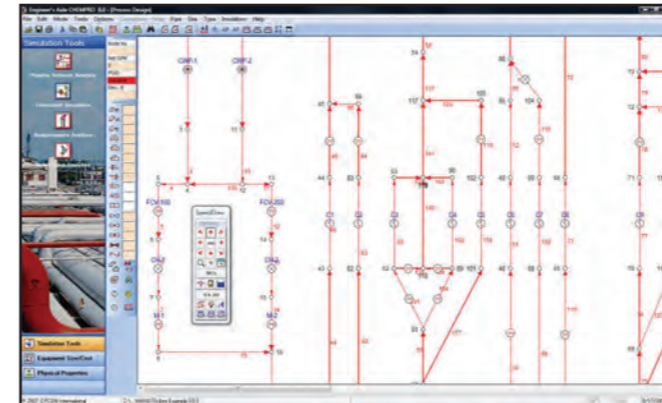
ADF Engineering is a full service engineering and consulting firm serving the food processing, bioscience and specialty chemical industries. ADF Engineering has accumulated an impressive client list including Fortune 500 companies by offering all disciplines of engineering expertise including process, civil/structural, electrical and instrumentation/controls.

Our technical specialists possess extensive field and design experience. We collaborate extensively with your team to ensure that the process is meeting your expectations.

We can manage all phases of any project from design concepts to startup services:

- Design/Build
- System and Facility Evaluation
- Facility Upgrades and Retrofits
- Grass Roots Facilities
- Full Service Engineering
- Construction Phase Assistance
- Start-Up Assistance

We have the capability to analyze liquid, vapor, gas and steam systems for overall performance, troubleshooting and optimization.



PROCESS FLOW SIMULATION



We can simulate, analyze and size fluid flow systems and evaluate them at various operating conditions.

ADF Engineering's strength is our focus on process design for plant efficiency and optimization. We will work with your personnel to develop energy saving solutions that positively affect your bottom line.

ADF Engineering can facilitate your operations energy optimization goals by providing system or facility energy audits. An energy audit collects information on the current energy usage patterns and quantities, compares those to best practice, locates pinch points to better match sources and sinks, and suggests alternatives to reduce or reuse energy.

Our list of energy optimization activities includes projects for corn milling, ethanol and pharmaceutical production facilities

- Scrubber water heat reclaim
- Boiler feedwater economization
- Boiler exhaust gas heat recovery
- Air compressor systems
- Chiller loading and water reduction
- Cooling tower optimization
- Evaporator efficiency
- Water reuse and reclaim
- Dryer insulation
- Nitrogen generation
- Emissions reduction
- Waste heat recovery
- Reliability improvements

We look forward to an opportunity to work with your facility to handle your next process optimization project.