



Summit Enterprises LLC
365 Bonny St, Unit B, Grand Jct, CO 81501
Phone: 888-521-6696, Fax: 866-484-7351

EZBiodiesel C375-Tk1a System Outline

This system is a complete system from the Oil collection setup to the waste oil and glycerin storage tanks. It does not however include the Biodiesel storage tanks. Perfect for a small farm or business. Here are additional details about this system.

The base processor for this system is our Model C375 commercial processor which is built using higher quality components than the homeowner versions, along with using explosion proof pumps and electrical equipment. This estimate also includes a dry wash system which eliminates all need for water washing, reduces processing hands on time and allows for processing in fewer days. It also eliminates any chance of emulsions, while still producing ASTM quality fuel. This system is very expandable for future growth.

Dimensions:

- Processor: 52w" x 81h"
- Methoxide Tank: 32" x 51h"
- As mounted in the Skid frame/cage - approximately 5'w x 8'L x 8'H
- Weight, estimated: 800 lbs

Electrical

This model will be completely wired so that all that's required on site is to connect one main power line to our built in service panel.

Power Requirements: 220V, 150amp

Pumps -

This model comes standard with 4 pumps totals.

1. The Processor pump is a very high quality, Explosion Proof centrifugal pump which flows at approximately 70 gpm.
2. Methoxide mixing pump is also a high quality explosion proof diaphragm air powered pump.
3. Drywash system will have a metering pump as flow rate must be controlled to achieve thorough cleaning.
4. Glycerin pump sized accordingly, and explosion proof.

Highlights of this system:

- **Processor** - Comes with a 500 gallon Polyethylene cone bottom tank that will process up to 375 gallons of Biodiesel every 24 hours or over 120,000 gallons per year. Installed on a sturdy steel skid cage frame. Frame is forklift able and surrounds the entire processor and methoxide pump. Does not surround settling tanks, etc.
- **Electrical** – All electrical components will be mounted to this skid frame in commercial grade explosion proof electrical panels with explosion proof switches, etc. All that will be required to connect the electrical will be to run a 150 amp 220V service line to our control panel. All other electrical will be complete when it arrives.
- **Plumbing** – All inlet and outlet lines for WVO, glycerin, methanol & Biodiesel will terminate in 1-2 common manifolds. All plumbing lines will be completely labeled.
- **Control Panel**- will have a custom control panel containing the pump timer, water pre-wash controller (for methanol removal prior to dry washing), indicator and warning lights, digital temperature controls, etc. The 5% water pre-wash will be fully automated as the water must be added during the last 15 minutes of the processing time. Will still require manual draining of the water.
- **In line Heater** – Comes with an in line heater with 13,000 watts of total heat, thermostat, safety switches, control panel, indicators, etc.
- **Oil collection pump and tank** - Includes an oil collection pump that will pump 150 gpm with Goodyear fuel hoses, ball valve shut offs, etc. Tank is a 350 gallon pickup tank. If you will be using new oil we can delete this option. Larger tanks available.
- **Oil collection lids** - Includes 20 barrel oil collection lids. These locking lids can be fitted to 55 gallon barrels and will pre-filter the larger debris from your WVO and also prevent oil theft.
- **Settling and storage tank** - Comes with 4 settling tanks. These 500 gallon tanks are the tanks you will pump the collected WVO into after collection. Allows the oil to settle out the watery oil and the waste debris in the oil before transferring into the processor.
- **Waste collection tank** – This 175 gallon tank allows you to transfer the gunk settled out above into this tank to be disposed of later. Can be disposed of through a grease renderer, land filled, or possibly composted.
- **Glycerin storage tank**. Comes with a 500 gallon Glycerin storage tank. You will produce 80 gallons of glycerin per 375 gallon batch. Includes a dedicated pump to more quickly pump the glycerin from the processor into the glycerin tank.
- **Drywash system** – This is a Lead/Lag system with (2) 12" columns for the most efficient dry washing. Utilizes the latest, most technologically advanced media available, known as Thermax T45 resin. Will process 24-48,000 gallons per media change. Adds roughly 10 cents per gallon to the processing cost. We can include the option of (2) lead lag systems to double the media life if requested.
- **Complete Supplies** – Comes with a complete, premium titration kit, stainless steel scale for measuring catalyst, and full safety gear.



On site setup and Training – We will come to your facility for 3-4 days of on site setup and training. We will supervise the installation and provide hands on training during this period to help you process the first batch of Biodiesel. Available for US or International orders, although there is an extra charge for International hands on training. Additional training time is available.

Capacity - This system will process up to 375 gallons every day, 2600 gallons per week or up to 130,000 gallons per year. (actual yield will be closer to 365 gallons per batch due to draining losses). System can be expanded easily to produce much larger amounts.

All tanks will be fully plumbed and ready to use. We will completely mock up the entire setup on site before shipping. Photos of this setup will be taken for reference during setup.

Shipping is extra. Call for a shipping quote.

Price includes on site setup supervision. This will require at least one helper supplied by yourself as well as all tools needed to complete the installation. May require a plumber also if additional lines must be run for methanol, biodiesel, etc. **On site setup is for Supervision and general setup only** and not any actual electrical or plumbing labor. You will have to supply the electrical hookup by a certified electrician. This will require running a service line of 150a capacity to our control panel. Water will also have to be plumbed by a plumber to the location we designate.

A fully detailed drawing of the installation location will be required before we ship the processor in order to detail the location of the water outlet, etc. We can send a building layout form to you if needed.

You would need to supply the methanol storage containers if you don't get it in 55 gallon drums. You will also need to supply the finished biodiesel storage tank. Requires an air compressor of at least 15cfm to run some of the pumps.

Waste oil Free Fatty Acid content, FFA, must test lower than an average of 2-3. If oil tests higher, we can provide a chemical which will lower the FFA to the needed level for an additional fee.

I recommend a rolling ladder with platform for working on and operating the biodiesel processor. We can include one in the bid if needed. Or you can have a catwalk built if you desire, or we can include that in the bid.

The oil collection barrels are not included.